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Paper 5: How can we assess physical literacy?

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Introduction: Few researchers have recommended ways to measure physical literacy. If physical literacy is considered an important construct and likely to relate to children's health behaviours, then it is important to be able to assess it. The purpose of this paper is to provide a guide to physical literacy assessment using the Australian definition of physical literacy, which includes the four constructs of physical, psychological, cognitive and social capacities. The intention is to outline key considerations that will help when deciding what assessment approach to use.

Methods: We propose a decision-making heuristic to guide and inform the assessment of physical literacy. Similarly, previous guides to assessment of physical activity (Dollman et al., 2009) and sedentary behavior (Hardy et al., 2013) in children and young people were produced to guide users to select the most appropriate method for their research purpose. **Results:** Nine guidelines to assist decision-making were identified. These included: 1. Domains of importance (i.e. cognitive, social, psychological, physical); 2. Subdomains (e.g., gross motor skill – subdomain of physical); 3. Context (e.g., physical environment); 4. Purpose (e.g., monitor class levels of motor skill); 5. Age group (e.g., primary school); 6. Structured Observation of Learning Outcomes (SOLO) level (i.e., acquisition and accumulation); 7. Method (e.g., objective-vs-subjective); 8. Number of participants; and 9. Cost. Example assessment scenarios will be presented, which highlight the complexities of assessment across the constructs.

Discussion: Researchers, practitioners and policy makers who are interested in measuring physical literacy need a process to be able to select the methods that best fit their intention, needs and resources. We have provided an approach to stimulate thinking about decision making around assessing physical literacy through measurement of its operationalised elements. The examples demonstrate that deciding on an assessment approach for physical literacy is not easy because it is an umbrella term for an enormous number of interrelated elements. Nevertheless, it is not feasible (or arguably appropriate) to be prescriptive about measurement tools because of this very complexity of the construct. Considering that our ability to measure is also always evolving, the other advantage is that this system is effectively independent of whatever measures exist at any given point in time. Appropriate evaluation of physical literacy will facilitate investigation into physical literacy levels, into whether cultures or subgroups in the population differ in their physical literacy levels, and most importantly, if they do, what can be done to address inequities.

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