CHANGES OF RELATIONS BETWEEN ANTHROPOLOGICAL AND ATHLETICS DIMENSIONS OF MIDDLE-AGED SCHOOL BOYS UNDER THE INFLUENCE OF ONE SCHOOL YEAR TREATMENT

Abstract
The aim of this study was determination, on the one hand, relations between chosen morphological indicators and motor abilities, and on the other hand between some athletics results with boys so we can determine the effects of previous work and to understand what is possible to do inside a school year. It was 166 boys in the sample, all pupils of Mixed middle technical school in Travnik. It was standard canonical bi-orthogonal analysis used for relations determination. Results have showed us three canonical combinations: 1) general form of athletics movement realization; 2) distinction of explosiveness and endurance; and finally 3) distinction of simplest and complex athletics movements. In second measurement (at the end of school year) it was only one significant canonical factor isolated, identified as general measure of anthropo-athletics dimensions, and as composite significantly saturated with explosiveness, strength and endurance. Results have showed us that under influence of transformation process inside a school year it was integration of athletics dimensions occurred into compact common assemble. Although in athletics as a sport the aim is to develop special abilities for particular disciplines (except pentathlon), in PE lessons that integration is wanted purpose, because that situation means complete influence on children dimensions development.

Key words: motor, morphology, athletics, transformation, canonical analysis