

Barriers to Exercise Behavior Among Older Adults: A Focus-Group Study

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Longer life expectancy, rapid population growth, and low exercise-participation rates of adults 65 and older justify the need for better understanding of older adults' exercise behavior. The objectives of this focus-group study were to determine barriers to the exercise behavior of older adults. Six focus groups, three with exercisers and three with nonexercisers, were conducted at various sites throughout Rhode Island. The majority ($n = 57$) of the 66 individuals who participated were women, and all stated that they were 65 and older. Results from the focus-group data identified 13 barriers to exercise behavior. The most significant barriers mentioned by nonexercisers were fear of falling, inertia, and negative affect. Exercisers identified inertia, time constraints, and physical ailments as being the most significant barriers to exercise. Implications from these focus-group data can be useful in the development of exercise interventions for older adults, which could increase exercise participation.

Key Words: fear of falling, health promotion, self-efficacy

Adults 65 years old and over currently make up 12% of the U.S. population, and they are the largest and fastest growing segment of our population (U.S. Census Bureau, 2000; U.S. Department of Health and Human Services [USDHHS], 1999). It is estimated that the percentage of adults 65 and older will increase to 20%, and the number of individuals aged 85 and older will more than double to 8.5 million, by the year 2030 (USDHHS). Reported rates of illness and physical disability increase sharply among the "oldest old," those individuals 85 and over (USDHHS). Physical activity limitations generally increase with age, and women are more likely than men to have physical limitations across the entire age range of adults 65 and older (USDHHS). Essential activities of daily living (ADLs) such as bathing, eating, and dressing, in addition to instrumental activities (IADLs) such as cooking and cleaning, also appear to become more difficult with increased age. These factors have a tremendous impact on the health status and independence of the older adult population.

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Research supports the notion that exercise and higher levels of physical activity might actually delay the progression of ADL/IADL disabilities and the onset of chronic health problems and disease often associated with aging (Blair & Connelly, 1996; Miller, Rejeski, Reboussin, Ten Have, & Ettinger, 2000). Additional well-documented benefits include reducing the risk of coronary heart disease, hypertension, osteoporosis, Type II diabetes, and falling (American College of Sports Medicine, 1998; National Institute of Health, 1995; Tinetti et al., 1994). Despite the recognized evidence of the benefits of regular exercise for older adults, the rate of exercise participation among adults 65 and older is among the lowest of all age groups. Over 40% do not participate in any leisure-time physical activity, and less than 10% participate in vigorous activity (USDHHS, 1999).

In addition, specific types of barriers have been shown to have an impact on the exercise behavior of older adults. Barriers might include poor health, lack of time or motivation, perceived ability, adverse environments, social concerns, and fear of pain (Clark, 1999a, 1999b; Grossman & Stewart, 2003). Identifying barriers and overcoming them might be necessary to help older individuals make the transition from a relatively inactive lifestyle to a more active one.

The primary objective of this qualitative focus-group study was to determine the predominant circumstances that influence the exercise behavior of older adults and to compare these for exercisers and nonexercisers. Additional objectives were to identify the specific barriers to exercise that make it most difficult for older adults to initiate and maintain exercise behavior. Better understanding of these factors might help in developing more effective exercise interventions for this population and, ultimately, to increase exercise-participation levels.

Methods

This research is part of a pilot study from the SENIOR Project, a community-based health-promotion intervention project designed to increase the exercise participation and fruit and vegetable consumption of older adults in East Providence, RI (Clark, Nigg, Greene, Riebe, & Saunders, 2002).

The use of focus groups is a qualitative research method that has been shown to be effective in generating a rich understanding of individual beliefs and attitudes on a particular topic (Krueger, 1998a). Six focus groups were conducted ($N = 66$): three with exercisers ($n = 37$) and three with nonexercisers ($n = 29$). Before participating in the focus group, participants were asked if they were 65 years of age or older. Study protocol did not require for participants to report their specific age. Thus, beyond meeting the age requirement, the exact age of the participants is unknown. Most participants were women ($n = 57$, 86.3%). Participants were recruited from senior housing, senior centers, and swim clubs for older adults. Before taking part in the focus groups, participants answered one screening question by checking “yes” or “no” regarding the amount of exercise in which they participated in order to make the groups as homogeneous as possible with respect to exercise behavior (exercisers, nonexercisers). Exercise was defined as any planned

physical activity (e.g., brisk walking, swimming, water aerobics, line dancing, biking, exercise class) that is performed a minimum of three times per week for at least 20 min per session.

