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RECRUITING AND RETAINING AN ETHNICALLY DIVERSE SAMPLE OF OLDER ADULTS IN A LONGITUDINAL INTERVENTION STUDY

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Abstract

This paper describes strategies developed to recruit and retain an ethnically diverse sample in a longitudinal intervention of 246 participants in the SeniorWISE study. The ethnic and socioeconomic differences of these participants necessitated the use of different methods of effectively communicating with this population. Recruitment benefited from the use of focus groups, media attention, and personal appearances in the community. Educational strategies included modification of language and examples. Testing sessions were called interviews, and team members were available to answer questions and to read the instruments to participants, when desired. Participants were sent birthday cards and a monthly newsletter. The study is 90% completed.

Providing educational interventions to individuals of widely divergent backgrounds in research settings can prove challenging to researchers and their teams. As the population of the United States ages and as the need for research populations become more diverse, knowledge of how to impart educational information gains importance. Previous researchers have acknowledged the need for improving recruitment and retention of older adults in research studies (Arean & Gallagher-Thompson, 1996). Moreover, research with different ethnic groups requires an understanding of their life experiences as they relate to research topics and to research itself (Lichtenberg, Brown, Jackson, & Washington, 2004; Shellman, 2004). Effective interventions must take into account these different life experiences. Longitudinal studies, in particular, require that recruitment techniques not only attract participants but also hold their interest—so that attrition will be low. In such studies, success can be determined not only by generating data and disseminating findings in a timely and effective manner, but also by attracting and keeping a group of subjects. Such success depends on the willingness of the trainer and the team to become flexible, and to adapt the message to the target population. In this paper, we describe the strategies used to successfully recruit, retain, and instruct a diverse group of community elders in a longitudinal intervention study.

PROJECT DESCRIPTION

SeniorWISE, a research project based at the University of Texas at Austin, School of Nursing, was a study designed to enhance memory function in community-dwelling adults over the age of 65. Participants were randomly assigned to two conditions: an intervention designed to improve every day memory, or a comparison condition that discussed health information.

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Participants in both conditions received instruction in successful aging techniques in a series of eight classes. These classes consisted of 90-minute lectures that included questions, discussions, and a brief questioning on the subject matter. Three months after these classes, a series of four booster sessions was held to refresh participants' memories and reinforce learning from the curriculum. The study, funded by the National Institute on Aging, spans a 5-year period, although each participant's obligation to the study is for 26 months. During this time, the participant not only received the informational classes, but was also tested five times for executive function, functional ability, and memory performance, and was interviewed in subjective assessments of depression, memory self-efficacy, and health. Participants were paid a total of \$180 over the course of the study. This study took place in an urban community in central Texas.

In this study, differences in ethnicity, education, socioeconomic factors, and life styles existed among the 246 participants. Different ethnic groups respond differently to participation in research projects (Ard, Carter-Edwards, & Svelkey, 2003). In addition to ethnicity, our participants displayed differences in other important factors such as attitudes toward, and interpretations of, our topics of discussion. Minority participation in research is notoriously difficult to obtain (Banks-Wallace, Enyart, & Johnson, 2004; Murthy, Krumholz, & Gross, 2004). Our intention was to duplicate local demographics as closely as possible, which included 52.9% White, 30.5% Hispanic, and 9.8% Black. It was, therefore, important to us to explore different methods of recruiting minorities and to retain the minorities we had enrolled. In addition, it was important to offer everyone information to assist them with independent living in order to hold their interest throughout the study.

Experts in the recruitment of participants into minority research have found that successful recruitment and retention of older minorities into health research have to go beyond traditional methods in order to overcome barriers related to fear and mistrust of science (McDougall, Holston, & Wilke, 2001; Miranda, 1996). Thus, we adapted our recruitment and instruction to accommodate these needs.

This paper is an account of the different methods we used to successfully recruit, retain, and instruct this diverse group of participants. Specifically, we describe these different groups we instructed in a course of successful aging strategies.

RECRUITMENT

The strategies we used to recruit our participants all speak to the issue of credibility, both of the project and of the members of the team who dealt with participants. We realized that the success of the project dictated different strategies for recruitment of members of these several ethnic and economic groups.

