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Albuquerque, Dayse da Silva; Goulart, Fernanda de Moraes; Klavdianos,
Natália de David; Günther, Isolda de Araújo; Portella, Adriana

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AGING, SENSE OF PLACE AND URBAN PLANNING: FACILITATORS AND BARRIERS

Dayse da Silva Albuquerque^{1 2}, Orcid: <http://orcid.org/0000-0003-1745-8336>

Fernanda de Moraes Goulart³, Orcid: <http://orcid.org/0000-0003-1776-8553>

Natália de David Klavdianos⁴, Orcid: <http://orcid.org/0000-0002-2083-2547>

Isolda de Araújo Günther⁴, Orcid: <http://orcid.org/0000-0002-9584-3654>

Adriana Portella⁵, Orcid: <http://orcid.org/0000-0001-6291-181X>

ABSTRACT. The urban planning is a process that comprises successive improvements aimed at the quality of life of populations and the aging of the population puts pressure on social instances to assume new postures about the ways of planning this environment. To understand the elderly's attachment with the environment, it is necessary to understand the resources available in the place and the experiences lived in that context. From the sense of place, people transform spaces and are transformed by them. Thus, this study questioned how elderly residents of three locations in the city of Brasília build their sense of place, based on their identification of facilitators and barriers faced daily and the demands for building an aging-friendly environment. The qualitative data presented derives from the use of three research techniques: face-to-face interviews, go-along interviews, and photographic diaries. Sixty-three elderly persons between 60 and 90 years participated in the study. The analysis carried out using the Iramuteq software allowed the development of four classes related to social and community bonds, activities of daily routines, symbolic aspects that reflect the sense of place and the relationship with rural and urban elements perceived in each scenario. Being aware of the changes resulting from the demographic pyramid's inversion incur on some of the issues identified in this study. However, the results confirm how much further progress is still needed to include more dynamically the elderly-environment relationship in studies that address the aging process.

Keywords: Aging; urban planning; sense of place.

ENVELHECIMENTO, SENTIDO DE LUGAR E PLANEJAMENTO URBANO: FACILITADORES E BARREIRAS

RESUMO. O planejamento urbano é um processo que compreende sucessivas melhorias voltadas para a qualidade de vida das populações e o envelhecimento populacional pressiona para que instâncias sociais assumam novas posturas sobre os modos de se planejar a cidade. Para compreender a ligação do idoso com o ambiente, é necessário entender os recursos disponíveis no local e as experiências vividas naquele contexto. A

¹ Faculdade de Educação (FACED), Universidade Federal do Amazonas (UFAM), Câmpus Artur Virgílio Filho, Manaus-AM, Brazil.

² E-mail: daysealbuquerque@ufam.edu.br

³ Faculdade de Arquitetura e Urbanismo (FAU), Universidade de São Paulo (USP), Câmpus São Paulo, São Paulo-SP, Brazil.

⁴ Instituto de Psicologia (IP), Universidade de Brasília (UnB), Câmpus Universitário Darcy Ribeiro, Brasília/DF, Brazil.

⁵ Programa de Pós-Graduação em Arquitetura e Urbanismo da Faculdade de Arquitetura e Urbanismo, Universidade Federal de Pelotas (UFPEL), Pelotas-RS, Brazil. Instituto Urbano, Heriot-Watt University, UK.



partir do sentido de lugar, as pessoas transformam os espaços e são por eles transformados. Assim, esse estudo questionou como moradores idosos de três localidades da cidade de Brasília constroem seu sentido de lugar, a partir da identificação de facilitadores e barreiras enfrentadas diariamente e das demandas para a construção de um ambiente amigável ao envelhecimento. Os dados qualitativos apresentados decorrem do uso de três técnicas de pesquisa: entrevistas face a face, entrevistas caminhadas e diários fotográficos. Fizeram parte do estudo 63 participantes com idade entre 60 e 90 anos. A análise realizada por meio do *software Iramuteq* permitiu a elaboração de quatro classes relacionadas aos vínculos sociais e comunitários, às atividades das rotinas diárias, aos aspectos simbólicos que refletem o sentido de lugar e a relação com elementos rurais e urbanos percebidos em cada cenário. Estar atento às mudanças resultantes dessa inversão da pirâmide demográfica incide sobre algumas das questões identificadas nesse estudo, mas também confirma o quanto ainda se faz necessário avançar para incluir de modo mais realista a dinâmica relação idoso-ambiente em estudos que abordam o processo de envelhecimento.

