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### **ORIGINAL**



# Impact of the Comprehensive School for Older Adults on Quality of Life

# Impacto de la Escuela Integral para Personas Mayores en la calidad de vida

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### **ABSTRACT**

**Introduction:** active aging and quality of life in older adults are priorities in public health and higher education. The Comprehensive School for Older Adults (Escuela Integral para Personas Mayores, EIAM), developed by Universidad de Las Américas, aims to promote self-care, social participation, and overall wellbeing, while enhancing professional training of students through community engagement activities.

**Method:** a mixed-methods design was applied. In the quantitative phase, 44 participants from the 2024 cohort completed a pre- and post-intervention quality-of-life questionnaire. In the qualitative phase, two focus groups were conducted with 24 participants from the 2023 cohort to explore perceptions and programattributable changes. The evaluated dimensions included economic conditions, social participation, use of information and communication technologies, physical and mental health, social support networks, and overall well-being.

**Results:** improvements were observed in self-perceived skills for healthy eating (65,4% to 88,3%), technology use (good or very good skills: 38,5% to 47,1%), and active physical and cognitive life (very good cognitive skills: 0% to 40%). Focus group findings highlighted strengthened community sense, self-esteem, civic participation, and self-care. Areas for improvement included program continuity, adaptation of academic language, and in-depth coverage of legal and digital literacy content.

**Conclusions:** the EIAM positively impacts older adults' quality of life and university students' comprehensive education, constituting an effective community engagement practice. Its continuity and expansion align with Sustainable Development Goals 3, 10, and 11, fostering health, inclusion, and sustainable community environments.

**Keywords:** Aged; Quality of Life; Health Promotion; Community-Institutional Relations; Students; Education, Higher; Aging; Social Participation.

#### **RESUMEN**

**Introducción:** el envejecimiento activo y la calidad de vida en la vejez constituyen prioridades en salud pública y educación superior. La Escuela Integral para Personas Mayores (EIAM), desarrollada por la Universidad de Las Américas, busca promover el autocuidado, la participación social y el bienestar integral, a la vez que fortalece la formación profesional de estudiantes mediante actividades de vinculación con el medio.

**Método:** se aplicó un diseño mixto. En la fase cuantitativa, 44 participantes de la versión 2024 completaron un cuestionario de calidad de vida pre y post intervención. En la fase cualitativa, se realizaron dos grupos focales con 24 participantes de la versión 2023 para explorar percepciones y cambios atribuibles al programa. Las dimensiones evaluadas incluyeron condiciones económicas, participación social, uso de tecnologías,

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salud física y mental, redes de apoyo y bienestar general.

Resultados: se observaron mejoras en la autopercepción de habilidades para alimentación saludable (65,4 % a 88,3 %), uso de tecnologías (habilidades buenas o muy buenas: 38,5 % a 47,1 %), y vida activa física y cognitiva (muy buenas habilidades cognitivas: 0 % a 40 %). Los grupos focales destacaron el fortalecimiento del sentido de comunidad, la autoestima, la participación ciudadana y el autocuidado. Se identificaron áreas de mejora en la continuidad de módulos, adaptación del lenguaje académico y profundización en contenidos legales y digitales. Conclusiones: la EIAM impacta positivamente en la calidad de vida de personas mayores y en la formación integral de estudiantes universitarios, constituyéndose como una práctica efectiva de vinculación con el medio. Su continuidad y expansión se alinean con los Objetivos de Desarrollo Sostenible 3, 10 y 11, promoviendo salud, inclusión y entornos comunitarios sostenibles.

Palabras clave: Envejecimiento Activo; Calidad de Vida; Adultos Mayores; Educación Superior; Vinculación con el Medio.

