What Factors Influence Persistence Rates in Active Older Adult Group Exercise Programs?

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Abstract: The purpose of this research was to discover factors that influence the persistence rates of active older adults participating in exercise classes, and how instructors respond to these factors. Data suggested participants prefer group classes for wellness, socialization, and instructors, who are critical in advancing exercise motivation to attend classes.

Exercise is no longer an isolated activity but continues to have universal appeal. However, many middle age and senior adults typically do not continue with exercise programs despite the low cost options available. Of the individuals who do participate in regular group exercise, many quit within three to six months after starting a regular group exercise program (Jones et al., 2001). With decreased physical activity, prevalence rates of major health concerns such as obesity, cognitive decline, and age related illness are significantly increased (Jones et al., 2001). Furthermore, empirical research projects the population of individuals above 60 years of age to increase over the next several decades, emphasizing a need to intensify advantageous behaviors, thus increasing longevity.

Research into exercise adherence, conducted by Abraham, Feldman, Nyman, and Barleen (2011) suggests that individuals who recognize the benefits of exercise, as well as have access to additional resources promoting exercise and health, were more likely to participate in regular exercise. Specifically in middle aged and senior adults, exercise stimulates cognitive activity, enhances mood, and promotes growth of nerve cells, as well as improves self-confidence, efficacy, and decreases depression (Roberson, 2007). What prior research advocates is that active older adults can benefit from education and wellness programs designed with their unique demographic needs in order to improve persistence and retention. This can include increased awareness of exercise, nutrition, and flexibility training directed specifically towards an active older population.

Implications of Exercise Persistence

Many individuals considered middle aged and older will be experiencing, often for the first time, age related deficits, and a desire to increase or engage in healthful behaviors. Roberson (2007) posited that greater preparation through education can enable these middle-aged adults to better prepare and delay the aging process. Stephan, Boiche and Le Scanff (2011) further proposed that individuals above 60 years of age will increase dramatically within the next decade. In 2030, this number is projected to increase to 20% of the United States population (Kuczmarksi & Cotugna, 2009). Because of this increased education concerning health and wellness, worldwide views regarding aging are shifting in a marginally positive direction, increasing the propensity towards living longer and healthier (Roberson, 2007).

Abraham et al. (2011) further argued a strong parallel between activity in early to middle adulthood and cognitive stability and longevity later in life. In an investigation into the participation rates of voluntary employee wellness programs, Abraham et al. noted the correlation between the increased participation of individuals in company-sponsored wellness programs and the rising rate of insurance, suggesting a desire to improve wellness to decrease

insurance premiums. Despite conclusive research that exercise and wellness initiatives improve cognitive and physical health, Oka (2011) posited that the prevalence of physical inactivity continues due to increased time and environmental dependence associated with careers, lifestyle, and travel cost and distance. Internationally, many countries also have not explored the benefits of senior programs; rather, the impetus remains a focus on early adulthood wellness programs (Roberson, 2007).

Positive Health Effects

According to the American College of Sports Medicine (Haskell et al., 2007), active older individuals should engage in light to moderate physical activity that promotes cardiovascular, strength, and flexibility health most, if not all days of the week. Resnick (2001), for example, suggested light activity can include walking, or light yard work, while biking, and jogging can be considered moderate depending on speed, intensity, and duration. Cardiovascular health can be improved by any activity that prolongs sustained heart engagement, such as walking or jogging (Resnick, 2001). Alternately, muscular strength can improve through weight bearing exercises that work the body against gravity (Resnick, 2001). Finally, flexibility training promotes elongation of the muscle groups essential in older adults because flexibility is lost as age increases, leading to loss of balance and injury (Resnick, 2001).

