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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7447071/pdf/pone.0237919.pdf>

Article Overview:

This systematic review investigated the validity and reliability of observational fundamental movement skills (FMS) assessments. The article identified 90 studies to be included that applied 24 different assessment tools for school-aged children.

Key take home messages:

1. The Test of Gross Motor Development (TGMD) was the assessment tool with the most consistently positive evidence in favour of validity and reliability. However, the TGMD might be less feasible to implement in school settings.
2. Only 64% of studies reported similarly promising results for the Movement Assessment Battery for Children (MABC). Other limitations of the MABC is the specialist equipment required and the lengthy administration time.
3. Twelve studies found good evidence for the reliability and validity of the Bruininks-Oseretsky Test of Motor Proficiency but poor study quality appeared to inflate results. It is notably costly and it takes between 45-60 minutes to assess each child.
4. The results showed that not enough FMS assessment tools are being developed that include all aspects of FMS.
5. Overall, there is insufficient evidence to justify the use of any observational FMS assessment tools for universal screening in schools, in their current form. There is a need to develop low cost, reliable and valid measures of FMS that are suitable for testing large numbers of children within school settings.