

**Title of Intervention and Website:** Improving physical activity in older adults

**Intervention Strategies:** Individual Education, Supportive Relationships

**Purpose of the Intervention:** To improve physical activity maintenance in middle-aged and older adults through phone and mail-mediated interventions

**Population:** Men/women aged 50-65 years in good health

**Setting:** Sunnyvale, California residents; home-based

**Partners:** None mentioned

**Intervention Description:**

- Individual Education: At baseline, participants attended a 30-40 minute individual session in which they received face-to-face instruction from a project staff member. They learned to monitor heart rate and were given written materials and activity logs to complete monthly. Participants received exercise prescriptions for physical activity based on baseline performance assessments. In year two, some participants also received monthly written, educational mailings that focused on information related to relapse-prevention and how to cope with illness, inclement weather, travel and boredom, while other received phone calls and mailings.
- Supportive Relationships: During year one, all participants received telephone counseling calls at a decreasing rate (e.g., weekly to biweekly to monthly) to monitor progress, answer questions and provide feedback. The content of the calls included active problem solving of identified barriers to physical activity, self monitoring of progress and discussion of motivating factors. Following year one, participants received either telephone and mail contact or mail-only contact. Those receiving telephone counseling in year two, received similarly formatted calls as in year one.

**Theory:** Social Cognitive Theory

**Resources Required:**

- Staff/Volunteers: counselors
- Training: training to conduct telephone counseling
- Technology: not mentioned
- Space: walking routes
- Budget: not mentioned
- Intervention: phone, printed educational pieces for mailing
- Evaluation: treadmill test to determine peak heart rate range, activity logs

**Evaluation:**

- Design: Randomized Clinical Trial
- Methods and Measures:
  - Monthly self-reported exercise adherence rates were the primary outcome.
  - All participants underwent symptom-limited treadmill exercise tests at baseline and every 6 months over the 2-year trial.

**Outcomes:**

- Short Term Impact: Individuals who were prescribed high intensity physical activity and received predominantly mail intervention had higher adherence rates during the maintenance year than individuals who received phone and mail. Both phone and predominantly mail intervention strategies were effective in promoting maintenance in low intensity group.
- Long Term Impact: not mentioned

**Maintenance:** At the beginning of year two, some participants received weekly booster phone calls for 4 weeks to help to transition to the mail-only strategy.

**Lessons Learned:** Participants in the predominantly mail-mediated program had significantly better exercise adherence rates than those in the telephone and mail program. Results suggest that after successful adoption of physical activity with the help of telephone counseling, less intensive interventions are successful for physical activity maintenance in older adults. There were administrative barriers to coordinating follow-up phone calls as they involved more staff/resources than mail-based intervention.

**Citation(s):**

Castro, C. M., A. C. King, et al. (2001). "Telephone versus mail interventions for maintenance of physical activity in older adults." *Health Psychol* 20(6): 438-44.