

The Experimental Effect of Parental Influence on Children's Physical Activity

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Today's children are not participating in adequate amounts or intensities of physical activity. While research has demonstrated several positive factors that contribute to increases in physical activity, no experimental studies have been conducted examining the impact of parental influence on children's physical activity behavior. Because the existing evidence is from non-experimental studies, the causal impact of parental influence on children's physical activity behavior cannot be inferred. **PURPOSE:** To assess the amount, intensity, enjoyment (i.e., liking), and preference of children's physical activity under three conditions; *alone*, with a *parent watching*, and with a *parent participating*. **METHODS:** Twenty children ($n = 10$ girls) between the ages of 3-6 years old participated in each condition for 30-minutes in which they could choose from a variety of physical and/or sedentary activities. In addition to accelerometry data, at the end of each 30-minute session children were asked to indicate their liking by using a visual analog scale. Children were then asked if they would like to play for an additional 10-minutes or if they wished to be finished for the session. After all three conditions were completed, each child indicated which condition was their favorite. **RESULTS:** More counts ($p \leq 0.02$) were accumulated during the *parent participating* ($109,523 \pm 32,155$ counts) condition than the *alone* ($67,938 \pm 37,857$ counts) and *parent watching* ($85,624 \pm 44,985$ counts) conditions. More time ($p = 0.01$) was allocated to sedentary activities during the *alone* (15 ± 10 minutes) condition than the *parent participating* (6 ± 8 minutes) condition. Children liked ($p \leq 0.03$) the *parent participating* (9.9 cm) condition more than the *alone* (8.0 cm) and *parent watching* (8.7 cm) conditions. A significantly greater ($p \leq 0.01$) proportion of children chose to participate in the additional 10-minute bonus period during the *parent participating* (89%) condition than the *parent watching* (55%) and *alone* (22%) conditions. **CONCLUSION:** *Parental participation* during bouts of physical activity (or at minimum direct supervision) may be an important component in the development of physical activity environments intended to maximize physical activity behavior in children.