Motivation and Dropout

Mode or type of exercise, and intensity can be both motivating and intimidating when beginning any exercise program (Resnick, 2001). If individuals are engaged in activity that is above or below the participant's ideal level, intimidation or boredom can occur, respectively. Furthermore, if exercises are complicated or progress at a frenetic rate, confusion can lead to discouragement about exercise, yet another contributing factor that can eventually lead to exercise dropout. Stephan et al. (2011) examined motivational causes influencing dropout in an active older female population utilizing self-determination theory- innate changes that promote motivation and growth. Several possibilities may be responsible for influencing retention or, conversely, dropout rates: intrinsic and extrinsic motivation. Stephan et al. described intrinsic retention factors to be elevated knowledge of exercise: how it relates to active aging, and extrinsic to be discouraging factors as societal pressure to maintain weight. Utilizing a random sample of 1,000 women, aged 55 plus, the French Federation of Physical Education and Voluntary Gymnastics allowed researchers to determine which intrinsic and extrinsic factors were responsible for motivating exercise (Stephan et al., 2011). Those who were more intrinsically motivated were more likely to continuously participate because of positive development over a period of time. Moreover, the release of endorphins allowed them to experience more enjoyment from exercise (Stephan et al., 2011). Those who left the program tended to be externally motivated, and potentially lacked sufficient information or motivation to participate longer.

Aging Stereotypes

Horton, Baker, and Deakin (2007) of the School of Kinesiology, Ontario, Canada clarified the negative effects of stereotypes on an older adult population. Despite the literature on continuing health and exercise, seniors are often subject to harmful cultural stereotypes and denigrations because of their demographic (Horton et al., 2007). With the prevalence of media, other forms of discrimination are commonplace, such as images and claims of reduced socioeconomic status, lowered cognitive ability, and decreased physical appearance. As a result, many active older adults mistakenly adopt these false stereotypes of health. Internalizing these subliminal propaganda and false claims often prevents successful aging and performance through

reduced physical and cognitive output and a lack of confidence and self-efficacy (Woo & Sharps, 2003).

Researchers discovered that when providing positive information to seniors regarding preventative behaviors involved in health and aging, self-perceptions of aging improved dramatically and directly correlated with their overall self-concept (Horton et al., 2007). Increasing mindfulness of stereotypes and eradicating their usage could result in improvement of self-concept and self-efficacy for older adults. Harris and Dollinger (2001) further suggested that professionals in health related fields would benefit from continued educational classes designed to provide psychological insight and education concerning senior adults attitudes, including methods of reduction of age related myths and stereotypes. Furthermore, in research on these continued educational courses for older adults, participants had a more positive outlook on health, decreased anxiety, and decreased negativity towards their own aging process (Harris & Dollinger, 2001).

Cognitive Benefits

Woo and Sharps (2003) researched the salient association between exercise and enriched cognitive responsiveness and attentiveness. Utilizing a Kaufman Brief Intelligence Test, Woo and Sharps determined baselines of cognitive functioning in groups of older adults who were participating in an exercise program. Resulting data indicated that older adults experienced increased levels of verbal memory directly correlated with increased exercise (Woo & Sharps, 2003). Furthermore, Blair, Glaister, Brown, and Phillips (2007) posited that individuals in the care of senior residential or assisted living facilities who regularly engage in daily activity have increased cerebral functioning when compared to those who decline exercise. Dependence on these facilities additionally hastens physical decline because residents rely on staff to take care of needs rather than maintaining autonomy (Blair et al., 2007). This suggests that senior adults require physical as well as psychological stimulation for optimal health.

Dickinson and Hill (2007) evidenced that communication is essential with older adults, as it increases the likelihood of psychological and social wellbeing, along with sustained higher order processing. As adults age, the loss of spouses, friends, and colleagues can lead to social and cognitive decline. Furthermore, physical impairments, such as illness, memory loss, hearing difficulties, and other age related conditions can cause some older adults to remove themselves from social situations (Dickinson & Hill, 2007). Younger adults also contribute to this marked removal from society, as younger adults often provide only superficial communication because of a lack of erudition towards senior adults (Dickinson & Hill, 2007). Understanding communication, including how to improve methods of interaction with active older adults, is also an impetus to increasing retention of active adults in group exercise classes.

