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ANOPTIMAL DELIVERYFORMATFORPRESENTATIONS TARGETINGOLDER ADULTS

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Abstract

Thirty-four African-American, Hispanic, and Caucasian community-dwelling elders were invited to attend three ten-minute informational sessions. Following the sessions, participants were invited to take part in focus groups to determine the best format for presenting information. Flip charts, transparencies on an overhead projector, and Microsoft PowerPoint presentation software were used to present the material, one format for each topic. Individuals were then asked to rate the different formats, and to provide open-ended feedback about accessibility, novelty, visual preferences, and efficacy of material presentation. Participant feedback was tape recorded and later transcribed. Participants overwhelmingly preferred the PowerPoint presentation on every dimension. Participants were paid \$10.00 for their time.

Focus group methodology provides a way to learn how a particular group perceives presented information (Ivanoff, 2002). Such groups can serve as an information-gathering tool to make subsequent study more meaningful to subjects. Older people often experience physical conditions that influence their understanding of presented matter, and the utilization of focus groups can highlight what these conditions may be. For example, in light of ameliorating them, age-related declines in sensory, perceptual, cognitive and communication abilities can be examined, when the prevalence of these are discovered in focus groups (Barret & Kirk, 2000). In addition to physical conditions, sometimes attitudes of participants can be generalized to a larger population, and clarifying measures can be taken to eliminate any misunderstandings about the subsequent study. Distrust of researchers is fairly common among those who have been harmed previously, or have knowledge of harm to others as a result of research. In addition, several studies have pointed to the influence of familial and cultural attitudes on participating in new activities (Kearney, Rosal, Ockene, & Churchill, 2002; Kelly & Groff, 2000).

Smithson (2000) points out that the methodology of focus groups allows the interactive styles representative of a larger population to emerge, such as dominance of the group by some individuals, or conflicts and arguments within the group. Williams, Abbott, and Taylor (1997) also point out the importance of selecting the membership of focus groups to reflect the interest of the greater group to be addressed in a subsequent study. The Center for Disease Control (2002) considers the use of focus groups to be so vital, that they provide a guideline for developing successful focus groups.

METHOD

Focus groups were designed to ascertain the optimal format of presenting information to community dwelling elders. The project was a prelude to a 5-year, 2.5 million dollar study

funded by the National Institute of Health (NIH): Improving Everyday Memory in At-Risk Elderly. The results from these focus groups were used in determining the method for information delivery in the Internal Review Board (IRB)-approved study. It was decided that formation of focus groups with representative adults could effectively address the question of the method of presentation for the upcoming study investigating improvement of memory in elderly people. Flip charts, overhead projections, and PowerPoint had all been used successfully in the past, and all were possible choices for the study. Three subjects, “Buying Drugs In Foreign Countries” (PowerPoint), “Consumer Fraud and Crimes Against the Elderly” (Flip Chart), and “Drug Interactions” (Overhead Projections) were chosen as topics to present in these three modalities.

Sample

The plan included three focus groups. These were to be held at Senior Community Centers, assisted living centers, and independent living apartments for low-income elderly. The Principle Investigator of the Improving Memory study, which was to follow the focus groups, and several of his staff met with administrators of various facilities to obtain permission to speak to their residents or members about the focus groups. They also determined the best method of introducing the focus group concept to these members. Subsequently, a team member addressed gatherings of the senior members at scheduled community meetings to explain the focus groups and ask for volunteers. Printed information about the focus groups was distributed. If possible, announcements of the forthcoming groups also were included in newsletters of the various sites. Activity directors received information to aid in recruitment. Focus groups were scheduled according to times available at the sites and preferences of the participants.

The participant population was 65 years of age or older, male and female, African-American, Caucasian, or Hispanic. There were no stated criteria for inclusion in the groups, but administrators were asked to consider participants' ability to participate in the focus groups when referring subject individuals. Participants received an informational letter describing the research, explaining their responsibilities, and outlining conditions of payment (\$10.00) for participation. There were no known potential risks. To insure confidentiality, any contact information was destroyed immediately following the focus groups and no identifiers are used with data collected.

The three sites of the focus groups were an assisted living center, an apartment complex for low-income seniors, and a senior activity center. These sites are typical settings for elders with different health statuses. The assisted living center was populated by those needing the most help in carrying out activities of daily living. The apartment complex housed individuals who lived independently within their apartments, but relied on the complex for transportation. The Senior Center was attended by those able to provide their own transportation to the Center.