#### INTRODUCTION

The world's population is aging at an unprecedented rate, posing significant challenges for maintaining quality of life in old age. (1) Higher education can play a disruptive role in this scenario by promoting active aging and meaningful social participation. (2)

University programs designed for older adults, such as the Chairs for Older Adults, have demonstrated clear benefits. For example, it has been proven that continuing education in university settings contributes to improving quality of life by promoting socialization, self-esteem, and recognition as active members of the community. (3) In particular, this training has been key to promoting active aging and reducing social isolation.(3)

There are pioneering initiatives in Latin America: the University Chair for Older Adults in Cuba has been identified as an institutional benchmark in education for older adults, demonstrating a positive correlation between participation and improved physical and mental well-being. (4) Similarly, the Autonomous University of Tlaxcala in Mexico is developing educational models focused on autonomy, personal agency, and dialogic relationships, based on the principles of successful aging. (5)

At the global level, UNESCO, together with Shanghai Open University, has promoted studies on the response of higher education institutions (HEIs) to lifelong learning. It is recognized that these HEIs can facilitate active aging through intergenerational education, digital learning, and institutional openness. (6)

Evidence also confirms that, although many programs exist, they are not always tailored to the specific needs of older adults: affordability, flexible schedules, and recognition of prior experience are common barriers. (6)

For their part, university wellness programs aimed at students, although in a different age group, have shown that 81,8 % of participants reported improvements in their quality of life. (7) This reinforces the thesis that HEIs are effective platforms for promoting health, inclusion, and personal development in a comprehensive manner.

The Integral School for Older Adults (EIAM), developed by the University of Las Americas, offers an innovative practice in the context of higher education. It seeks not only to improve the quality of life of older adults, but also to strengthen the professional training of students through enriching outreach strategies. Considering the above background and the growing relevance of inclusive higher education, this study aims to generate empirical evidence that will enable higher education institutions to design and implement community engagement policies aimed at increasing the participation and retention of older adults in inclusive university programs by at least 20 % over the next five years.

## **METHOD**

Study design

A mixed-methods study was conducted, with a quantitative quasi-experimental pretest-posttest component without a control group and a qualitative descriptive component using focus groups. This combination allowed for the analysis of both changes in objective indicators of quality of life and the subjective perceptions of the participants.

Variables and dimensions

The dependent variables were the dimensions of quality of life, operationalized as:

1. Physical and mental health (self-perception of health status, presence of functional limitations,

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emotional well-being).

- 2. Social support networks (frequency of interaction, availability of help in situations of need).
- 3. Social and community participation (level of involvement in neighborhood, cultural, and civic activities).
- 4. Use of information and communication technologies (ICTs) (level of basic digital skills: use of cell phones, messaging, video calls, internet).
  - 5. Perceived economic conditions (sufficiency of income to cover basic needs).
  - 6. General well-being (life satisfaction and perception of overall quality of life).

#### Measures and instruments

A structured quality of life questionnaire designed specifically for the EIAM program was administered, consisting of 36 items distributed across the six dimensions mentioned above. Each dimension was measured with between 4 and 8 items.

- Response scale: all items were evaluated using a 5-point Likert scale (1 = very low, 5 = very high), allowing both scores per dimension and an overall quality of life score to be calculated.
- Coding: the values were transformed into categories (low, medium, high) for descriptive and comparative analysis before and after the intervention.
- Validity and reliability: the questionnaire was reviewed by a panel of experts in gerontology and public health to ensure content validity. A pilot study was conducted with 10 participants in 2023; acceptable internal consistency was obtained (overall Cronbach's  $\alpha = 0.81$ ).

## Qualitative

In the qualitative phase, two 90-minute focus groups were conducted using a semi-structured guide that explored perceptions of change in health, well-being, social networks, barriers to participation, and recommendations. The guide was validated by consensus among three researchers with experience in participatory methodologies.

## Temporal measurement

The questionnaire was administered at two points in time:

- Pre-intervention: one week before the start of the program.
- Post-intervention: one week after the end of the module cycle.

# Context and study population

The intervention was carried out within the framework of the Comprehensive School for Older Adults (EIAM), implemented at the La Florida Campus of the University of Las Américas, Chile, during the years 2023 and 2024. The program was aimed at people aged 60 and over who were residents of the local community, and was run by academics and university students from different degree programs as part of their community outreach activities.