All the focus-group sessions were approximately 1 and one half hours long and were led by a trained moderator using a pilot-tested discussion guide (see Table 1). Focus groups were audiotaped, and an assistant moderator took notes on a laptop computer. Refreshments were served, and participants received a \$10 gift certificate to use at a local supermarket as an incentive to participate and to compensate them for their time.

Analysis

Data from the focus groups were coded and analyzed according to guidelines outlined by Miles and Huberman (1994) and Krueger (1998b). Immediately after each focus group, the moderator and assistant moderator discussed the group, noting common themes, unexpected items, and group dynamics. After all focus groups had been conducted, the audiotapes from each group were transcribed and all identifiers were removed to protect confidentiality. Transcripts were studied to identify common themes, and frequencies of responses were noted. Similar responses were grouped together, and categories were identified and coded into descriptive headings based on the content of actual quotes. Matrices were used

Table 1 Focus-Group Questions

Exercise focus group	Nonexercise focus group
Tell me what the words <i>physical activity</i> mean to you.	Tell me what the words <i>physical activity</i> mean to you.
What does the word <i>exercise</i> mean to you?	What does the word <i>exercise</i> mean to you?
Think back to when you first started to exercise. When was that and what got you started?	What are the reasons that you don't exercise?
What helps you to keep exercising?	What do you think are the negative aspects of exercise?
What gets in the way of you exercising?	How do you think exercise might help you?
How do you think exercise is helping you?	What would it take for you to begin exercising?
What do you think are the negative aspects of exercise?	If we were to develop a program, what would make people like you exercise?
We have heard your input on exercise.	
What are your other favorite activities?	

to organize quotes and paraphrases in a systematic data display (Miles & Huberman). Decisions were made as to what headings and subheadings were to be used in each matrix based on the questions from the discussion guide and included the identification of barriers or items that get in the way of exercise for older adults. Common themes, attitudes, and barriers to the exercise behavior of older adults were identified, sorted, and compared. Analysis included systematic steps for identifying basic concepts and comparing results with other groups in order to find common patterns (Krueger, 1998a).

Results

To be considered a theme, an idea had to be mentioned several times within a group or across groups. A total of 12 barriers (presented in Table 2) were identified by focus groups with exercisers and focus groups with nonexercisers, with three individuals in the exercise focus groups stating that they did not encounter any barriers to exercise. These are discussed based on exercise grouping. Included in the definition of barriers to exercise, actual or perceived, were items that limited or inhibited exercise behavior. Five barriers to exercise for older adults—fear of injury/falling, inertia, time constraints, negative affect, and physical ailments—were clearly more significant than others.

Table 2 Barriers and Definitions

Barrier	Definition
Inertia	Characterized by passivity, including being too busy, lazy, bored
Fear of falling/Safety	Afraid of falling, have fallen, or know of others who have fallen; fear for personal safety
Time	Doctor's appointments, volunteer work
Negative affect	Characterized by feelings of depression and lack of motivation
Physical ailments	Barriers resulting from injury, chronic illness, poor health
Social	Lack of social support (exercise) or demands of others—friends, relatives (nonexercise)
Discomfort	Unpleasant sensations associated with exercise, including pain, dizziness, and shortness of breath
Weather	Bad weather, heat, humidity
Age	Personal and social perception of age appropriateness
Inconvenience	Scheduling, access
Perceived capability	The belief that one cannot perform activity
Verbal persuasion	Physician advice, or the advice of others, generally not to exercise

FOCUS GROUPS WITH EXERCISERS

When asked to give examples of situations that made it difficult to exercise, 11 categories of barriers (see Table 3) were identified. Frequencies of responses also were noted. Inertia, characterized by being “too tired” or “too lazy” or finding exercise to be “boring,” was the most frequently mentioned barrier for exercisers. Time constraints attributed to doctor’s appointments and physical ailments, including physical injury and ill health, represented the second and third most commonly mentioned barriers, respectively.

Inertia. “I hate getting started. I just don’t feel like it some days. Laziness!” “Sometimes I find it boring.”

Time Constraints. “Doctor’s appointments make it difficult to exercise. Doctors take a lot of time.” “Sometime(s) you just don’t have time. I know last year I missed a couple of exercise sessions because of volunteer work.”

Physical Ailments. “I couldn’t come last winter because I had bronchitis.” Weather, negative affect (characterized by feeling depressed or embarrassed to be seen exercising), and age were not considered significant barriers to individuals in the focus groups with exercisers. It is important to recognize that social barriers mentioned in these groups pertained to distractions provided by other individuals.

