



Effect of adult leader participation on physical activity in children

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ABSTRACT

Background: Participation in physically active games is one way to increase energy expenditure in children. However, it is unknown whether adult leader participation (LP) in games can impact children's physical activity (PA) levels. The purpose of this study was to examine the influence of LP compared to no LP on PA levels among children participating in organized active games. **Methods:** Children (n = 14) in grades 4-6 (Male = 42.8%, White = 50%, Overweight/ Obese = 42.8%) participated in four active games across two consecutive days. Each day, children participated in two 16-minute games and received verbal encouragement from an adult leader. Each game was divided into four-minute intervals alternating between LP or no LP. LP was counter-balanced across two days. Each child wore an Actigraph GT1M accelerometer. Time spent in moderate-to-vigorous PA (MVPA), vigorous PA (VPA), and sedentary behavior (SB) was determined by Freedson's MET prediction. Data were analyzed using a condition (LP or no LP) by game repeated-measures ANCOVA. **Results:** Children participated in MVPA 52.3% of game time across all games. There were no differences in MVPA, VPA, and SB by gender, weight status, or ethnicity. LP and no LP conditions were not different for MVPA, VPA, or SB. **Conclusions:** These results show no effect of LP on PA in children during active games. It may be that LP could not increase PA because the children were already exhibiting high levels of MVPA.

KEYWORDS

Accelerometer; Obesity; Exercise; Evidence-Based Research

Cite this paper

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