FOCUS GROUPS

First, to learn how to hold the interest of our participants, we held focus groups to determine the best method of presentation. We gave three brief lectures to three different groups using overhead projections, flip charts, and PowerPoint (Austin-Wells, Zimmerman & McDougall, 2003). Our participants preferred PowerPoint by a large margin. They explained that it was easier to see, it was more like television, which they were familiar with, and if hearing was a problem, they could more easily discern the meaning if they could see it as well as hear it.

PERSONAL APPEARANCES

Members of our team made appearances at several organizations to discuss the project, answer any questions about it, and invite participation. We attended a health fair at a predominately African American college and hired a liaison at that time to help recruit African Americans.

MEDIA

The principal investigator of SeniorWISE presented a segment on memory on The Today Show. This person was subsequently interviewed by local and regional print and broadcast media, and by an African American radio station. The resulting publicity possibly added to the credibility of the project, and may have eased some fears of scientific research.

The interest produced by media coverage resulted in a large group of inquiries on the special telephone line we had installed to receive such calls. From the calls we received, we realized that most of the respondents were caucasians. Therefore, we needed to go to extra lengths to recruit Hispanic and African Americans, as well.

SENIOR CENTERS

We visited a number of senior centers and made presentations to members, also inviting participation. One of the senior centers has a predominately African American membership, and another attracts primarily Hispanics. We enlisted the aid of the director of the Hispanic center, who was instrumental in recruiting members of that center. There was initially some mistrust of our team, and the director of the center was responsible for vouching for us and our project. She helped to identify the people who would benefit from participation. She stressed to us the value to this population of the monetary incentive we were offering participants, and she asked us to clarify to each participant just what monies would be paid to them at each stage of the investigation. She also made it clear that trust was an important issue with this population, so several members of the team visited the center frequently, joined in several celebrations there, and played Spanish Bingo with the members. Gradually, the members welcomed us and responded well to our project.

Initially, we had few responses from African Americans. We realized that our African American liaison could help establish the credibility of our project, and that once a few people had good experiences with us, more would follow. This proved to be the case. The first classes we scheduled at the predominantly African American senior center were made up of people who were not members of that center, but found it the most convenient location. As these classes became a part of the center, center members expressed more interest, and we began to receive inquiries about our project.

As we recruited for our study, we realized that we could be more effective if we recruited immediately before scheduling classes. Interest was high at the point, and participants could have input as to the times classes were held. Many of our participants have very active lives, and it was necessary to consider their other activities when scheduling classes. We also scheduled classes and testing at times that were most convenient for our participants.

SETTING THE CONTEXT FOR TESTING

This longitudinal study involved five data collection periods, each lasting approximately three hours. The first of these testing sessions took place before participants were assigned to classes, and the last was held 26 months after the clients were enrolled. We began to make modifications after the first testing session, when we realized that “testing” incurred anxiety among participants—particularly among the less educated ones who were less accustomed to a test

setting. We first explained that these were like tests ordered by physicians; pass/fail was not a consideration. We had limited success with this strategy; however, we found that anxiety decreased when we referred to these sessions as “interviews” rather than “tests.”

A number of strategies were used to diffuse the anxiety and distrust that many older adults, particularly less educated adults, may feel in a testing situation. In addition to participating in events at the senior centers, the testers spent a considerable amount of time establishing rapport with participants, chatting with them about their lives in the time frame preceding the testing. Research assistants sat with participants as they completed the written self-report portions of the battery.

The testing sessions were quite lengthy. We offered to hold two separate sessions to reduce fatigue. We found that it reduced client anxiety for the research assistants to offer help in interpreting the questions, and also to offer to read the questions to participants. Many participants did not read well, did not read English well, or had vision problems. Our research assistants often said, “some people prefer to do this part themselves and others prefer for us to read it. Which do you prefer?” This reduced embarrassment on the part of the participant. It was also explained that some questions were confusing, and the administrator was there to help.

In the performance tests, adaptations were also necessary. One section of the Direct Assessment of Functional Status (DAFS) asks participants to demonstrate the writing of a check. Many subjects do not handle their own finances, or do not have checking accounts. When this was the case, the tester asked the participant to examine the wording of the check and try to assess what was needed, such as “date,” “amount,” etc. There were no instances of participants refusing to complete this section of the assessment. In addition, many participants no longer drive—and some never did. The performance-based functional ability measure also requires participants to identify a group of road signs. In these cases, the instructor asked them to imagine riding in a car as a passenger, and remember seeing the signs along the road. Most of these participants correctly identified the more common signs, such as “stop” or “RR crossing.” Sometimes the signs denoting “no left turn” or “do not enter” proved confusing. An interesting note here is that the tester would also ask, when the “do not enter” sign was identified, what steps the participant would take if he/she suddenly saw this sign while they were driving. Most would solve the problem by turning around, or turning down a different street. However, there were a number of participants who simply would pull off the road and wait until some help, such as the police, arrived.

