

MUSCLE STRENGTH TEST PERFORMANCE CHANGES OVER TIME IN SERBIAN CHILDREN

Jadranka Kocić¹, Darko Stojanović², Sladjana Stanković³, Lana Petrović¹, Aleksandar Ignjatović³, Zoran Savić¹, Vesko Milenković¹, Tijana Stojanović⁴, Zoran Momčilović⁵

¹University of Priština, Kosovska Mitrovica, Faculty of Sport and Physical Education, Leposavić, Serbia

²University of Union - Nikola Tesla, Faculty of Sport, Belgrade, Serbia

³University of Kragujevac, Faculty of Education, Jagodina, Serbia

⁴Club for synchronized swimming "Niš", Niš, Serbia

⁵University of Niš, Pedagogical Faculty in Vranje, Vranje, Serbia

Contact: Jadranka Kocić
Ratka Vukičevića 1/10, 18000 Niš, Serbia
E-mail: jadranka.kocic@pr.ac.rs

The aim of this study was to identify the changes in motor performance test over an interval of four decades in eleven-year-old children in Serbia. The secular trend of body height and weight showed constant increase over time, but positive influence on the motor performance was lacking. Most studies found some decline in various motor skills over different time periods. However, none of them investigated the standing long jump results over the period of four decades. Data were collected from three separate cross-sectional samples examined in 1971, 2014 and 2018. Measurements were conducted by a team of qualified testers, coordinated by the Faculty of Physical Culture from Belgrade in 1971, Serbian Institute of Sport and Sport Medicine in 2014, and authors of this study in 2018. Motor performance test that was evaluated including the standing long jump. Despite the average increase in longitudinal skeleton dimensions, an average distance of the long jump showed a significant decrease. Decreased values after four decades ranged between 10 % and 18 % depending on the sample. The results of this study raise serious concerns about the contemporary way of life of children and trends in their motor skills. Without changes in lifestyle and healthy nutritional habits, and most importantly, greater participation in organized physical activities that target at deficits in muscular fitness and motor skill performance early in childhood, these contemporary trends of motor test performance will most likely continue to decrease in the future.

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