


LEISURE AND TECHNOLOGIES FOR THE ELDERLY: THE PROPOSAL OF CEPELS/UFT

 <https://doi.org/10.56238/arev7n3-096>

Submitted on: 02/12/2025

Publication date: 03/12/2025

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ABSTRACT

Population aging is a growing reality, with significant implications for society, especially regarding the digital inclusion of older people. The use of Information and Communication Technologies (ICTs) offers opportunities to improve the quality of life of this population, providing greater socialization and access to information. However, challenges such as lack of familiarity with technologies and cognitive and motor barriers make it difficult to adapt. The objective of this study is to analyze the impact of ICTs on the leisure and well-being of older people, discussing the opportunities and obstacles of this interaction. The methodology used was qualitative and exploratory, with a bibliographic review and analysis of projects of the Center for Training, Extension, Innovation, and Research in Education, Leisure and Health of the Federal University of Tocantins (Cepels/UFT). Data collection included articles, institutional reports, and scientific publications, focusing on barriers and solutions to digital inclusion. The results show that, despite the difficulties, ICTs can improve socialization, and cognitive and emotional health, in addition to enabling access to cultural and educational content. The conclusion highlights the importance of developing digital literacy strategies and technical support to overcome technological barriers, highlighting the potential of ICTs as tools for empowerment and inclusion, promoting active aging, and the participation of older people in society.

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Keywords: Education and Leisure. Technologies. Lifelong education.

INTRODUCTION

Population aging is a global reality, bringing challenges and opportunities to contemporary society (Sales *et al.*, 2019). With the increase in life expectancy and the improvement in health conditions, the elderly population has become an increasingly expressive and diverse group (Martins *et al.*, 2024). In this context, Information and Communication Technologies (ICTs) have been directly impacting the way older people interact with the world, transforming their leisure habits and promoting greater social inclusion (Do Nascimento *et al.*, 2020). The digitalization of services, access to information, and the interactivity provided by social networks are elements that contribute significantly to the quality of life of this population (Dos Santos, Ribeiro, Ferreira, 2020).

However, the relationship between older people, leisure, and technology requires reflections on accessibility, learning, and the benefits that digital connectivity can provide to the well-being of this group (Cunha *et al.*, 2022). While ICTs offer new opportunities for socialization and entertainment, there are also barriers to overcome, such as unfamiliarity with electronic devices, motor and cognitive difficulties, and initial resistance to the use of new technologies (Abrão & Del Pino, 2016). Thus, it is essential to develop strategies that facilitate the insertion of the elderly population in the digital world, such as digital literacy programs, accessible technical support, and intuitive interfaces (Bessa *et al.*, 2022).

The methodology of this work is qualitative and exploratory, focused on the analysis of documents and projects related to the interaction of older people with ICTs. The research involved a bibliographic review on digital inclusion, active aging, leisure, and accessibility, as well as a documentary analysis of projects from the Center for Training, Extension, Innovation and Research in Education, Leisure, and Health of the Federal University of Tocantins (Cepels/UFT). Data collection included academic articles, institutional reports, and scientific publications, with an emphasis on barriers and solutions for the digital inclusion of the elderly population. Content analysis was used to identify patterns and themes related to the impact of ICTs on the leisure and well-being of older people, discussing the opportunities and challenges of this process and the role of institutions in promoting digital inclusion and quality of life in old age.

In this scenario, the Center for Training, Extension, Innovation, and Research in Education, Leisure, and Health of the Federal University of Tocantins (Cepels/UFT) collaborates as a point of connection and promotion of different academic and social projects that directly and indirectly reach active aging. After all, Cepels/UFT develops

initiatives that seek to integrate older people into the digital universe, promoting technological inclusion and strengthening their participation in leisure and socialization activities (UNIVERSIDADE FEDERAL DO TOCANTINS, 2024).