Social Barriers. “I have friends I used to work with and we get together. They can keep me from exercising.” In addition, not all barriers (e.g.,

Table 3 Frequency of Responses of Exercise Barriers for Exercise and Nonexercise Groups

Barrier	Exercisers Groups 1–3	Nonexercisers Groups 4–6
Inertia	14	12
Fear of injury	—	14
Time	13	6
Physical ailments	7	4
Inconvenience	5	7
Social	5	7
Perceived capability	4	5
Discomfort	4	6
Verbal persuasion	3	—
None	3	—
Age	2	3
Weather	1	7
Negative affect	1	9

perceived capability, discomfort) were mentioned in every group. This might be attributed to various within-group dynamics or attempts to achieve social desirability.

FOCUS GROUPS WITH NONEXERCISERS

A total of 11 barriers were mentioned in the three focus groups with nonexercisers (Table 3). Fear of injury/falling, inertia, and negative affect were the most significant barriers for individuals in these focus groups.

Fear of Injury/Falling. Fear of injury/falling was the most significant barrier to the exercise behavior of older adults in the focus groups with nonexercisers. Individuals mentioned that their own fear of falling and knowing of others who have fallen often discouraged them from exercising. “I would worry if I got on the treadmill that I would not be able to stop. Since I am alone, I could be lying there for days.” “I used to walk around the building, but I fell once and hurt myself.”

Inertia. Inertia—including procrastination, dislike of exercise, and the excuse of having other things to do—was the second most frequently cited barrier inhibiting exercise behavior. “I just keep putting it off a bit. Like, I’ll say I’ll go a little later.” “I don’t enjoy lifting weights.”

Negative Affect. Negative affect—having “no motivation,” “being embarrassed,” or “feeling down”—was the third most mentioned barrier. “I have this macular degeneration, so that makes it scary to go. It’s embarrassing when you can’t really see people.” “I stopped exercising because I had a long spell with depression.” Unlike individuals in focus groups with exercisers, individuals in nonexercise groups mentioned social barriers in reference to the lack of social support or confidence in their ability to exercise alone. Perceived capability, physical ailments, and age seemed to be less influential. Again, not all barriers were mentioned in every group.

COMPARISON AND CONTRAST BETWEEN GROUPS

It is interesting to note that inertia was considered a significant barrier to exercise behavior in focus groups with both exercisers and nonexercisers. Fear of falling was the most significant barrier in the focus groups with nonexercisers. Although individuals mentioned their own fears of falling and knew of others who had fallen, only 1 focus-group participant made any direct reference to personally experiencing a fall. The fear of falling was not mentioned at all in the focus groups with exercisers. Furthermore, negative affect was recognized as a significant barrier to exercise in focus groups with nonexercisers but was only mentioned once in the groups with exercisers. Although not mentioned as one of the top barriers to exercise for exercisers or nonexercisers, feelings of discomfort such as pain, dizziness, and shortness of breath were mentioned more often by those who were less active. Feelings of discomfort were expressed: “I don’t sweat, but just the opposite. I feel

faint.” “Exercising is painful. I ache when I exercise.” Inconvenience and social barriers to participating in exercise behavior seemed to have about the same significance for both exercisers and nonexercisers. Participants in the focus groups with nonexercisers mentioned a greater number of barriers than those in focus groups with exercisers, despite having fewer participants.

Discussion

It has become increasingly important to gain a better understanding of the exercise behavior of older adults. Factors such as the rapid population growth of individuals 65 and older, longer life expectancy, the well-documented benefits of exercise, and the impact of physical inactivity on public health all work together to support the need to further examine the exercise behavior of older adults. The focus-group data analyzed in this study might help provide valuable insight into the specific barriers that older adults encounter with respect to exercise behavior.

Fear of falling was mentioned as being the most significant barrier to exercise among individuals in nonexercise focus groups. These results are consistent with the literature, which has shown the fear of falling to be one of the major causes of inactivity among older adults (Hill, Schwarz, Kalogeropoulos, & Gibson, 1996). As a consequence of the fear of falling, individuals might be less physically active and thus could increase their likelihood of experiencing some type of functional disability. Those who are more sedentary might have less confidence in their ability to participate in exercise safely, whereas the increased mobility of active individuals might offset their fear of falling. This is consistent with literature indicating that individuals with lower exercise self-efficacy, as reflected by the nonexercise focus groups, might have higher self-reported declines in perceived functional ability and therefore less confidence in their ability to safely participate in exercise (Seeman, Unger, McAvay, & Mendes de Leon, 1999).

On the other hand, individuals who engage in regular exercise have higher exercise self-efficacy beliefs (McAuley, 1992, 1993; Sallis, Hovell, & Hofsterr, 1992), and individuals with higher exercise self-efficacy expectations typically have more confidence in their ability to engage in exercise behavior without the concern of falling (Bandura, 1997). Furthermore, those with higher exercise self-efficacy beliefs tend to be individuals characterized as having more mobility, which, in turn, might offset their fear of falling (Bandura).