Palavras-chave: Envelhecimento; planejamento urbano; sentido de lugar.

ENVEJECIMIENTO, SENTIDO DE LUGAR Y PLANIFICACIÓN URBANA: FACILITADORES Y BARRERAS

RESUMEN. El urbanismo es un proceso que comprende sucesivas mejoras encaminadas a la calidad de vida de las poblaciones y el envejecimiento de la población presiona a las instancias sociales para que asuman nuevas posturas sobre las formas de planificar este entorno. Para comprender la percepción del ambiente por parte de los adultos mayores, es necesario comprender los recursos disponibles en el lugar y también las experiencias vividas en ese contexto. Desde el sentido del lugar, las personas transforman espacios y son transformados por ellos. Por lo tanto, este estudio cuestionó cómo los residentes mayores de tres localidades de la ciudad de Brasilia construyen su sentido de lugar, en función de sus identificaciones de los facilitadores y las barreras que se enfrentan a diario y las demandas para construir un ambiente amigable con el envejecimiento. Los datos cualitativos presentados derivan del uso de tres técnicas de investigación: entrevistas personales, entrevistas complementarias y diarios fotográficos. 63 personas mayores entre 60 y 90 años participaron en el estudio. El análisis realizado con el *software Iramuteq* permitió el desarrollo de cuatro clases relacionadas con los vínculos sociales y comunitarios, actividades de la rutina diaria, aspectos simbólicos que reflejan el sentido del lugar y la relación con los elementos rurales y urbanos percibidos en cada escenario. Conocer los cambios resultantes de esta inversión de la pirámide demográfica se centra en algunos de los problemas identificados en este estudio, pero también confirma cuánto progreso aún se necesita para incluir de manera más dinámica la relación entre el anciano y el ambiente en los estudios que abordan el envejecimiento.

Palabras clave: Envejecimiento; planificación urbana; sentido de lugar.

Pioneers of modernity: from red dust to the affective connection with the place

Built-in the emptiness of the cerrado, Brasília, unlike other Brazilian cities, was not colonized. The first migratory flow was formed by pioneers coming from all regions of the country, who entered the cerrado and, after more than half a century, grew old here.

The Plano Piloto was designed by the architect Lúcio Costa in a sectorized and orthogonal grid, consisting of four urban scales: monumental, residential, gregarious, and bucolic. Its shape is popularly compared to an airplane (Botelho, 2009). However, its creator rejected this comparison and argued that the city should be associated with a butterfly (Carpintero, 2006). When it was created, the projected city welcomed young families from different social strata who sought to re-establish their lives here, occupying planned residential areas, but also informal camps of construction companies. Over six decades, the city flourished thanks to the work of everyone who settled here, cultivated their friendships, and led their lives.

The city continues to dazzle through the originality of its architectural forms and the breadth of its horizon, having spread among those who arrived here, the syndrome of the three D: despair manifested in the first times of permanence in the city, associated with the lack of structure, to the untamed red dust and rootlessness; dazzled by the monumentality and proximity to power; dementia, for the insane way in which the city clings to the body and soul of those who live there (Garcia, 2012).

Age-friendly cities

Urban planning comprises successive improvements aimed at the quality of life of populations. In a modernist city like Brasília, discussions about environmental quality involve specificities such as the preservation of its architectural heritage, and the socio-spatial segregation occurring even within its urban complex. The city's original project provided for an equitable distribution of public services and urban equipment in the spaces of the blocks and superblocks, in which the social gradation would take place by location, size, and level of finishing of the housing units (Holanda, 2016).

However, reality imposed itself and informal settlements were formed in the vicinity of the capital, founded by the most vulnerable strata of the population, linked to the need to live in areas closer to their work places. These settlements arise organically and are established through regulation. Although recognized by the government, they remain lacking in the provision of public services and urban infrastructure. Among such nuances, which reveal socio-spatial inequality in Brasília, population aging is evident and pressures different social instances to assume new positions on ways of planning this urban environment for the older adult population.

In view of such demand not only in the local scenario, but in many cities around the world, the World Health Organization (WHO) has defined, over the last few decades, the following guidelines for the characterization of age-friendly cities: presence of adequate housing, green areas, provision of quality public transport, expansion of health services and community support, promotion of work and volunteering opportunities, social inclusion, social and civic participation, respect and dissemination of information (World Health Organization [WHO], 2008). The relevance of such guidelines stems from the importance of the benefits arising from the potential in terms of satisfaction with the place of residence and the neighborhood (Iecovich, 2014).

