

Title of Intervention: The Stanford Adolescent Heart Health Program

Website: <http://www.childtrends.org/Lifecourse/programs/StanfordAdolescentHeartHealthProgram.htm>

Intervention Strategies: Group Education, Campaigns and Promotions

Purpose of the Intervention: To enable adolescents to adopt heart healthy lifestyles

Population: Tenth grade students

Setting: Senior high schools in Northern California; school-based

Partners: School districts

Intervention Description:

- **Group Education:** The education program consisted of 20 classroom sessions. Each session lasted 50 minutes. The first 13 sessions included topics such as healthy lifestyle concepts, cardiovascular disease risk factors, healthy behaviors, goal setting and attainment, physical activity, nutrition, cigarette smoking, stress and self-regulatory skills. Education methods included discussion-oriented information session, slide presentations, videotaped vignettes in which peers modeling learning to use skills successfully and performance-based exercises. The first 13 sessions were followed by a two-session competitive game. The final five sessions were devoted to training students in problem solving and developing of an action plan for behavior change.
- **Campaigns and Promotions:** During the 2-session competitive knowledge game, winning teams members received \$5 gift certificates to a local music store.

Theory: Social Cognitive Theory, McGuire's Social Inoculation Theory

Resources Required:

- **Staff/Volunteers:** Classroom instructors
- **Training:** Instructors received weekly training sessions
- **Technology:** Audiovisual equipment
- **Space:** Classroom
- **Budget:** Not mentioned
- **Intervention:** Personal change notebook, "Choices" video vignettes, prizes, lesson plans
- **Evaluation:** Questionnaire, expired air carbon monoxide tests, carbon monoxide monitor, standard balance beam scale, skin fold calipers, automated blood pressure device

Evaluation:

- **Design:** Randomized controlled trial
- **Methods and Measures:**
 - Knowledge of cardiovascular disease risk concepts multiple choice test measures knowledge
 - Physical activity checklist measured behaviors
 - Nutrition/diet checklist measured behaviors
 - Cigarette smoking and alcohol and marijuana use frequency survey

Outcomes:

- **Short Term Impact:** Knowledge gains were significantly greater for intervention group on topics regarding nutrition/diet, physical activity and cigarette smoking. A significant amount of reported non-regular exercisers became regular exercises. For those in the intervention group, there were improvements in heart rates, BMI, triceps skinfold thickness and subscapular skin fold thickness. Students in the intervention group were more likely to report that they would choose heart healthy snack items than those in the control group. Those in the intervention group that were experimental smokers were more likely to quit smoking.
- **Long Term Impact:** Not measured

Maintenance: Not mentioned

Lessons Learned: The staff expressed doubts about their abilities to deliver the curriculum without training. In particular, they sought training to improve both their knowledge of cardiovascular disease risk concepts and their ability to use non-lecture educational strategies. Two specific roles are suggested for teacher training: (1) sophisticated instruction on cardiovascular risk factors and (2) instruction facilitating the development of innovative teaching skills.

Citation(s):

Killen, J. D., T. N. Robinson, et al. (1989). "The Stanford Adolescent Heart Health Program." *Health Educ Q* 16(2): 263-83.