



G&DR. V. 18, N. 3, P. 268-285, set-dez/2022. Taubaté, SP, Brasil. ISSN: 1809-239X

> Received: 09/18/2020 Accepted: 03/09/2022

# HUMAN AGEING, DIGITAL TRANSFORMATION AND THE ELDERLY IN THE MUNICIPALITY OF SANTA CRUZ DO SUL

# ENVELHECIMENTO HUMANO, TRANSFORMAÇÃO DIGITAL E AS PESSOAS IDOSAS DO MUNICÍPIO DE SANTA CRUZ DO SUL

Roberto Wickert<sup>1</sup> Silvia Virginia Coutinho Areosa<sup>2</sup> Diorginis Luis Fontoura da Rosa<sup>3</sup>

#### **Abstract**

This article discusses the concepts of Development and Culture, approaching the theme of population ageing and the impacts of an increasingly connected society on the ways of life and manifestations of the elderly. The methodological process used in this research went based on interviews with 20 people, whose ages vary between 60 and 69 years old, living in the urban area of the city of Santa Cruz do Sul in the state of Rio Grande do Sul. The results show that the internet is already part of the interviewees' daily lives. It is a communication and information tool incorporated into their routines, taking on a larger dimension as they become more comfortable expanding their uses and discovering new features. Thus, we conclude that the internet is a fundamental instrumental freedom to expand the capacities of choice and citizenship of the older people interviewed. Although they lived their childhood and adolescence in a period of deprivation of civil and political freedoms, thanks to the advancement of ICTs, broad freedom of expression and information is available. We concluded that this work is innovative in Regional Development studies because it places the older person as the protagonist of the territory they inserted, placing such individuals as agents. They can transform the reality of their region, from the access and appropriation of ICTs or their citizen presence participating in decisions that interfere with their daily lives.

Keywords: Development. Culture. Older Persons. Society. Internet.

#### Resumo

Este artigo discute os conceitos de Desenvolvimento e Cultura aproximando a temática do envelhecimento populacional e os impactos de uma sociedade cada vez mais conectada nos modos de vida e manifestações das pessoas idosas. O recorte metodológico da pesquisa foi feito a partir de entrevistas feitas com 20 pessoas, cujas idades variam entre 60 e 69 anos, residentes no meio urbano do município gaúcho de Santa Cruz do Sul. Como resultado percebemos que a internet já faz parte

<sup>1</sup> Master in Regional Development (UNISC). Porto Alegre – RS, Brazil. Email: wickert.roberto@gmail.com

<sup>&</sup>lt;sup>2</sup> PhD in Social Service (PUC-RS). Professor and Researcher at the Graduate Program in Regional Development at the University of Santa Cruz do Sul. Santa Cruz do Sul – RS, Brazil. Email: sareosa@unisc.br

<sup>&</sup>lt;sup>3</sup> Graduated in Psychology (UNISC). Santa Cruz do Sul – RS, Brazil. Email: di\_fontoura@hotmail.com

do cotidiano dos entrevistados. É uma ferramenta de comunicação e informação que naturalmente foi sendo incorporada nas suas rotinas, tomando uma dimensão maior à medida que foram se sentindo mais confortáveis em ampliar seus usos e descobrir novas funcionalidades. Isto nos permite concluir que a internet se constitui como liberdade instrumental fundamental para ampliar as capacidades de escolha e cidadania das pessoas idosas entrevistadas. Embora tenham vivido sua infância e adolescência em um período de privação das liberdades civis e políticas, graças ao avanço das TICs têm ao seu alcance uma ampla liberdade de expressão e informação. Concluímos ainda que este trabalho é inovador no campo dos estudos do Desenvolvimento Regional pois coloca a pessoa idosa como protagonista do território em que está inserida, posicionando tais indivíduos como agentes capazes de transformar a realidade da sua região, a partir do acesso e apropriação das TICs ou da sua presença cidadã participando das decisões que interferem no seu cotidiano.

Palavras-chave: Desenvolvimento. Cultura. Pessoas Idosas. Sociedade. Internet.

#### Introduction

This article intends to discuss the concepts of Development and Culture, approaching the theme of population ageing and the impacts of an increasingly connected society on the ways of life and manifestations of the elderly. The methodological approach of the research started with the analysis of primary data obtained from interviews with people whose ages vary between 60 and 69 years old, living in the urban environment of the city of Santa Cruz do Sul, in which we seek to understand how to perceive in this context.

In this sense, Sen's work (2000) is used as an epistemological axis in the light of the theory of Development as Freedom, in which the author refers to the term Development as a broader, interdisciplinary concept, not restricted to economic aspects. Hall's work (1997) is used as a guide for the cultural discussion when it gives it fundamental importance, a centrality, in the structuring and organization of modern society as well as in the processes of Development of the global environment, which increasingly most affected by the impact of technologies and the information revolution.

We seek to contextualize the elderly in this scenario to demonstrate the impacts that historical, social, cultural, and political changes have on the reality of contemporary older people. We should also note that we conducted this discussion considering the heterogeneous character of old age, as presented by Camarano and Pasinato (2004). They indicate that the meaning of ageing involves more than the simple demarcation of biological ages but comprises a multidimensional character. The ageing process is complex and multifaceted; longevity, in turn, brings a generational character to this discussion as it represents the number of years lived by people of the same generation (CARVALHO; GARCIA, 2003).

For Becker (2000), the concept of development, whether on a local or regional scale, can only be complete when there is an appreciation of the quality of life of individuals, social participation, and the well-being of present and future generations. This concept emphasizes the horizontal dimension of the territory by seeking to improve the quality of life of the actors, at the individual or collective level, through the insertion of the community in the global scope and through the recognition of the particularities of the region in which it is inserted, emphasizing the identity and cooperation.

The concept of development mentioned above is connected to Sen's (2000) understanding, for whom development is the process of expanding the freedoms and capabilities of individuals. Thus, there only developed<sup>4</sup> when the deprivations of liberty limit people's choices and opportunities to exercise their conditions as eliminated agents. In this logic, individuals, whether elderly or not, can shape their destiny and act as agents of social transformation, not only passively favored by the development process.

This approach consists of looking at development as a broader, interdisciplinary concept, not just restricted to economic aspects. In this way, it breaks with the predominantly economistic views

<sup>4</sup> Aware that the term "development" had loaded several meanings, we used it in capital letters to reinforce the theoretical and conceptual orientation guiding this discussion.

of development guided only by indicators such as the gross domestic product. In Sen's (2000) view, there is a fundamental distinction between the two expressions in which growth implies a change in quantitative order. In turn, it is perceived as a qualitative impact when looking at the development concept.

We can say that, in the perspective of Sen (2000), financial capital and economic values are no longer the centers, and this is now occupied by people, where what matters is their well-being and the guarantee of their ability to choose. The financial aspect, then, becomes a resource of a complementary nature to the development process and not the only way to do so, as until then it had been approached by other researchers.

For Tânia Bacelar, in the publication "Nordeste 2022 - Perspectives studies", from 2014, the challenge of the multidimensional character of development implies precisely building an integrated vision, that is, making a synthesis from dimensional readings, aiming, above all, at the of conflicts. This multidimensional reading will make it possible to diagnose the central points of the relationship between cultural, economic, and political dimensions, among others. In this sense, when we return to the concept of territory as a result of a social actionl<sup>5</sup> (PECQUEUR, 2009), which, concretely and abstractly, appropriates a space (both physically and symbolically), it is necessary to direct the discussion to the perspective of the individual's performance, especially the elderly, in the context of territorial formation, as well as its contribution to the development of the region in which it is inserted.