The Present Study

This study was concerned with understanding what factors encourage activity and the level of instructor awareness about how these factors can be adopted in their future classes. Despite the low cost options available, many individuals do not continue to participate in group exercise classes specifically designed for active older populations. As active middle aged and senior populations continue to grow, there is a greater need to understand factors that will motivate this group to benefit from exercise. Research provides a greater insight into how the active older adult community can benefit from regular exercise— not only physically, but also cognitively. Additionally, health related resources increase the likelihood of participation in addition to exercise, and positively influence intrinsic motivation. It is imperative that

researchers discover how to better influence this population now so that future generations can benefit from longitudinal research directed at increasing health and wellness.

Continued research is essential to develop enriching education promoting the benefits of exercise adherence, wellness, and specific initiatives triggering retention and persistence with an active older population. Therefore, the target of the current study was twofold: (a) it sought to discover what factors influence persistence rates in active older adults enrolled in exercise programs, and, (b) how instructors said these findings would influence their methodology in these courses.

Method

Participants

Thirteen individuals participated in the first group (age range, 40-89; men n = 3, women n = 10) recruited based on their participation or current membership at a gym in Central Florida, who attended group exercise classes designed for an active older population. In order to be considered for the study, participants must have been attending or had attended at least one group exercise class designed for active older adults or/and met the age demographic requirements for active older adults. For the purposes of this research, persistence concerns continuous or lifelong activity, and participants qualified if they were 40 years of age or older. Other demographic information indicated that 53% were employed in white collar professions such as health care, insurance, physician's office administration, and community college administration. Participants also reported that 84% spent 2-5 hours engaged in physical activity per week, while 16% engaged in 5-9 hours. Although several participants noted that joint problems (e.g. back and wrist) were their most common discomfort, most participants did not report chronic illnesses preventing them from regularly attending group exercise classes. Each participant received a cover letter, informed consent, and voluntary questionnaire containing open-ended and Likert type questions designed to engage thoughts and feelings regarding participation in group exercise classes.

The second group participating in the study consisted of group exercise instructors (one man and one woman) who had expertise in conducting classes designed for an active older population. Additionally, both instructors had been involved with or had taught group exercise classes for 10 years or more.

Procedure

This research utilized three participant surveys as the primary method of data collection. The first survey, designed for the group exercise instructors, determined current instructor cognizance of what factors were significant to active older adults and what personal attention strategies were currently implemented in classes. The second survey, based on the literature review, was designed for active adult participants and examined overall feelings towards group exercise. Furthermore, the second survey and research findings in the literature were the basis for a professional development course, an hour-long professional development session designed to improve instructors' course standards. It included demographic questions, including gender, age range, and marital status; Likert type questions asking participants to evaluate questions from strongly agree through strongly disagree; one ranking order question; and lastly, nine open-ended questions regarding what motivational factors were involved in the decision to participate. During the professional development course, instructors participated in a final follow up survey to determine whether the active adult survey information assisted instructor development of improved standards of care and personally motivating strategies about active older adults. It

should be noted that the two instructor surveys asked four open-ended response questions and one ranking question and was a condensed version of the larger participant questionnaire.

The first stage of implementation consisted of two synchronous phases in which instructors and active adults responded to surveys ascertaining their feelings and opinions about group exercise. The first group received and responded to surveys during a weeklong collection period during classes intended for active older adult participants. Instructors also responded and returned surveys during this period. Additionally, although some individuals participated in multiple classes during the survey period, no one responded twice. Following data collection, the professional development session was conducted, at the end of which instructors responded to a second survey to determine whether they had an enhanced understanding of motivators for active adult populations.

