

Desbloquear el bienestar: el impacto integral de los programas de ejercicio comunitarios en los adultos mayores

Unlocking wellness: the comprehensive impact of community-based exercise programs on older adults

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Abstract. Introduction: Community-based exercise programs have been shown to significantly improve physical health, cognitive function, and emotional well-being in older adults. However, the factors influencing varying levels of benefit among participants and the challenges they face in maintaining participation remain underexplored. Aim: This study aimed to explore the multifaceted impacts of a community-based exercise program on older adults, focusing on their physical, psychological, and social experiences. Method: A qualitative study design was employed, utilizing thematic analysis to identify themes and sub-themes from participant experiences. Data were collected through semi-structured interviews, focus groups, and participant observations. Participants included 45 older adults aged 60 years and above who had been in the program for at least three months. Result: The analysis revealed several key themes: Improvement in Physical Function (increased mobility, strength, balance, and endurance), Enhanced Exercise Self-Efficacy (confidence in physical abilities, positive attitude toward exercise, self-management of health), Social and Emotional Benefits (social connections, emotional support, motivation from group dynamics, reduced loneliness), Psychological and Cognitive Benefits (increased mental alertness, stress reduction, improved mood), Overcoming Initial Challenges (physical barriers, psychological hesitations, adapting to new routines), Long-Term Commitment and Behavior Change (continued participation, development of healthy habits, increased awareness of health), and Program Design and Facilitators' Role (tailored exercises, positive influence of instructors, accessibility of the program). Conclusion: Community-based exercise programs offer multifaceted benefits for older adults, including physical, psychological, and social improvements. These findings underscore the need for personalized approaches and enhanced support systems to maximize benefits and ensure sustained engagement.

Keywords: Older Adults, Community-Based Exercise, Physical Health, Psychological Well-Being, Social Interaction

Resumen. Introducción: Se ha demostrado que los programas de ejercicio basados en la comunidad mejoran significativamente la salud física, la función cognitiva y el bienestar emocional en los adultos mayores. Sin embargo, los factores que influyen en los diferentes niveles de beneficio entre los participantes y los desafíos que enfrentan para mantener la participación siguen siendo poco explorados. Objetivo: Este estudio tuvo como objetivo explorar los impactos multifacéticos de un programa de ejercicio basado en la comunidad en adultos mayores, centrándose en sus experiencias físicas, psicológicas y sociales. Método: Se empleó un diseño de estudio cualitativo, utilizando el análisis temático para identificar temas y subtemas de las experiencias de los participantes. Los datos se recopilaron a través de entrevistas semiestructuradas, grupos focales y observaciones de los participantes. Los participantes incluyeron 45 adultos mayores de 60 años o más que habían estado en el programa durante al menos tres meses. Resultado: El análisis reveló varios temas clave: Mejora de la función física (mayor movilidad, fuerza, equilibrio y resistencia), Mejora de la autoeficacia en el ejercicio (confianza en las capacidades físicas, actitud positiva hacia el ejercicio, autogestión de la salud), Beneficios sociales y emocionales (conexiones sociales, apoyo emocional, motivación a partir de dinámicas de grupo, reducción de la soledad), Beneficios psicológicos y cognitivos (mayor estado de alerta mental, reducción del estrés, mejor estado de ánimo), Superación de los desafíos iniciales (barreras físicas, dudas psicológicas, adaptación a nuevas rutinas), Compromiso a largo plazo y cambio de comportamiento (participación continua, desarrollo de hábitos saludables, mayor conciencia de la salud) y Diseño del programa y papel de los facilitadores (ejercicios personalizados, influencia positiva de los instructores, accesibilidad del programa). Conclusión: Los programas de ejercicio basados en la comunidad ofrecen beneficios multifacéticos para los adultos mayores, incluidas mejoras físicas, psicológicas y sociales. Estos hallazgos subrayan la necesidad de enfoques personalizados y sistemas de apoyo mejorados para maximizar los beneficios y garantizar un compromiso sostenido.