In this context, the aging-in-place (AIP) concept indicates the person's ability to live in the place of their choice, for as long as possible to maintain meaningful activities and quality of life. It involves the ability to live safely, autonomously and comfortably in their own home or community, regardless of age, income or health status (Center for Disease Control and Prevention, 2013). The search for strengthening bonds and the support provided by environmental aspects aimed at accessibility, mobility and independence are complementary to this conception (Wiles, Leibing, Guberman, Reeve, & Allen, 2011).

As the body ages, the person acquires motor and cognitive limitations that make it difficult to perform certain activities with the same ease as before, such as handling instruments, moving around or communicating. By building accessible public spaces, bonds are maintained through meaningful relationships with family members, peers, members of local businesses, health services, and spaces for socialization and leisure, providing a friendly neighborhood (Brett et al., 2019).

Therefore, it is possible, with urban design and the provision of services, to create an environment that recognizes the capabilities and limitations of the older adult, anticipating and responding to preferences associated with age. Older people are commonly in a situation of vulnerability, which can be further enhanced by environmental pressures that generate stress (Günther & Elali, 2018).

In this way, the impact of urban space on the physical and social well-being of the older adult comes from the adaptation between their functional capacities and environmental characteristics (Lawton, 1986). To make active aging possible in cities, public policies in urban planning processes have to anticipate the needs and preferences of older people, optimizing opportunities for mobility and social interaction (Aroogh & Shahboulaghi, 2020; World Health Organization [WHO], 2005).

Mobility also becomes central in this context as it enables the older person to meet their daily needs. Once the person has reduced mobility, their ability to control the environment is also minimized. The absence of devices to facilitate mobility increases the occurrence of falls which, in turn, restrict the functional performance of the older adult, reducing their self-confidence. Contact with neighbors is often hampered by accessibility obstacles and barriers, such as very high curbs, absence of benches, guardrails and handrails, presence of bicycles on sidewalks and heavy traffic. Given that older people with limitations feel insecure when going out, staying at home longer and isolating themselves from community life, improvements in urban accessibility result in greater social well-being (Van der Pas et al., 2016).

Once mobility and accessibility limitations are overcome, the older person needs to have at their disposal the necessary amenities to maintain social well-being, which includes factors such as the possibility of participating in community activities, the feeling of security and protection and access to businesses, and public health and transportation services (Buffel & Phillipson, 2016). Of all the aspects mentioned, security is the most influential in an older person's decision to use public space and, like mobility, insecurity can be a factor that leads to isolation (Woolrych et al., 2019).

Encouraging community participation and involvement is intertwined with ways of disseminating local information. Emotional support from family, friends and community members gives the older adult the necessary security to use neighborhood resources, and when using these places to find out about community news, they reinforce their social bonds even more (Ahn, Kang, & Kwon, 2020). Thus, it is legitimate to explore the affective bond built by residents in relation to the city they helped to build.

In order to understand the perception of the older person about the environment in which they live, it is necessary to understand not only what resources are available in the place, but also what were the experiences lived in that context and the meanings attributed to these aspects. In this way, the affective dimension, which includes the sense of place, is important for understanding the bonds established between the older person and their place of residence.

Sense of place and aging

The affective relationship that is built with different environments throughout life and the subjective qualities attributed to them, such as the personal meaning of the place of residence, the social bonds formed there, as well as the history and ancestral connections resulting from the person-environment relationship compose what is called sense of place. It also covers emotions, social relationships, beliefs, values, social constructs, attachment, and environmental satisfaction (Hay, 1998; Stedman, 2016).

The sense of place can be obtained and maintained by individuals through the construction of a history with a certain space, characterized by memories and affections (Tuan, 1980). It can be defined by the affective ties that compose it, represented by an emotional attachment, by symbolic meanings attributed to the place, and by the perceptions, feelings and actions that characterize the functional attachment that drive the permanence in the place, through levels of weaker or stronger rootedness (Fang et al., 2016). Recognition of the multidimensionality of this concept reflects its theoretical improvement since 1968, when it was mentioned for the first time, and its articulation with constructs more recently discussed in the literature, such as identity of place and attachment to place, defined from the dimensions of emotional and functional attachment, or place dependence (Nelson, Ahn, & Corley, 2020).