Thus, this essay analyzes the impact of technologies on the leisure of older people, discussing the opportunities provided by the use of digital devices and interactive platforms, as well as the challenges faced by this population in adapting to the digital world (Andrade & Pereira, 2009). The adoption of technologies can favor social inclusion by enabling contact with distant friends and family, participation in cultural and educational activities, and the development of new skills (Souza *et al.*, 2022). In addition, practices such as electronic games, applications for physical and mental exercises, and access to audiovisual content can contribute to maintaining the cognitive and emotional health of this population (Abrão *et al.*, 2022).

Therefore, the interaction between older people and technology represents a promising field of research and social intervention. With proper support, it is possible to transform technology into a tool for empowerment and inclusion, ensuring that aging is a phase of life marked by autonomy, well-being, and active participation in society (Pires & Nunes, 2021).

PATHS TRAVELED

The methodology adopted for this work is a qualitative and exploratory approach, focusing on the analysis of documents and projects that involve the interaction of elderly people with Information and Communication Technologies (ICTs). The research was based on a bibliographic review of academic articles, institutional reports, and scientific publications related to digital inclusion, active aging, leisure, and accessibility for the elderly population. In addition, a documentary analysis of projects developed by the Center for Training, Extension, Innovation, and Research in Education, Leisure, and Health of the Federal University of Tocantins (Cepels/UFT) was carried out, which aims to promote digital inclusion and the promotion of leisure in old age.

Data collection was made from the analysis of academic documents, reports of extension and research activities, and institutional materials made available by Cepels/UFT, in addition to other secondary sources pertinent to the theme (Marconi and Lakatos, 2003). The research also included an analysis of scientific publications that describe digital inclusion initiatives aimed at older people in different contexts, with an

emphasis on the barriers faced by this population and the solutions adopted, such as the development of digital literacy programs, technical support, and the creation of more accessible digital interfaces.

For the interpretation of the data, the content analysis technique was used (Bardin, 2011), which allowed the identification of patterns, themes, and categories related to the impact of ICTs on the leisure and well-being of the elderly. The research thus shares the understandings of its authors that involve questioning how digital interaction contributes to active aging and how access to technologies can be a factor of empowerment and social inclusion for this population.

The objective is, based on the evidence raised, to discuss the opportunities and challenges of the use of ICTs in the leisure of the elderly, in addition to analyzing the role of institutions, such as Cepels/UFT, in the promotion of policies and initiatives that favor digital inclusion and the well-being of the elderly population.

LEISURE IN OLD AGE: CONCEPT AND IMPORTANCE

Leisure is an essential element for the quality of life of individuals, regardless of age. In the context of old age, its importance is even greater, as it contributes to the physical, mental, and social well-being of the elderly. According to Dumazedier (1976), leisure can be defined as a set of occupations to which the individual dedicates himself voluntarily, seeking rest, fun or personal development. With the increase in life expectancy and the aging of the population, it is essential to discuss the possibilities and challenges of leisure for those who age. In addition to being a form of entertainment, leisure activities in old age play a key role in maintaining autonomy, socialization, and health promotion (Campos *et al.*, 2021).

Leisure can be understood as a subjective experience that involves individual and collective choices, varying according to the culture and interests of each person (Abrão *et al.*, 2024). For Huizinga (2000), leisure is related to the concept of play, that is, a voluntary and pleasurable activity that provides a break with daily obligations. In old age, leisure acquires a special meaning, as it can act as a factor in coping with the changes resulting from aging, such as retirement, reduced mobility, and the loss of loved ones (Barros *et al.*, 2024). According to Gomes (2004), leisure can be an important ally in the active aging process, as it stimulates cognitive functions, promotes socialization and improves the self-esteem of the elderly.

Thus, older people must have access to various leisure activities, adapted to their conditions and preferences, so that they can fully enjoy this phase of life (Reis *et al.*, 2024). The practice of activities that involve movement, such as walking, dancing, sports, and water aerobics, contributes significantly to the maintenance of physical health. According to Silva and Nascimento (2018), a sedentary lifestyle is one of the main risk factors for chronic diseases in old age, and active leisure can act to prevent these diseases. In addition, regular physical activity helps preserve muscle strength, flexibility, and balance, reducing the risk of falls and increasing autonomy (Abrão, Da Silva Quixabeira & Ferreira, 2022). Water aerobics, for example, is an effective activity in improving joint mobility and reducing pain associated with diseases such as osteoarthritis (Bezerra *et al.*, 2024).

