

Influence of Parental Encouragement and Participation in Physical Activity on Children's Physical Activity and Weight

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Introduction: With the percentage of children engaging in the recommended daily physical activity (PA) levels declining, with age, parents may play vital roles in the prevention of childhood obesity. Therefore, the purpose of this study was to examine the relationship between parental encouragement of PA and parental participation in PA and their child's level of PA and body mass index (BMI).

Methods: A cross-sectional analysis of 31 participants [14 obese (>95th (BMI) percentile), 2 overweight ($\geq 85^{\text{th}}$ -<95th (BMI) percentile), and 15 healthy weight (25th - $\leq 85^{\text{th}}$ BMI percentile), ages 7-10 years; 15 males, and 14 females] prior to participation in a before-school physical activity program. All participants completed the Physical Activity Questionnaire for Children (PAQ-C), a 7-day PA recall which assesses general levels of PA throughout the elementary school year. To compare parental encouragement and participation in PA to their child's PA levels and BMI, a two-tailed test was employed with significance set at 0.05.

Results: No statistical analyses were performed regarding parental encouragement of PA as all parents (n=31) responded "yes" to the question specific to encouragement. Comparing active vs. non-active parents, no significant difference in children's PA levels were observed although PA levels were higher in children with active parents. Children of active parents vs. non-active parents displayed lower, but not statistically significant BMI levels (18.5 \pm 3.3, 18.6 \pm 3.3 vs. 21.1 \pm 3.3, 20.6 \pm 3.5, active vs. non-active mothers and fathers, respectively).

Discussion: Although statistically significant differences were not observed, children of active parents displayed higher levels of PA and overall lower BMIs. Targeting parents and encouraging them to participate in PA may be a valuable strategy in the prevention and/or reduction of childhood obesity.