

Physical activity in older adults: benefits, risks of inactivity, and motivational factors

Actividad física en adultos mayores: beneficios, riesgos de la inactividad y factores motivacionales

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ABSTRACT

Background: Physical activity is essential for promoting health, autonomy and quality of life in older adults. However, adherence to exercise remains low worldwide. Motivation is recognized as a key factor influencing the initiation and maintenance of physical activity. This systematic review examines how motivational factors affect participation in physical activity among older adults. Methods: A systematic search was performed in PubMed, SciELO and Google Scholar between 2016 and 2025. Studies were included if they involved older adults, assessed motivational factors and provided full text. Five qualitative, quantitative and quasi-experimental studies were selected. Due to methodological heterogeneity, a narrative synthesis was conducted. Results: Intrinsic motivation, including enjoyment, emotional well-being and perceived health benefits, emerged as the main determinant of adherence. Extrinsic motivation, particularly social support, professional guidance and group programs, facilitated the initiation and maintenance of physical activity. Identified barriers included physical limitations, low self-efficacy and limited access to suitable programs. Experimental studies reported improvements in self-esteem and psychological well-being. Conclusion: Motivational factors play a decisive role in the participation of older adults in physical activity. Strengthening intrinsic and extrinsic motivation should be considered in the design of interventions aimed at promoting active and healthy aging.

Keywords: Aged; Motor Activity; Motivation; Exercise; Health Behavior.

RESUMEN

Introducción: La actividad física es fundamental para promover la salud y la autonomía en adultos mayores. Sin embargo, la baja adherencia continúa siendo un desafío. La motivación, tanto intrínseca como extrínseca, se reconoce como un factor clave para iniciar y mantener la actividad física. Esta revisión sistemática analiza la influencia de los factores motivacionales en la participación de adultos mayores. Métodos: Se realizó una búsqueda sistemática en PubMed, SciELO y Google Académico entre 2016 y 2025. Se aplicaron criterios de inclusión que contemplaron población adulta mayor, análisis de motivación y disponibilidad de texto completo. Se seleccionaron cinco estudios cualitativos, cuantitativos y cuasi-experimentales. Se efectuó una síntesis narrativa debido a la heterogeneidad metodológica. Resultados: La motivación intrínseca, representada por el disfrute, el bienestar emocional y la percepción de beneficio para la salud, emergió como el principal determinante de adherencia. La motivación extrínseca, especialmente la socialización, el acompañamiento profesional y los programas grupales, facilitó el inicio y la continuidad. Las barreras incluyeron limitaciones físicas, baja autoeficacia y dificultades de acceso. Los estudios experimentales mostraron mejoras en autoestima y bienestar. Conclusión: Los factores motivacionales influyen de manera decisiva en la participación de adultos mayores en actividad física. El fortalecimiento de la motivación intrínseca y extrínseca debe considerarse en el diseño de intervenciones para promover un envejecimiento activo. Palabras clave: Edad; Actividad Motora; Motivación; Ejercicio; Comportamiento Saludable.

INTRODUCTION

Population aging is one of the main public health challenges, as it is associated with increased chronic disease burden, loss of functional capacity, and decreased autonomy. In this context, physical activity is recognized as one of the most effective interventions for promoting comprehensive health, improving quality of life, and fostering active aging in older adults. Available evidence indicates that regular physical activity yields physical, psychological, and social benefits. However, adherence remains low worldwide due to multiple factors.

Various studies highlight that motivation is a key factor in initiating and sustaining physical activity in this population. Intrinsic motivation—such as enjoyment, emotional well-being, and perceived competence—and extrinsic motivation—such as socialization, professional support, and group programs—directly influence participation and continuity. Despite this, there is heterogeneity in the motivational factors described and in the contexts in which they are studied, which hinders the integration of findings.

Given this situation, there is a need to synthesize recent evidence on the influence of motivational factors on physical activity among older adults. The hypothesis of this study posits that motivational factors play a decisive role in adherence to and participation in physical activity programs. The objective of this systematic review is to analyze and compare the motivational factors identified in the current literature and their relationship to physical activity among older adults.

