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# Friendly urban environments from the perspective of children and older people

## *Ambientes urbanos amigáveis na perspectiva de crianças e idosos*

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### Abstract

#### Objective

This study aimed to identify how children and older people evaluate their residential environments, considering their individual capacities and the pressures of the physical urban environment.

#### Method

Using an exploratory, descriptive and qualitative approach, interviews with photographs were conducted with children and older people in two locations. The interviews followed a semi-structured script and photographs were presented according to the environmental characteristics of each location.

#### Results

The analyses revealed a pursuit of independence and autonomy in the use of spaces, to varying degrees, according to each group's abilities to cope with environmental pressure situations. The findings indicate that the relationship with the urban environment is shaped by daily experiences, memories, and the environmental resources available to these individuals in their residential environments.

#### Conclusion

Facilitators and barriers intersperse in daily life, demanding alternative use of spaces and modifications of scenarios in order to turn them friendlier for urban populations.

**Keywords:** Aging; Childhood; Cities; Environmental psychology; Human development.

### Resumo

#### Objetivo

Este estudo buscou identificar como crianças e idosos avaliam seus ambientes residenciais, tendo em vista suas capacidades individuais e as pressões do ambiente físico nas cidades.

**Método**

*Usando uma abordagem exploratória, descritiva e qualitativa, foram conduzidas entrevistas com fotografias com crianças e idosos. As entrevistas seguiram um roteiro semi-estruturado e as fotografias foram apresentadas de acordo com as características ambientais de cada localidade.*

**Resultados**

*As análises permitiram identificar a busca por independência e autonomia no uso dos espaços, em graus variados, de acordo com as habilidades de cada grupo para lidar com as situações de pressão ambiental. Os resultados revelam que a relação com o ambiente urbano reside nas vivências diárias, nas memórias e nos recursos ambientais disponíveis para esses indivíduos em seus ambientes residenciais.*

**Conclusão**

*Facilitadores e barreiras se intercalam nesses cotidianos, exigindo usos alternativos dos espaços e modificações de cenários a fim de torná-los mais amigáveis para as populações urbanas.*

**Palavras-chave:** Velhice; Infância; Cidades; Psicologia ambiental; Desenvolvimento humano.

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The existence of physical barriers in urban frameworks hampers different population groups to have access and use spaces; this has become a common problem in several Brazilian cities. Therefore, adapting to the place where one lives becomes a continuous challenge, which in addition to generating negative physical and psychological impacts, can cause difficulties in the development process. Environmental Psychology is part of this dialogue with view at building support for the promotion of more population-friendly cities, especially for those considered more vulnerable, such as children and the older people, since it is understood that at different moments in the life cycle, the relationships established with the environment contribute to the formation of affections that can strengthen the desire to stay in or move away from urban environments.

In addition to the characteristics of the physical environment, it is extremely important to consider individual specificities that may facilitate or hinder the use of available local resources. The disorder characteristic of large cities highlights the lack of planning and the emergence of assessments that support interventions to increase the levels of satisfaction of city dwellers (Albuquerque & Günther, 2019).

Children prefer larger spaces that allow them to engage in leisure activities, while older adults seek more accessible environments that are close to services and have a cohesive social network (Aragonés et al., 2017; Fornara & Manca, 2017). The desire to dwell in the place of residence in the old age is called aging-in-place in the field of environmental gerontology and has been associated with high levels of residential satisfaction (Iecovich, 2014).

Lack of social support and high population density are perceived in childhood as barriers that lead to negative repercussions, deficits in social skills and harm the relationships with family and peers. Factors of socio-environmental vulnerability also add to these factors, generating the need to mobilize internal and external resources for individual well-being. Risk areas (due to flooding or landslides, for example), degraded areas or areas without basic sanitation may be occupied, generating situations of vulnerability. From a social point of view, these people may not have the financial means to move, no matter how precarious the socio-environmental conditions are. Another vulnerability factor would be the lack of a fixed place to live, as homeless people are exposed to a number of risks. Studies in the north and south regions of Brazil indicate that there are still few spaces for children in large urban centers, which leads to limited knowledge about the city, centered on displacements to carry out daily activities (Cartier et al., 2009; Ferreira, 2016; Lacerda Junior & Higuchi, 2020).

