

Towards the Construction of Test for Assessing Motor Abilities in Four-aged Pre-school Children*

Joško Sindik¹, Vatroslav Horvat² and Marijana Hraski²

¹*Institute for Anthropological Research, Zagreb 10 000, Croatia*

²*University of Zagreb, Faculty of Teacher Education, Zagreb 10 000, Croatia*

E-mail: ¹<josko.sindik@inantro.hr>, ²<vatroslav.horvat@ufzg.hr>, ²<marijana.hraski@ufzg.hr>

KEYWORDS Affects Lifelong. Development. Metric Characteristics. Pre-school

ABSTRACT The objective of this study is to determine the basic metrical properties of the tests for the assessment latent dimensions of motor abilities at four-year children. Sample included 50 children aged 4 years ($\pm$ 6 months) from three kindergartens in Zagreb, during the first half of 2015. Battery of tests that assess the hypothetical motor abilities (coordination, speed, balance, and strength) was applied. Reliabilities of the tests varied in the range from 0.45 to 0.96 (Cronbach's alpha). Already satisfactory discriminability is not found only for tests two-leg jumping through hoops and standing on one leg. Homogeneity of the tests varies in range from 0.22 to 0.89 (average inter-item correlation). Analysis of the construct validity revealed two-component structure which has very low reliability of the second component. Results indicate the potential for constructing new instruments for measuring motor abilities in four-aged children, on a larger sample of participants.