## UDITAX – MODEL OF DISTINCT TAXONS BASED ON DISTANCE MAXIMIZATION OF REPRESENTATIVE ENTITIES

## Abstract

The aim of this research was to define algorithm and coding of the new model of taxon analysis based on representative entity maximization in total sample. Methodological design is oriented toward new approach to distinct taxons that enables representatives in total sample and they become carriers of primary group information. With remaining entity successive accession practical groups, sub-samples i.e. taxons are being formed. The results presented real existence of taxons in a few situations and for illustration we selected complex solution with 249 boy's age of 7 described with 26 biomotorical variables (morphological, motor and functional). Originality of this research and presented model is placed in stability of extracted taxons and their extremely simple identification. From a strictly mathematical point of view this model of taxon analysis is totally impassive to the number of entities or variables and as such is applicable on small samples that are usually used in sports. Practically there are no limitations of a model and presented algorithm so it is even possible that the amount of variables is multiple higher then the amount of entities which usually presents limitations for every other model.

Key words: grouping, distances, representatives