Results

Based on the empirical evidence linking exercise and wellness, one purpose of this study was to determine what factors influenced active older adults to persist—or continuously participate—in group exercise classes.

Survey results from the 13 participants in the first group indicated that 92% of the individuals enjoy engaging in regular exercise, and 69% indicated that exercise is additionally more enjoyable in a group setting. When asked Likert type questions (Table 1) regarding specific factors that influenced and motivated exercise, 84% of participants indicated overall health, 84% indicated socialization factor, and 76% indicated maintaining fitness were the most motivating. Most participants indicated that they strongly agreed with one or more of the seven motivational factors indicated on the Likert scale. The next question asked participants to rank their choices of these factors from one to seven. Participants ranked overall health highest and family lowest.

Active adult participants were additionally asked to respond to open-ended questions, providing more detail about specific exercise considerations. Respondents indicated that the most important reasons for class attendance were to "keep the body in working condition," to get out of the house, [and] learn new exercises," for "weight loss," and for the "socialization factor." Specifically regarding favorable characteristics of group classes, respondents indicated they sought "encouragement from peers and the instructor," and enjoyed being able to "ask instructors health and fitness related questions." When asked to add additional comments, responses included:

- I appreciate the individualized instructor attention to students and form, as well as the understanding that not everyone is on the same page and the instructor provides modifications
- The instructors are positive role models for women and fitness
- Group exercise has improved my overall mental and health outlook
- I love using all the different exercise instruments
- The instructors have friendly and warm dispositions and make us feel comfortable because they share their lives with us
- Exercise has improved my health and wellbeing
- The most important thing for me is that the instructor has been able to adapt classes to all levels of fitness, regardless of young and old, and keeps us motivated!

The first instructor survey examined what steps they take to personalize attention in group classes, with independent responses stating that learning members' names was essential, as well as getting to know the regular and returning members. Questions additionally encompassed

what important factors should be considered during group classes. Instructors both stated that introducing themselves helps set the tone for the class and ensures member comfort during class, such as when members ask questions, and that it is essential to learn each participant's level of ability, thus ensuring safety. When asked about what recommendations instructors have to improve group classes, instructors both stated they attend regular conferences and/or workshops to improve understanding of exercises and/or to maintain certifications. In ranking the needs of active older participants based on a list of seven items, one instructor chose maintaining fitness as the most important and increased mental health as being the least important. The second instructor additionally chose increased fitness as the most important but chose family as the least important.

Lastly, instructors participated in an hour-long professional development course that was based in part on questionnaire results from the group exercise participants. During this time, all research data were consolidated to provide a clear body of what factors were important to participants, including the high relevance of instructor input and class organization, including the camaraderie, encouragement and motivational stance of the instructors. Following the professional development course, instructors responded to a follow up survey indicating an improved understanding of participant needs. Data indicated that previous knowledge of their classes provided a foundation for their understanding; this research highlighted areas previously not considered, which included increased mental health and sustained self-sufficiency. Interestingly, although instructors additionally indicated the data provided in the professional development session increased their motivation to improve standards, there seemed a profound realization that their contribution and involvement influenced class standards more than previously realized. Furthermore, instructors indicated that they recognize the greater importance of not simply recognizing participants, but really getting to know them, thus increasing rapport.

Discussion

This study illustrates the crucial influence that group exercise and instructors can have on motivational factors encouraging individuals to participate—not simply in exercise, but in increasing their own wellness. During the course of the study, it was clear how excited active older participants were at participating in this research, as evidenced through rapid return of surveys, and a willingness to respond with detail and clarity. One couple made it a point to stop into the facility to return the survey despite not attending classes that day. After the conclusion of the study, many of the participants inquired about the study, and continued to show interest in what the study implied for the future of these programs.