DEVELOPING HEALTH TOPICS

As we prepared our presentations for the study, relevancy gained prominence in our considerations. Our challenge was to structure the instruction to appropriately address the understanding and concerns of all participants, and to hold their interest throughout the entire lecture series. In addition to the lectures, participants needed to remain involved with the study throughout the entire 26 months of their commitment.

While the content of the intervention classes was determined by the purpose of the project—to improve everyday memory functioning—the content of the comparison group was more flexible. In an effort to find topics that would meet the needs and expectations of our audience, we developed a list of topics and then consulted colleagues who had successfully delivered lectures to our target population. On their advice, we dropped some topics and added others.

We eventually developed 18 topics to be used in 12 lectures. Participants voted on their choices from the 18. Our 18 topics were alternative medicine, exercise, spirituality and health, weight management, getting the most from your doctor visit, caring for the caretaker, healing foods,

drug interactions, osteoporosis, maintaining relationships, health myths, consumer fraud, nutrition, leisure activities, writing family stories, health monitoring tests for home use, buying drugs in foreign countries, and useful websites for seniors. The latter two topics were never chosen by participants to be included in lectures. The topics chosen most often were exercise, weight management, and spirituality and health.

When the first class met, all the topics were introduced, and participants were asked to vote on their three top choices. Subsequent lectures followed these guidelines. The topic of the first lecture, chosen by the instructor, was alternative medicine. This lecture was chosen to lead off the classes because it was expected to stimulate discussions that would reveal cultural differences in medical practices of our different ethnic groups. The literature suggests that Mexican Americans interweave alternative and standard medical practices (Gomez-Beloz & Chavez, 2001; Hunt, Arar, & Akana, 2000; Padilla, Gomez, Biggerstaff, & Mehler, 2001; Palinkas & Kabongo, 2000), and we expected to learn of some of them. In this locality, medicinal herbs and other alternative medicine forms are readily available in stores frequented by Hispanics, and this topic was expected to help form the pattern of participant interaction. This discussion did not materialize, however, and most of the discussions of alternative treatments centered around chiropractic—which is also popular among our participants. Our participants may not use as many alternative medicines, or they may be reluctant to discuss this use. At this time, participants were also given a binder to hold the handouts which accompanied each lecture. These handouts were extensive and were complementary to the lecture topic.

The topic of exercise proved to be surprisingly popular. The team had assumed that elders hear so much about the benefits of exercise that the topic would be exhausted. However, our seniors were very interested in exercise. All senior centers and most retirement homes have exercise rooms, and several have walking programs. Many of our participants exercise regularly. The handouts accompanying this lecture included an assessment form to test readiness for exercise and also logs to record daily exercise. Many requested extra forms to give to friends and family members.

The topic of weight management addressed maintaining an appropriate weight with information about weight loss, weight gain, and appropriate means of obtaining necessary healthy food. As people age and their life circumstances change, their food intake can change radically. Single elders seldom cook the same amounts or kinds of foods they may have previously. Mobility also influences food choices. Among our clients of higher incomes, discussions after lecture often centered around popular weight loss diets. Among our lower-income clients, the restricting circumstances, such as costs, were more often discussed. Several of our participants who lived in retirement communities gathered to share meals, or shared food with neighbors, enabling them to more fully duplicate previous circumstances.

One popular topic during this lecture was about appropriate snacks. Older people are often more comfortable when they eat less at one time, but eat more frequently. So a snack serves the purpose of a small meal. This also offers an additional opportunity to obtain fruits and vegetables.

Classroom discussions during the lecture on spirituality and health revealed pronounced cultural differences between our participants. The lecture is based on research findings regarding the role of spirituality in health, and the connection between the two. To many of our participants, spirituality meant a formal religious belief; to others, a religious practice was not necessary for them to consider themselves to be a spiritual person. Hispanic participants reported that religious practices were formal, and their church was the basis of instruction on how to live their lives.