THEORETICAL FRAMEWORK

Definition of Older Adults in Argentina and the International Context

In Argentina and internationally, there is no consensus on the age that marks the beginning of the older adult stage, or on what is defined as the “third age,” as it is often referred to. Globally, the United Nations considers “older persons” to be those aged 65 or older in developed countries and 60 or older in developing countries (1). At the regional level, the Inter-American Convention on the Protection of the Human Rights of Older Persons—adopted by the OAS in 2015 and in force in Argentina since 2017—defines an older person as anyone aged 60 or older. Differences are also observed within the country: the Argentine Republic’s Physical Activity and Health Guidelines (2013), for example, uses the cutoff age of 65, an age traditionally associated with the onset of retirement in many pension systems. These discrepancies also appear in various national studies, such as that by Renzi et al. (1), which highlights the coexistence of both definitions in the academic sphere.

Aging and health in older adults

Aging involves a series of physiological changes that increase vulnerability to chronic diseases and functional limitations. However, the concept of active aging emphasizes the role of physical activity in preserving autonomy and independence. Several studies have shown that regular exercise reduces functional decline and improves physical and emotional well-being in older adults (5).

Physical Activity in Older Adults: Types, Benefits, and Risks

Physical activity includes aerobic, strength, flexibility, and balance exercises, as well as adapted recreational activities. The reviewed studies highlight significant benefits in mobility, strength, balance, body composition, cognitive functions, and, above all, emotional health (5). Associated risks—pain, falls, or exacerbation of chronic diseases—can be minimized through individualized and supervised programs, a recommendation emphasized in contemporary reviews (5, 6).

The Concept of Motivation and Relevant Theoretical Models

Motivation is essential for initiating and maintaining health-promoting behaviors. Self-Determination Theory (SDT) classifies motivation into intrinsic (enjoyment, well-being) and extrinsic (rewards, medical prescription, social support). The findings of this review show that most older adults act under autonomous motivation, that is, satisfying their desire for choice and feeling free to decide their own actions, which facilitates long-term adherence. Therefore, autonomy is the most decisive factor, as it allows for the establishment of different levels of motivation, ranging from the highest level—autonomous, self-determined, or intrinsic motivation—to the lowest—demotivation (or lack of motivation)—while the various types of controlled or extrinsic motivation fall between these levels. (6).

Intrinsic Motivation and Its Role in Adherence

Intrinsic motivation appears to be the most consistent predictor of adherence to physical activity among older adults. Participants who enjoy the activity, perceive improvements in their health, and experience emotional well-being demonstrate greater continuity over time. When older adults are intrinsically motivated, they engage in physical activity and/or sports because of the feelings of fun, interest, satisfaction, and pleasure that the activity itself evokes. In addition to autonomy, individuals must also feel that their need for competence and their relationships with others are fulfilled (3).

Extrinsic motivation: socialization and support as key drivers

Extrinsic motivation also plays a significant role, especially when physical activity occurs in group settings, natural environments, or under professional guidance. Socialization, instructor support, and a sense of belonging enhance adherence, particularly among adults with low initial self-efficacy (5, 6).

Barriers Limiting Physical Activity in Older Adults

The main barriers identified in the reviewed studies include:

Physical: functional limitations, joint pain, fear of falling (5).

Psychological: low self-efficacy, embarrassment, low perceived competence (5).

Environmental: limited access to appropriate programs, unsafe environments, and a lack of professional support (6).

Facilitators and elements that enhance motivation

The most common facilitators were adapting exercises to individual ability, professional supervision, recreational activities, programs focused on enjoyment, and safe environments. Physical and recreational activities sustained over six months significantly improved self-esteem, reinforcing both intrinsic and extrinsic motivation (3).

Additionally, programs conducted in natural settings showed a greater intention to continue practicing in the future, indicating that the environment also acts as a motivating factor (6).

Interaction between benefits and motivation

Physical and psychological benefits increase intrinsic motivation, which promotes adherence, creating a virtuous cycle. Interventions based on enjoyment, recreation, and socialization demonstrated positive effects on continuity, according to systematic reviews and experimental studies (5).

