

FENNELL, CURTIS G., PH.D., AUGUST 2016

HEALTH SCIENCES

THE EFFECTS OF A 16-WEEK EXERCISE PROGRAM AND CELL PHONE USE ON PHYSICAL ACTIVITY, SEDENTARY BEHAVIOR, AND HEALTH-RELATED OUTCOMES (208 pp.)

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American adults participate in low physical activity and high sedentary behavior. Specific Aim #1 assessed the effects of a 16-week worksite exercise program on physical activity, sedentary behavior, fitness-related variables, and health-related psychometric trait changes. Specific Aim #2 examined the relationship between cell phone use, physical activity, and sedentary behavior in adults 30 years of age and older. Employees participated in a 16-week exercise intervention (Intervention group:  $n = 47$ ,  $n = 38$  females) or served as a control (Control group:  $n = 15$ ,  $n = 11$  females), completed fitness testing, wore accelerometers, and completed questionnaires assessing their physical and sedentary behavior, psychometric traits, and cell phone use. Results revealed both groups participated in recommended physical activity with no differences between groups ( $p \geq 0.2$  for all measures). Sedentary behavior significantly decreased ( $p = 0.003$ ) in the Intervention group. Fitness-related variables and health behavior improved in both groups, but to a greater extent in the Intervention group. Cell phone use was not associated with objective physical activity ( $r \leq 0.1$ ,  $p \geq 0.3$  for both), subjective physical activity, ( $r \leq 0.1$ ,  $p \geq 0.3$  for all), or sedentary behavior ( $r = -0.11$ ,  $p = 0.4$ ). These results suggest participating in a worksite exercise program or participating in regular fitness assessments may foster positive health outcomes, but the worksite exercise program may

lead to greater improvements. Adults 30 years and older may prefer other more traditional forms of activity during their sedentary time than the use of a cell phone.