African Americans reported that the church formed both a spiritual and a social basis to their lives. They were eager to talk about the role of religion in their lives. We found that Caucasians were more reluctant to initiate such discussions. McAuley, Pecchioni, & Grant (2000) did an extensive investigation of the health belief systems of rural African Americans and Whites in a rural-dwelling community. They identified a number of key religious beliefs that suggested the primacy of one's relationship with God, including the interweaving of religion and health, both as a reward from God and as a punishment for not following God's dictates. These beliefs were echoed by our African American participants, as well. The question "Do you consider yourself to be a spiritual person?" was posed in the demographic questionnaire answered by our participants during intake. Responses to this question demonstrate some cultural differences in our subjects. There were 29 Caucasians who did not consider themselves to be spiritual, while only one Hispanic was placed in this category. There were no African Americans who considered themselves nonspiritual. This illustrates the prominence of spirituality in the lives of Hispanics and African Americans.

AUDIENCE NEEDS AND EXPECTATIONS

Our lectures were carefully chosen and developed, but sometimes the differences in the lives of our audience provided different insights on the subject. For example, the lecture on caring for the caregiver is based on the assumption that the target audience represents the person with the responsibility of caring for another. It became clear during this presentation, however, that the concerns of those who were being cared for needed to be addressed. Some of our participants, although not ill, still depended on relatives to fill some of their needs, such as transportation. Some had relatives who handled their finances or did the primary meal preparation. Some lived with relatives. For adults who have lived independent lives, this can be a depressing aspect.

One cultural difference that was revealed during this lecture was that of family responsibility for caregiving. The lecture discusses the need for caregivers to have personal time and distractions from the burden of caring for sick relatives. Many of our Hispanic participants often felt caregiving was a natural part of the life journey and felt little resentment about it. The major source of discontent in this culture was the unfair division of labor among family members.

The lecture on health myths provided a lively reminiscence session, as our lower-income participants recalled various health remedies practiced when they were children. These practices derived primarily from the lack of formal medical care during their younger days. These discussions seemed to enhance a sense of community between these participants, an unexpected benefit to our study, as socialization is important to retention of participants.

Audience needs also included the need to be addressed appropriately. It was important to find a way to deliver the lectures and answer the questions in language that could be understood by all and was insulting to no one. We had many participants with little or no education, and some participants who had obtained advanced degrees. The instructor made a special effort to express admiration for those who had not had the advantage of education, but had led successful and fulfilling lives. She complimented them on their skill in interacting with people of more educational advantages, and recognized that the rigor of their lives had served to strengthen them. She was joined in this by other class members, and those who had felt uncomfortable often lost their reluctance to discuss their lives. This was demonstrated by the following example: At the beginning of one class, three women who could not read sat together in a corner. By the third class, they were mingling with other participants, and were conversing with their neighbors.

Some of the choices made by the lecturer to address these needs were sentence structure and length, word choices, detail, and the use of humor. These all combined to help bridge the gap among participants. Examples given during lectures were carefully chosen to use situations familiar to all participants.

The lecturer sought to build rapport with the participants, and rapport among the participants was an unexpected bonus. Every group of participants with the exception of one decided to exchange e-mail addresses and phone numbers. One group had several social gatherings during and after the end of classes. There were several instances of participants who had not known each other who became close friends.

OTHER RETENTION STRATEGIES

Several of our retention efforts have been surprisingly successful. We send birthday cards to all participants, and we also publish and distribute a monthly newsletter. Our birthday cards have been very well-received. We have even been sent thank-you notes for the cards. We have been told by participants that they save the newsletters and file them away for future reference. There is a study update in each newsletter which mentions the next group to be taught or tested, and approximate times for subsequent meetings. We also mention each group that completes the final testing and thank them for their participation.

The newsletter also contains a column aimed at interests of our participants. We have addressed the importance of grandparenting, of role modeling for younger members of the family, of passing on family traditions, and other matters of interest to this age group.

CONCLUSIONS

The study began with 287 participants. As of this date, when all participants have been tested four times over approximately 1-1/2 years and have approximately a year left in the study, we have 246 participants. The majority of dropouts occurred during the first 3 months of the study. At testing 2, which occurred after the first classes, our enrollment was 263. Six participants have died, and the rest have dropped out for various reasons, including nursing home placement and changes in residences. Our estimated attrition rate was 30%, and our current enrollment of 246 illustrates that we have lost less than half of our anticipated amount.