Knowledge gaps and rationale for the review

Despite consistent findings, there is methodological heterogeneity and a lack of longitudinal studies exploring the relationship between motivation and long-term adherence, especially in Latin American contexts. Therefore, this systematic review is necessary to integrate the available evidence and guide strategies that strengthen active aging (5).

RATIONALE

Population aging represents one of the greatest public health challenges in Argentina and Latin America. Regular physical activity is recognized as one of the most effective interventions for improving the physical, psychological, and social health of older adults, reducing the risk of dependency, and promoting active aging. However, despite its broad scientific support, adherence to physical activity in this population remains low.

Various studies indicate that motivation is a determining factor in initiating and maintaining physical activity, but there is heterogeneity regarding the motivational factors that influence this behavior and the barriers that hinder it. Furthermore, in Latin America and particularly in Spanish-speaking countries, there is a scarcity of systematic reviews that integrate recent evidence on motivational aspects in older adults.

Therefore, this systematic review is essential for synthesizing available knowledge, identifying common patterns, recognizing research gaps, and providing relevant information for the design of physical activity programs that increase adherence among older adults.

RESEARCH QUESTION

- How do motivational factors influence older adults' participation in and adherence to physical activity?

LITERATURE SEARCH STRATEGY

A systematic search was conducted in the PubMed, SciELO, and Google Scholar databases between January 2016 and January 2025. Boolean operators were used to combine MeSH terms and keywords in Spanish and English related to older adults, physical activity, and motivational factors.

P – Population	Older adults (≥60 years).
E – Intervention / Exposure	Motivational factors (intrinsic, extrinsic, barriers, and facilitators) related to physical activity.
O – Outcome	Participation, engagement, and adherence to physical activity.

HYPOTHESIS

Motivational factors, both intrinsic and extrinsic, significantly influence older adults' participation in and adherence to physical activity. Thus, it is expected that older adults with higher intrinsic motivation (enjoyment, well-being, perceived competence) and higher extrinsic motivation (professional guidance, social support, group activities) will demonstrate higher levels of participation and continuity in physical activity.

GENERAL OBJECTIVE

To identify and synthesize the motivational factors associated with physical activity among older adults through a systematic review of studies published between 2016 and 2025.

SPECIFIC OBJECTIVES

To describe the different types of physical activity addressed in recent literature on older adults.

Analyze the intrinsic motivational factors related to older adults' participation in physical activity.

Examine the extrinsic motivational factors that influence the practice of and adherence to physical activity among older adults.

Identify the barriers and facilitators that influence motivation toward physical activity in this population.

To evaluate the methodological quality of the included studies and their contribution to the current evidence.

MATERIALS AND METHODS

Study Design

A systematic literature review was conducted to identify motivational factors associated with physical activity participation among older adults. The methodological design was structured according to the PRISMA 2020 guidelines, ensuring transparency, rigor, and reproducibility throughout the evidence search, selection, and synthesis process.

Search Strategy

The literature search was conducted between July and November 2025 in the PubMed, SciELO, and Google Scholar databases, selected for their relevance to health sciences, Latin American research, and access to current literature. Controlled MeSH descriptors and free-text terms were used in combination with the Boolean operators AND and OR.

The main terms used were: Aged, Older adults, Physical activity, Exercise, Motor activity, Motivation, Adherence, Barriers, Facilitators.

The search queries were adapted to each database to optimize search sensitivity.

The search period included articles published between 2016 and 2025 to obtain recent, relevant evidence aligned with the study's objectives.

Inclusion Criteria

Studies that met the following criteria were included:

Population: older adults (≥ 60 years).

Main topic: physical activity and motivational factors, barriers, or facilitators related to its practice.

Accepted study types: qualitative, quantitative, mixed-methods studies, systematic reviews, or narrative reviews.

Publication years: 2016–2025.

Languages: Spanish and English.

Access: full-text articles available.

Exclusion criteria

Studies focused on populations under 60 years of age without a specific analysis of older adults.

Articles focused exclusively on pathologies or treatments, with no link to motivation or physical activity.

Clinical trials or interventions that did not include motivational analysis.

Abstracts, letters to the editor, opinions, or non-peer-reviewed publications.