This understanding assumes that the elderly constitutes themselves as a social actor in contemporary society, where they seek to guarantee their space and assert their active role, able to distance themselves from the figure of supporting circumstances, from the outdated view of a hindrance to the younger generations. To advance in this discussion, it is necessary to carry out the delimitation exercise of the term culture, which has an enormous amplitude. Etymologically, the term derives from the Latin *colere* and is used to refer to things as distinct as housing, religious worship ("cult"), passing through a well-known meaning associated with agricultural cultivation, referring to the work of "farming" until reaching the field of this reflection, which understands culture as a way of life, expressed through the meaning attributed to things (WILLIAMS, 1989).

The first look is at the global dimension of culture. This scenario of the advancement of technologies and what Hall (1997) calls the information revolution, which causes a change in popular consciousness influenced by the synthesis of time and space. In this case, one of the effects mentioned would be a tendency toward cultural homogenization, indicating that the world becomes a unique place both from a spatial, temporal, and cultural point of view. However, the author himself opposes this idea, emphasizing the argument that global culture needs 'difference' to thrive. Thus, globalization produces 'simultaneously' new 'global' and 'new' local identifications rather than a uniform and homogeneous global culture.

The author addresses the issue of the centrality of culture in the constitution of subjectivity, identity itself, and the person as a social actor. At this point, he asserts that our identities are culturally formed and should be thought of as constructed within representation, through culture, not outside of it. By concluding analysis of the subjective expansion of culture, he addresses its epistemological centrality. This argument is based on the 'cultural turn', a concept that refers to the relevance that language comes to have in the constitution of facts, and being recognized for this, not only for reporting them, as it was conceived until then.

Hall's look at the global dimension of culture impacted by the advance of technologies is connected to that of the Brazilian geographer Milton Santos (1999) when he cites the advance of information and communication techniques as one of the engines of the globalization process, representing the advance of the economic model based on capitalism. This advance, according to Santos, makes possible the interconnection between several other techniques and creates the so-called universal finance, alongside global added value. Thus, from the perspective analyzed by Santos (2000), globalization presents itself in two ways: the first, in the form of an opportunity, enables the exchange of knowledge through the advancement, uniqueness, and universality of

www.rbgdr.net

<sup>&</sup>lt;sup>5</sup> In his 2009 work "The Territorial Turn of the Global Economy," PECQUEUR distinguishes between two types of territories. The first one would be the "given territory" originated from political-administrative decisions. The other would be the one that is built-*territory*, formed from a meeting of social actors in a given geographic space to identify and solve a common problem.

communication techniques. The second face, the perverse expression of the globalization process, would be the one that destroys and smothers.

From the present discussion's perspective, the regions are classified as a scale of global and local mediation. It is, then, in the configuration of this game of forces that takes place from the process of a globalized world that an approach emerges that announces the end of regions from the growth of capitalist production relations. On the other hand, regions saw as particularities that can and should enhance as an endogenous alternative to regional development (ETGES, 2013). A region's development only begins when it contemplates its citizens' rights. Otherwise, there is no development (SEN, 2011).

## Elderly people, the internet, and the development

The UN warned of the importance of discussing the issue of population ageing since the 1980s; when it held the first World Assembly on Ageing in 1982 when it gave rise to the document called the Vienna International Plan of Action on Ageing, which sought to instigate action on topics such as health and nutrition, protection of elderly consumers, housing and the environment, family, social welfare, income, and employment security, education, and the collection and analysis of research data.

In the early 1990s, the organization adopted the United Nations Principles for Older Persons. This document signals the rights of older persons regarding independence, participation, care, self-fulfillment, and dignity. Soon after, in 1992, the Ageing Proclamation was adopted. Two years later, in Brazil, the National Policy for the Elderly was made official (Law n.º 8.842/1994). The end of the decade, within the scope of the UN, is still marked by the choice of 1999 as the International Year of Older Persons.

In 2002, the Second World Assembly on Ageing took place in Madrid<sup>6</sup>, Spain. A milestone of this meeting was the elaboration of the Madrid International Plan of Action on Ageing and the Political, which offers specific recommendations so that all governments can pay attention to older people and development, improving health, and well-being, ensuring housing and support environments, among other actions. Furthermore, it advocates that the protection of human rights and fundamental freedoms, including the right to development, is essential for creating a society that includes all ages, in which the elderly participate fully, without discrimination, and on an equal footing. (UN, 2003). These fundamental freedoms express by Sen (2000) as the fundamental right of citizens to choose.

According to the guidelines of this document, the three knowing priorities mentioned below in thematic axes and respective objectives: Older people and development; Promotion of Health and Well-Being in Old Age; Creating an Enabling and Favorable Environment. All on the premise that the older person should be allowed to continue contributing to society.

Recent decades have marked the increase in longevity indices and indicated an exponential growth of technologies in their most diverse forms. Based on the "impulse that the creation of the computer and the advancement of information techniques give to the globalization process" (SANTOS, 1999, p. 201), several authors highlight the impact of ICTs in the most varied areas of individuals lives. A worthy example of this is the work Cyberculture, in which Pierre Lévy (1999) analyzes this "new" system of communication that would later integrate the global production of words, sounds, and images of culture, creating new forms and channels of communication. as well as interfering in the morphology of society and also being modified by it. Hall (1997), in turn, mentions that expanding information and communication technologies suggests a cultural regulation that demands the constitution of new subjects. The author also maintains that such a move causes a globalized culture, in which coexistence between the global is characterized by a homogeneous worldview, which does not consider the particularities of regions, and the local, marked by the singularity of territories.

It is worth remembering that the internet was initially not a "territory for the elderly". Its origins date back to the 1980s and start from the context of university academic development—the

<sup>&</sup>lt;sup>6</sup> The holding of World Assemblies takes place through the UN General Assembly, which is the main deliberative body of the Organization and where its Member States (currently 193 countries) meet to discuss issues that affect the lives of all the inhabitants of the planet. In the General Assembly, there is total equality among all its members so that each country has the right to one vote. It is important to note that the resolutions deliberated in these forums act as recommendations and are not mandatory. It is up to each Member State to assess the best way to consider such aspects in their government program.

initial portion of people connected to this technology comprised intellectuals, researchers, and young people. The high cost of equipment to connect to the Worldwide network also limited its use. In Brazil, commercial Internet use was only made official in 1995. The elderly population started to adhere to this means of communication when the costs of accessing mobile communication services became lower. Likewise, there have been successive efforts to enable older generations to connect to the Internet because the share of youth participation is close to saturation in some markets (CASTELLS *et al.*, 2007).

In this context, the new information and communication technologies, especially the internet, make the person, in a way, obliged to deal with and learn how to handle them to feel inserted in society, following the evolution of the environment. Social. (REIS, 2012). Thus, the contribution of Antunes *et al.* (2006) when they state that the advent of the internet confronts the concept of citizenship, including the right to access information and the possibility of inclusion in the wide variety of communication possibilities through access to the world wide web, to the tripod of the set of civil rights, social and political.

Based on the above, reflection on the theme of aging and the perspective that the internet has brought about the scope of citizenship in more comprehensive and homogeneous ways is necessary. It becomes relevant to contribute to the production of knowledge on the subject. Moreover, its implication in the scope of Regional Development is still little explored in scientific knowledge. It is also necessary to consider in this discussion the impact of these digital technologies on the daily lives of the elderly. According to Kachar (2001), this wide availability of Internet access in our daily lives caused a rupture with previous generations, modifying the traditional notion of space and time, how people think, and how they relate.

