

# Effects of Active Breaks on Physical Literacy: A Cross-Sectional Pilot Study in a Region of Spain

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## Abstract

Several studies have shown that active breaks (AB) lead to improvements in physical fitness, daily steps taken and participants' health. However, there are no studies that have evaluated how they affect physical literacy (PL). Aims: Therefore, this study examined the effects of a 4-week recreational AB program based on games whose main objective was to improve motivation and motor skills' improvement in PL in schoolchildren. Method: A quasi-experimental pilot study was conducted with PL assessments before and after a 4-week recreational AB program. Results: Fifty-seven schoolchildren ( $10.28 \pm 0.43$  years) participated in the study, 29 in the control group and 28 in the experimental group. An improvement in PL was found between the experimental and control groups after the intervention ( $p = 0.017$ ). Moreover, the experimental group also improved ( $p < 0.001$ ) PL after the intervention. More specifically, within the domain of PL, improvements were found after the intervention in the experimental group in the domains of physical competence ( $p < 0.001$ ), motivation and confidence ( $p < 0.001$ ) and knowledge ( $p < 0.001$ ) but not in the domain of daily activity ( $p = 0.051$ ). Conclusion: The application of an AB program based on playful games, during four weeks, produced an increase in scores in the general PL level, as well as in the domains of physical competence, motivation, and knowledge and understanding in schoolchildren. © 2022 by the authors. Licensee MDPI, Basel, Switzerland.

## Author keywords

active breaks; physical literacy; playful games; schoolchildren