#### Sample

Quantitative phase (2024): Forty-four participants completed the pre- and post-intervention questionnaires. Qualitative phase (2023): Twenty-four participants who attended focus groups at the end of the program were considered.

### Intervention

The Comprehensive School for Older Adults (EIAM) was implemented at the La Florida Campus of the University of Las Américas in a face-to-face format, through a 12-week consecutive program. The sessions were held once a week, each lasting 90 minutes.

The program was organized into six thematic modules, each consisting of two sessions:

- 1. Healthy eating (2 sessions)
  - o Content: principles of nutrition, planning balanced menus, reading nutrition labels.
  - Methodology: initial lecture + practical workshop on preparing healthy foods.
- 2. Physical and cognitive activity (2 sessions)
  - o Content: age-appropriate physical exercises, joint mobility routines, memory and attention training.
    - Methodology: guided demonstrations + supervised practice.
- 3. Use of information and communication technologies (ICTs) (2 sessions)
  - o Content: basic use of smartphones, video calls, instant messaging, internet browsing.
  - o Methodology: practical workshop with individual support for students.

- 4. Emotional well-being (2 sessions)
  - o Content: stress management, self-esteem, self-care, and relaxation techniques.
  - Methodology: group dynamics and guided relaxation exercises.
- 5. Citizen participation (2 sessions)
  - o Content: citizen rights, community participation opportunities, local support networks.
  - Methodology: theoretical presentation + case studies and participatory debate.
- 6. Rights of older persons (2 sessions)
  - o Content: national legal framework, health rights, social security, and protection against discrimination.
    - Methodology: interactive classes with practical examples and question-and-answer sessions.

All sessions were taught by teachers specializing in gerontology, nutrition, kinesiology, and social sciences, with the support of undergraduate students acting as monitors. The teaching strategy combined short lectures (30-40 min) with practical and interactive activities (50-60 min), ensuring both knowledge transfer and experiential learning.

The average attendance per participant was  $85\,\%$  of the total sessions, which allowed for complete exposure to the program in most cases.

#### Data collection

Quantitative: A structured quality of life questionnaire for older adults was administered, designed based on the review and adaptation of previously validated instruments at the national and international levels, including the National Survey on Quality of Life and Health (ENCAVI, MINSAL), the WHOQOL-BREF scale (WHO), the study "Aging in Chile" (PUC and Confuturo, 2023), and the national surveys on quality of life in old age (PUC and Caja Los Andes, 2019 and 2022), as well as the Seventh National Survey on Social Inclusion and Exclusion of Older Adults (University of Chile and Ministry of Social Development, 2023), with Likert scale items designed to measure dimensions of quality of life: physical and mental health, support networks, social participation, use of technologies, economic conditions, and general well-being. The measurement was taken before and after the intervention. Qualitative: Two 90-minute focus groups were conducted, led by a trained moderator, with a semi-structured guideline aimed at exploring perceptions of change, facilitators, barriers, and recommendations for the program.

#### Data analysis

Quantitative: Descriptive statistics (frequencies, percentages) and comparison of pre- and post-intervention proportions were used.

Qualitative: Transcripts were subjected to thematic analysis, inductively coding emerging categories and contrasting them with the dimensions evaluated in the quantitative phase.

## Ethical considerations

The project was carried out under the coordination and supervision of the Outreach Department of the University of Las Américas. All phases of the study were conducted in accordance with the ethical principles of the Declaration of Helsinki and current institutional regulations.

#### **RESULTS**

# Quantitative results

Forty-four adults aged 60-82 (mean age 68,4 years; range 60-82) participated in the quantitative phase, completing the quality of life questionnaire before and after the intervention.

