



Evaluation of the AARP Red Hat Society Step & Stride With Ruby: A Year-Long Walking Program

Executive Summary

July 2008

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Introduction

In 2007, AARP developed a year-long walking program, *Step & Stride with Ruby* (SSWR), supported by the AARP Foundation Women's Leadership Circle (WLC) and in collaboration with the Red Hat Society (RHS) to test the connection between the social aspects of group exercise (i.e., walking) and the likelihood that participants will sustain this regular exercise over time. The program continued a major AARP focus for several years to increase the level of physical activity among the age 50 and older population.

AARP has found that 74 percent of its members who exercise prefer walking over any other type of physical activity. Walking has the particular benefits of not only being an activity that does not require expensive equipment or venues, but also it can help reduce the risk of diseases like heart attack, stroke, diabetes, and hip fracture. Walking also helps in weight management, blood pressure control, and cholesterol reduction.

The interest in the development and testing of the year-long walking program, *Step & Stride with Ruby*, by the AARP Foundation Women's Leadership Circle was because of the research that identified women's desire to maintain healthier lifestyles but also their concerns about how to do so, given the other demands on their time. For example, research conducted by Roper for the AARP Foundation WLC highlights the following:

- While women 45 and older describe their health in positive terms, less than half feel that they are doing all they can to keep themselves healthy.
- One in three women in this age group has a health condition that affects what they are able to do in their daily lives.
- Almost one-fifth of women said they do not get at least 30 minutes of exercise a week (with African American, Hispanic, and Asian American women all more likely than the general population to exercise less than 30 minutes a week).
- A majority of women thought they would be more likely to exercise if they had a friend to exercise with.

Previous AARP research has found a connection exists between the social aspects of group exercise and the likelihood those participants will continue their exercise program over the longer term. Collaborating with the Red Hat Society to offer the *Step & Stride with Ruby* program provided a natural opportunity to further test the relationship of social aspects of physical activity over the long term.

Study Design

Through an online application process, RHS Chapters were invited to apply to be selected for the *Step & Stride with Ruby* walking program. The goal was to have enough Chapters

to apply to have at least 500 program participants. Surprisingly, a total of 816 Red Hat Society Chapters applied to be in the program. Because of the large number of applications, and to be fair in the selection process, socio-demographic and Chapter characteristics were used to select a stratified random sample of 21 Study Chapters for a total of 556 participants study participants and eight matching Control Chapters with a total of 83 participants.

Study and Control Chapters received the *Step & Stride with Ruby* participant packets that included the following:

- step counter
- participant guide
- 12-months of log cards
- Ruby's attire card

Each month, Study Chapter participants who participated in a scavenger hunt were eligible to be a part of a monthly drawing for a \$50.00 prize. The program rules required Study Chapter Countesses to turn in the participants' step counts online. When a Study Chapter's number of steps was entered, the website automatically updated the ranking of each Study Chapter as shown in Exhibit 3. This feature was designed to foster competition between Study Chapters; and thus, motivate participants to increase their number of steps. Each participant in Study Chapters with the three highest numbers of steps on average won prizes at the end of year worth \$500.00, \$250.00, and \$100.00.

In addition, only the Study Chapter Countesses received an orientation and a Fit Kit. Both the orientation and Fit Kit provided tools to help Countesses recruit, and implement the program as well as tips for keeping the participants motivated.

Both Study and Control Chapter Countesses administered a survey in January 2007 to Chapter members who wanted to participate in the program. A total of 529 Chapter members completed a baseline survey, signed waivers, and granted permission to be contacted at a later date. A follow-up survey was mailed to all participants after the program ended in February 2008. A total of 424 of the 529 participants returned the follow-up survey, for a response rate of 80%.

KEY FINDINGS

While the sampling process was designed to select Chapters with similar characteristics, the baseline survey included a set of items that enabled the socio-demographic characteristics of respondents for the Study Chapters and Control Chapters to be compared to determine if the two groups were indeed similar. No significant differences were found for the two groups. Thus, any differences found in the follow-up survey at the end of the program cannot be attributed to socio-demographic differences.

A large factor in the decision to collaborate with the Red Hat Society is that the organization is intended to be a social network of women from all walks of life dedicated

to showing the world that there is fun after 50. Thus, it was assumed that the Study and Control Chapter participants would be very sociable. To examine this assumption, the baseline survey included questions that asked the respondents to rate their agreement or disagreement with a set of questions related to sociability, including friendship, camaraderie, cooperation, and how the Chapter implemented its activities. There were no significant differences in how the Study and Control Chapters rated their Chapter and their relationships with one another. Therefore, differences at the end of the program cannot be attributed to differences in the social characteristics of the two groups.

Because participant attrition is often a problem that programs designed to increase physical activity levels often face, respondents were asked if they had participated for the full year; and if not, for how many months they were involved, and why they had stopped participating.

- Study Chapter participants (87%) were much more likely to have participated for the full year than those in Control Chapters (49%).
- Of those study chapters and control chapters who participated less than a full year, Study Chapter respondents (35%) were three times as likely to have participated at least nine months or more than those in Control Chapters (10%).
- Health was the reason that a quarter (24%) of both the Study and Control Chapter respondents who did not participate the full year said they did not participate for the full year.

