## Influence of body composition on physical literacy in spanish children

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## Abstract

Background: Childhood obesity is a major health challenge in modern societies; therefore, prevention and management policies are needed. This study aims to establish the level of Physical Literacy (PL) in overweight and non-overweight children in Extremadura (Spain), analysing the potential differences between them and exploring their relationships with body composition. Methods: A single-measure crosssectional study was performed with 135 children, who were taken anthropo-metric measurements and administered The Canadian Assessment of PL Development (CAPL-2) to assess their level of PL. The CAPL-2 covers four domains and participants to be classified into four levels: beginning, progressing, achieving, and excelling. Statistical analysis included descriptive and correlations. Results: Significant differences between overweight and non-overweight participants were found. Non-overweight participants had higher scores in all the domains included in PL, with the PL level of overweight children mainly being in the two lowest levels. Inverse correlations between body composition variables and PL in all domains (r from -0.223 to -0.507) were found, except for the knowledge domain. Conclusions: Most of the non-overweight children had higher levels of PL than their overweight counterparts. The PL of overweight children was significantly lower compared to non-overweight children. Healthier body composition values were associated with a better PL. © 2021 by the authors. Licensee MDPI, Basel, Switzerland.

## Author keywords

Body composition; Body mass index; Exercise; Health-related quality of life; Paediatric obesity; Physical literacy