Group size was set at between 5 and 10 participants per group, as this has been shown to be optimal (Center for Disease Control, 2002), with one exception, which will be discussed later. The selected length of the presentations was ten minutes, with a five minute break after each one. The three presentations were then followed by a discussion between the participants of their opinions on the methods of presentation. The combination of the presentation, the breaks, and the discussion group was estimated to last a maximum of two hours. There were two team members assigned to conduct these discussions, and the discussions were recorded. The presenter of the material was not present during these discussions, as it was felt that her presence could influence the frankness of discussion. Refreshments were available during the breaks and discussion groups. Participants were paid \$10.00 in cash for their participation.

Procedures

Each participant listened to three didactic presentations in different formats, lasting approximately ten minutes each, with a 45-minute to one-hour discussion time following the presentation. Participants were seated facing the speaker. The speaker gave a brief welcome and thanked the participants for their help. She then explained that the purpose of the group was to give feedback on the method of presentation, not on the content. The material presented in each presentation had been chosen to be of equal interest to the group. The order of presentation varied with sites; at some sites the presentations started with PowerPoint, at others with flip charts, and at still others with the overhead projections. However, the same subject area was always shown in the same mode (i.e., “Drug Interactions” was always shown on the overheads, “Consumer Fraud and Crimes against the Elderly” was always shown on flip charts, and “Buying Drugs in Foreign Countries” was always presented in PowerPoint).

Participants were told that the presentations would last 10 minutes each, that time would be allowed after each presentation to ask questions, and that a five-minute break would be provided between presentations. Individuals were encouraged to write down any questions they might have, and to include questions for the discussion session. Participants were told that the presenter would not be present during the discussion, and that if they wished to make comments about the presenter, they were encouraged to do so. Although a break was provided, some sites decided to forego the break in the interest of shortening the total time. After the presentations, the speaker thanked participants again, reminded them they would receive \$10.00 for their time, and left.

The team member appointed to be the moderator invited the participants to gather around a table for an informal discussion (Center for Disease Control, 2002), and informed them that the session would be recorded. She also informed the group that the recording would be difficult to understand if everyone talked at once, and stated that taking turns talking would be most beneficial. She emphasized that all their thoughts were important, because the researchers wished to customize the classes to the needs of the elderly populations. She explained that she wanted to hear all comments, “the good, the bad, and the ugly.” The moderator assured them of their privacy, explaining that name tags would be destroyed, and any reference to names on the tapes would be erased. She then presented them with the list of questions to be discussed. They were:

What are your thoughts about the PowerPoint presentation of “Buying Drugs in Foreign Countries”?

What are your thoughts about the Overhead presentation of “Drug Interactions”?

What are your thoughts about the Poster [flip chart] presentation of “Consumer Fraud and Crimes Against the Elderly”?

Which presentation held your interest the most? Why?

Is this because of personal interest in the subject or because of the method of presentation? (Redirect discussion to purpose of the focus group).

Which presentation held your interest the least? Why?

If you were attending a Health Promotion class for 1.5 hours for four weeks, which method of presentation of the material would you prefer? Why?

Which method of presentation would you least enjoy for the Health Promotion classes? Why?

RESULTS

At the independent living site, the vote was unanimously in favor of the PowerPoint presentation. All ten participants agreed on this. The second choice was for the Overhead projections, and Flip Charts were third.

At the assisted living site, five people ranked the PowerPoint presentation the favorite, one ranked Overhead projection best. Four stipulated that the Flip Chart was their least favorite presentation.

At the Senior Center site, although the group had been set at ten, people continued to join throughout the presentations, and the group eventually totaled 18. Of these, 12 people chose the PowerPoint presentation as best, six ranked the Overhead projections as best, and no one chose Flip Charts (see Table 1).

Participant Comments

The comments of the participants of the focus groups reflected the age-related declines experienced by this group of adults. Four participants mentioned the need to compensate for hearing loss. “Hard of hearing, therefore it was good to be able to see it.” “Can read but can’t hear—computer better.” “Hearing is a real problem and the computer is best for that.” “Speaker was very clear on pronunciation—helps a lot because I lip read.”

Of those responding, several indirectly referred to vision deficits about Overhead projections (“Large print made it easier to see than the computer”) and about the Flip Chart (“Could read it”). Two people mentioned this.