Palabras clave: Adultos mayores, ejercicio en la comunidad, salud física, bienestar psicológico, interacción social

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Introduction

In the past decade, much research has focused on the benefits of physical activity for older adults, particularly in terms of improving physical health, cognitive function, and emotional well-being. Community-based exercise programs have been widely recognized for their role in promoting social interaction and enhancing quality of life for older adults. Studies have demonstrated that regular participation in these programs can lead to significant improvements in mobility, strength, balance, and overall physical

endurance (McPhee *et al.*, 2016; Asteasu *et al.*, 2017). Furthermore, the social aspect of these programs has been shown to provide emotional support and reduce feelings of loneliness among participants (Stand., 1998; Etnier, Drollette and Slutsky, 2019).

However, it remains unclear why some older adults experience more profound benefits from these programs than others (Langlois *et al.*, 2013; Young *et al.*, 2015). Factors such as individual differences in physical capability, psychological readiness, and social engagement may play a role, but these aspects have not been fully explored. Additionally,

while the positive impacts of community-based exercise programs are well-documented, there is limited understanding of the specific challenges and barriers that older adults face in initiating and maintaining participation in these programs (Angevaren *et al.*, 2008a, 2008b). Addressing these gaps is crucial for designing more effective and inclusive interventions that cater to the diverse needs of the elderly population (Falck *et al.*, 2019).

The purpose of this study was to explore the multifaceted impacts of a community-based exercise program on older adults, utilizing a qualitative approach to capture in-depth insights from participants. By employing thematic analysis, the study aimed to identify and categorize themes and sub-themes related to the physical, psychological, and social experiences of participants. The findings of this research provide valuable information for improving the design and implementation of community-based exercise programs for older adults. Furthermore, the study will outline the implications of these findings for future research and practice, highlighting the need for personalized approaches and enhanced support systems to maximize the benefits for the elderly.

Method

Study Design

This qualitative study was designed to explore the multifaceted impacts of a community-based exercise program on older adults. The study utilized thematic analysis to identify and categorize themes and sub-themes that emerged from participant experiences. The COREQ (Consolidated Criteria for Reporting Qualitative Research) checklist was followed to ensure comprehensive and transparent reporting.

Participants

Participants were older adults enrolled in a community-based exercise program. Inclusion criteria included being aged 60 years or older and having participated in the exercise program for at least three months. A total of 45 participants were included in the study (Table 1).

Table 1.
Demographic Data of Study Participants

Demographic Variable	Category	Number of Participants (N=45)	Percentage (%)
Age	60-64 years	12	26.7
	65-69 years	15	33.3
	70-74 years	10	22.2
	75 years and older	8	17.8
Gender	Male	20	44.4
	Female	25	55.6
Marital Status	Married	30	66.7
	Single	5	11.1
	Widowed	8	17.8
	Divorced	2	4.4
Education Level	Primary Education	5	11.1
	Secondary Education	15	33.3
	Tertiary Education	20	44.4
	Postgraduate	5	11.1
Employment Status	Retired	35	77.8
	Part-time Employed	5	11.1
	Full-time Employed	3	6.7

Table 1.
Demographic Data of Study Participants

Demographic Variable	Category	Number of Participants (N=45)	Percentage (%)
Duration in Program	Not Employed	2	4.4
	3-6 months	20	44.4
	7-12 months	15	33.3
	More than 12 months	10	22.2

Data Collection

Data were collected through semi-structured interviews, focus groups, and participant observations. The semi-structured interviews were conducted individually with participants to gather in-depth personal insights. Focus groups were organized to capture collective experiences and group dynamics. Participant observations were conducted during exercise sessions to understand real-time interactions and behaviors.

Procedure

1. Semi-Structured Interviews: Each interview lasted between 30 and 60 minutes and was conducted either in-person or via video conferencing. The interview guide included questions about participants' physical, psychological, and social experiences related to the exercise program.
2. Focus Groups: Focus groups consisted of 5-8 participants and were facilitated by a researcher. Each session lasted about 90 minutes. Discussions centered around shared experiences, challenges, and benefits of the program.
3. Participant Observation: Observations were made during exercise sessions to capture participants' engagement, interactions, and the role of instructors. Field notes were taken to document these observations.