In addition to the physical benefits, leisure plays an important role in preserving the cognitive functions of older people. Activities such as reading, board games, crossword puzzles, and learning new skills help stimulate memory, attention, and creativity. According to Chaves *et al.* (2019), the stimuli provided by intellectual leisure activities are fundamental to slow cognitive decline and prevent neurodegenerative diseases, such as Alzheimer's. Studies indicate that older people who maintain an intellectually active lifestyle have a lower risk of developing dementia compared to those who do not engage in cognitive stimulation activities (Silva & Abrão, 2022).

Participation in cultural and artistic activities, such as theater, music, and painting, allows older people to express their emotions and strengthen their identity. These activities not only stimulate creativity, but also promote the resignification of life experiences, contributing to emotional and psychological well-being (Abrão & Noletto, 2016). Participating in cultural workshops and artistic events provides a space for recognition and appreciation of the trajectory of elderly people, promoting self-esteem and personal satisfaction (Lobato *et al.*, 2024).

Leisure also offers opportunities for social interaction, being essential to avoid isolation and loneliness in old age. As highlighted by Tavares *et al.* (2023), participation in community groups, clubs, and cultural events strengthens social ties and improves the quality of life of older people. This social interaction not only promotes emotional well-being, but also contributes to the construction of support networks, which are fundamental to face the challenges of aging (Do Nascimento *et al.*, 2021). According to Souza and Lima (2021), involvement in collective leisure activities, such as dance, theater, and cultural workshops, favors a sense of belonging and stimulates the development of new skills.

In this context, the Center for Training, Extension, Innovation and Research in Education, Leisure and Health of the Federal University of Tocantins (Cepels/UFT) has a strategic role in promoting and fostering academic and social projects that encourage leisure in old age. Cepels/UFT acts as a space for research, training and extension, developing initiatives aimed at social inclusion that reaches the elderly through leisure practices that promote health, well-being and quality of life. In addition, its activities seek to integrate different generations, creating opportunities for older people to share their experiences and strengthen their participation in society (UNIVERSIDADE FEDERAL DO TOCANTINS, 2024).

Leisure in connection with technology can also expand the spaces for valuing the experience of older people, promoting the recognition of their role in society. According to Gomes (2020), the involvement of older people in community and intergenerational activities contributes to the exchange of knowledge between different generations, promoting a more active and participatory aging. Therefore, public policies and social initiatives must encourage and facilitate the access of older people to leisure activities that favor their social integration and quality of life (Dharlle Oliveira Santana *et al.*, 2021).

CHALLENGES FOR THE PROMOTION OF LEISURE IN OLD AGE

Despite the benefits of leisure and technology for the quality of life of older people, their participation in recreational activities still faces barriers. These difficulties can compromise the well-being of the elderly population and are related to structural, economic, technological, and psychological factors, making access to leisure more challenging (Rocha *et al.*, 2021).

According to Gomes and Pinto (2006), the scarcity of public spaces for the leisure of elderly people reinforces the marginalization of this group, hindering their social participation and impairing their quality of life. So one of the main obstacles is the lack of access to adequate spaces and activities. Many cities do not have infrastructure that meets the needs of old age, such as community centers, accessible cultural spaces, and specific programs aimed at this audience. In addition, the absence of adapted public transportation and the lack of public policies that encourage active aging contribute to the exclusion of older people from these activities (Duarte *et al.*, 2024).

Another relevant factor is financial difficulties. Many older people rely solely on limited retirements and pensions, which restricts their ability to invest in paid activities such

as gyms, courses, and travel. According to Teixeira (2007), this economic limitation reduces the accessible leisure options for this population. In this sense, Costa and Fernandes (2021) highlight that economic accessibility is a determining factor for the participation of older people in cultural and sports activities, and it is necessary to develop policies that expand free or subsidized access to these initiatives.

