



Physical Activity Interventions: What Works Best?

Teresa A. Keenan, Ph.D.
AAPOR 61st Annual Conference
May 19, 2006





Five-City Walking Pilot

- Designed as a follow-up to the Active for Life™ campaign
- To test the efficacy of different elements of a walking program
- Selected cities to be similar to Richmond, Virginia

Interventions

- Richmond, VA: overall control
- Raleigh, NC: media only
- Columbia, SC: media + step-counters
- Little Rock, AR: media + peer support
- Montgomery, AL: media + step-counters + peer support



Two components

- Population-level telephone interviews
 - Four separate waves
 - Combination of cross-sectional and panel
- Individual-level pen and paper surveys



Population-Level Interviews

- Wave One: June 2004
- Wave Two: July—August 2004
- Wave Three: September—October 2004
- Wave Four: April—May 2005

Pen and Paper Surveys

- Baseline surveys were distributed by staff at program launches
- Follow-up surveys were mailed approximately one week after the conclusion of the 10-week programs
- Baseline n=1,154; Follow-up n=480
- Response rate = 42 percent



Survey Themes

- Awareness of the walking campaign
- Attitudes toward exercise
- Types of physical activity
- Knowledge and use of step-counters
- Impact of program on health
- Impact of program on behavior
- Demographics



Behavioral Changes

- Percentage of respondents in Columbia who said they walked 5 days a week increased significantly (14% to 29%).
- Percentage of respondents in Montgomery who said they walked 4 days a week increased significantly (10% to 22%).



Behavioral Changes

- Percentage of respondents who said they don't exercise dropped significantly in Montgomery (13% to 2%) and Little Rock (17% to 2%).
- This percentage also dropped in Columbia, but not significantly.

Behavioral Changes

- In terms of the number of minutes spent in physical activity, respondents in Montgomery showed the highest gains:
 - 31-45 minutes increased from 25% to 38%
 - 46-60 minutes increased from 14% to 25%



Behavioral Changes

- In Columbia, the percentage of respondents citing 31-45 minutes, 46-60 minutes, and 60+ minutes all increased from baseline to follow-up, but not significantly.
- The same pattern was found in Little Rock.



Levels of Physical Activity

- Respondents in Columbia, Montgomery, and Little Rock all appear to be more active after the walking program than they were before it.
 - All cities saw drops in the percentages saying they don't currently engage in physical activity.
 - All cities saw increases in the percentages saying they have been active a year or more.

Walking

- The percentage of respondents who say they walk for 30 minutes at a time increased significantly in all three cities:
 - Columbia: 66% to 82%
 - Montgomery: 69% to 86%
 - Little Rock: 66% to 80%

Muscle Strength

- Increases were also noted in the percentage of respondents who say they do things to increase their muscle strength:
 - Columbia: 47% to 54%
 - Montgomery: 37% to 45%
 - Little Rock: 40% to 49%



What does this tell us?

- In terms of the key question guiding this research, these results suggest that all three of the interventions have motivated participants to become more active.



What do we know about step-counters?

- In Columbia and Montgomery—the two cities in which participants received step-counters—high percentages said they found the device to be *extremely* or *very helpful* in getting them started with walking, keeping them motivated, and helping them keep track of their progress.
- But, over half in both cities reported no longer using it.

What do we know about step-counters?

- In both Columbia and Montgomery, the step-counter seemed to be the “hook” that got participants started, but even though over half said they stopped using it, they *still kept walking...*

What do we know about peer support?

- In Little Rock, where the development of walking groups was the intervention, the percentage of respondents who said they belonged to a group increased significantly from baseline to follow-up.
 - Four in ten found it *extremely* or *very motivating* to walk with others, while another quarter said it was *somewhat motivating*.



What about the combination?

- Given the original design of the project, we expected participants in Montgomery to show the greatest increase in walking since they received two motivators.



What about the combination?

- Only one-quarter found walking in a group to be motivating.
- But, those who did (and who used a step-counter) were the most likely to keep walking and to walk for a longer time when they did so.

Conclusions

- Results from this pilot suggest it is the combination of the step-counter and walking groups that is most motivating.

Conclusions

- Other useful elements include:
 - 10-week duration of the program
 - Educational kick-off
 - Walk leaders or walking buddies
 - Tracking of steps or minutes
 - Weekly “touch” point
 - Celebration of achievement



Questions? Comments?