It is important to note that more than one third of adults 65 years and older fall each year (Hornbrook et al., 1994), and of those who fall, 20–30% suffer moderate to severe injuries (e.g., hip fractures), which can reduce mobility and independence (Sterling, O’Connor, & Bonadies, 2001). It has been shown, however, that older adults can exercise safely (Greene & Crouse, 1993; Pate, Pratt, & Blair, 1995), and there are actually few reasons to prevent older adults from exercising. Exercise has been shown to strengthen muscles, improve gait and balance, and ultimately decrease the risk of falling (Fiatarone et al., 1990; Sterling et al., 2001). Lack of

exercise or physical inactivity can actually have a negative impact on health (Centers for Disease Control and Prevention, 2004).

There are several factors that should be taken into consideration in order to maximize the safety of older adult exercise. Recognizing diversity (e.g., age and health disparities) among older adults and individualizing exercise prescription, consulting with their physicians, and proper training (Butler, Davis, Lewis, Nelson, & Strauss, 1998) can help maximize the safety of older adult exercise.

It appears that barriers representing inertia—including feeling “too tired,” “too lazy,” or simply “too busy”—can interfere with the exercise behavior of both exercisers and nonexercisers. This factor was considered a major barrier in both types of group. The themes representing inertia resemble the content of the competing-demands subscale from the recently developed Temptations Not to Exercise Scale (Hausenblas et al., 2001) and might indicate that inertia or competing demands, whether perceived or real, are salient barriers to exercise in all groups of older adults. Thus, it seems prudent to address these competing demands when promoting exercise adoption or working on relapse prevention with older adults.

Feelings of discomfort associated with exercise—including “sweating,” “feeling faint,” and “aches and pains”—did not appear to be as important to individuals in the exercise focus groups, although when discomfort was mentioned, it was only in direct reference to physical pain, not sweating or feeling faint. This provides partial support for Bandura’s theory (1997), in which physical pain associated with activity affects exercise self-efficacy expectations and therefore can decrease motivation. Therefore, the more self-efficacious people judge themselves to be, the less pain they tend to experience (Bandura). Even when pain is associated with exercise, those with higher exercise self-efficacy and motivation, as typically reflected by those in exercise focus groups, seem to be more successful at diverting attention away from their pain sensations (Bandura). Those with lower exercise self-efficacy might give up more readily because of the association of exercise with pain. Less efficacious individuals, in nonexercise focus groups, might tend to dwell more on pain sensation, which in turn makes pain more noticeable and more difficult to bear (Bandura). It is interesting to note that age or perception of age-appropriate behavior did not seem to be a significant barrier across any of these focus groups. It is also important to recognize the types of strategies that were mentioned as most effective to overcoming barriers. Nonexercisers spoke about exercising in a group and having a buddy system, which would make it easier to exercise. Individuals in the focus groups with exercisers mentioned that having more choices, easier access to equipment, and more classes would make it easier to exercise.

Study Limitations

Although these focus-group data can be used as a valuable source of information, there are some limitations that deserve attention. The small sample size might be viewed as a limitation. Nonetheless, this study was not intended for generalization but rather for gaining a richer understanding of factors that influence the exercise

behavior of older adults. These focus groups provide some useful insights into the specific barriers to exercise behavior for older adults. The absence of acquiring any additional demographic information including specific age, along with self-report and related social desirability might also be considered limitations. The use of small interactive groups might have helped minimize this effect.

Implications for Practice

The expanded knowledge and information provided from these focus groups can be very useful in the development of exercise intervention programs for older adults. Based on the results of this study, it would be beneficial to target fear of falling and feelings of negative affect among individuals who do not exercise and develop strategies for overcoming time constraints and physical ailments in individuals who do exercise. Strategies for overcoming inertia would be important for all.

Because the population of older adults is continuing to increase and become more diverse, it will be important to recognize differences among them. Today, the age variation among adults 65 and older could easily vary from 10 to 30 or more years. It would not be safe to assume that a “younger-old” adult has the same physical or functional capacity as an “oldest old.” It would be beneficial to include individuals from various socioeconomic and ethnic backgrounds in future research in addition to exploring various barriers and differences among the young old, middle old, and oldest old. Exercise barriers specific to women should also be examined because women constitute a majority of the older adult population. Identifying more realistic goals such as making it easier for an older adult to play with his or her grandchildren, improving performance in activities of daily living, and improving the overall quality of life might increase motivation to exercise among older adults. Finally, examining exercise frequency and the impact on differences in regard to barriers to exercise is recommended.

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