Data Analysis

Thematic analysis was employed to analyze the qualitative data. The process involved the following steps:

1. Familiarization: Researchers read and re-read the interview transcripts, focus group discussions, and observation notes to become immersed in the data.
2. Coding: Initial codes were generated by identifying significant phrases, sentences, or sections that captured key aspects of participants' experiences.
3. Theme Development: Codes were collated into potential themes and sub-themes. Themes were reviewed and refined to ensure they accurately represented the data.
4. Reviewing Themes: Themes were reviewed by multiple researchers to ensure reliability and validity. Any discrepancies were discussed and resolved.
5. Defining and Naming Themes: Each theme and sub-theme was defined clearly, and representative quotes were selected to illustrate them.

Ethical Considerations

Ethical approval was obtained from the relevant institutional review board. Informed consent was obtained from

all participants before data collection. Participants were assured of confidentiality, and pseudonyms were used to protect their identities.

Rigor and Trustworthiness

To ensure the rigor and trustworthiness of the study, the following strategies were employed:

1. **Triangulation:** Multiple data sources (interviews, focus groups, observations) were used to corroborate findings.
2. **Member Checking:** Participants were invited to review and validate the themes and sub-themes identified in the analysis.
3. **Peer Debriefing:** Findings were discussed with colleagues who provided critical feedback and alternative interpretations.
4. **Audit Trail:** A detailed record of the research process, including data collection and analysis steps, was maintained.

This methodological approach enabled a comprehensive understanding of the effects of the community-based exercise program on older adults, revealing the complex interplay of physical, psychological, and social benefits.

Result

The qualitative analysis identified a variety of themes and sub-themes that describe the effects of the community-based exercise program on older adults. These themes provide insights into the multifaceted impacts of the program, both physical and psychological, along with social aspects (Table 2).

Table 2.
Summarizing the themes and sub-themes from the research

Theme	Sub-theme
1. Improvement in Physical Function	1.1 Increased Mobility
	1.2 Enhanced Strength
	1.3 Improved Balance and Coordination
	1.4 Increased Endurance
2. Enhanced Exercise Self-Efficacy	2.1 Increased Confidence in Physical Abilities
	2.2 Positive Attitude Toward Exercise
	2.3 Self-Management of Health
3. Social and Emotional Benefits	3.1 Social Connection
	3.2 Emotional Support
	3.3 Motivation from Group Dynamics
	3.4 Reduced Feelings of Loneliness
4. Psychological and Cognitive Benefits	4.1 Increased Mental Alertness
	4.2 Stress Reduction
	4.3 Improved Mood
5. Overcoming Initial Challenges	5.1 Physical Barriers to Starting the Program
	5.2 Psychological Hesitations
	5.3 Adapting to New Routines
6. Long-Term Commitment and Behavior Change	6.1 Continued Participation Beyond the Program
	6.2 Development of Healthy Habits
	6.3 Increased Awareness of Health
7. Program Design and Facilitators' Role	7.1 Importance of Tailored Exercises
	7.2 Positive Influence of Instructors
	7.3 Accessibility of the Program

Improvement in Physical Function

Increased Mobility

Participants noticed greater ease in walking, climbing stairs, and general movement.

"Before the program, I struggled to get up from a chair, but now I can do it easily."

Enhanced Strength

Significant improvements in muscle strength, especially in the legs and core, were reported.

"My legs feel stronger, and I don't get tired as quickly."

Improved Balance and Coordination

Participants experienced better stability, reducing the fear of falling.

"I feel more balanced when I walk; I'm not as scared of tripping anymore."

Increased Endurance

The program helped participants increase their stamina for both daily activities and longer exercises.

"I can stand for longer periods now, and I don't get as exhausted."

Enhanced Exercise Self-Efficacy

Increased Confidence in Physical Abilities

Many participants felt more confident in their ability to exercise, both within and outside the program.

"I didn't think I'd be able to complete the exercises, but now I know I can."

Positive Attitude Toward Exercise

Participants developed a more positive outlook on physical activity and were more willing to continue exercising.

"Now, I actually look forward to exercising, which I never thought I would."

Self-Management of Health

Participants became more proactive in managing their physical health, learning exercises they could do independently at home.