Articles are duplicated across databases.

Planning for data collection

The selection was conducted in three stages:

Initial screening of titles: Duplicate studies and those unrelated to the topic were excluded.

Review of abstracts: Methodological and thematic relevance was assessed.

Full-text evaluation: Inclusion and exclusion criteria were applied to determine the final studies.

The entire process was documented in accordance with the PRISMA 2020 guidelines. The flowchart will be prepared upon completion of full inclusion of studies, and will be included in the appendices.. (Figure 1.)

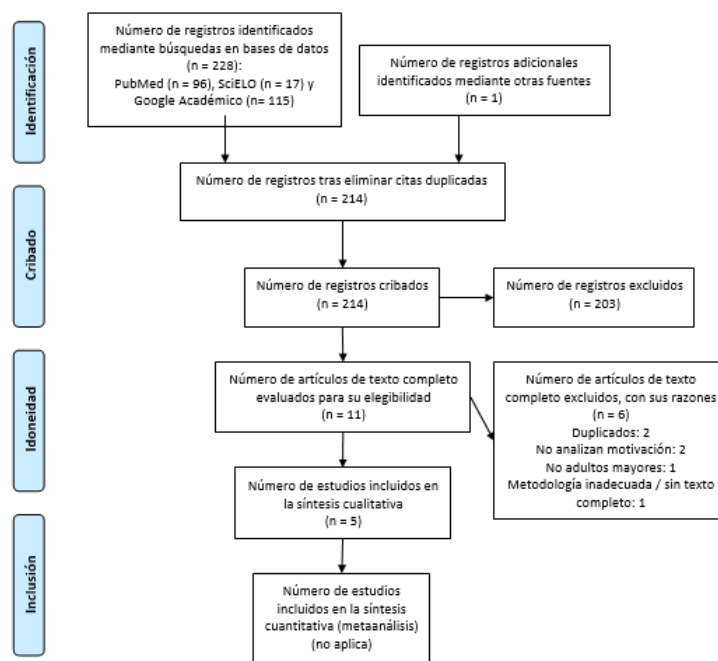


Figure 1. Four-level PRISMA flowchart

Scope of the study

This study was conducted within the academic setting of the Inter-American Open University, without the participation of human subjects or direct intervention. It relied solely on bibliographic sources and studies published in the databases mentioned.

Data Analysis Plan

Data analysis was conducted through a qualitative content synthesis to identify patterns, similarities, and differences among the selected studies. To this end, the findings were organized into categories linked to the objectives of this review: benefits of physical activity, motivation to engage in physical activity, associated psychological aspects, and characteristics of the environment where the activity takes place.

Each article was evaluated based on its methodological design, study population, main results, and conclusions. Subsequently, the findings were synthesized through a narrative analysis, enabling comparison of the available evidence and establishing conceptual relationships among the included studies.

Study Biases and Limitations

This study has some limitations inherent to the design of a literature review. First, there is a potential selection bias, as only full-text articles published in and accessible through selected databases were included. This may have excluded relevant research published in other languages or in non-indexed repositories.

Furthermore, the methodological heterogeneity of the included studies (differences in samples, designs, assessment instruments, and application contexts) limits the possibility of making quantitative comparisons or establishing causal relationships.

The review focused on articles published between 2016 and 2025, so earlier studies that could have provided complementary information were not considered.

Finally, as this is a qualitative analysis, the interpretation of the findings may be influenced by the reviewer's bias. However, explicit and systematic criteria were applied to select and analyze the evidence.

Resources Required

The conduct of this review required IT and bibliographic resources. These included:
Access to a personal computer.

Internet connection.
Access to academic databases such as PubMed, SciELO, and Google Scholar.
Word processor for drafting the final report.

RESULTS

A total of five studies that met the established selection criteria were included. The studies, published between 2016 and 2025, were conducted in Argentina (1), Spain, Mexico, Chile, and Ecuador, and investigated motivational factors related to physical activity in older adults. Two studies were systematic reviews (2, 6), one was a quasi-experimental study (5), one was a quantitative cross-sectional study (3), and one was qualitative (4).

