

Title of Intervention and Website: Mothers and Daughters Exercising Together

Intervention Strategies: Group Education, Individual Education, Supportive Relationships

Purpose of the Intervention: To increase physical activity and health-related fitness

Population: Mothers and daughters

Setting: Fitness facility at a local University; community-based; home-based

Partners: Fitness Center

Intervention Description: Pairs of mothers and daughters were assigned to 12-week community or home-based interventions.

- **Group Education:** All participants attended two classroom sessions which included topics such as appropriate amounts of physical activity, components of health-related fitness, calculating energy expenditure of various activities, goal setting and positive self talk. The home-based group received instructions on how to complete various exercises and stretches. Participants in the community-based group attended twice-weekly fitness activities (e.g., aerobic activity, strength building, stretching) at a fitness facility and once-weekly recreational activities/sports (e.g., rock climbing, skiing, hiking) around the metropolitan area.
- **Individual Education:** The home-based group received a detailed packet containing a calendar of recommended activities, pictures of stretches, calisthenics and strength building activities, and tips for overcoming barriers.
- **Supportive Relationships:** Mothers and daughters were encouraged to exercise together.

Theory: Social cognitive theory

Resources Required:

- **Staff/Volunteers:** qualified fitness instructors
- **Training:** staff were trained to collect data
- **Technology:** not mentioned
- **Space:** fitness and recreational activity spaces
- **Budget:** not mentioned
- **Intervention:** educational materials, fitness center, fitness logs, attendance forms
- **Evaluation:** logs, Fitnessgram questionnaire, space for 1-mile walk test and push-up/sit-up test, blood pressure cuff, scale

Evaluation:

- **Design:** Quasi-experimental
- **Methods and Measures:**
 - Attendance logs for community-based group activities
 - Fitness logs for home-based activities
 - Fitnessgram Physical Activity Questionnaire assessed the number of days per week of participation in aerobic, resistance training and flexibility exercises.
 - 1-mile Walk Test measured aerobic capacity
 - Push up and sit up tests measured muscle strength and endurance
 - Physiological variables included blood pressure, height and weight
 - Program adherence measured by either 1) Community-based: calculation of total number of classes attended and total possible classes or 2) Home-based: calculation of total number of recommended sessions complete and total number of recommended sessions.

Outcomes:

- **Short Term Impact:** not mentioned
- **Long Term Impact:** Participation in all types of physical activity increased significantly in mothers and daughters from both groups. There were no difference between changes in physical activity

participation for community and home-based groups. Data indicates that the community-based program may have a stronger impact on muscle strength and endurance than the home-based program.

Maintenance: Weekly prizes (e.g., tickets to athletic events, water bottles, hiking boots) were awarded to encourage attendance of community-based activities. Home-based participants were rewarded with similar prizes for compliance with recommended exercise sessions.

Lessons Learned: While the community and home-based groups had similar results, the community-based intervention may increase motivation. Each program was designed to gradually increase frequency, intensity and duration of exercise, which promotes self-efficacy.

Citation(s):

Ransdell, L. B., A. Taylor, et al. (2003). "Daughters and mothers exercising together: effects of home- and community-based programs." *Med Sci Sports Exerc* 35(2): 286-96.