



of the American Alliance for Health, Physical Education, Recreation and Dance

AAHPERD RESEARCH GRANT PROGRAM AWARD 2003

Effect of the Take10! Activity Program on Total Energy Expenditure and Attitude Towards Physical Activity in Elementary School Children

INVESTIGATOR David A. Rowe, East Carolina University

CATEGORY Established Investigator Grant

ABSTRACT

Daily physical activity is an important health goal for children. The purpose of this study was to evaluate the effectiveness and convenience of *Take10!*, a daily 10-min physical activity program, on elementary school children.

Take10! was implemented over a school year in all classes at one elementary school. Teachers were trained prior to starting *Take10!*, and daily support was provided. Half of the classes served as controls (C) in the fall, and the other classes conducted *Take10!* (T10). In the spring, C classes also participated in the *Take10!* program. All children with parental consent wore an RT3 accelerometer for one week in the fall semester, and one week in the spring semester. Teachers recorded times of *Take10!*, recess, and physical education every day during the week in which accelerometer data were obtained. At the end of the year, teachers also completed an evaluation survey.

Children's accelerometer data (expressed as counts/min) were analyzed by either a 2-way mixed analysis of variance (ANOVA) or a series of one-way repeated measures ANOVAs, depending on the research question. Class-level data were analyzed descriptively. The overall activity was not influenced by implementation of the *Take10!* program. Overall counts/min of the C classes were not significantly different from T10 classes, and overall counts/min of the C class did not significantly change after the beginning of the *Take10!* program. There was no compensatory effect of *Take10!* on children's recess activity; recess counts/min were not significantly different with implementation of *Take10!*. Comparisons of activity during *Take10!* with activity during recess and physical education were equivocal; during the fall, counts/min were highest in P.E., followed by recess, and were lowest during *Take10!*. In the spring, counts/min were highest in recess, followed by *Take10!*, and finally, physical education. Most teachers gave positive evaluations of *Take10!*; however, daily records indicated that *Take10!* often replaced recess, and was only implemented an average of 2.5 times per week.

In conclusion, despite extensive daily support, favorable teacher response, and positive teacher evaluations, it appears that implementation of *Take10!* is difficult for teachers, and that overall activity of children is unaffected. Future research should address the reasons for compliance/noncompliance of classroom teachers in implementing daily physical activity for school children.