Correlation between Sargent jump and 45-meter dash in the estimation of the anaerobic power

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\begin{abstract}
Mental and physical health of students is important objects of every society, because their health ensures scientific progression and development. The current study was aimed to estimate the anaerobic power in two ways Sargent jump and run 45 meters and the factors influencing them among selected male and female students of Qazvin University of Medical Sciences. This was an analytical cross-sectional study among 110 students who participated in the study that were selected randomly. To measure anaerobic power, Sargent jump and run 45-meter test was used. In order to analyze the factors affecting anaerobic power test, independent t-test and ANOVA with a significance level of 0.05 was conducted, and also to examine the relationship between two tests Pearson correlation test was used. Data analysis showed that sex, weight, height and body mass index in Sargent jump and sex and weight in 45 meters test are significant. Pearson correlation on test between anaerobic power test results are positive and significant relationship (r= 0.83 and P<0.001), respectively. The overall results of this study showed a high correlation on between the two methods. Also, variables such as sex and weight in both tests showed significant association in the mean anaerobic power.
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