Our participants were given questionnaires to answer anonymously at the fourth class meeting. Also, an exit interview was conducted. Participants were asked if they knew what to expect next in the study, if they felt their questions had been properly addressed, if they felt respected by the team members, and if they would recommend the classes to others. The exit interview also asked for suggestions on improving the study. Replies to these questions were overwhelmingly positive. The complaint mentioned most frequently was that participants didn't know what to expect next. After analyzing the replies, the instructor emphasized at the last class meeting the next step for them in the study. One of the staff members also visited the last class to schedule testing at that time, since that was the next part of the study. Many participants asked to be included in any subsequent studies, and all are interested in the outcome of the study. Many have expressed regret at the completion of the study. Our conclusions are that our recruitment and retention efforts were successful. We base our assessment of this both on the retention rate and the positive responses from our participants.

Our experience with this longitudinal study has been positive, and we believe that it has been positive for our participants as well. The lessons we have learned during this study can be summarized as follows:

- The lecturer needs to be flexible in tailoring the presentations to the audience.

- Be aware of the different backgrounds of the people served when planning topics for lectures.
- Language used should be suited to the participants.
- Examples used should reflect situations with which participants are familiar.
- A friendly attitude on the part of the lecturer is necessary, but a professional distance must be maintained.
- Show respect to participants; this includes speaking in a voice they can hear, listening attentively, and answering all questions when asked. Some participants will have experienced a lack of respect in the past and will be particularly sensitive to this aspect.

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References

- Ard JD, Carter-Edwards L, Svetkey LP. A new model for developing and executing culturally appropriate behavior modification clinical trials for African Americans. *Ethnicity and Disease* 2003;1392:279–285. [PubMed: 12785426]
- Arean PA, Gallagher-Thompson D. Issues and recommendations for the recruitment and retention of older ethnic minority adults into clinical research. *Journal of Consulting and Clinical Psychology* 1996;64:875–880. [PubMed: 8916614]
- Austin-Wells V, Zimmerman T, McDougall GJ. An optimal delivery format for presentations targeting older adults. *Educational Gerontology* 2003;29:493–501. [PubMed: 18841248]
- Banks-Wallace J, Enyart J, Johnson C. Recruitment and entrance of participants into a physical activity intervention for hypertensive African American women. *Advanced Nursing Science* 2004;72(2):102–116.
- Gomez-Beloz A, Chavez N. The bontanica as a culturally appropriate health care option for Latinos. *Journal of Alternative and Complementary Medicine* 2001;7(5):537–546.
- Hunt LM, Arar NH, Akana LL. Herb, prayer, and insulin. Use of medical and alternative treatments by a group of Mexican American diabetes patients. *Journal of Family Practice* 2000;49(3):216–223. [PubMed: 10735480]
- Lichtenberg PA, Brown DR, Jackson JS, Washington O. Normative health research experiences among African American elders. *Journal of Aging and Health* 2004;16(5 Suppl):78S–92S. [PubMed: 15448288]
- McAuley WJ, Pecchioni L, Grant JA. Personal accounts of the role of God in health and illness among older rural African American and White residents. *Journal of Cross-Cultural Gerontology* 2000;15:13–35. [PubMed: 14618008]
- McDougall GJ, Holston EC, Wilke P. Recruiting African Americans into research on cognitive aging. *Ethnicity and Disease* 2001;11:124–133. [PubMed: 11289233]
- Miranda J. Introduction to the special section on recruiting and retaining minorities in psychotherapy research. *Journal of Consulting Clinical Psychology* 1996;64(5):848–850.
- Murthy VH, Krmholz HM, Gross CP. Participation in cancer clinical trials: Race-, sex-, and age-based disparities. *Journal of the American Medical Association* 2004;291(22):2720–2726. [PubMed: 15187053]
- Padilla R, Gomez V, Biggerstaff SL, Mehler PS. Use of curanderismo in a public health care system. *Archives of Internal Medicine* 2001;161(10):1136–1340.
- Palinkas LA, Kabongo ML. The use of complementary and alternative medicine by primary care patients. A SURF8NET study. *Journal of Family Practice* 2000;49(12):1121–1130. [PubMed: 11132062]
- Shellman J. Nobody ever asked me before: Understanding life experiences of African American elders. *Journal of Transcultural Nursing* 2004;15(4):308–316. [PubMed: 15359064]