In addition to financial challenges, "technological barriers" also make it difficult for older people to access leisure that can be achieved in the digital universe. A challenge for the growing digitalization of recreational activities, in which many face difficulties in using electronic devices and accessing cultural content online. The lack of familiarity with technology, combined with the absence of adequate support, can generate digital exclusion, preventing access to virtual events, online courses, and other forms of digital entertainment (Inoyou, 2009; Oliveira, Santana & Ferreira, 2021). In this sense, Gil *et al.* (2015) emphasize that the digital inclusion of older people should be a priority to ensure their active participation in contemporary society, providing opportunities for learning and leisure through technology.

Psychological factors also pose significant challenges to older people's adherence to leisure. Demotivation, fear of participating in recreational activities, and insecurity resulting from health problems or loss of autonomy can lead to social isolation. Issues such as depression, low self-esteem, and lack of family or social incentive can reduce the interest of older people in seeking leisure opportunities, making aging more solitary and less active (Abrão *et al.*, 2013). In addition, Silva *et al.* (2021), mentions the need to "overcome emotional barriers" to strengthen social bonds and encourage participation in coexistence groups, which provide emotional and motivational support.

In the face of these challenges, the Center for Training, Extension, Innovation and Research in Education, Leisure and Health of the Federal University of Tocantins (Cepels/UFT) presents itself as a mediator for the promotion of initiatives that seek to reduce these barriers and expand the access of elderly people to leisure activities. Cepels/UFT arises to foster more academic projects aimed at active aging, encouraging the development of inclusive policies and the creation of more spaces that favor the participation of elderly people in recreational activities. In addition, it foresees in its actions the search for partnerships with other institutions in favor of actions that stimulate digital inclusion, emotional support and the strengthening of support networks, contributing to a healthier and more participatory aging.

Therefore, overcoming the challenges for the promotion of leisure with the elderly requires a joint effort between government, society and academic institutions. Dialogue that is essential for the implementation of public policies that guarantee adequate infrastructure, economic and digital accessibility, as well as psychological support so that older people can fully enjoy leisure and its benefits for quality of life.

STRATEGIES TO OVERCOME CHALLENGES FOR LEISURE AND WELL-BEING

For leisure with the elderly to be accessible and inclusive, the government, society and families must encourage and promote policies aimed at this population. Leisure should be understood as a social right, contributing to the quality of life, well-being, and autonomy of older people (Abrão, 2024). Thus, some strategies are essential to expand the participation of this group in recreational activities. In this context, the Center for Training, Extension, Innovation and Research in Education, Leisure and Health of the Federal University of Tocantins (Cepels/UFT) plays a central role, by expanding the University's presence in the promotion of academic and social projects aimed at the inclusion of elderly people in leisure in technology in favor of active aging (FEDERAL UNIVERSITY OF TOCANTINS, 2024).

One of the main strategies is the expansion of public infrastructure. Investment in accessible leisure spaces, with adapted transportation and adequate equipment, is essential to ensure that older people can enjoy cultural and sports activities. According to Ferreira and Almeida (2021), the creation of inclusive public spaces is a determining factor for increasing the participation of older people in leisure activities, as it reduces physical barriers and encourages active aging. In addition, the adaptation of squares, parks and community centers can encourage the practice of physical activities, such as walking and outdoor gymnastics, promoting benefits for physical and mental health.

Another challenge faced by those who age is financial difficulties, which limit their participation in recreational activities. To mitigate this problem, it is essential to create programs that offer free or discounted access to cultural, sporting, and recreational events. According to Gomes (2008), the implementation of public policies that guarantee free or subsidies for leisure for the elderly population contributes to social equity and the well-being of this group. The exemption of fees for cultural events, the financing of clubs and other spaces of interaction and the incentive to social tourism are some of the measures that can be adopted to expand access to leisure.