This person-environment bond adds physical, emotional and experiential elements in a relationship of individual or collective interdependence with the place, which helps in terms of identity formation and belonging that is produced through constant adaptation and use of places by people (Agyekum & Newbold, 2019; Ghoomi, Yazdanfar, Hosseini, & Maleki, 2015). The feeling of belonging generated by this relationship is capable of promoting well-being and reducing social isolation, which signals articulations between psychology and environmental gerontology, for example, to support precepts of age-friendly cities.

Some factors that contribute to the development of a sense of place also contribute to healthy aging, such as participation in activities in the local community, intergenerational relationships, the shared past with where one lives, including events, structures and objects, the contact with traditions and teachings transmitted between generations, familiarity with the neighborhood and local social support (Chapin III & Knapp, 2015). Over the years that one lives in the same place, relationships of affection and dependence develop with them, which start to carry personal meanings for the individual, so that an eventual departure from this place can be a source of suffering for the older adult who already had affective and social support established in the place (WHO, 2008).

From this sense of place, people transform the spaces in which they are inserted and are transformed by them. Hence the importance of respecting the preferences of this population, especially with regard to where they want to live during the aging process. Under these considerations, this study aimed to explore how older people living in three locations build their sense of place, from the identification of opportunities available in their place of

residence, the facilitators and barriers faced daily and the demands for the construction of an environment that favors active aging.

Method

Research characterization and contexts

The qualitative data presented result from three techniques: face-to-face interviews, go-along interviews, and photographic diaries. It represents a collaboration between universities in Brazil and the United Kingdom between the years 2016 and 2019.

This study was carried out in three residential areas with urban configuration, income strata (high, medium and low) and specific historical-cultural contexts. In addition to the distance to downtown (3.5 km, 6.2 km, and 9.1 km), these are regions with a formal and regularized urban fabric, but which are differentiated by the type of housing (houses and apartments), provision of services, local tree planting, and neighborhood relations. In this sense, the objective of this study meets the meanings of places that are associated with these local particularities, giving contour to relationships and providing opportunities, at different levels, for the construction of affections that make residents closer to and/or distant from their surroundings.

The South location was the first residential area built in the city and received all the public facilities designed by Lúcio Costa. The area has a total of 2,051 inhabitants in 766 households, which have an upper- and middle-class profile. Among the older people, 67% are female. The North location is made up of affordable housing. The number of floors and the size of the apartments were reduced, facilities such as elevators and covered parking were excluded. The area has a total of 2,183 residents in 830 households (Instituto Brasileiro de Geografia e Estatística [IBGE], 2010). The age pyramid shows a similar distribution to the city's population, with a predominance of young adults (25-30 years) and 10.95% of older adults, among whom 59.58% are female.

The West location emerged from the creation of an urban center for civil servants in the federal and district sectors. The area was established in the 90s through the distribution of 370 plots of land, with an average size of 150 square meters. It consists of 13 single-family residential blocks with houses from one to three floors, classified as a sensitive area due to its proximity to an environmental conservation unit. It gathers approximately 2,000 residents, 50.6% female, in 558 households, of which 65.27% are aged between 18 and 59 years old and 7.13% over 60 years old (IBGE, 2010).

Participants

Participants were sixty-three persons (M = 26; F = 37) aged between 60 and 90 years. In each of the three locations, ten participants were interviewed face-to-face (N=30), seven in the go-along interview procedure (N=21), in which the respondent, when walking and photographing the environment chosen, is interviewed (Evans & Jones, 2011). Four participants from each neighborhood documented their routine experiences through photo diaries (N=12). After the photographic record, another interview was carried out to access the meanings attributed to the images.

Participation was voluntary by signing the Informed Consent, following the parameters of Resolution 466/12 of the National Health Council and the Human Research Ethics Committee, under approval opinion 4,033,823 (CAAE: 70931517.1.1001.5317).

Data collection and analysis procedures

Data were collected between April and September 2017. Residents participated in three moments of the study aimed at collecting information to answer the three central questions of the project: (1) how is the place of residence perceived by the older adult, (2) what are the main services needed to make the place more friendly for this population, and (3) how the place can be designed to integrate the sense of place and the needs of the residents.

From a script with 12 questions, the face-to-face interviews were carried out in a place defined by the older person and were audio-recorded for later transcription. The questions dealt with daily experiences in the neighborhood, accessibility, leisure and use of public spaces, community support, sense of place, belonging and social participation. With regard to the go-along interviews, older people were invited to take a route around their homes to show the researchers perceived positive and negative aspects, the main services routinely used and their experiences related to difficulties and facilities of using the services. During the walk, the older adult was instructed to keep the audio recorder with them to record the speeches and the researchers photographed elements mentioned by the participant along the way.

