

S13-3: The French Version of Physical Literacy in Children Questionnaire (FR-PLC Quest): Translation and Internal Validation

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Purpose: Physical literacy is a key determinant of health-enhancing physical activity (HEPA), yet validated assessment tools remain limited in non-English-speaking contexts. The PLC-Quest, a 30-item pictorial questionnaire featuring a rabbit character, assesses children's self-perceived physical literacy across four dimensions: physical, psychological, social, and cognitive. While validated in its original language and known for its child-friendly format, no French version has yet been validated. As physical literacy is embedded in the French school curriculum, an adapted tool should be needed. This study aimed to translate and validate the French version of the PLC-Quest and evaluate its psychometric properties.

Methods: The validation followed two main steps: translation and internal validation. The translation process adhered to the Beaton protocol. Two independent bilingual translators produced a French version of the questionnaire. A consensus version was then created and back-translated into English by two others. These back-translations were compared with the original to ensure conceptual and linguistic equivalence, ensuring the integrity of the French version. For the internal validation, 1,000 children aged 6–12 years from France completed the FR-PLC Quest. Construct validity was assessed using confirmatory factor analysis (CFA) based on four domains and an overarching physical literacy construct. Reliability was measured via Cronbach's alpha and test-retest reliability (intraclass correlation coefficients, ICC). Sensitivity was evaluated using Ferguson's Delta.

Results: Following the Beaton protocol with translators consensus, the French PLC-Quest was edited. 902 children aged between 7 and 12 years were included. Goodness-of-fit indices confirmed the construct validity of the model, indicating an acceptable fit to the empirical data ($\chi^2/df = 3.56$). All items demonstrated significant standardised loadings on their respective latent dimensions (standardised estimates >0.40). The FR-PLC Quest also showed excellent test-retest reliability in a subsample ($n=103$) of 12-year-old participants ($ICC = 0.82$) and high internal consistency ($P\alpha = 0.88$). Additionally, the instrument exhibited excellent sensitivity (0.98), reflecting a strong discriminative capacity.

Conclusions and Implications: The French PLC-Quest appears to be a valid and reliable tool for assessing physical literacy in children. It can guide the development and evaluation of HEPA-promoting interventions in French-speaking educational and community settings.

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