"I now feel like I can maintain my health on my own with the exercises I've learned."

Social and Emotional Benefits

Social Connection

Participants highlighted the value of meeting peers and fostering friendships, which motivated them to continue attending the program.

"I've made a lot of new friends here, and it feels like we're in this together."

Emotional Support

The group environment provided emotional encouragement, helping participants feel less isolated.

"We're all facing similar challenges, and that really helps me not feel alone."

Motivation from Group Dynamics

The collective motivation from participating in a group setting helped maintain long-term commitment.

"Seeing others push themselves inspires me to do the same."

Reduced Feelings of Loneliness

Attending the exercise program reduced participants' feelings of loneliness, especially for those living alone.

"I used to feel lonely, but now I have something to look forward to every week."

Psychological and Cognitive Benefits

Increased Mental Alertness

Participants felt that regular exercise improved their cognitive function and mental sharpness.

"I feel more mentally sharp, and I can focus better after the exercises."

Stress Reduction

Many participants reported feeling less stressed and more relaxed after attending the sessions.

"Exercising with others helped reduce my anxiety, and I feel calmer afterward."

Improved Mood

Participants noticed improvements in their mood, often attributing this to physical activity and social interaction.

"I feel happier and more positive on the days I attend the program."

Overcoming Initial Challenges

Physical Barriers to Starting the Program

Many participants initially faced physical difficulties, such as pain or stiffness, that made starting the program challenging.

"At first, I was so stiff I could barely move, but the instructors helped me get through it."

Psychological Hesitations

Participants expressed concerns about their ability to complete the program due to age or physical condition but overcame these doubts over time.

"I was afraid that I couldn't keep up, but the instructors were very patient and helped me."

Adapting to New Routines

Adapting to a regular exercise schedule required effort, especially for participants who were previously inactive.

"I wasn't used to exercising regularly, but once I got into the habit, it became part of my routine."

Long-Term Commitment and Behavior Change

Continued Participation Beyond the Program

Many participants expressed their intention to continue exercising after the program ended, integrating physical activity into their daily routines.

"I've become more active overall, not just during the

sessions but at home too."

Development of Healthy Habits

The program fostered the development of long-term healthy habits, such as stretching, walking, and strength training.

"Now I make sure to do some light exercises every morning, which wasn't something I did before."

Increased Awareness of Health

Participants became more conscious of their overall health, paying attention to both physical activity and other lifestyle factors such as diet.

"I'm more aware of my health now—I eat better and move more."

Program Design and Facilitators' Role

Importance of Tailored Exercises

Participants appreciated that the exercises were adapted to their physical capabilities, making it easier for them to participate.

"The exercises were designed for people like us, which made it easier to follow along."

Positive Influence of Instructors

The role of the instructors was critical in motivating participants and ensuring that exercises were performed safely.

"The instructors were very encouraging and always made sure we were doing the exercises correctly."

Accessibility of the Program

Participants appreciated that the program was easily accessible, both in terms of location and scheduling, which allowed them to attend regularly.

"The community center is close by, and the schedule is convenient, so I can attend regularly."

The research revealed multiple layers of impact from the community-based exercise program on older adults. Improvements were not limited to physical health, but extended to social, emotional, and psychological domains. The community aspect and the supportive structure of the program were essential in fostering sustained engagement and improving overall well-being. Participants not only developed physical strength and mobility but also gained confidence in managing their health and created lasting social connections.

Discussion

A qualitative analysis identified various themes illustrating the multifaceted effects of community-based exercise programs on the elderly, encompassing physical, psychological, and social aspects. These themes provide insight into the comprehensive impact of such programs. The program notably enhances physical function, contributing to

improvements in mobility, strength, balance, coordination, and overall physical endurance. Previous research supports these findings, indicating that structured exercise programs can significantly improve physical health outcomes (Lok, Lok and Canbaz, 2017; Chau *et al.*, 2020; Valada *et al.*, 2022). Proponents argue that these programs not only boost physical capabilities but also foster mental well-being by increasing self-efficacy and promoting a positive attitude toward exercise (Cadenas-Sanchez *et al.*, 2016; Gorain *et al.*, 2022). They highlight the potential for such programs to empower individuals in managing their health more effectively. Conversely, critics point out that the effectiveness of such programs can vary based on individual differences and adherence levels (Gmmash *et al.*, 2023). They also caution about the potential for injury if exercises are not properly supervised. Thus, while the program shows promising benefits, personalized approaches and adequate supervision are essential to maximize its efficacy and safety.

