

Construct validity of the English version of the Perceived Motor Competence Questionnaire in Childhood (PMC-C)

Swantje Brandt¹, Till Utesch², Dennis Dreiskaemper¹, Farid Bardid^{3,4}

¹ *Institute of Sport and Exercise Sciences, University of Münster, Germany*

² *Institute of Education, University of Münster, Germany*

³ *School of Education, University of Strathclyde, Glasgow, UK*

⁴ *Department of Movement and Sports Sciences, Ghent University, Belgium*

Abstract

Objectives: Perceived motor competence is an important part of the physical self-concept. Whilst there are various questionnaires measuring physical self-concept and its sub-components in children and adolescents, few have focused on assessing self-perception of motor skills. To this end, the Perceived Motor Competence Questionnaire in Childhood (PMC-C; Dreiskaemper, Utesch & Tietjens, 2018) was developed to measure children's perception of different locomotor and object control skills; the instrument has been validated in German. The present study aimed to investigate the construct validity of the English version of the questionnaire.

Methods: A total of 324 children aged 8-12 years ($M = 10.17$, $SD = 1.16$) from Scotland (UK) took part in the study and completed the 24-item questionnaire, which uses a 4-point Likert scale. The PMC-C covers 4 locomotor skills (hop, jump run, and skip) and 4 object control skills (bounce, catch, kick, and throw) with 3 items per skill. Internal consistency was examined using polychoric alphas or omegas. The latent structure of the original PMC-C was tested using confirmatory factor analysis (CFA).

Results: The results showed good internal consistency for locomotor skills (.78 – .88) and object control skills (.73 – .89), and ordered thresholds for all items. Furthermore, the CFA revealed a good model fit for the assumed structure of the original PMC-C ($\chi^2(243) = 501.1$, $p < .001$, $TLI = .985$, $CFI = .987$, $RMSEA = .061$).

Conclusion: The study provides evidence for the construct validity of the English version of the PMC-C. This questionnaire is thus considered an appropriate tool to assess children's self-perception of motor skills.