The results consistently show that intrinsic motivation—including enjoyment, emotional well-being, and perceived health—is a key determinant of participation in and adherence to physical activity (3). Similarly, extrinsic motivation—primarily socialization, professional support, and group activities—stands out as a facilitator for initiating physical activity (5, 6).

The main barriers identified were physical limitations and fear of falls, low self-efficacy, embarrassment (5), and difficulties accessing appropriate programs (6). Conversely, facilitators include adapted programs, professional supervision, and recreational or natural environments (5).

Experimental studies demonstrated significant improvements in self-esteem following participation in physical-recreational activities, a reinforcement that increases motivation and adherence (5). Overall, the findings confirm that the positive emotional experience generated by physical activity is directly related to continued participation (6).

Table 1. Characteristics of the studies included in the review

Author / Year	Country	Design	Sample	Main Findings
Reyes-Rincón & Campos-Uscanga, 2020	Mexico	Descriptive systematic review	20 studies	Physical activity in older adults improves functionality, prevents physical and psychological decline, and promotes healthy aging.
Portilla-Bravo & Bayas-Machado, 2024	Ecuador	Quantitative, cross-sectional	50 older adults (96% women)	Older adults with higher intrinsic motivation exhibit significantly higher levels of physical activity and better adherence to regular exercise.
Pallarés et al., 2020	Spain	Qualitative, focus groups	14	Older adults are primarily motivated by the pursuit of health, autonomy, and socialization, with these factors being key to sustaining physical activity.
Calero Morales et al., 2016	Ecuador	Quasi-experimental	20 AM	Participation in group physical and recreational activities boosts motivation, improves emotional well-being, and increases sustained participation among older adults.
Velásquez Parra, 2025	Ecuador	Systematic review	20 studies	Evidence shows that physical activity provides functional and psychological benefits, but participation in it depends heavily on motivational factors such as social support, accessibility, and enjoyment.
AM: Older Adults				

DISCUSSION

The findings of this review confirm that motivation plays a central role in adherence to physical activity among older adults, consistent with the conclusions reported by previous reviews (5). Intrinsic motivation, particularly enjoyment and the perception of well-being, emerged as the primary predictor of continued participation (3). These results align with the principles of Self-Determination Theory, which posits that autonomous behavior is more persistent when basic psychological needs for autonomy, competence, and social relatedness are met.

Extrinsic motivation, such as peer support, socialization, and professional guidance, was also shown to be relevant, particularly among those with lower intrinsic motivation. Qualitative studies show that group and natural settings promote greater adherence due to a sense of belonging and shared enjoyment (6). The quasi-experimental study from Ecuador reinforces this finding by demonstrating significant improvements in self-esteem following recreational programs, thereby sustaining physical activity (5).

The identified barriers are consistent with the international literature: fear of injury, pain, embarrassment, and low self-efficacy (3, 5). These variables negatively affect adherence, indicating the need for personalized interventions that address both physical and psychological aspects.

Finally, the methodological heterogeneity observed in the included studies points to the need for more robust designs in Latin America that longitudinally assess the relationship between motivation and adherence. This review helps synthesize recent evidence and highlights the importance of motivation-centered strategies for promoting active aging.

CONCLUSION

The results of this systematic review allow us to conclude that motivation is a key element in promoting participation in and adherence to physical activity among older adults. Intrinsic motivation, related to enjoyment, emotional well-being, and the perception of improved health, emerges as the most influential factor in exercise continuity (3, 6). Extrinsic motivation, particularly professional support, socialization, and group programs, also plays a significant role (5). When older adults engage in physical activity and/or sports for the consequences or benefits derived from the activity—such as improving their image, outperforming others, or gaining greater social recognition—motivation is extrinsic and instrumental. Meanwhile, unmotivated individuals have no intention of engaging in physical activity, as a lack of motivation leads them to adopt a passive stance.

Physical, psychological, and environmental barriers hinder participation, while identified facilitators—adapted programs, recreational settings, and professional supervision—strengthen both intrinsic and extrinsic motivation (3). Taken together, these findings underscore the need to implement interventions that integrate motivational strategies to promote active and healthy aging.

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