

## COMPARATIVE ANALYSIS OF LATENT STRUCTURES OF VARIABLES OF PATHOLOGICAL CONNATE CHARACTERISTICS IN CASE OF HANDBALL PLAYERS BELONGING TO DIFFERENT COMPETITION RANKS

### **Abstract**

*The aim of this research to measure the system containing 12 pathological connate variables on the sample of 180 handball players belonging to the First and Second League as well as the national rank of the Republic of Serbia; then, this research aims to determine their latent structure and conduct the comparative analysis among three groups of athletes (in each sub-sample there are 60 respondents) so the information on the variety of latent structures towards the levels of the quality of athletes in competition ranks will be obtained. The obtained information can be used for the purposes of forming more rational procedures for optimal modelling, diagnosis, programming and controlling the training process as well as for efficient tracking of their development during continual selection and implementation of transforming training process. By applying the factor analysis (direct oblimin) and Kaiser-criterion ( $\lambda \geq 1.00$ ), there are two pathological latent variables (integral neuroticism and asthenic syndrome) detected with the handball players belonging to the First League; the statistically significant connection between these two variables is at the level .00. In case of the handball players belonging to the Second League, two pathological latent variables have been isolated (asthenic-sthenic syndrome and conversion sthenic syndrome); two variables can be found in case of the handball players belonging to the national rank (sthenic-dissociative syndrome and asthenic-conversion syndrome); there are no statistically significant connection in none of these two groups of handball players. The results of comparative analysis show that the group of handball players belonging to the First League characterizes integral neuroticism and anxiety – the decrease of excitation and reduction of adaptation so they show greater ability to adequately model excitatory and inhibition processes; the features of the handball players belonging to the Second League are overt insecurity, slightly increased or decreased excitation and functioning at slightly increased level of tension. In case of the handball players belonging to the national rank, disorders of mechanism for regulating vegetative nervous system and integrative functions (structuring of excitatory and inhibition processes) have been detected.*

**Key words:** handball players, pathological connate variables, factor structure, comparison

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