

Effects of a College-Mentored Physical Activity Program for Elementary Students

WILLIAM D. SAYRE, KEEGAN R. O'CONNOR, CASSANDRA S. DIEP, AMANDA M. PERKINS-BALL, AUGUSTO X. RODRIGUEZ, and LAURA S. KABIRI

Kabiri Research Group; Department of Kinesiology; Rice University; Houston, TX

Category: Undergraduate

Advisor / Mentor: Kabiri, Laura S. (lk22@rice.edu)

ABSTRACT

Health risks of a sedentary lifestyle for children, defined as being less than 5,000 steps per day, include unfavorable indicators of body composition and cardio-metabolic risk. Results of school-based physical activity interventions to increase physical activity levels have been mixed. However, mentorship programs have shown promise. Previous mentorship programs have relied on peer-to-peer mentorships, with participants being of a similar age group. College mentors present an alternative and low-cost resource that may also provide positive results, yet have been largely ignored in research studies to date.

PURPOSE: The purpose of this study was to investigate the impact of a novel, individualized college-mentored physical activity program on physical activity levels among older elementary school students.

METHODS: Fifth grade students ($n = 12$) were paired one-to-one with local college mentors for 30 minute bi-weekly running sessions on the elementary school campus for six weeks. Multiple assessments from activity trackers were compared on intervention versus non-intervention days using paired-samples t-tests.

RESULTS: Significant increases in steps ($t(11) = 8.056; p \leq .001$) and moderate-to-vigorous activity ($t(11) = 5.202; p \leq .001$) were seen on intervention days, as compared to non-intervention days. The average increase in step count on intervention days (6,381) versus non-intervention days (3,158) also resulted in students being elevated out of a sedentary classification. **CONCLUSION:** Individualized mentoring from college students significantly increased multiple assessments of physical activity, including minutes of moderate-to-vigorous activity and number of steps taken. Perhaps most notably, the mentored physical activity program promoted students from a sedentary to active lifestyle on intervention days as determined by step count. This novel high-impact and low-cost approach should be further developed for future school-based physical activity programs and research.