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**TRACKING PHENOMENON OF PHYSICAL DEVELOPMENT DURING
ELEMENTARY SCHOOL**

Abstract:

The method generally used to assess motor ability in elementary school is the 10-step assessment in the new physical fitness test advocated by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan. However, no method of assessing physical fitness and motor ability has been established that considers changes with age in schoolchildren, who are in the growth stage. Specifically, no method to evaluate physical longitudinal data for individual children has been created. In this study, we constructed an aging span evaluation chart of motor ability using the wavelet interpolation method and applied it to longitudinal development data for motor ability in the physical ability of first to sixth grade elementary school students. Motor ability tracking was then examined with the application of this evaluation method. The results confirmed that motor ability tracked closely in first to sixth grade elementary school students. Therefore, this suggests that there is a trend for individuals with high motor ability in childhood to follow the same high level course afterward. Also, children with poor motor ability in particular may need early educational attention.

Keywords:

Tracking phenomenon, Motor ability, Wavelet Interpolation Method, elementary schoolchildren

JEL Classification: I00, I10, I19