Health and motor abilities school children in innovated physical education curriculum

Kocić J¹, Popović R², Lomen E³, Tosic, S⁴
¹Teachers College, University of Kragujevac, Jagodina, SCG ²Faculty of Physical Education, University of Niš, SCG ³PE secondary teacher, Melbourne, Victoria, Australia ⁴Synchronized Swim Team SCG

Introduction
A child`s initial development of foundation skills walking, throwing, catching, hitting, running, skipping – is often experienced by home. Primary schools are required to supply for the physical development needs of all children, but the Physical Education program granted in primary schools does not always provide children with the necessary foundation for later participation. Starting from the assumption that modern teaching of physical education does not contribute enough to the adequate transformation of anthropological dimensions of schoolchildren, it was applied some specific elements of rhythmic gymnastics and elements of dances in regular physical education classes during one academic year.

Methods
This research has been realized on the sample of 148, age 7-8 (+-6months) PE male and female elementary school pupils in Serbia & Montenegro. In order of fulfill the tasks, and realize stated objective of the research project, the pupils were divided into the experimental and the control groups and a series of necessary activities was carried out. The assessment of motoric abilities was carried out by applying a 16-test battery that analyze the structure at the level of second-order factors, defined as structuring of movements, tonus regulation and synergic regulation, excitation intensity regulation, and excitation duration regulation. Musical-rhythmical abilities were measured by means of Seashore`s battery, consisting of six tests for assessment of basic musical abilities. Research results were processed by means of canonic discriminative analysis.

Results
Statistic data showed the examining the coefficients that determine the discriminative function it can be noted that it separates the pupils according to balance, coordination, segmentary speed, explosive and repetitive strength, and flexibility. Examining the results of the canonic discriminative analysis of musical variables of the experimental and control groups, it can be concluded that there is no statistical significance in any of the tests for measuring basic musical abilities.

Discussion / Conclusions
At the beginning of the experimental treatment there was no statistically significant differences in the results of the examined motoric abilities between the subjects from the experimental and control group. It was interesting that at the end of the experimental treatment an expected statistically significant differences in the results of the examined morotic characteristics in favor of the subjects from the experimental group was shown. What should be stressed is the justification of the obtained results considering the fact that the examined abilities are to a considerable extent inborn, and therefore cannot be statistically significantly improved by permanent learning, chronological age or previous experience. It is, however, evident that the use of music in physical education classes has considerably contributed to closer attention of the pupils, better task-oriented concentration, as well as better efficiency of their performing. Moreover, the emotional effect, provided by the music, was very high, which minimized all the strenuous physical activities.

References