REGRESSION ANALYSIS OF CONNECTION BETWEEN MORPHOLOGICAL, MOTOR AND FUNCTIONAL ABILITIES WITH THE SUCCESS OF PERFORMACE OF TECHNICAL ELEMENTS IN DANCE

Abstract

This research was conducted on 84 dancers (78 females and 6 males) with the age range from 11 to 16 year old; the sample is the population taken from different dancing clubs in Bosnia and Herzegovina: Gemma (Banja Luka), City Jazz (Banja Luka), Bolero (Banja Luka) and Orion (Pale). The participants were divided in two groups randomly. The experimental group (N = 44, 40 females and 4 males) was formed of 'Gemma' dancing club members and they were used for a three-month experimental program. The control group members (N=40, 38 females and 2 males) were trained by the standard dance program. The primary aim of the research was to investigate significance and relative impact of morphological characteristics, motoric and functional abilities (marked as predictor variables) on the competence shown in a composite dance test which serves to indicate mastery of dance movement structures in dance (marked as a criterion). A regression analysis was used to determine a possible influence of morphological characteristics, motoric and functional abilities on success of technical performance of dance movements. On the basis of the regression analysis results after initial and final measurements, it can be concluded that the proprioceptive training with a jumping rope resulted in positive changes, that is, it was positively correlated to predictors and changes of structures. The conclusion based on the influence of predictors is that the success in dance needs joint participation of all applied variables (morphological characteristics, motoric and functional abilities).

Key words: *regression analysis, dance structures, anthropological dimensions*