This rupture potentializes when we connect the issue of Internet access to the reality of contemporary older people when we consider the different economic, socio-environmental, and cultural contexts through which they passed. That is because it was only from the 1990s onwards that the need for a more direct political participation of civil society in the formulation and implementation of development policies. Born at least thirty years after the emergence of radio, in the 1950s/60s, when television was beginning to gain space in Brazilian homes, they lived through adulthood in a scenario of oppression marked by crises and milestones of transformation in various spheres, generally assuming a passive stance towards the struggle for civil rights. In economic matters, they experienced the height of hyperinflation and the beginning of the process of national economic stability; in the political sphere, the opening of democracy after a period marked by the regime of the military dictatorship - ended in the mid-1980s, where censorship of the media prevailed, for example, and caused a crisis of adaptation to the democratic regime.

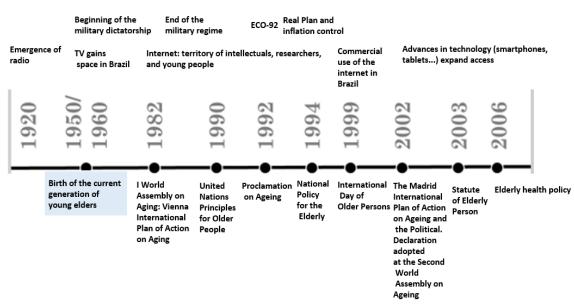
In the environmental sphere, they witnessed the first movements towards greater awareness of the impacts of human activity on nature, with the holding of Eco-92<sup>7</sup>, where participating countries recognize the concept of sustainable development and intend actions to protect the environment. Furthermore, in the social sphere, they experienced what Bresser-Pereira (1996) called the failure to create a Welfare State in Brazil, close to the European social democratic model. The image below summarizes all the discussions so far. It contextualizes the theme of aging in the global and national agenda over the last few decades. These main milestones have influenced the culture of the current generation of older people and the evolution of information and communication technologies.

www.rbgdr.net

<sup>&</sup>lt;sup>7</sup> Also known as Rio-92 or Earth Summit, the United Nations Conference on Environment and Development (UNCED) was held in June 1992 in Rio de Janeiro and marked how humanity views its relationship with the planet by placing the subject on the public agenda.

The need for a more direct political participation of civil society in the formulation and implementation of development policies

Figure 1: Milestones that influenced the generation of elderly people studied



Source: Prepared by the authors.

By recognizing the uniqueness of the aging process and the possibility of using technology to "bring people together and thus contributing to the reduction of marginalization, loneliness and the separation between the ages" (UN, 2003, p. 42).), we understand that it is vital to investigate further the senses and perceptions of the elderly about the use of the internet as a possibility of expanding people's capacities to lead the kind of life they value, aware of their rights and duties, influenced by the effective use of the participatory capacities of the people (SEN, 2000).

## Methodology

We opted for qualitative research as we understood it as the most appropriate for working with the universe of meanings, motives, aspirations, beliefs, values, and attitudes (MINAYO, 2015). The semi-structured interview was the technique chosen for the collection of primary data. The interview script was composed of questions that sought to investigate the relationship of the elderly with the internet, motivators to adhere to this technology, habits of use, information, how they perceive themselves in a connected society, and, finally, their understanding of citizenship in old age. Were sent the scripts to researchers who specialized in human ageing for evaluation before the beginning of the interviews. Notwithstanding, two pre-tests carried out to verify the interviewees' ability to understand the proposed questions, the estimated duration of the interview, and possible adjustments. At this moment, for example, it was possible to perceive some difficulties with specific words in the script, because they are not part of the daily lives of the interviewees, such as the understanding of the concept of citizenship.

The research selected participants using a non-probabilistic method initiated through a mapping that sought to identify the neighborhoods of the municipality of Santa Cruz do Sul with the most significant number of older people. Then, was identified the coexistence groups of the elderly in these neighborhoods. The next step was to contact the coordinators of each group. The interviewer introduced himself, explaining the need to schedule a time for the research project presentation. If there was availability to collaborate, a space was open in meetings of the groups for the presentation of the research proposal and identification of volunteers willing to participate in the interviews.

This way was interviews with men and ten women aged between 60 and 69 years and residing in the urban area of Santa Cruz do Sul. An approximation justified this age segmentation option with the concept of Papalia, Olds and Feldman (2013), for whom the term young elderly generally refers to people between 65 and 74 years old, who are usually active and full of life and vigorous. That is an American definition, and since in Brazil, people over 60 years old are considered elderly, we chose to consider people aged between 60 and 69 years old as young elderly for this study.

Furthermore, in the light of Sen's theory (2000), we conducted a reflection on what would be the specific functioning's that could include in the list of significant achievements and their corresponding capabilities according to the reality of the interviewed subjects. When Sen (2000) deals with the issue of functioning, his concern with the evaluative issue is evident, bringing the complexity of the subject explicitly. In this sense, it is because we assume internet access as a fundamental function, capable of helping to expand the capacities of the interviewed subjects, that using this information and communication technology was established as a research requirement.

Furthermore, we emphasize that this investigative process took place by the principles of Resolution 466/2012 of the National Health Council (BRASIL, 2012), which deals with ethics in research with human beings. To this end, a research project was prepared and submitted for evaluation by the Research Ethics Committee of the University of Santa Cruz do Sul (CEP-UNISC), responsible for implementing and enforcing the requirements regarding research with human beings. Thus, another fundamental requirement was the availability to participate in the study after clarifying the research objectives and signing the Free and Informed Consent Term - TCLE. Thus, the project, identified under CAAE 11016019.0.0000.5343, was approved by the Research Ethics Committee - CEP of UNISC under Opinion No. 3,361,947.

## The perception of elderly people from Santa Cruz do Sul about the internet

In this section, we discuss based on the research data most relevant to understand the perception of older people in the city of Santa Cruz do Sul about the internet. However, first, let us share data regarding the qualification of the sample, such as territorial distribution, education, and profession.

From the perspective of territorial distribution, we verify that the research sample was distributed among different neighborhoods in the municipality of Santa Cruz do Sul. This amplitude can be evidenced in the map below, which indicates that the neighborhood with the largest number of respondents was the University, where 05 people who participated in the research live. Subsequently, the Centro and Schulz neighborhoods concentrated the second largest number of respondents, with four subjects in each neighborhood. In the Santo Inácio and São João neighborhoods, two older people in each territory, and, in turn, in the Independência, Higienópolis, and Esmeralda neighborhoods, one person from each location.

THE PERSON IN SUCCESSION SERVICES

VARIETY

VARI

Figure 02: The territorial distribution of the sample

Source: Prepared by the authors.

The people interviewed were characterized by having exercised different fields of professional activity. The Industrial occupation, with three mentions, followed by the Commercial

occupation, with two mentions, and Caregiver for the Elderly, also with two mentions, were the ones that had the highest number of citations. Concerning the schooling of the researched group, it is also possible to verify a diversity of the level of education. The sample has people who claim to have studied until the early years of Elementary School and who reported having completed Elementary School, High School, technical courses, and even higher education.

Regarding the motivators that drove the interviewees to have contact with the internet and their relationship with technologies, it is possible to analyze that the family has a significant influence on this process of digital inclusion. Cecília, 64, says that her daughter and son-in-law's vacation trip was the trigger for her to replace her "small cell phone" with a device with internet access:

But I, I forced myself (to use the internet)... then my son-inlaw and my daughter went to travel to Bahia... and they said that "you, with your small cell phone, you cannot stay... you have to buy another one for..." then I saw everything... them sitting, wherever they stopped at the hotels and stuff... they always said "look, I really miss having a mate" (laughs and more relaxed). Cecília, 64 years old.