In addition, digital inclusion is an essential factor in ensuring that older people can enjoy the new leisure possibilities provided by technology. With the advancement of digitalization, many recreational activities have been adapted to the virtual environment, allowing access to cultural content, courses, and online social interactions. However, lack of knowledge and lack of familiarity with technology can make this inclusion difficult. Therefore, it is essential to offer courses and workshops that teach the use of electronic devices for leisure and entertainment. According to Rocha *et al.* (2011), the digital inclusion of older people is an indispensable factor for their social integration, allowing them to explore new forms of entertainment and communication. Classes on social networks, streaming platforms, and reading apps can provide new cultural experiences and reduce social isolation.

Another strategy is the promotion of events, meetings and social groups, which stimulate the socialization and emotional well-being of the elderly. Group activities, such as dance, theater, choir and handicrafts, favor the exchange of experiences and strengthen interpersonal bonds. According to Duarte *et al.* (2024), living spaces for older people play a key role in promoting mental health, as they reduce the risks of depression and encourage the construction of social bonds. In addition, intergenerational programs, which promote interaction between young people and older people, can contribute to the appreciation of aging and the exchange of knowledge, enriching social interaction and strengthening the inclusion of this public.

Therefore, the implementation of these strategies is essential for older people to enjoy accessible and inclusive leisure, promoting not only their physical and mental health, but also their active participation in society. Thus, Cepels/UFT stands out in this scenario as a reference center in research and in the promotion of initiatives that seek to guarantee the right to leisure of the elderly population, contributing to the development of policies and actions that favor active and dignified aging.

THE BENEFITS OF USING TECHNOLOGIES FOR LEISURE AND WELL-BEING

Population aging is a global reality, bringing challenges and opportunities to contemporary society. With the increase in life expectancy and the improvement of health conditions, the elderly population has become an increasingly expressive and diversified group. In this context, the advancement of Information and Communication Technologies (ICTs) has directly impacted the way older people interact with the world, transforming their

leisure habits and promoting greater social inclusion (De Oliveira Martins, 2023). The digitalization of services, access to information and the interactivity offered by social networks are elements that have contributed significantly to the quality of life of older people. In addition, the use of ICTs favors the autonomy and independence of this public, providing them with new forms of communication, learning, and leisure (Abrão et al., 2024).

However, this relationship between old age and technology requires reflections on accessibility, learning and the benefits that digital connectivity can provide to the well-being of older people. While ICTs offer new opportunities for socialization and entertainment, there are also barriers to overcome, such as unfamiliarity with electronic devices, motor and cognitive difficulties, and initial resistance to the use of new technologies. Thus, it is essential to develop strategies that facilitate the insertion of the elderly population in the digital world, including digital literacy programs, accessible technical support, and the development of intuitive interfaces (De Almeida, 2021).

In this scenario, the Center for Training, Extension, Innovation and Research in Education, Leisure and Health of the Federal University of Tocantins (Cepels/UFT) has stood out, as the actions developed by the center aim not only to find ways to expand the training of elderly people for the use of ICTs, but also to ensure that these technologies are used as tools to strengthen socialization, the well-being and quality of life of this population.

The incorporation of ICTs into the daily lives of older people brings numerous benefits, going beyond entertainment and promoting social inclusion and cognitive stimulation. Among the main positive impacts of the use of technologies, the reduction of social isolation stands out. The use of the internet allows for greater social interaction, especially for those who live alone or have mobility difficulties. Social networks and video calls allow them to keep in touch with family and friends, reducing feelings of loneliness and exclusion (Araújo *et al.*, 2021). Cognitive stimulation and continuous learning are also relevant points, as digital games, online reading, and virtual courses are excellent ways to keep the mind active and prevent cognitive decline. In addition, studies show that frequent use of digital devices can improve memory and logical reasoning skills in older people (Pereira et al., 2022).

Despite the advances, older people still face barriers in the use of ICTs. Among the main challenges of digital inclusion, the lack of familiarity with digital interfaces, motor and visual difficulties, and the fear of fraud and virtual scams stand out. Many elderly people

have not had previous contact with technologies and find it difficult to adapt to the use of electronic devices (Silva *et al.*, 2021). Small buttons, touchscreens, and complex interfaces can pose obstacles for this age group. In addition, the lack of knowledge about digital security can expose older people to cyber risks, such as bank fraud and theft of personal data (Cunha *et al.*, 2019).

