

SOME RELATIONS BETWEEN BOXER'S COGNITIVE ABILITIES AND MORPHOLOGICAL CHARACTERISTICS

Abstract

The aim of the research was, to apply system of 15 variables (3 cognitive ability variables and 12 morphological characteristic variables) on the sample of 92 boxers from Croatian boxing clubs in different weight categories and determine statistically significant relations between cognitive ability variable system and morphological characteristics variable system. Determining this relation is significant so we could form rational procedures for better sports orientation and selection, planning, programming and controlling transformational process of sportsman. Relation determination of two different multidimensional anthropologic manifest variable systems was carried out through appliance of canonical correlation analysis method. Based on gained results included in canonical structure matrix where we identify statistically significant correlations between first canonical factor and all applied cognitive variables in 88 to 89 spans which can be identified as general canonical factor of cognitive abilities. Span of correlation coefficients between first canonical factor and morphological characteristic variables moves from .21 to .77, so it can be identified as general canonical factor of growth and development. Relations between general canonical factor of cognitive abilities and general canonical factor of growth and development indicates that boxers of such sample with such statistically significant coefficients between two different sets can successfully achieve much better sport results in boxing.

Key words: boxers, cognitive abilities, morphological characteristics, relations