We found similar reports by Elis, 69 years old, and Frida, 61. In their case, their children moved to other countries for work. So, due to the distance that made it impossible to maintain a personal relationship, access to the internet through smartphones made it possible to maintain contact. Research published by Foletto, Fiepke and Wilhel (2018, p. 516), investigates the uses of the internet as a means of communication and a source of information by the elderly in the city of Frederico Westphalen, in the state of Rio Grande do Sul, the authors emphasize that the family, "more specifically the children, who have been inserted for a longer time in a mediatized reality, are one of the biggest drivers that lead the elderly to the desire to also insert themselves in this form of communication and information".

We found a situation similar to that described in the study above when interviewing young, older people in the city of Santa Cruz do Sul. We see pressure from children for parents to keep up to date with information and communication technologies and enjoy the benefits of digital transformation. Let see:

No, I didn't... cell phone even... my cell phone... I always had a little one... then my son [...] he said "dad you have to update you dad... you can get a lot of news"... and I... "Son, this is not like that, you studied for this and the older generation does not have this facility, how can an old man learn this"... "No, father... you learn... you will see that you can do so much... you will research things". Caetano, 66 years old

We agree with Mantovani and Justo (2016, p. 14) when they say that access to the internet influences the elderly in such a way that "their motivation, self-esteem, and quality of life improve, because they feel more useful and important, integrated into the environment". context of digital culture", one of the characteristics of contemporary society. Dellarmelin and Froemming (2015, p. 2) follow the same line when emphasizing that "online communities can help and bring several benefits to the stimulation of the elderly, consequently making them feel an integral part of the new style of society." In this sense, it was possible to identify statements that reflect the behavior of those who experienced the internet as a form of social inclusion:

No, not at first (there was internet), then yes... that thing right... everyone has it, so I had to have it too... so I bought one... too... then I used it in the office, then it was with internet right. Celso, 65 years old.

According to Leitão, Gaige and Siqueira (2019), new information and communication technologies do not require a specific cultural capital, such as formal education. The challenges then present themselves in the sensory and cognitive fields. Once "in the network," the operationalization difficulties manifest themselves, so a support network is necessary. We can see that such support is made by family members, according to the reports below:

It was my son who taught... and more studying... I didn't even know how to write, type and stuff... he lives next door... my wife too, she already had one... so she understands a little more than I... and we're going to turn around, right? Carlos, 66 years old.

From then on, I entered messenger, whatsapp, I went in... anything I would go there and ask my kid, how do I do it... no, you go into settings, go there, stuff... just be careful not to open... some sites... that these sites have, right... they are dangerous and stuff... he taught me to take everything... and I learned, I understood. Oswaldo, 68 years old.

Although in a digital literacy process aimed at the elderly public, it is recommended that those who teach need to be aware of a teaching methodology adapted to the reality of each one so that it is possible to fully develop the student over 60 years old (MILANÉS; HERRERO; HERNÁNDES, 2016), the learning scenario in the interviewed families is far from this reality. In the case of Alberto, 64, his "teacher" is the youngest son, who does not have the patience to explain to his father repeatedly:

Then I accessed it because he taught me... father, he does it like that, sometimes he went to school... he made a mistake and didn't know how to go back... I had to wait for him to get home from school... "Dad"... "hey son... the father pays for English classes for you, pays for school... you won't teach the old man"... "okay, sit here"... then it takes time... "but dad, I already taught you that"... yeah... I have a harder time getting it right ...huh. Alberto, 64 years old.

Regarding usage habits, it is possible to see how much older people have incorporated these new information and communication technologies and started using digital tools to maintain contact with family members and sustain friendship bonds, as mentioned by Mantovani and Justo (2016). ). We also identified reports of beginning new friendships with people they did not even know outside the virtual environment. The testimony of Caetano, 66 years old, expresses well this issue of social bonds pointed out by the authors and shows that the central theme of interaction with family members for him is "good morning, how are you" through WhatsApp platforms and Facebook.

whatsapp message, messages from... from my cousins who live in Porto Alegre, there are friends too... more "how are you", send them on whatsapp (looking at the cell phone as if talking about someone), oh my, in the morning when I I get up now... it seems like everyone has already put something... what I use most is whatsapp, the phone itself, right, Facebook (pause) and what else, I take some pictures, I have my contacts of people, everything, right?, several people... Caetano, 66 years old.

Another exciting fact appears in the speech of Malala, 60 years old when she shares the importance she attaches to the recognition of her friends, expressed through "likes."

Ah, (I like to post) pictures... good morning, good night, good afternoon... these things (laughs) and then there are friends like that, they also post, I like their posts... they like mine... and we'll get together I understand... but yeah, I post things like this, I like to see how many likes and stuff like that. Malala, 60

According to Deters and Mehl (2013), status updates on social networks, such as photo posts, can alleviate the feeling of loneliness. In a study evaluating the usage habits of one hundred and two people from the American University of Arizona, the authors concluded that these content publications draw attention to the user and can motivate friends to initiate social interactions. In addition, we also identified in the interviewees' testimonies the habit of using chat apps such as WhatsApp or Messenger to foster social interactions, as can be seen in Alberto's speech below:

My cell phone... ah... there's a lot of... group... no... whatsapp group for us to communicate... there's a family group... and a

group of 28 veterans that I participate in Grêmio Esportivo 28 de Setembro, so for us say if there is a game or not, to have a meeting and that kind of thing. Alberto, 64 years old.

The highlighted speech reinforces the potential of the internet and the positive influence that this information and communication technology has on the daily lives of the older people interviewed. In a study that analyzes the digital literacy experience of Cuban people over 60 years old who attended classes at the Central Palace of Computing and Electronics in Havana, Milanés, Herrero and Hernández (2016), for example, conclude that access to ICTs offers benefits to the older population, such as increased capacities for social, cultural and entertainment interaction. In addition, we also agree with the authors when they state that access to these technologies enables these people to qualify for their individual and social development and optimize their quality of life. For researchers Bolzan and Löbler (2016), in addition to raising the actors' self-esteem, access to ICTs makes it possible for them to become more secure in relation to their families and society. In a publication in which they investigate the process of digital inclusion of young people, adults, and the elderly, the authors consider that "it is a matter of regaining the family's attention, especially the children and grandchildren, and their space in society." (BOLZAN; LÖBLER, 2016, p. 145).

The use of the internet also reveals an informational aspect, according to the interviewee's statements. If, until then, we have evidenced the influence of the family to enter the digital world, it was possible to perceive that they expanded the access available on the network from the moment they joined it, mainly looking for news, whether in the local, regional, or global scope. According to Carneiro (2018, p. 44) the process of "search and use of information indicates a constructive activity of meaning for the situations of change through which the person goes through to solve problems". And from the moment that the elderly have a tool capable of increasing their informational capabilities, the act of navigating the net makes it possible to fill this gap in meaning.

In the case of Celso, 65, the high cost of subscribing to the printed newspaper made him migrate to the newspaper's own digital platform and the Facebook platform.

(Points to cell phone to explain how to get information) I read the newspaper... the Gazeta was very expensive and I cut it... [...] then I look around here (cell phone)... on Facebook, then open the.. Gazeta, for example, [...] or I look around here... when I have this thing (laptop) open here... I have Face here... then I don't spend it there (laughs)... Celso, 65 years old.