The results of the program demonstrate significant social and emotional benefits, including fostering social connections, providing emotional support, motivating through group dynamics, and reducing feelings of loneliness. These findings are consistent with previous research, such as a study (Fox, 1999; Fogarty and Happell, 2005; Tetlie *et al.*, 2008), which highlighted the importance of social support in buffering stress and enhancing well-being. Additionally, a meta-analysis linked strong social relationships with increased longevity and reduced risk of mental health disorders (Mazyarkin *et al.*, 2019). Proponents argue that these programs not only improve mental alertness and reduce stress but also significantly enhance participants' overall mood and quality of life (Helgeson *et al.*, 2000; Williams *et al.*, 2020). However, critics point out potential downsides, such as the risk of dependency on group dynamics for motivation, which may decline without continual social interactions. They also caution that not all individuals may equally benefit from social programs, particularly those with social anxiety or introverted tendencies (Cruwys *et al.*, 2020; Zimmer *et al.*, 2022).

The results of this program indicate that participants successfully overcame physical and psychological barriers, adapted to new routines, and committed to long-term participation. Previous research, such as that conducted, has shown that individually tailored exercise programs can enhance motivation and long-term success (Durlak *et al.*, 2011; Kehoe, Havighurst and Harley, 2020). Another advantage of this program is the positive influence of experienced instructors, who can provide emotional support and technical guidance. However, there are some cons to consider (Velsor, 2009; Romosiou, Brouzos and Vassilopoulos, 2018). Firstly, the program may not be accessible to everyone due to cost or location constraints. Secondly, some participants might feel pressured by the high standards set by the instructors, which could reduce their motivation. Overall, despite some challenges, the benefits of this program seem to outweigh the drawbacks, especially when it is tailored to meet individual needs (Haslam *et al.*, 2016; Xavier

et al., 2023).

The results of community-based exercise programs show significant benefits for the elderly, including improved physical, psychological, and social well-being, as well as the promotion of sustainable healthy habits (Fave *et al.*, 2018; Lee *et al.*, 2023). Based on previous theories and research, such as studies published in the *Journal of Aging and Physical Activity*, participation in group exercise programs can reduce the risk of chronic diseases, enhance cognitive function, and strengthen social relationships (Levy *et al.*, 2020; Dupuy *et al.*, 2021). The advantages of this approach include increased motivation through social support, greater access to resources, and reduced social isolation often experienced by the elderly (Farrance, Tsofliou and Clark, 2016; Báez *et al.*, 2017). However, there are also some drawbacks to consider, such as mobility limitations that may hinder participation for some individuals, funding constraints for sustaining the program, and potential risks of injury if activities are not tailored to individual capabilities (Emery and Gatz, 1990; Elhajjmousa *et al.*, 2019; Dabkowski, Porter and Barbagallo, 2021; Santos *et al.*, 2023). Nevertheless, the long-term benefits of these programs often outweigh the challenges, making them a valuable option for enhancing the quality of life for the elderly.

Conclusion

This study highlights the multifaceted benefits of community-based exercise programs for the elderly, encompassing improvements in physical functions such as mobility, strength, balance, and endurance, as well as enhanced self-confidence in physical abilities, positive attitudes towards exercise, and better self-management of health. Additionally, these programs offer significant social and emotional benefits, including social connections, emotional support, group dynamics-driven motivation, and reduced feelings of loneliness. Psychological and cognitive advantages, such as increased mental alertness, stress reduction, and improved mood, were also identified. The findings underscore the urgent need for wider implementation of such holistic interventions, given the growing elderly population and their challenges in maintaining physical and mental health. Future research should explore personalized approaches, long-term effects, technological integrations, multidisciplinary interventions, and scalability to ensure broader accessibility and sustained impact on the overall well-being of the elderly.

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