Moreover, this study indicated that persistence rates of active older individual individuals participating in group exercise classes can be improved through personalized attention strategies, as evidenced by the data and feedback collected from instructors. Stephan et al. (2011) previously noted that negative extrinsic motivation—such as poor media exposure or negative stereotyping—was a determining factor in increased dropout over time as participants continued in exercise programs. Conversely, this current study suggests that participants who felt encouraged and motivated by the group, and more specifically by the instructor, began to internalize their commitment and continue because of personal determination. In other words, the survey responses could be interpreted as evidence that positive external reinforcement and motivation led to increased self-confidence and self-efficacy. Additionally, participants attended classes when they derived a sense of self-worth and improved self-perceptions negating aging stereotypes, as evidenced through participant responses indicating how they felt when instructors

adapted classes to meet the requirements and needs of each person in the class, regardless of age or athletic level. Interesting findings were that participants responded to instructors who made them feel capable of performing external tasks with greater efficiency and the profundity of instructor awareness of their role as motivators and teachers.

Because of the small sample size of participating members and instructors, this study may not be generalizable at this time, but may provide future insights to researchers who repeat this study with a larger sample. Additionally, what was not analyzed in this research study was data from the individuals who are reticent to participate or are intimidated by group classes as a result of never having attended, and those who do not have access to gyms or are unaware of the classes offered for active older individuals. Incorporating this information into a longitudinal research study would lend reliability to the current examination by expounding on the group exercise prevalence rate and the relationship between exercise and health. In the future, focus groups are recommended to obtain greater in depth responses, further data evidencing camaraderie between participants and instructors. A focus group could promote further reflection on the questions, and stimulate thinking in ways that individual, personal reflection cannot.

Conclusions and Final Thoughts

Individuals, regardless of age, want to feel capable and autonomous. Especially at this critical juncture in our history where the number of adults 60 years of age and older is increasing, it is essential that positive and encouraging wellness programs be designed with a vision for the future of successful aging. The implications of this study suggest that when individuals participate in group classes designed for active older participants, they are motivated by the personal attention strategies and direct care that is result of the group exercise environment, the participants as a whole and the instructor. It is clear that active and continuous motivation from instructors or group exercise leaders can influence both intrinsic and extrinsic factors related to exercise. Additionally, when group exercise instructors provide continued education dispelling myths regarding active aging while encouraging positive behaviors, participants continually persist in their exercise regimen.

Finally, this study acknowledges the importance of the human spirit. Exercise was considered a nebulous concept several decades ago, until researchers discovered the inexorable connection between exercise and longevity, cognitive awareness, and happiness. The participants of this study continue their exercise journey, in part to prevent cognitive deficits, in part to reduce physiological decline, and in many ways to circumvent the inevitable process of aging. Not enough research can be done to outline how important successful aging is toward improving the quality of life for active older individuals. Research must continue to make strides towards research in this area so that generations to come will benefit from increased mindfulness and consideration of the journey towards health and wellness.

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Table 1Specific Motivational Factors Influencing Participation

Statement	(5) Strongly Agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly Disagree
I enjoy engaging in regular exercise.	12	1	0	0	0
Exercise is more enjoyable alone.	0	0	3	4	6
Exercise is more enjoyable in a group setting.	9	3	1	0	0
I only attend group classes because of a friend or spouse.	4	0	0	4	5
Retention and Persistence					
I attend group exercise classes because of the instructor.	5	7	1	0	0
When motivated or encouraged by the instructor, I feel I can do more in class.	7	6	0	0	0
There are too few classes for me to attend.	5	3	2	2	1
A public gym environment is the best for me to engage in regular exercise.	5	4	4	0	0
Which of the following motivates your exercise routine? (Please answer all that apply)					
Maintaining fitness	10	3	0	0	0
Maintaining health	11	2	0	0	0
Socialization	3	5	3	2	0
Engaging in physical activity	11	1	1	0	0
Increased mental health	9	3	1	0	0
Increased self-sufficiency	8	4	1	0	0
Family	4	4	4	1	0