There are still those who prefer the Facebook platform itself as a source of information. Although the social network does not produce content and is a large portal in which other information vehicles disclose their coverage, it is worth noting that in the perception of Elis, 69 years old, Facebook fulfills this role.

Although somewhat extensive, the testimony of Mário, 61, shows a search for information through the vertical dimensions of the territory. The interviewee reports a routine that consists of looking for news from the region, then expanding to state coverage and going to news portals worldwide.

first I start with the local news... right... I take a look at the websites here... Gazeta... Riovale... to see if there is anything interesting about the region... and then I go to... to... gauchos from there... Zero Hora and Correio do Povo ... I read it... if there is any news that interests me, and then I go to the national ones... then I look at Stern, who is German [...] and sometimes I look at El País do Uruguay... for a while I was reading... the ... a... La Tercera from Chile [...] but basically I look at a German site every day, then another one, there are others that are Deutsche Welle, it's very interesting. Mário, 61 years old

Is also mentioned the use of other information media, such as radio and television, together or in addition to internet browsing:

I... first thing at night, when I have... we have the notebook too... the wife doesn't use it much... then I take the notebook...

I open it... I look, the first thing I look at is the news... I look... the first thing is the news ... then I look ... as we don't know ... in the morning I listen to the radio, of course ... in the morning ... I ... get up ... step in front of the radio ... first thing I turn on the radio ... then I go to the bathroom, come back from the bathroom... I do... I heat the water, I make mate, then I listen to the radio. Caetano, 66 years old.

The above statement reflects what Carneiro (2018) points out after investigating the information skills of people over 60 years old residing in the city of Fortaleza, Ceará, using digital technologies. In her research, the author found that most respondents conceive information relevance as part of contemporary society's dynamics.

According to Pinheiro (2012, p. 18), in an article in which he performs a conceptual analysis of Amartya Sen's approach to human capabilities, in general, the sources of deprivation of individual freedoms, such as illiteracy or lack of education, "can come from lack of opportunities, inefficient processes, or both. In the testimony of Alberto, 64, the internet presents itself as a channel to expand his capabilities. Although he missed the opportunity to attend higher education, he searches the internet for additional knowledge that can fill gaps related to lack of knowledge:

The internet, for example... when you go to look for it... there are a lot of things that aren't... you know how to distinguish what is right or wrong, then it comes from your self-knowledge... I tried to take the entrance exam twice... it didn't work... I stopped... but what I know I know... now what I learned in high school and now I'm 64 years old I'm going to look it up on the internet... they say one thing, from my experience, I already know, look, this is not right, but sometimes when in doubt, you go there and look for it... oh, it wasn't right, that's not what they're saying. Alberto, 64 years old.

The retiree, however, reinforces the importance of critical analysis to help discern the content consumed. Regarding access to information through the web, we noticed a concern about fake news. This theme gained space in the conversation circles after the 2016 American elections and also guided the year 2018 in Brazil<sup>8</sup>. The positions expressed by the interviewees are that it is necessary to keep a critical eye on what is received, assessing whether it is accurate or false information before sharing.

Yes, that's why you have to filter a lot, you have to take care... take care not to share something that actually has nothing to do with it, that's why I say, this can't be, it can't, it's a lot... no no no. Celso, 65 years old.

We agree with Carneiro (2018, p.40) when she states that, since the internet presents itself as a place where information is freely accessed, it is necessary "that people can use search engines efficiently," as well as the discernment to identify relevant, false or incomplete information."

As we proceeded with the analysis of the content of the interviews on the perception that older people from Santa Cruz have of the internet, we identified the most varied uses made by those who participated in this study. In this sense, it is also worth emphasizing the habit of learning on the web, which, in the view of Alberto, 64 years old, is very easy:

When you need something... you go there... you find it easily... you want to know something... Google it there... he answers...

www.rbgdr.net

<sup>&</sup>lt;sup>8</sup> Additional information on the impact of fake news on society can be accessed at the links below . O crescimento das fake news no ambiente digital. Available at: <a href="https://digitalks.com.br/artigos/o-crescimento-das-fake-news-no-ambiente-digital/">https://digitalks.com.br/artigos/o-crescimento-das-fake-news-no-ambiente-digital/</a>>. Accessed: 27 sept. 2022; Crescimento das 'fake news' influencia agenda pública e requer ações. Available at: <a href="https://www.unicamp.br/unicamp/ju/noticias/2018/09/14/crescimento-das-fake-news-influencia-agenda-publica-e-requer-acces">https://www.unicamp.br/unicamp/ju/noticias/2018/09/14/crescimento-das-fake-news-influencia-agenda-publica-e-requer-acces</a>>. Accessed: 27 sept. 2022; Estudo aponta que as fake news políticas cresceram 150% em dois anos. Available at: <a href="https://veja.abril.com.br/mundo/estudo-aponta-que-as-fake-news-politicas-cresceram-150-em-dois-anos/">https://veja.abril.com.br/mundo/estudo-aponta-que-as-fake-news-politicas-cresceram-150-em-dois-anos/</a>>. Accessed: 27 sept. 2022.

so when you have this here (cell phone) you always have up-todate communication, right. Alberto, 64 years old.

It was then possible to verify that some learn to make natural fertilizers, as is the case of Carlos, 66 years old, with a vocational-technical course; even those who learn and teach pornography, according to Oswaldo, 66, who attended elementary school, and whose account presented below:

That's right, if you put it on (pornography)... you have it... you can even ask to look, if you want to look... but then it's not funny, right... for me, for someone else... it's fun for you, if you want take a look there is there to look... there is Google, there is here... these times my nephew said to me, uncle... I entered uncle... I entered [...] I entered there as you explained to me... pornography for me to see... I joined uncle... then... he didn't know what gay was... so I asked... he thought gay was a woman, uh... how shall I say, from life... a slut... that was gay ... no, it was a man with a man... then I told him... oh, did you see a man with a man... he said uncle, it's disgusting, those bearded men kissing (laughs)... then he saw it... then I put it to him, woman with two men, show him... then just ask like this... you upload porn videos of women with two men, or else upload porn videos of women with animals... then come with dog, horse... with sheep. Oswaldo, 66 years old.

Furthermore, some use the internet to improve their craft, as is the case of Caetano, 66, who studied until the early years of elementary school.

and at night I take the note [...] if it's still early... we... eight thirty nine o'clock we're sleeping, right... then there's nobody else... nine o'clock at the most... then there's nobody else (awake) ... then I really like... about... about work... then I go to google... and I look for how to turn wood or how to renovate old furniture, how to make a lathe... these little things like that, you see... that we are more inside [...] to invent a machine... I have invented a few already. Caetano, 66 years old.

Talking about learning, we realize that the reports are the most different and that the low level of education of most of the interviewees, as mentioned before, does not manifest itself as an impediment factor for them to use the web as a learning space. It is access to the internet that enables a process of expanding capacities, providing the elderly, specifically, with contact with contents and processes of continuing education that, as advocated by Areosa *et al.* (2016, p. 225) "cannot be limited to a particular period of life, but must allow the individual to learn throughout their entire life course."

Alternatively, even Frida, 61, researches medicines and diseases.

Yes, I do research (with emphasis and emotion) ... medicine, illness, I have something... the name... I do... everything someone says something... my poor neighbor over there doesn't know... I'll look there... I'll tell her... it's like, like, like that... I do it on Google... I do everything that is research... it's pretty good, right... it's all there. Frida, 61 years old.

