Recruitment and retention of older adults:
Lessons shared from conducting an intervention study

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Introduction

Many social work researchers are hesitant to conduct intervention studies. A colleague of mine remarked, "No way would I conduct an intervention study. It's like triple jeopardy: You need to bank on finding willing subjects, need to bank on them showing up, then you need to bank on changing them? No thanks!" In addition to these obstacles, intervention studies are also costly and time consuming.

Despite some of the challenges associated with intervention research, I chose to do an intervention study for my dissertation, "The impact of a yoga intervention on the mental well-being and physical functioning in older adults living in the community." The study was a classical experimental design that entailed designing a yoga intervention, recruiting a community sample from a low-income senior housing building, and carrying out the study using random assignment of subjects to either a yoga intervention group or a neutral socialization group that were shown movies. Measures for this study included depression, morale, hope, isolation, balance, flexibility, and lower body strength. In an effort to include as many subjects as possible, the study did not use inclusion criterion of a mental health diagnosis or cutoff score. Approval for this study was granted by Fordham University's Institutional Review Board. Informed consent was provided for each subject at the time of enrollment. The informed consent and study

procedures were carefully explained to each subject in a one-on-one setting. If the person agreed to participate in the study, she or he then signed an informed consent form. Because the residents of the senior housing building are presumed to be independent and capable of making their own decisions, it was unnecessary to involve any other parties.

Researchers have been urged to share their struggles and successes regarding recruitment with other researchers (Harris & Dyson, 2001). Thus, the purpose of this article is to share some of my experiences and insights regarding recruitment and retention in order to help doctoral students decide if an experimental study may be feasible for their dissertations. This is important for at least two reasons. First, I hope it will allow doctoral students to determine how much time will be needed to carry out an intervention study. Second, it provides specific strategies and challenges that may be applicable to other types of intervention studies and target populations.

Recruitment and retention of subjects for studies targeting older adults has been widely documented as more difficult than other populations. Arean and Gallagher-Thompson (1996) cite that between 70% and 80% of older adults approached to participate in mental-health studies agree to participate, whereas the standard in younger samples is 90–95%. Despite incorporating many strategies suggested by other researchers for increased recruitment, such as transportation to the cite, providing monetary incentives, and minimizing participant confusion by having the same interviewer administer baseline and follow-up measurements (Arean, Alvidrez, Nery, Estes, & Linkins, 2003), this study had a small sample size despite various and ongoing efforts to recruit participants. After multiple administrations of the intervention, the final sample size was 18 (N=18), with 35.3% of the eligible residents recruited into the study. Recruitment for the study began with hanging informational flyers around the building, distributing flyers under each resident's door, word of mouth by building staff, and holding informational sessions about the study. If a resident expressed interest, she or he was instructed to return on the day of enrollment to provide informed consent and to complete the pretest. With these strategies, there was a limited response, and it became apparent that the recruitment strategy would need to be tailored to the population. Thus, each resident was personally invited to participate by either me or the building social worker. I offered to visit individual apartments to explain the study one-on-one prior to enrollment. Recruiting was considered exhausted after every eligible resident had been contacted.

Recruitment

A barrier to recruiting and retaining participants is the provision of transportation to the research site (Arean & Gallagher-Thompson, 1996). I took this potential barrier into account by conducting the entire intervention at the housing building, as suggested by past researchers (McNeely & Clements, 1994). However, depending on the target population, conducting the study at the participants' housing site may not always be feasible. In addition, because all the subjects share a common living space, this sampling strategy increases the threats to validity because it increases the possibility of contamination and reactivity to selection. Thus, when considering where to recruit and where to conduct an intervention study, researchers must be made aware of these types of tradeoffs.

Recruitment into studies involving physical activity such as yoga also poses special challenges (Jancey et al., 2006). Fear of physical strain or medical conditions obviously influenced many potential subjects into declining to participate. In addition, misunderstanding the intervention was a barrier to participation. Even though it was stressed that the yoga was gentle, would be conducted while seated, can be helpful with chronic and painful conditions, and

can be modified to meet the needs of the most severely impaired person, residents still voiced concern about "not being able to get on the floor" or "doing anything with my bad back."

The researcher kept a log of all the attempts made to recruit subjects, recruitment plans, and issues that arose with the subjects regarding recruitment. Most of the reasons for not wanting to participate focused on time or physical constraints. Few people voiced an aversion to mental-health treatment as a reason for nonparticipation. This could be due to a lack of knowledge of what yoga and the intervention entailed. Also, although the study was designed as an alternative treatment for mental and physical health, it did not provide a direct and obvious intervention for mental health.