How Did the Study and Control Chapter Respondents' Level of Physical Activity Compare?

For the baseline survey, the Study and Control Chapters respondents' reported similar exercise levels:

- 84 % Described their level of exercise as moderate--exercise that brings about slight increases in heart rate and breathing such as in doing brisk walking or light yard work.
- 12% Described their level of exercise as vigorous—exercise that brings about large increases in heart rate and breathing--such as running or aerobics.

There were significant differences before and after the program in the percent of participants who reported accumulating at least **30** minutes of moderate intensity physical activity on **5** or more days a week or at least **20** minutes of vigorous activity on **3** or more days a week:

- The Study Chapter respondents increased from 59% to 75%
- The Control Chapter respondents decreased from 75% to 63%

There were also significant differences before and after the program in the percent of participants who reported accumulating at least **30** minutes of moderate intensity physical activity or at least **20** minutes of vigorous activity at least **1** day a week:

- The Study Chapter respondents increased from 61% to 76%
- The Control Chapter respondents increased from 57% to 68%

The average number of days that participants said they are physically active was similar for the Study and Control Chapters (3.6 days) which remained the same in both the baseline and follow-up surveys.

The average number of days in a typical week that participants in the study chapter ever walked for 10 minutes or more:

- For the Study Chapter respondents, the average number of days increased from 4.4 to 5.1
- For the Control Chapter respondents, the average number of days decreased from 5.2 to 4.8.

The increase in the percentage of respondents who reported they were consistently active over the last six months was larger for the Study Chapters than the Control Chapters:

- Study Chapters increased from 65% to 93%
- Control Chapters increased 76% to 88 for participants.

Were Respondents Exposed to Program Features and How Helpful Were They?

The Red Hat branded clothing items is a hallmark feature of the RHS society. One of the main program features (interventions) was Ruby, the RHS paper doll included in the RHS branded participant walking packet. The goal was for the respondents to obtain exercise clothing gear “cut outs” to result in a fully dressed Ruby paper doll wearing the RHS branded walking gear. Each month in return for turning in their number of steps for the month, Chapter walk leaders gave their participants an item of Ruby clothing.

A significantly larger share of the Study Chapter participants (73%) indicated they had collected Ruby attire, and thus were exposed to this feature than participants in Control Chapters (42%). Most often, the reason those in the Study Chapter did not receive Ruby attire was they were not present at a chapter meeting to collect them, while for the Control Chapters, it was their Chapter that did not participate in this feature of the program.

When asked to rate the features of the *Step and Stride with Ruby* year-long program on a five-point scale where “1” was *Not at all helpful* and “5” was *Extremely helpful*, nearly half or more rated five of the features *Extremely* or *Very helpful*: Chapter support, step

equivalent chart, SSWR log cards and Ruby attire, Chapter Countess, and Chapter walk leader.

At least half or more of the respondents indicated they had experienced a positive change in their energy (53%) and close to a third or more noted positive changes in endurance (40%), weight (38%) and mood (31%).

CONCLUSIONS AND DISCUSSION

This evaluation research was designed to examine the relationship between the social aspects of a walking program and the likelihood that participants would continue to be physically active over the long term. Thus, assuming that the RHS Chapters would be highly sociable groups, AARP collaborated with the Red Hat Society to develop and offer the *Step and Stride with Ruby* year-long walking program with the support of the AARP Foundation Women's Leadership Circle. A set of questions to examine the characteristics of Chapter member relationships and how the Chapters functioned indicated that they are very sociable groups.

The finding of a retention rate of 87% for the Study Chapter and 49% for the Control Chapter respondents supports the notion that a program with intact social groups can increase the likelihood of individuals remaining in a program over an extended period of time. This is a contrast to the less than a third (29%) on average of the individuals who have participated for the full length of the AARP 10 Week Walking program. Moreover, that the Study Chapters had a much higher retention rate suggests that there are additional features that only the Study Chapters were exposed to that are related to higher retention rates.

The finding that there was a greater increase in the amount of time spent exercising in a week for the Study Chapters than for Control Chapters suggests that the additional features the Study Chapters were exposed to have added value for increasing physical activity among cohesive social groups.

An interesting finding is that while for the Study Chapters that had the competition feature, just over half of the respondents said it was personally important for their Chapter to win the competition (52%) nearly 9 in 10 said that they did not want to let their Chapter down (85%). This suggests that it may be that if one's action impacts others in a cohesive group, because of the social capital related to such groups, individuals commit themselves to doing what is for the good of the group. That this may be a factor is further supported by the fact that 4 in 10 of the Study Chapter respondents (40%) said they were no longer using the step counter because they did not need it any more. These findings may have important implications for the characteristics of groups selected for this type of year-long social program.

The finding that a third or more of the respondents reported positive changes in energy, endurance, weight, and mood supports earlier findings that participants experience a number of different benefits in participating in the program.

The findings that virtually all of the respondents said they are likely to continue walking for exercise suggests that the program was successful in incorporating physical activity as a way of life for the respondents.

In conclusion, the results for this evaluation research indicate that the *Step & Stride with Ruby* program was successful in keeping a large share of the participants active over the span of a year in order to increase their physical activity and associated physical and emotional benefits.