The excerpts from the statements above reflect the elaboration of the Chilean researchers Pinto-Fernández, Muñoz-Sepúlveda and Leiva-Caro (2018, p. 152) after carrying out a digital literacy project for the elderly during the period from 2012 to 2015, in Chile. They concluded that the formal education received by potential participants should not be a limiting or entry requirement since, by knowing how to read and write, older people can incorporate knowledge about these types of tools. (free translation).

The internet also plays a role in helping to fill the time of the elderly in Santa Cruz. Here, the tool is evident as a resource to alleviate the feeling of loneliness, enhance social relationships and impact the quality of life, as present in studies by several authors (KACHAR, 2009; MANTOVANI; JUSTO, 2016; KHALAILA; VITMAN-SCHORR, 2018). Malala, 60, already shows a specific dependence on being connected. It is interesting to note that she does not like going to the countryside anymore because the internet access is terrible.

This is very difficult, in rural areas if we go there... there is no signal, you know... time does not pass [...] there was no internet installed here (in the urban residence)... it was only with a card, right... and sometimes it ended and then there was a whole night... I missed it already (laughing embarrassed). Malala, 60 years old.

Clarice, 67 years old, mentions a similar situation. In the case of the interviewee, the habit of swiping her finger across her cell phone screen represents the act of browsing the internet. For Frida, 61, the telephone device that gives her access to the internet network works like a company.

Now, telling you the truth... in my solitude he helps me a lot, you know... he follows me like this... he... (silences looking at the phone, opens several apps). Frida, 61 years old.

Continuing with our analysis, it is still possible to perceive that some interviewees also use the internet to initiate love relationships or even facilitate infidelity, as appears in the report of Manoel, 64 years old.

You have to know how to deal with it, right... there are a lot of people who don't know how to deal with it and they get into a cold, each one, right... I've been to visit... I went there in... Ivoti, I took my car... I left in the morning... I went there to Ivoti... (thoughtfully) to find a... a friend... laughs... then on the way back... I did everything... everything went well there... I found her... and then at back from there to here... do you know Montenegro? I got lost (laughs). Manoel, 64 years old.

When we analyze all these habits of use, it becomes easier to understand the reports of Ruth, 68 years old. He shows how much this habit into his routine: "ah, this is already part of us... I don't know what it would be like, because if you go a day without news or if you don't come in for a day, you'll miss it., this is something that looks like it already belongs to you, right". In addition, in the interviewees' speeches, it was even possible to identify a change in posture when encouraged to reflect on their life without access to the internet.

We also observed that the interviewed subjects have different perceptions about the internet. The statements below show polarized views, which sometimes highlight the good side of this new media and sometimes the wrong side. Sometimes, this dichotomy appears in the same answer of an interviewee, as is the case of Cássia, 69 years old, who reveals that she is trying to reduce the use of the Internet, but recognizes that she is unable to do so because she perceives the value of the network by providing interesting information to herself:

And I feel a lot of remorse when I use it, because I spend a lot of time on this drug... so little by little I'm almost leaving it... I want to leave it, but you can't... because the curiosity is great... something interesting always comes up. Cássia, 69 years old.

In the same way as Cássia, Frida, 61, also has a vision still under construction on the subject. According to the interviewee, just as the internet has made her life more accessible, it also contributes to dehumanization, as children deprive themselves of contact with other people because they are always with their cell phones:

there is a good side and a bad side of it... because they don't communicate anymore... the good side is that there is technology, and the bad side is that there is no more human contact... that's what's missing, you know... then they don't end up talking sometimes, there is no more dialogue, that's why you see so many bad things, one suspects the other... then they keep texting, they fight... it's so easy for you to write here (on your

cell phone) and not say it to the person's face and that's it. you can see it a lot, so it has both sides... it made life easier, it made it easier... but also in certain cases it dehumanized. Frida, 61 years old.

On the other hand, some people have a positive stance on the matter. In the speech of Clarice, 67, there is a mention of the ease of seeking her rights, recognizing the potential for expanding information capabilities through the world wide web. According to the interviewee, the internet helps to know people's rights. The authors Rodrigues Carracedo and Barrera Minevervini (2014) conclude, in their studies on the learning process of the elderly with ICTs, that it is possible to learn throughout life by exercising cognitive potential. They also state that the continuous learning provided by the interaction with information and communication technologies would be responsible for delaying, even aging, and acting positively on the individual's emotions. This recognition of the internet as a space for expanding capabilities is explicit in the interviewees' speech. The ability to have information on any subject at hand, as Alberto, 64, says, gives him the perception of coming out of the darkness of lack of knowledge.

Look, I... let's say that I... came out more, for example, from ignorance, from the dark... to the light... for having another vision... that everything they say to you is true... no... yesterday, they said about it That's true, I don't know... it could be (shakes cell phone) [...] so you take the doubt so you don't know what they say there. Alberto, 64 years old.

In the same way, the testimony of Cézar, 61 years old, completes this picture of reports of experiences of those who underwent life transformations after surfing the net.

it helps... a lot... because I think that even when I stopped working I read very little... and then with the internet... I almost didn't know how to read anymore... with the internet I started reading again... and then you pay attention ... go read... read and write something right... and I don't anymore... because if you don't work your brain you won't help... and after I retired, I stopped exercising my head with all these things, right... I accommodated, then when the internet came I almost didn't even know how to read properly, and now I don't... I already read, normally, right. Cézar, 61 years old.

The analyzes above show that the internet is a place capable of expanding the capabilities of the people interviewed. Through this comprehensive tool of freedom, it is possible to maintain relationships with family members who live near or far, expanding social relationships and reducing the feeling of loneliness. It also enables access to information at different scales of the territory, learning new languages, the realization of courses, and the apprehension of knowledge that stimulates health care.

### Final considerations

As we mentioned at the beginning of this article, the proposal that guided this work consisted of initiating a discussion on the concepts of development and culture, approaching the theme of population ageing and the impacts of an increasingly connected society on the ways of life and manifestations of older people. Thus, our first conclusion is that necessary to give older people the right to choose the freedoms they consider essential for their lives. Likewise, the means and instruments developed to enable the construction of public policies must consider that not everyone has the same skill and ability to participate. We then reinforce the importance of including these subjects in constructing territories that consider their ways of life, thus avoiding the deprivation of political freedoms.

ICTs are present in several dimensions of our daily lives, but Thirty years ago, their access was only by small groups of intellectuals in some universities worldwide. It is a significant movement. Nowadays, electronic devices accompany individuals from the moment they wake up through intelligent assistants capable of organizing the daily schedule, verbalizing schedule reminders, and even giving tips on what to wear based on the weather forecast, until bedtime. using chat tools or content available via streaming. Through smartphones, it is possible to regulate the air conditioning unit, the television, the coffee maker, and ambient lighting. Notwithstanding, governmental bodies, in their most varied spheres, also move to have more efficiency in their processes, guarantee more transparency, and change relations with citizens. However, we need to be aware of the needs of those individuals who are still learning to live within this new scenario of many possibilities, which requires attention to expanding learning and operating capabilities in this environment.

Finally, we realized that internet use is already part of the interviewees' daily lives. It is a communication and information tool naturally incorporated into their routines. It took on a greater dimension as they felt more comfortable expanding its uses and discovering new functionalities such as video applications, relationships, and news sites. The environment of many possibilities is frightening at first. It is possible to perceive fascination and recognition of something, which makes it possible to go from the dark to the light form of knowledge. Furthermore, this allows us to conclude that the internet constitutes one of the fundamental instrumental freedoms to expand the capacities of choice and citizenship of the older people interviewed. Although they lived their childhood and adolescence in a period of deprivation of civil and political liberties, today, thanks to the advance of ICTs, the most expansive freedom of expression and information is at their fingertips.