As for the photo diaries, the older adults registered up to 12 scenarios or situations that they considered relevant in the neighborhood. Subsequently, the researcher went to the participant's residence to retrieve the images and collect information about the choices of scenarios through an audio-recorded interview.

The audios of the three moments were fully transcribed and organized for analysis using the Iramuteq software (Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires). The transcribed content was formatted and imported as a textual corpus to direct the required analyses. Descriptive statistics and descending hierarchical classification (CHD) were requested, which generates a simplified factorial analysis of the data (Camargo & Justo, 2013), of the 63 texts corresponding to the content of each interview. The quantitative analysis provided by the software organizes the data into a dendrogram that presents the relationships between the categories and the words associated with each one of them. Initially, each moment of the research was analyzed separately, but due to perceived categorical similarities, we decided to use the content of the three moments for a global analysis, which allowed greater retention of text segments by the software and consequently greater accuracy of results.

Results

Descriptive statistics informed texts with 5,502 segments, 10,805 forms and 4,820 hapax (forms that have only one occurrence throughout the text). The number of hapax represents 44.61% of the forms and 2.45% of the occurrences, which made the analysis possible.

In Reinert's method (CHD), the software presented a retention of 99.11% text segments imported from the corpus. From the CHD, it was possible to visualize the number of classes/categories obtained and the words associated with them. Four classes of text segments were obtained in this study. All classes proved to be interrelated according to the dendrogram (Figure 1), however, class 2 was the most significant hierarchically, representing 18.4% text segments. Classes 1 (30.5%) and 2 showed evidence of higher

levels of similarity due to proximity in the simplified factor analysis graph (Figure 2), and classes 3 (29.4%) and 4 (21.6%) showed greater independence. Figure 3 shows the details of the classes according to the vocabulary associated with each.

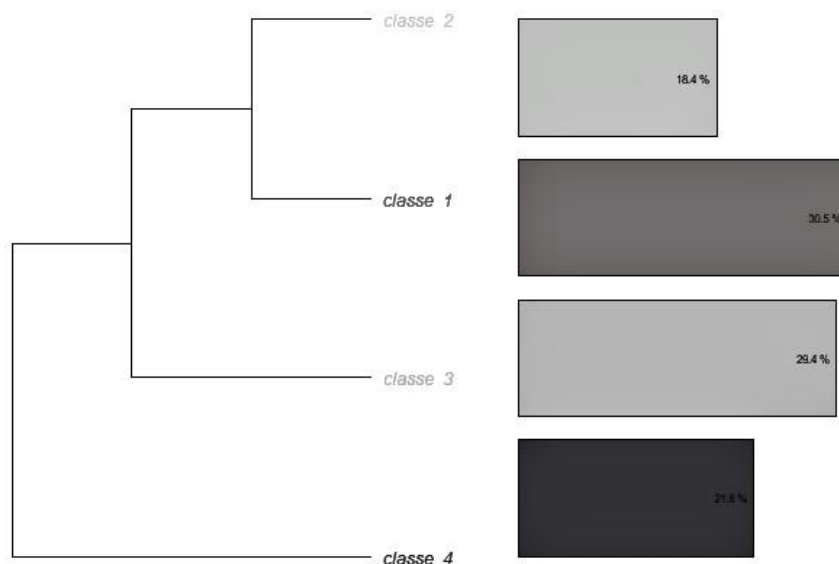


Figure 1. Dendrogram of classes for the Descending Hierarchical Classification (CHD). Fonte: Data analysis in Iramuteg software.

