

FACTOR STRUCTURE OF BOXER'S BASIC MOTOR ABILITIES

Abstract

On the sample of 92 boxers from Croatian boxing clubs from different weight classes, the system of 15 basic motor variables was applied with aim to determine their factor structure. With appliance of factor analysis (direct oblimin) and Kaiser – criteria ($\lambda \geq 1.00$) for obtaining mutual characteristic roots and clarified parts of mutual variance, two latent variables have been isolated. The first one was interpreted as regulation of intensity and excitation duration and tone regulation whose structure consists of variables of explosive strength (Broad jump and throwing medicine ball while lying down), repetitive strength (lifting legs while lying down, deep squat with load and knuckles on high bar with under) and flexibility (forward bend on the bench, forward bend straddle and forward band to the right). The second latent variable is interpreted as motion structuring and regulation of intensity of excitation since it is defined by body coordination variables (pulling through and jumping over, agility in the air and polygon backward), frequency speed (hand tapping, leg tapping and leg tapping against the wall) and one variable of explosive strength (20 m run from standing start). Based on matrix of latent variable correlation it is visible there is no statistical significant correlation between isolated latent variables which is interpreted as wanted efficacy in boxing is achieved primarily with motor abilities of intensity and tone regulation and excitation duration, because research has shown that this latent variable is dominant, but structuring of motion and frequency speed are also relevant for top boxers.

Key words: *boxers, basic mobility, factor analysis, latent structure*