As a final point of our considerations, we understand that this work is innovative in Regional Development studies because it places the older person as the protagonist of the territory they inserted. In other words, it positions such individuals as agents capable of transforming the reality of their region, either through access to or appropriation of ICTs or through citizen presence, participating in decisions that interfere with their daily lives. We also reinforce that it is essential to expand studies on the impacts of new information and communication technologies on the lives of older people. We know that several approaches are possible in this context, but we emphasize here the issue of implications related to the abusive use of the internet by these individuals. Although it was not a focus issue of the work, what caught our attention during the interviews was the attachment some interviewees showed to their devices and the way in which they reported difficulty imagining themselves without access to the internet. In this sense, we suggest other studies that can deepen this new relationship.

## References

ANTUNES, P. H. *et al.* **Disciplinarium Scientia. Série: Artes, Letras e Comunicação**, Santa Maria, v. 7, n. 1, p. 71-84. 2006. Available at: <a href="https://periodicos.ufn.edu.br/index.php/disciplinarumALC/article/view/703/652">https://periodicos.ufn.edu.br/index.php/disciplinarumALC/article/view/703/652</a>. Accessed: 27 sept. 2022.

AREOSA, S. V. C. *et al.* Envelhecimento ativo, um panorama do ingresso de idosos na Universidade. **Revista Reflexão e Ação**, Santa Cruz do Sul, v. 24, n. 3, 2016. p. 212 – 228,2016. Available at: <a href="https://online.unisc.br/seer/index.php/reflex/article/viewFile/8407/pdf">https://online.unisc.br/seer/index.php/reflex/article/viewFile/8407/pdf</a> - Accessed: 19 sept. 2022.

BANCO DO NORDESTE DO BRASIL. **NORDESTE 2022 - Estudos Prospectivos** – Documento Síntese/ Banco do Nordeste do Brasil e Instituto Interamericano de Cooperação para a Agricultura – Fortaleza: Banco do Nordeste, 2014. Available at: <a href="https://www.bnb.gov.br/documents/50268/54349/df\_dezembro\_2014/86eefcb5-1ce2-4c60-9dd4-39d9cf4fcfd6">https://www.bnb.gov.br/documents/50268/54349/df\_dezembro\_2014/86eefcb5-1ce2-4c60-9dd4-39d9cf4fcfd6</a>>. Accessed: 22 sept. 2022.

BECKER, W. Teaching economics in the 21st century. **Journal of Economic Perspectives**, v. 14, p. 109-119, 2000. Available at: <a href="https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.14.1.109">https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.14.1.109</a>>. Accessed: 22 sept. 2022.

BOLZAN, L. M.; LOBLER, M. L. Socialização e afetividade no processo de inclusão digital: um estudo etnográfico. **Organizações e Sociedade**, Salvador, v. 23, n. 76, p. 130-149,2016. Available at:

<a href="http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S1984-92302016000100130&lng=pt&nrm=iso">http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S1984-92302016000100130&lng=pt&nrm=iso</a>. Accessed: 22 sept. 2022.

BRESSER-PEREIRA, L. C. Da administração pública burocrática à gerencial. **Revista do Serviço Público**, Brasília, v.47, n.1, p. 7-40, 1996. Available at: <a href="https://revista.enap.gov.br/index.php/RSP/article/view/702">https://revista.enap.gov.br/index.php/RSP/article/view/702</a>>. Accessed: 22 sept. 2022.

BRASIL. **Decreto-Lei n. 8.842, de 4 de janeiro de 1994**. Available at: <a href="http://www.planalto.gov.br/CCivil\_03/Leis/L8842.htm">http://www.planalto.gov.br/CCivil\_03/Leis/L8842.htm</a>>. Accessed: 26 sept. 2022.

. Ministério da Saúde. Estatuto do Idoso. Brasília: Editora do Ministério da Saúde, 2003.

CASTELLS, M. *A Sociedade em Rede*. *A era da informação*: economia, sociedade e cultura. v. 1. São Paulo: Paz e Terra, 1999.

CAMARANO, A. A.; PASINATO, M. T. O envelhecimento populacional na agenda das políticas públicas. In: CAMARANO, A. A. (Org.). Os novos idosos brasileiros: muito além dos 60? Rio de Janeiro: Ipea, 2004. p. 253-292. Available at: <a href="https://www.ipea.gov.br/portal/images/stories/PDFs/livros/Arq\_29\_Livro\_Completo.pdf">https://www.ipea.gov.br/portal/images/stories/PDFs/livros/Arq\_29\_Livro\_Completo.pdf</a>>. Accessed: 26 sept. 2022.

CARVALHO, J. A. M. de; GARCIA, R. A. O envelhecimento da população brasileira: um enfoque demográfico. **Cadernos de Saúde Pública**. Rio de Janeiro, v. 19, n. 3, p.725-733,2003. Available at: <a href="https://www.scielo.br/pdf/csp/v19n3/15876.pdf">https://www.scielo.br/pdf/csp/v19n3/15876.pdf</a>>. Accessed: 26 sept. 2022.

CARNEIRO, B. L. F. Análise das competências em informação dos idosos no uso das tecnologias digitais. Dissertação (Programa de Pós-Graduação em Ciência da Informação) – Universidade Federal do Ceará, Departamento de Ciências da Informação, Fortaleza, 2018. Available at: <a href="http://www.repositorio.ufc.br/bitstream/riufc/36080/5/2018\_dis\_blfcarneiro.pdf">http://www.repositorio.ufc.br/bitstream/riufc/36080/5/2018\_dis\_blfcarneiro.pdf</a>>. Accessed: 26 sept. 2022.

DELLARMELIN, M. L., FROEMMING, L. M. S., Vovôs conectados: Análise da utilização das Redes Sociais pelos Idosos. In: XV Mostra de Iniciação Científica, Pós-Graduação, Pesquisa e Extensão, 2015, Caxias do Sul. Anais. p. 1-10. Available at: <a href="http://www.ucs.br/etc/conferencias/index.php/mostraucsppga/xvmostrappga/paper/viewFile/419">http://www.ucs.br/etc/conferencias/index.php/mostraucsppga/xvmostrappga/paper/viewFile/419</a> 5/1375>. Accessed: 26 sept. 2022.

DETERS, F.; MEHL, M. Does Posting Facebook Status Updates Increase or Decrease Loneliness? An Online Social Networking Experiment. **Social Psychological and Personality Science**, V. 4, n.5, p. 579–586, 2013. Available at: <a href="https://journals.sagepub.com/doi/abs/10.1177/1948550612469233#articleCitationDownloadContainer">https://journals.sagepub.com/doi/abs/10.1177/1948550612469233#articleCitationDownloadContainer</a>>. Accessed: 24 sept. 2022.

ETGES, V. E.; DEGRANDI, J. O. Desenvolvimento Regional – a diversidade como potencialidade. **Revista Brasileira de Desenvolvimento Regional**, Blumenau, vol. 1, n. 1, p. 85-94, 2013. Available at: <a href="https://proxy.furb.br/ojs/index.php/rbdr/article/view/3649/pdf\_9">https://proxy.furb.br/ojs/index.php/rbdr/article/view/3649/pdf\_9</a>>. Accessed: 27 sept. 2022.

FOLETTO, R.; FIEPKE, R. B.; WILHELM, E., Usos da Internet como meio de comunicação e fonte de informação por idosos. **Revista Contemporânea comunicação e cultura**, Salvador, v.16, n.02, p. 504-518, 2018. Available at: <a href="https://portalseer.ufba.br/index.php/contemporaneaposcom/article/view/21504/16825">https://portalseer.ufba.br/index.php/contemporaneaposcom/article/view/21504/16825</a>>. Accessed: 27 sept. 2022.