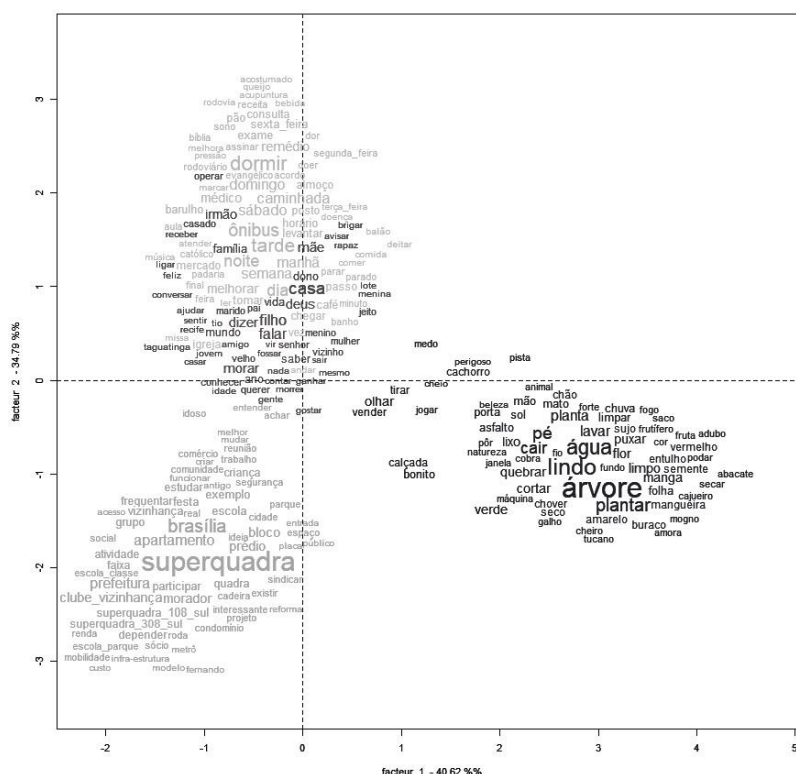


Figure 2. Graphical representation of the dendrogram on the Cartesian plane - Simplified Factor Analysis. Fonte: Data analysis in Iramuteq software.

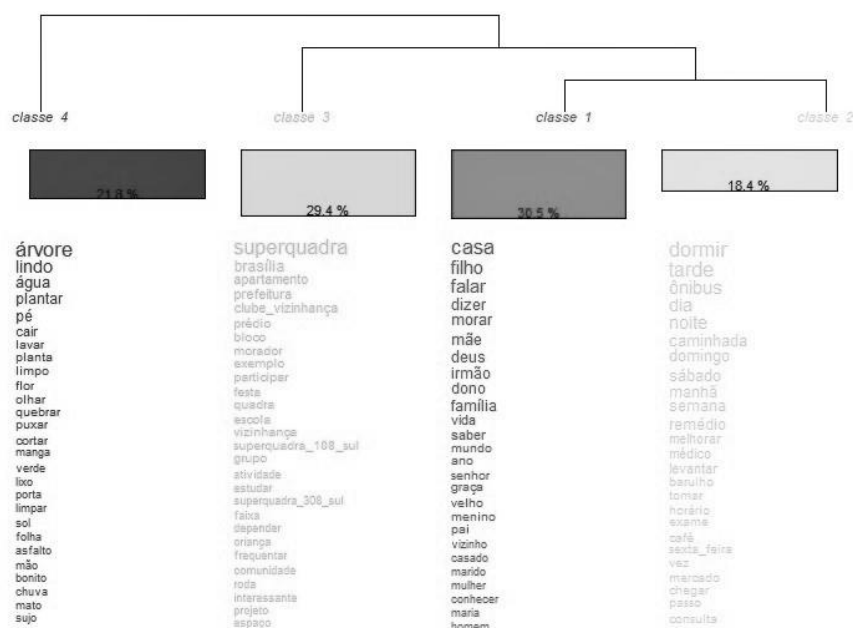


Figure 3. Dendrogram with text segments resulting from the Descending Hierarchical Classification. Fonte: Data analysis in Iramuteq software.

The simplified factor analysis graph showed the overlap of classes 1 and 2 (upper quadrants) and the independence of classes 3 (lower left quadrant) and 4 (lower right quadrant). To help define the classes and clarify common points and differences in the content of the participants' speeches, some explanatory excerpts from each research question were highlighted to name and define the categories in a qualitative analysis.

Speeches associated with Class 1 reflect memories linked to the period of living in the place of residence, encompassing comparisons related to previous periods and the perception of differences arisen over the years with regard to people and physical space. In addition, it incorporates the support of neighbors, superintendents and community city halls that help with the care and maintenance of the place of residence and for sharing information and requests for help on a day-to-day basis. Thus, some explanatory excerpts from the class called Social and Community Bonds are:

"I'm from Juscelino's time. Juscelino died and I stayed here. But there wasn't this bunch of people at home. It was more deserted here. We thought everything was far away from here" (F, 74 years old, west location).

