

A FRIEND VERSUS A GROUP OF FRIENDS EFFECT ON PHYSICAL ACTIVITY  
BEHAVIOR IN 6-10 YEAR OLD CHILDREN (107 pp.)

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Children today are not participating in adequate amounts of physical activity. While research has identified several positive factors that contribute to increases in physical activity, only a few experimental studies have been conducted and only assessed the effect of a single peer or friend. Children are often physically active with more than one peer or friend and it is possible the presence of more than a single friend can further increase physical activity behavior in children. Therefore, the purpose of this investigation was to assess the amount, intensity and motivation of children's physical activity in a controlled setting under three separate social conditions; *alone*, with a *single friend* and with a *group* (four) of friends.

Children (n= 12 boys, n= 12 girls) between the ages of 6-10 years old participated in each social condition for 30 minutes in which they could choose from a variety of physical and/or sedentary activities. Children's physical activity was measure via accelerometry while the amount of time each child allocated to sedentary activities was recorded using a stop watch. Upon completion of each 30-minute session children were given the option to participate in a 10-minute bonus period.

During a 40-minute activity session, children's accelerometer counts were

significantly greater ( $p < .05$ ) during the friend ( $136,983 \pm 8,636$ ) and group ( $131,356 \pm 6,493$ ) conditions, relative to the alone ( $99,835 \pm 9,225$ ) condition. Girls allocated significantly ( $p < .03$ ) more time to sedentary activities when alone ( $12.7 \pm 3.9$ ) compared to the friend ( $3.6 \pm 1.5$ ) and group ( $3.9 \pm 0.8$ ) conditions. Boys, relative to girls, allocated less ( $p < .006$ ) time to sedentary activities when alone ( $0.6 \pm 0.6$ ) and did not significantly ( $p \geq .08$ ) alter their time during the friend and group conditions. A significantly greater ( $p < .001$ ) proportion of children chose to participate in the 10-minute bonus period during the friend (92%) and group (100%) conditions than the alone condition (33%).

Playing with one or more friends, relative to playing alone, is more motivating and can increase physical activity and reduce the amount of time 6-10 year old children allocate to sedentary activities.