Table 1. Comparison of pre- and post-intervention results by dimension evaluated			
Dimension evaluated	Pre-intervention (%)	Post-intervention (%)	Absolute variation (%)
Healthy eating (good/very good)	65,4	88,3	+22,9
Use of technology (good/very good)	38,5	47,1	+8,6
Cognitive skills (very good)	0,0	40,0	+40,0
Social participation (active/very active)	54,8	76,2	+21,4
General well-being (high/very high)	59,1	81,6	+22,5

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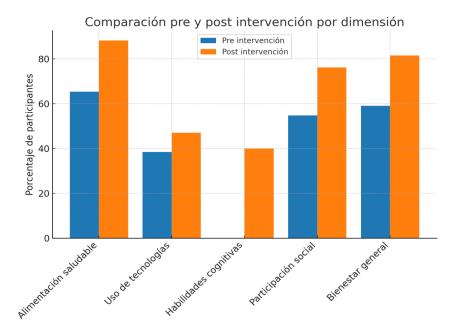


Figure 1. Comparative bar chart pre- and post-intervention by dimension evaluated

A statistically significant improvement (p<0,05) was observed in the dimensions of healthy eating, cognitive skills, and social participation, reflecting a significant positive impact of the intervention on key aspects of quality of life for older adults. The increase in the proportion of participants who reported good or very good healthy eating skills (65,4% pre- vs. 88,3% post-intervention) was consistent with the qualitative results, in which participants highlighted that they had become more aware of balanced eating practices during the nutrition workshops. These findings suggest that the quantitative improvement may be linked to the self-care learning and strategies discussed in the sessions, although no formal statistical association was established. In the case of cognitive skills, the change was particularly marked, going from zero levels in the initial measurement to 40% of participants reporting high performance after the intervention, suggesting a substantive educational effect.

# Qualitative results

The analysis of the two focus groups (n=24) generated five emerging categories:

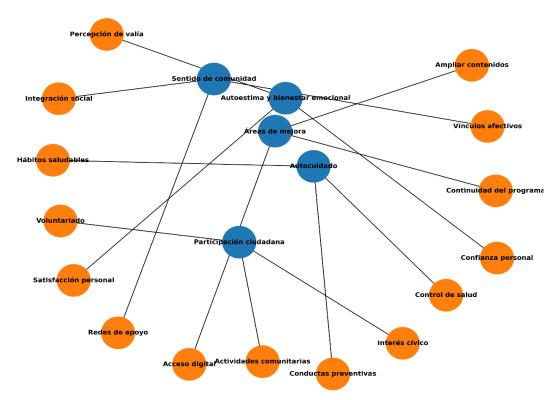


Figure 2. Outline of qualitative categories and subcategories derived from thematic analysis

Sense of community: development of emotional bonds and support networks, self-esteem and emotional well-being: increased perception of personal worth, citizen participation: greater involvement in neighborhood and community activities, self-care: adoption of healthy and preventive habits, areas for improvement: request to expand content and improve technological accessibility.

Nube de palabras de los grupos focales (estilo alternativo)

actividad confianza aprendizaje tecnología <sup>ap</sup>motivación salud ...b.ieanestar participación amistad autonomía

Figure 3. Word cloud of the most frequent words in the participants' discourse

Figure 3 presents the word cloud generated from the frequency analysis of terms in the focus group transcripts. The largest terms correspond to the words that recurred most frequently in the participants' discourse, reflecting the conceptual axes that guided their perceptions. Among the most prominent are friendship, autonomy, well-being, learning, and motivation.

Likewise, the prominence of terms such as participation, trust, community, and support indicates the importance participants placed on a sense of belonging and social interaction. Other concepts such as selfesteem, activity, inclusion, and technology reflect both the positive emotional impact and the incorporation of practical skills. These qualitative findings complement the quantitative results, providing a deeper insight into how the intervention influenced the quality of life and overall well-being of the participants.

