Field-Based Health-Related Physical Fitness Tests in Children and Adolescents: A SYSTEMATIC REVIEW

Authors
Adilson Marques, Duarte Henriques-Neto, Miguel Peralta, João Martins, Fernando Gomes Stevo Popovic, Bojan Masanovic, Yolanda Demetriou, Annegret Schlund and Andreas Ihle

Co-funded by the Erasmus+ Programme of the European Union

AIM
Identify and inform physical education, health professionals and entities about existing physical fitness batteries and field-tests that can be used in school settings.

WHY IS IT IMPORTANT?
Physical fitness is a multi-component construct and a biomarker of health. Worse Physical Fitness is related to vulnerability and predicts worse academic achievements.

METHODOLOGICAL APPROACH
A comprehensive literature search was carried out in five electronic databases (Academic Search Complete, Education Resources Information Center, PubMed, Scopus, and Web of Science) to Physical Fitness battery protocols that can be carried out in the school setting.

KEY FINDINGS

Overall, 24 Physical Batteries were identified.

Regarding the PF components assessed, only **cardiorespiratory fitness and upper body strength** were contemplated in all batteries. Middle-body strength and lower body strength were presented in most batteries (21 and 19 of 24, respectively).

Agility (16 of 24) and **body composition** (16 of 24) were also considered in several batteries, although to a lesser extent.

Flexibility (14 of 24) and **speed** (12 of 24) were the Physical Fitness components less represented in the batteries.

AMONG THE 24 IDENTIFIED PHYSICAL FITNESS BATTERIES, 81 PHYSICAL FITNESS ASSESSING THE DIFFERENT PHYSICAL FITNESS COMPONENTS WERE ENCOUNTERED.

The advances in the Physical Fitness field-based assessment in school settings and health in youth resulted in the amplification of the number of existing batteries.

IMPLICATION
Considering the connection between Physical Fitness and health and the opportunity that the school setting provides to assess fitness in children and adolescents, there is a need for standardization and a consensus of Physical Fitness assessments in this specific setting.

@eufitmos
eufitmos.eu

SCAN ME

Reference
Marques A, Henriques-Neto D, Peralta M, Martins J, Gomes F, Popovic S, Masanovic B, Demetriou Y, Schlund A and Ihle A (2021). Field-Based Health-Related Physical Fitness Tests in Children and Adolescents: A Systematic Review.Front. Pediatr. 9:640028. DOI: 10.3389/fped.2021.640028.