Several participants mentioned that the PowerPoint presentation held their interest: “I liked the graphics,” “I liked the detail in the graphics,” “It’s almost like having closed captioned TV,” “Very plain” [easy to understand], “I thought it was very interesting,” “I thought it was very informative,” “Computer can’t be beat,” and “Made more sense.” This issue relates to the age-related difficulty of paying attention (Folger & Stern, 1994). This distractibility was mentioned in notes taken at the sites by a team member, who mentioned that several participants started looking around the room and not focusing on the slides about five minutes into the presentation of the Overhead projections. The PowerPoint presentation seems to offer the opportunity to vary the presentation enough to retain interest beyond that of flip charts or overhead projections.

DISCUSSION

Focus groups were held with community dwelling elders in order to determine an optimal presentation format for a subsequent study. Three modes of presentation (Flip Charts, Overhead Projection, and Microsoft PowerPoint presentations) were used to present three topics of interest to mature adults. The participants overwhelmingly preferred the PowerPoint format. Comments from the elders suggest that this might be due to their familiarity with technology, in particular television. Although most people are used to tracking information across a television screen, it came as a surprise to the research team that the preference for PowerPoint was so pronounced. The other two modes of presentation have been used successfully in previous studies with this population, but were not well received in this sample. The contrast effect between the PowerPoint and other means of presentation was evident in participants’ comments that emphasized the brighter colors, the

larger text, simplicity of format, and high novelty, all of which reduced boredom and fatigue.

Sensory loss is a problem for many elderly participants (Njegovan, Hing, Mitchell, & Molnar, 2001). This was brought out in the focus groups, and accommodated to in the Memory Enhancement Study. Recruitment for the focus groups was more difficult than anticipated. Even with the short time demand and the reimbursement, people were slow to volunteer. Some expressed suspicion that participation in the focus groups would commit them to the larger Memory Enhancement Study. Ironically, when actual recruitment was held for the larger study, the response was overwhelmingly positive.

Several environmental factors emerged as critical to the success of the focus groups. The setting for such a group was essential to a positive reception. At one site, the room that had been reserved was unavailable, and the room provided was very noisy. Rearrangement of the furniture was necessary before the session could begin, which proved distracting to the participants. At a second site, it was difficult to find enough wall space on which to project the PowerPoint slides. The overhead projector had to be constantly moved to enlarge the image enough to allow all participants to view it. Portability of the equipment was essential as these presentations were offered on-site.

Issues specific to this population also influenced the outcome of these focus groups. Sensory changes that normally occur with age influenced preferred presentation mode. PowerPoint, as a medium, was able to address visual, auditory, and attention problems identified by the focus group participants. Bold colors and graphics, large font size, and novelty characterized the computer presentation and intrigued this group of elderly participants. The response was so marked, that the class presentations for the subsequent study were reworked to emphasize graphics, less information per slide, bright colors, and animation features. Presentations for mature adults need to include visual material for those with hearing deficits, large and highly contrasting colors for those with visual deficits, and limited information per slide to eliminate cognitive complexity.

Access to transportation did not emerge as a factor in this study, as participants resided at two of the sites used, and at the third, transportation was provided. However, in a larger study, transportation can be a major barrier and should be taken into account when planning groups. Therefore, focus groups likely will be more successful when the presenter goes to the group, rather than asking the group to come to some central location. The compact nature of the equipment optimized on-site presentation. The least cumbersome mode of presentation ensured that the participants were not kept waiting for time intensive equipment assembly. The use of a laptop computer to hold the PowerPoint presentation works well, and if the computer can be attached to a large-screen TV already on site, this simplifies the presentation considerably.

Some mature adults view research with suspicion, based on their own or others' experiences. As a result, recruitment was more difficult than anticipated, and even with a cash incentive, people were slow to volunteer. However, it should be noted that this trend was not replicated in the subsequent study.

In this experience, people were asked for comments about the mode of presentation, not the content of the lectures. Although participants were constantly reminded that the purpose of the focus groups was to determine the best means of presenting material, they had great difficulty separating this from the actual material presented. This was due, in part, to the fact that the topics were chosen specifically to be of interest to elders and to generate discussion.

In summary, focus group methodology yielded important information about older adults' preferences with respect to presented material. PowerPoint presentations addressed pragmatic, sensory, and environmental concerns much more efficiently than overhead projection or flip charts. The open-ended interview format allowed the research team to gather information not readily apparent in this vulnerable population. As adults over 65 have more access to technology, their preferences and expectations about presentations are likely to increase.

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Table 1

Delivery Format by Site

	Powerpoint	Overhead	Flip Chart
Independent living	10	0	0
Assisted living	5	1	0
Senior center	12	6	0