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## Title

# ***Physical Activity Questionnaire for Children: Validity and Cut-Points to Identify Sufficient Levels of Moderate- to Vigorous-Intensity Physical Activity Among Children and Adolescents Diagnosed With HIV***

## Abstract

Purpose: To investigate the validity of the Physical Activity Questionnaire for Older Children (PAQ-C) to assess the moderate-to vigorous-intensity physical activity (MVPA) level of children and adolescents diagnosed with HIV and propose cut-points, with accelerometer measures as the reference method. Method: Children and adolescents, aged 8-14 years (mean age = 12.21 y, SD = 2.09), diagnosed with HIV by vertical transmission, participated in the study. MVPA was investigated through the PAQ-C and triaxial accelerometer (ActiGraph GT3X+). Receiver operating characteristic curve and sensitivity and specificity values were used to identify a cut-point for PAQ-C to distinguish participants meeting MVPA guidelines. Results: Fifty-six children and adolescents participated in the study. Among those, 16 met MVPA guidelines. The PAQ-C score was significantly related to accelerometry-derived MVPA ( $\rho = .506$ ,  $P < .001$ ). The PAQ-C score cut-point of 2.151 (sensitivity = 0.625, specificity = 0.875) was able to discriminate between those who met MVPA guidelines and those that did not (area under the curve = 0.751, 95% confidence interval, 0.616-0.886). Conclusion: The PAQ-C was useful to investigate MVPA among children and adolescents diagnosed with HIV and to identify those who meet MVPA guidelines. © 2024 Human Kinetics Publishers Inc.. All rights reserved.

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