Harris and Dyson (2001) caution researchers not to underestimate the difficulty in recruiting frail older adults into research and ensuring that the data collection period is sufficient to recruit an adequate number of participants. Part of the value of this study is the lessons learned concerning what was done well and what could have been improved to increase recruitment and retention for studies targeting older populations. Tolmie, Mungall, Louden, Lindsay, and Gaw (2004) conducted a study to examine the reasons why older adults choose to participate in research studies. They found that curiosity was an important factor for preenrollment, whereas self-benefit and a desire to help researchers were important motivators in actual enrollment.

Retention

The attrition rate in this study was 5.6% (1 out of 18), which is consistent with the literature, which notes that the average dropout rate for studies targeting older adults is 10% (Arean & Gallagher-Thompson, 1996). A negligible dropout rate may suggest that the participants were satisfied with their choice to participate and content to support the study for its duration (Harris & Dyson, 2001). However, retention of the participants became increasingly difficult as the study progressed. By the third wave of the intervention, attendance adherence decreased. The first wave required little recruitment effort: For the most part, the subjects in the first wave pretty much "came to the researcher," whereas by the third wave, the "researcher went to the participants," and personal invitations and continued follow up were necessary for enrollment and retention. This could be an indicator of the motivation level of the groups or the overall health between the three waves, with the first wave being more relatively healthy and active, whereas the third wave was perhaps less healthy and more inactive. This trend could have implications for other researchers conducting intervention studies; special efforts could be made for the harder-to-target subjects and planning for statistical analyses.

Successful strategies in recruitment and retention

The percentage of eligible residents recruited into this study and low level of attrition could be partially attributed to my relationship with personnel at the site. I had a relationship with the social worker and the building management prior to the implementation of the study. These relationships were based on mutual respect for each others' work ethics and skills. Because of this, I was given considerable trust and support in the implementation of the study. For example, the building manager allowed me into the building at any time and allowed me to randomly knock on doors. The building manager and social worker accompanied the researcher when recruiting whenever possible. The building management informed and invited me to all community events where a number of residents would be congregating, and gave me priority in the use of the community room. The social worker allowed me to use her name in recruiting subjects. It is possible that the open and trusting relationship between the building staff and me caused the residents to feel a sense of "safeness" and trust for me and the study. Visiting older adults in their homes, considering the practical needs of the participants, attending community

events, and inquiring about factors that affect recruitment and retention have been regarded as trust-building strategies (Moreno-John et al., 2004). In addition, after the implementation of the first wave, other residents saw what the study entailed, and that I had kept all my "promises" (e.g., payment, the sessions, and luncheon). However, with the lack of anonymity in the study, the participants could have also felt pressure to participate in and/or complete the study.

Implications for Research and Practice

Difficulty in the recruitment and retention of older adults into research studies is commonly cited by scholars; however, once recruited into studies, the dropout rate is lower for older adults than for younger samples. Two areas of research for the retention and recruiting of subjects into intervention research could provide valuable information when designing studies that provide optimal recruitment and retention efforts. First, for recruitment and retention, it would be useful to study whether the role of the researcher's efforts affects the recruitment and retention rate. This could potentially provide future research with specific recruitment strategies. In this study, I made special efforts to engage the management and residents and continually followed up with residents with reminder calls and support to continue in the intervention. Examining how much follow up and trust-building is needed to successfully recruit and retain participants would be beneficial for future intervention research.

A second area for retention research is why the dropout rate is lower for older adults than other populations. A common misconception of nongerontological researchers is that older adults have an abundance of leisurely time, when in fact frailer older adults often use their time and energy to simply accomplish daily living (McNeely & Clements, 1994). Given this notion, the fact that there is a lower dropout rate for older adult participants suggests that older adults are selective in choosing their activities, and that their choices are made judiciously and wisely. The lower dropout rate could also be an indication that individuals are satisfied with their choice to participate in studies.

The reasons for a lack of attrition can be applied to practice. One possibility is that the time and care taken to explain the study and to make sure that the informed consent was genuine may indicate that the choice to participate was freely given (Harris & Dyson, 2001). On the other hand, researchers should consider the lack of anonymity in treatments and the pressure to participate in treatment. Although the lack of attrition in this study is considered a strength, it is important to determine if this was based on satisfaction with the participants' choice to enroll or was due to pressure. Coercion, even subtle, in research is considered unethical practice.

Conclusion

I hope that this article provides some insight into the implementation of an intervention study for older adults. Lessons learned in this dissertation study, from recruitment and retention to the implementation of the intervention, will, I hope, be useful to other researchers. Given the challenges of intervention research, along with the necessity to produce empirically validated practices, it is hoped that this article will illuminate intervention researchers' needs when garnering support for such studies. Intervention researchers need to be forthright about the issues and unpredictable experiences that can compromise the integrity of a study. Only when this is done can we continue to refine our intervention study skills and practices, and offer our clients the best possible services and treatment.

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