To overcome these challenges, it is essential to invest in digital training for the elderly population, developing accessible and intuitive teaching programs. The development of more inclusive and friendly technologies can facilitate the adhesion of this audience to the digital universe. The implementation of public policies and private initiatives that encourage the use of technologies is also essential to ensure a more connected and participatory aging. While Cepels/UFT acts directly in this perspective, promoting actions that seek to foster teaching, research and extension in actions that integrate older people into the digital world and ensure that ICTs are used as tools for inclusion, leisure and well-being.

TECHNOLOGY AS AN ALLY IN THE LEISURE OF THE ELDERLY

We live in an era of rapid technological transformations that affect various aspects of society, including the way the elderly population enjoys leisure. The advancement of Information and Communication Technologies (ICTs) has brought new possibilities to older people, allowing them to connect with family, friends, and communities, as well as providing entertainment and learning opportunities. One of the allies in this process is the Center for Training, Extension, Innovation and Research in Education, Leisure and Health of the Federal University of Tocantins (Cepels/UFT) by standing out as an important point of connection and promotion of academic and social projects aimed at digital inclusion and leisure.

ICTs encompass a variety of digital devices and resources, such as computers, smartphones, tablets, smart televisions, and digital media. With the popularization of the internet and social networks, older people began to explore new forms of leisure, such as watching educational and cultural videos, participating in virtual interest groups, playing online games, and using music and reading apps (Abrão, Del Pino, 2016). The adoption of older people to digital technologies has grown significantly. According to Reis *et al.* (2024), 76% of connected older people use the internet for entertainment and leisure, 67% participate in social networks to keep in touch with friends and family, and 90% have

learned to use these technologies in a self-taught way or with the help of family members. This scenario demonstrates the importance of making technology more accessible to older people, promoting training and encouraging the use of digital platforms that meet their needs and preferences.

The use of digital technologies in leisure not only provides entertainment, but also contributes to the physical and mental well-being of older people (Nascimento Ferreira *et al.*, 2022). Social networks, messaging apps, and video calls reduce social isolation and strengthen family ties. Digital games, online reading, and virtual courses help keep the mind active and prevent neurodegenerative diseases. Streaming platforms, audiobooks, and interactive content offer fun and learning in a hands-on way. In addition, exercise, meditation and dance apps encourage the practice of healthy habits.

Despite the benefits, older people still face challenges in the use of technologies, such as difficulties in adapting to digital interfaces, lack of technical support and fear of virtual fraud. The natural aging process brings physical limitations that impact the use of technologies. Problems such as arthritis, tremors, and reduced motor coordination make it difficult to manipulate mobile devices, especially those with touch screens (Da Silva *et al.*, 2021). In addition, visual difficulties, such as presbyopia, make reading on small screens a challenge, leading them to avoid the use of cell phones and tablets. Although, as pointed out in Cepels/UFT, companies develop accessibility features, such as font augmentation, voice commands, and simplified interfaces, but not all older people are aware of these features or know how to activate them (Ferreira & Moura, 2019).

Another relevant aspect is digital fatigue, caused by prolonged use of screens and difficulty in processing visual information quickly. To minimize these impacts, it is recommended that technological devices aimed at older people be developed with a more intuitive design and adapted to their needs (Borges, Xavier, 2021). In addition, the lack of knowledge about digital security can expose you to cyber risks, such as bank fraud, theft of personal data, and scams on social networks. Studies show that older people are among the groups most vulnerable to social engineering attacks, in which scammers use fake emails, misleading messages, and fraudulent calls to obtain sensitive information (De Araújo *et al.*, 2021).

To overcome these challenges, as pointed out in Cepels/UFT, it is essential to offer educational programs on digital security, addressing topics such as secure passwords, identification of fraudulent messages and good practices on the internet. The support of

family and friends is essential to help older people navigate the digital environment with more confidence and security (Abrão, Duarte, 2017). Thus, the promotion of digital inclusion and technological leisure for older people should be a priority, ensuring that this portion of the population can fully enjoy the possibilities that the digital age offers (Schwartz et al., 2020).