"[...] the neighbors, I have some that I call if I need to, I can count on them, but the rest is just with the family" (M, 82 years old, north location).

Class 2 includes the individual capacities of the older adult within the scope of the place of residence to carry out daily activities, autonomously and independently. Such activities include personal and housing care, as well as leisure activities and social interaction. It also deals with building neighborhood relationships based on cordiality among residents in the quest to maintain good coexistence and mutual cooperation. Some excerpts that exemplify the Activities offered by the neighborhood are presented below:

"At noon I have lunch, take a nap, then I stay on the sewing machine for a bit. Then comes the time to hike, then we hike, hike in the afternoon, in the morning I take care of the

house, the plants, the animals. I sew until 11 o'clock at night, then I go to sleep" (F, 74 years old, west location).

"[...] there's no neighbor who annoys me, we're friends, they're at their house, and I'm at mine. I'm not used to go to other people's houses, but good morning and good afternoon, how's it going, this kind of friendship [...]" (M, 81 years old, west location).

With regard to Class 3, the content of the speeches deals with the desire to remain in the place of residence (aging-in-place), reflecting the sense of place. Such processes strengthen the perception of the place as ideal for experiencing aging and are interrelated with factors such as access to services, accessibility, mobility and local infrastructure. Due to its symbolic character, the Belonging to the Place class presents subjective and objective nuances of the person-environment relationship demonstrated in statements such as:

"I don't intend to move from here, neither I nor my wife. If you talk about moving from here, she doesn't want to. I don't intend to move either" (M, 75 years old, west location).

"[...] I realized that this whole neighborhood here and this whole place here I realized that it was the place I wanted to stay to live" (F, 64 years old, north location).

"[...] there's everything here, everything close by, I can walk to everything [...] and there are all the stores here [...], I can walk around here and access all the stores [...]" (F, 64 years old, south location).

Finally, Class 4 emphasizes landscaping and tree planting in urban areas that contribute to the contemplation of an aesthetic beauty that brings satisfaction and pleasantness. Natural elements are included in reflective processes on the conflicting relationships in the use of natural resources, in view of urban growth and the consequent reduction of goods initially considered endless. To represent this class, we rescued the term (R)urbanization, conceived by Gilberto Freyre (Duqueviz, 2006) as a model aimed at the incorporation of rural elements in the urban context, in order to express the local specificities and their potential in the person-environment relationship, which is evidenced in the following statements:

"Especially with these beautiful trees! Brasilia is a garden, right? Here is a garden" (F, 61 years old, south location).

"I feel ashamed when I wash here, because now it is not possible to pour water, [there was rationing in the city] so not much water runs, because I wash the clothes and carry the water there, to throw a little water there and push the squeegee [...]" (F, 70 years old, west location).

"The feet of the people's wall, they don't have a garden, they don't have anything. Here there was a time when they even ended up with the gardens that the people had" (F, 74 years old, northern location).

The description of each class incorporates different components of the older person-environment relationship in the places studied. This panorama can provide evidence on how to promote aging-in-place for this population in dialogue with the literature on the subject and with the guidelines listed by the WHO with regard to age-friendly cities. Such aspects helped in the construction of the instruments used and in the direction of the study.

Discussion

The results presented reveal perceptions and demands of the older adult population of Brasilia in the three locations studied, allowing the cross-referencing that dialogues with other studies already carried out in the area, but that also exhibit local specificities according to the characteristics of the city and its residents. In this sense, urban problems linked to

segregation and socio-spatial inequality are present as well as in other regions of the country, in this case, since the planning of the city, and which have become evident with its growth.

Classes 1 and 3 (Social and Community Bonds/Belonging to the Place) emphasize relational elements, based on local historicity, and which reflect the construction of a sense of place. Class 2 (Activities) focuses on the possibilities of social use of spaces, clarifying residents' perceptions in relation to the surroundings, and Class 4 ((R)urbanization) highlights the physical and visual components observed daily in this contact with natural elements and constructed from the environment.

In this sense, residents demonstrate that what they perceive is based on what is observed on a daily basis, merging local aesthetics with their memories of the changes that have occurred over the years, in terms of reducing rural aspects superimposed by a more urban perspective. There is, therefore, a feeling of nostalgia that reinforces care and emphasizes the need to preserve the heritage represented by this modernist aesthetics. In the north and south locations, this relationship is evidenced by the appreciation of the physical environment and the elements that compose it, with a greater variety of services for people with greater purchasing power, as they are located closer to downtown. In the west location, activities and social relationships maintained a more vivid outline in the interviewees' speeches that present a shared history of resistance for the conquest of housing. This differentiation can be clarified by the characteristics of each location, as well as in the study by Ghoomi et al. (2015), in which residents of a neighborhood considered more modern highlighted visual components as more relevant for building positive affections with the place and those who residing in a more traditional neighborhood, valued the relational components as more significant.

