RELIABILITY AND FACTORIAL VALIDITY OF THE CYCLING TESTS AMONG SCHOOL POPULATION

Abstract

The purpose of this study was to assess the reliability and validity of the newly constructed bike tests among non-selected school population. The total of 30 non-selected primary school pupils (mean age = 13 ± 0.6 years; mean height = 162.35 ± 9.63 cm; mean body mass = 54.47 ± 13.08 kg) participated in this study without previous involvement in any training process. A total of six tests have been used. Three standardized tests for schools long jump from a place (LJP), bend gap (BG), raising trunk (RT) and three cycling tests cycling acceleration (CA), cycling polygon (CP), 1000 m time trial (C1000). Reliability coefficients for cycling tests CA a = 0.904, a = 0.978 CP. From a total of six tests, factor analysis resulted in two significant factors. The first factor explains 41.97% of the total variance and is defined as the cycling factor. The correlation coefficients of tests with the first factor CA =- 0.869, CP =- 0.849, and LJP = 0.692. The second factor explains 22.437% of the total variance and stands for the flexibility with the correlation between BG and other factors of 0.858. The results indicate that the tests are reliable and valid.

Key words: cycling tests, children, reliability, cross, bike