LOW SUPPLY OF COURSES AND SPECIFIC TRAINING

Although there are digital inclusion initiatives for older people, many are still limited and difficult to access. The offer of face-to-face and virtual courses aimed at older people does not always meet the demand, and the content may not be adapted to the pace and needs of this audience (Cunha *et al.*, 2021).

According to Ferreira *et al.* (2021), digital inclusion programs must have specific pedagogical approaches for older people, respecting their difficulties and encouraging learning gradually and interactively. In other words, practice-based teaching models, with face-to-face demonstrations and individualized monitoring, have shown greater effectiveness in the assimilation of technological content by older people.

In addition, the implementation of community learning spaces, such as digital coexistence centers and technological workshops in neighborhood associations, can contribute to expanding access to digital education and encourage intergenerational socialization. Another relevant factor is the inequality in access to technological devices and the internet. For many older people, especially those with low incomes, the purchase of a smartphone or computer can represent a high cost, making it difficult to adhere to technologies (Ferreira, Moura 2019).

In addition, access to quality internet is still unequal in several regions, especially in rural areas. According to the Brazilian Institute of Geography and Statistics (IBGE, 2021), about 30% of the elderly population in Brazil still does not have regular access to the internet, which significantly limits their participation in the digital society.

To address this challenge, public policies that promote the distribution of accessible devices and expand the reach of the internet in vulnerable communities are essential. Government programs and private initiatives aimed at democratizing digital access can contribute significantly to the inclusion of older people in the technological environment (Gil, 2015).

The Center for Training, Extension, Innovation and Research in Education, Leisure and Health of the Federal University of Tocantins (Cepels/UFT) enters the scene to support initiatives that promote the digital inclusion of the elderly population. Through research, training and partnerships with public and private institutions, Cepels/UFT will contribute to the creation of educational programs adapted to the needs of older people, ensuring effective pedagogical methodologies and expanding access to digital learning spaces.

CONCLUSION

The challenges of digital inclusion for older people highlight the need for more accessible and inclusive approaches for this audience. The lack of familiarity with technologies, motor and visual difficulties, fear of virtual fraud and economic barriers are factors that hinder the adoption of ICTs by older people. However, with appropriate strategies, such as the development of more intuitive interfaces and specific training, it is possible to reduce these barriers and provide older people with greater access to the benefits of the digital age.

In the paths of active aging, the participation of older people in the digital society allows this population to enjoy the opportunities for socialization, leisure and learning offered by contemporary technologies. Digital inclusion, therefore, should be understood not only as a means of access to information, but as an essential right for improving the quality of life in old age.

In addition to digital inclusion, leisure plays a key role in promoting the well-being of older people. It contributes to the maintenance of physical and mental health, strengthens social bonds, and provides a fuller and more meaningful life. However, the offer of leisure activities for this audience still faces challenges, requiring a joint effort to ensure that older people have access to enriching and pleasurable experiences.

The promotion of leisure in old age should be seen as a fundamental right and an essential tool for active aging. To ensure this access, it is necessary to involve the government, civil society and families, through the implementation of inclusive policies, such as the expansion of infrastructure and free cultural and recreational activities.

The Center for Training, Extension, Innovation and Research in Education, Leisure and Health of the Federal University of Tocantins (Cepels/UFT) plays an essential role in this context. Through its teaching, research and extension actions, Cepels/UFT contributes significantly to the training of educators, health professionals and public managers, in

addition to promoting applied research that guides public policies aimed at digital inclusion and leisure for the elderly.

The extension activities carried out by Cepels/UFT, such as courses and workshops, have been fundamental to bring knowledge directly to the communities. This strengthens the social bond with the elderly, offering them access to technologies and leisure in an inclusive way. In this way, Cepels/UFT positions itself as an important collaborator in the construction of active and digitally integrated aging, promoting a healthier and more participatory quality of life for the elderly.

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