HALL, S. A centralidade da cultura: notas sobre as revoluções culturais do nosso tempo. **Educação** & **Realidade**, Porto Alegre, v. 22, n 2, p 15-46, 1997. Available at: <a href="https://seer.ufrgs.br/educacaoerealidade/article/view/71361/40514">https://seer.ufrgs.br/educacaoerealidade/article/view/71361/40514</a>>. Accessed: 27 sept. 2022.

HARVEY, D. A Condição Pós-Moderna. São Paulo: Edições Loyola, 1992.

LEITÃO, D.; GAIGE, D.; SIQUEIRA, M. Pegando o jeito de domar o bicho. **Revista De Antropologia**, São Paulo, v. 62, n.3, p. 652-678, 2019. Available at: <a href="http://www.revistas.usp.br/ra/article/view/165233">http://www.revistas.usp.br/ra/article/view/165233</a>>. Accessed: 27 sept. 2022.

KACHAR, V. A Terceira Idade e o Computador: Interação e Produção no Ambiente Educacional Interdisciplinar. Tese (Programa de Pós-Graduação em Educação) - Pontifícia Universidade Católica de São Paulo, 2001.

\_\_\_\_\_. Inclusão Digital e Terceira Idade. In: Novas necessidades de Aprendizagem. Barroso, Á.E.S. (Coordenação geral). São Paulo: Secretaria Estadual de Assistência e Desenvolvimento Social/Fundação Padre Anchieta, 2009. p. 18-27.

KHALAILA, R.; VITMAN-SCHORR, A. Internet use, social networks, loneliness, and quality of life among adults aged 50 and older: mediating and moderating effects. **Quality of Life Research**, v. 27, n. 2, p. 479–489, 2018. Available at: <a href="https://link.springer.com/article/10.1007%2Fs11136-017-1749-4">https://link.springer.com/article/10.1007%2Fs11136-017-1749-4</a> Accessed: 27 sept. 2022.

MANTOVANI, A. M., JUSTO, J. L., A convivência da terceira idade em espaços digitais virtuais: perspectivas para emancipação digital. In: BERLEZI, E. M., FILHO. S., GARCES, B. B. **Envelhecimento humano**: compromisso das universidades gaúchas. Ijuí: Ed. Unijuí, 2016. p. 11-28.

MILANÉS, M.; HERRERO, E, HERNÁNDEZ, L. La Alfabetizacion Informática Del Adulto Mayor, Una Experiencia Cubana. In: **XVI Convención y Feria Internacional Informática**, 2016, Havana. Anais. Available at: <a href="https://docplayer.es/26277862-La-alfabetizacion-informatica-del-adulto-mayor-una-experiencia-cubana.html">https://docplayer.es/26277862-La-alfabetizacion-informatica-del-adulto-mayor-una-experiencia-cubana.html</a> Accessed: 27 sept. 2022.

MINAYO, M. C. de S.; GOMES, R.; DESLANDES, SUELY F. **Pesquisa Social**: teoria, método e criatividade. 34.ed.Petrópolis: Vozes, 2015.

LÉVY, P. Cibercultura. 3.ed. São Paulo: Editora 34, 2010.

ORGANIZAÇÃO DAS NAÇÕES UNIDAS. **Plano de ação internacional para o envelhecimento**, 2002/ONU. Tradução de Arlene Santos. Brasília: Secretaria Especial dos Direitos Humanos, 2003. Available at: <a href="http://www.observatorionacionaldoidoso.fiocruz.br/biblioteca/\_manual/5.pdf">http://www.observatorionacionaldoidoso.fiocruz.br/biblioteca/\_manual/5.pdf</a>>. Accessed: 27 sept. 2022.

PAPALIA, D. E., FELDMAN, R. D. Desenvolvimento humano. 12.ed. Porto Alegre: AMGH, 2013.

PECQUEUR, B. **A guinada territorial da economia global. Política & Sociedade**, Florianópolis, v.8, n.14, p. 79-106, 2009. Available at: <a href="https://periodicos.ufsc.br/index.php/politica/article/view/2175-7984.2009v8n14p79/10955">https://periodicos.ufsc.br/index.php/politica/article/view/2175-7984.2009v8n14p79/10955</a>>. Accessed: 27 sept. 2022.

PINHEIRO, M. M. S. As liberdades humanas como bases do desenvolvimento: uma análise conceitual da abordagem das capacidades humanas de Amartya Sen. Rio de Janeiro: IPEA,2012. Available at: <a href="https://www.ipea.gov.br/portal/images/stories/PDFs/TDs/td\_1794.pdf">https://www.ipea.gov.br/portal/images/stories/PDFs/TDs/td\_1794.pdf</a> . Accessed: 27 sept. 2022.

PINTO-FERNÁNDEZ, S., MUÑOZ-SEPÚLVEDA, M. y LEIVA-CARO, J. A. Uso de tecnologías de información y comunicación en adultos mayores chilenos. **Revista Iberoamericana de Ciencia, Tecnología y Sociedad**, Madrid, vol. 13, n° 39, pp. 143-160. 2018. Available at: <a href="http://www.revistacts.net/files/Volumen 13 Numero 39/N39.pdf">http://www.revistacts.net/files/Volumen 13 Numero 39/N39.pdf</a>>. Accessed: 27 sept. 2022.

REIS, A. A. O impacto sociocultural do uso da internet em um grupo de pessoas idosas. 2012. 127 f. Dissertação (Programa de Estudos Pós-graduados em Gerontologia) - Pontifícia Universidade

Católica de São Paulo, 2012. Available at: < <a href="https://tede2.pucsp.br/handle/handle/12418">https://tede2.pucsp.br/handle/handle/12418</a>>. Accessed: 27 sept. 2022.

RODRIGUEZ, C. M. C.; BARRERA, M., J. J. Alfabetización tecnológica para mayores. Experiencia en la UNED Senior. **Virtualidad, Educación y Ciencia**, Córdoba, v.5, n. 9, p. 56-69,2014. Available at: <a href="https://revistas.unc.edu.ar/index.php/vesc/article/view/9550">https://revistas.unc.edu.ar/index.php/vesc/article/view/9550</a>>. Accessed: 27 sept. 2022.

SANTOS, M. A Natureza do Espaço: Técnica e Tempo, Razão e Emoção. São Paulo: Hucitec, 1999.

\_\_\_\_\_. O papel ativo da geografia, um manifesto. **XII Encontro Nacional de Geógrafos**,2000, Florianópolis. Anais. Available at: < <a href="http://miltonsantos.com.br/site/wp-content/uploads/2011/08/O-papel-ativo-da-geografia-um-manifesto\_MiltonSantos-outros\_julho2000.pdf">http://miltonsantos.com.br/site/wp-content/uploads/2011/08/O-papel-ativo-da-geografia-um-manifesto\_MiltonSantos-outros\_julho2000.pdf</a> Accessed: 27 sept. 2022.

SEN, A. Desenvolvimento como liberdade. São Paulo: Companhia das Letras, 2000.

. A ideia de Justiça. São Paulo: Companhia das Letras, 2011.

WILLIAMS, R. Cultura is ordinary. In WILLIAMS, Raymond. Resources of hope: Culture, Democracy, Socialism. London: Verso, 1989. p. 3-18.



Esta obra está licenciada com uma Licença Creative Commons Atribuição 4.0Internacional.