Despite the differences between the locations, the content assigned to classes 1 and 3 are the most recurrent, demonstrating the power of belonging to the place of these residents. Therefore, this feeling is characterized as the main facilitator for the older person-environment relationship in the researched scenarios. The sense of place, by boosting the collection of symbolic meanings that are constituted from the life story of each subject with their place of residence, reinforces this connection and allows rooting (Fang et al., 2016; Nelson et al., 2020; Tuan, 1980). This older person-environment interdependence translates into the desire for aging-in-place, encouraged by objective and subjective factors that make the place more friendly to the older person within their needs (Ahn et al., 2020).

Along the way, barriers arise, characterized in this study by the limited availability of activities aimed at the older adult public and by the difficulty in accessing those that are offered. Thus, activities are restricted to the internal area of residences, which limits social contact with other residents. This community interaction is essential for health promotion and can directly affect the desire to stay in the place (Van der Pas et al., 2016). In addition, as emphasized in the strategy for age-friendly cities, the establishment of a support network among residents increases the perception of control, making the older person feel more autonomous and independent to integrate into the community (WHO, 2005, 2008).

The socioeconomic aspect focuses on participation in these activities, as respondents from the north and south locations seek private services for physical and leisure activities in spaces close to their homes. Favorable economic conditions help access, despite residents claiming interest in free activities. In the west location, there is little offer in the public and private spheres in this sector and residents have less favorable conditions to pay for them. This type of banking/monetary relationship makes it impossible for the older people to effectively use the urban space.

The elimination of barriers aimed at overcoming this distance permeates characteristics of the physical environment that facilitate accessibility and, consequently, the mobility of older people (Aroogh & Shahboulaghi, 2020). The guarantee of mobility in the neighborhood makes it possible to perceive the environment as less oppressive and to reduce the stress caused by social isolation. Among the main reasons for relocation in old age are dependency, due to physical and mental health weaknesses, associated with the perception of higher levels of environmental pressure. Thus, when planning environments, it is necessary to focus on the needs of those who will use the space (Günther & Elali, 2018). In the case of the older adult population, bearing in mind how that environment can promote active aging is paramount.

The identification of facilitators and barriers offers subsidies to design environments that more efficiently integrate the needs of residents and generates the consolidation of a sense of place. To this end, participatory research and planning processes can be a very promising alternative, which in addition to promoting engagement and social participation (Chapin III & Knapp, 2015), lead to an approximation with local knowledge, making planners, researchers and residents dialogue in a process of constant exchange to structure a more friendly city.

From the data presented, the next step was to seek this dialogue through research strategies involving the older people and other residents of each location, in order to concatenate the results of this study with intervention possibilities. Involving the older adult population in decision-making processes also emerges as a preponderant factor to encourage active aging in cities and consolidate respect for the preferences of this group, which is, so far, increasingly numerous in our society.

Being aware of the changes resulting from this inversion of the population pyramid focuses on some of the issues identified in this study, but also confirms how much progress is still needed to include the older adult-environment dynamics in a more realistic way in studies that address the aging process and its nuances. The social role of the older person and their identity constitution impose the recognition of limitations within the scope of research in psychology, even more so when questions related to the role of the physical environment in this relationship are highlighted. With the purpose of bridging this gap, this study sought a broader view of this context and a deeper understanding of factors that hinder and facilitate the daily lives of older people, in order to offer contributions to future research on the subject.

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Authors' contributions

Dayse da Silva Albuquerque: conception, design, analysis, and interpretation of data; writing of the manuscript, critical review of the content, and approval of the final version to be published.

Fernanda de Moraes Goulart: conception, design, analysis, and interpretation of data; writing of the manuscript, critical review of the content, and approval of the final version to be published.

Natália de David Klavdianos: conception, design, analysis, and interpretation of data; writing of the manuscript, critical review of the content, and approval of the final version to be published.

Isolda de Araújo Günther: conception, design, analysis, and interpretation of data; writing of the manuscript, critical review of the content, and approval of the final version to be published.

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