## **DISCUSSION**

The study results show that the implementation of the Comprehensive School for Older Adults (EIAM) had a positive impact on several dimensions of quality of life in older adults, particularly in healthy eating, cognitive skills, and social participation. These findings are in line with previous studies on university educational interventions for older adults, which have documented improvements in psychological and social well-being after participation in University of the Third Age (PUMA) learning programs in Spain, Mexico, Chile, and Cuba. (8)

The observed strengthening of cognitive abilities—from 0~% to 40~% of participants rating themselves as performing very well—reflects a significant impact of the intervention. This resonates with evidence from metaanalyses showing that formal education in later life contributes to improved cognitive function, quality of life, and emotional well-being, even significantly increasing MMSE scores. (9)

Likewise, participants in the focus groups highlighted intrinsic values such as friendship, autonomy, wellbeing, learning, and motivation (Figure 3), underscoring the psychosocial component of learning in university settings. This emotional and relational dimension is central to models of active aging and activity theory, which point out how staying socially active improves life satisfaction in old age. (10)

At the institutional level, educational programs aimed at older adults, such as universities for the elderly and the Age-Friendly University Global Network, promote intergenerational learning and continuous educational inclusion, fostering both personal and social development in older adults.(11)

In relation to healthy eating, the results of this study are in line with international research showing how nutrition education in older adults increases self-perception of healthy habits and the adoption of preventive behaviors. (8) In particular, Latin American evidence has documented that the combination of practical workshops and personalized counseling promotes sustainable changes in diet and self-management of self-care. (2) Our findings, which reveal a significant increase in the perception of dietary skills after the intervention, suggest that community college programs are an effective vehicle for positively impacting local public health.

With regard to cognitive skills, the increase from 0 % to 40 % of participants with a self-assessment of very good performance is in line with systematic reviews that demonstrate the ability of late-life learning programs to preserve cognitive plasticity and prevent mental decline. (9) The uniqueness of this study is that it confirms these benefits in a Latin American university context, where educational opportunities in old age

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are still limited. This reinforces the hypothesis that structured intellectual stimulation, combined with social interaction, is a protective factor against pathological aging.

In the area of social participation, the results of the EIAM are consistent with those reported by Orosa Fraíz<sup>(4)</sup> in Cuba and Guillén<sup>(5)</sup> in Mexico, where university programs for older adults promoted community integration and citizen agency. The expansion of social networks and the consolidation of neighborhood ties reported in our focus groups is in line with the WHO's theory of active aging, which argues that sustained participation in the community is as important as physical health for well-being in old age.

Finally, from an institutional perspective, this study confirms that university engagement with older adults not only produces individual benefits but also contributes to broader social objectives, such as reducing inequalities and building inclusive community environments. In this sense, the results of the EIAM provide empirical evidence that complements and reinforces the experiences of the Global Network of Age-Friendly Universities, consolidating the idea that higher education can and should play an active role in intergenerational sustainable development.

### **CONCLUSION**

The implementation of the Comprehensive School for Older Adults demonstrated a positive impact on various dimensions of quality of life, highlighting significant improvements in healthy eating, cognitive skills, and social participation. These results support the usefulness of university-level educational programs aimed at older adults as a strategy to promote active aging and comprehensive well-being.

The strengthening of cognitive skills and the consolidation of social networks show that education in later life not only promotes formal learning but also acts as a catalyst for psychosocial processes relevant to mental health and community integration.

However, more moderate advances in the use of technologies and the absence of significant changes in economic conditions and access to health services indicate the need to complement these initiatives with specific interventions in digital literacy and public policies that address structural factors.

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# **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest.

### **AUTHOR CONTRIBUTION**

Conceptualization: Constanza Rivero, Carolina Silva. Data curation: Constanza Rivero, Carolina Silva. Formal analysis: Constanza Rivero, Carolina Silva.

Research: Constanza Rivero, Ignacio Astudillo, Carolina Silva.

Methodology: Constanza Rivero, Ignacio Astudillo.

Project management: Constanza Rivero.

Supervision: Constanza Rivero. Visualization: Ignacio Astudillo.

Writing - original draft: Constanza Rivero, Carolina Silva.

Writing - review and editing: Ignacio Astudillo, Iris Tejos, Constanza Rivero, Carolina Vizcarra, Gabriel

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