Barriers for the older population include the individual's physical and cognitive limitations as well as such factors as accessibility and mobility, poor urban infrastructure, low supply of services in the vicinity of the residence and low levels of social support (Woolrych et al., 2019). More specifically, studies highlight the perception of insecurity and the difficulty in accessing public transport. In addition, other age groups' disrespect of the rights of the older people, the lack of urban furniture and the poor maintenance of streets and sidewalks ought to be mentioned (Amâncio, 2020).

The skills for developing strategies to adjust and regulate difficulties resulting from barriers occur through the apprehension of resources perceived and evaluated as capable of meeting individual demands, in accordance with what is proposed by the ecological model of aging, which states that older people are capable of choosing, managing and adapting environments in accordance with their needs (Lawton & Nahemov, 1973). The congruence between environmental characteristics (resources) and individual characteristics (competencies) helps in understanding stress responses – resulting from high levels of environmental pressure – and well-being – in view of environmental docility, that is, the flexibility of spaces to adapt to the needs of the individual (Günther & Elali, 2018).

Environmental pressure is characterized by demands that influence people, considering their individual capacities to adapt to the resources available in the physical environment and their needs for using such resources. Thus, pressure results in varying the levels of environmental stress, which in turn relate to the body's physiological and emotional responses to external demands. Stress prepares the body to face the situations imposed and is subject to each individual's degree of adaptation (Günther & Fragelli, 2011). Changes in pressure levels affect human behavior differently, and each individual has a different pressure threshold. Thus, people remain little aware of the environment until pressure levels increase to the point of requiring adjustment and adaptation (Lawton & Simon, 1968).

The lifespan perspective and the processes of selection, optimization and compensation described by Baltes (1987) conceive that losses and gains are part of human development and that there is a constant need for adjustments and adaptations to achieve congruence between the person and the environment. To this end, we ought to consider the demands and opportunities facing the individuals and how they should deal with each of them. As they arise, external and internal factors act to shape the tasks to be performed. Thus, it seems appropriate to reflect that Lawton's model and the processes described by Baltes are capable of incorporating distinct moments of the life cycle, such as childhood and old age.

Due to their prolonged staying at home, older people attach greater importance to these spaces, recovering memories and recognizing the relationships built and strengthened over time (Bonaiuto & Alves, 2012). Regarding the institutionalized spaces, the sometimes conflicting relationship of older people with their caretakers can sometimes be identified in studies with children in school contexts and in the limitations imposed by adults on the use of open and closed environments on account of safety (Depeau, 2017). The process of reclaiming the appropriation of urban environments is the result of constant negotiations that contrast the perceptions and risk assessments of parents and the needs of children for independence and autonomy (Valentine, 2004).

In environments considered friendlier, children were found to have a greater ability to perform tasks, and this performance is shown to be fundamental for the construction of strategies in the private sphere that ensures the autonomous use of public spaces. Children's mobility is emphasized by Broberg et al. (2013) when they mention that urban settings should encourage independent movement and access to affordances, so that resources are within everyone's reach. Affordances refer to characteristics of a stimulus that arouse and enable specific actions (Gibson,

1986). In this sense, promoting care and exchange between children and spaces would promote the constant updating of affordances, learning and skills for their appropriation.

The support and flexibility perceived in the environment, aspects cited by Lawton and collaborators in their ecological model, are also highlighted as relevant to the quality of spaces for children, in the sense of facilitating congruence between children's demands regarding stimulation, exploration, safety and social relationships. In this framework, affordances act by delimiting places for different types of actions according to the abilities, needs and opportunities perceived by the child (Broberg et al., 2013).

The availability of physical resources and social support has a significant impact on human development, imposing barriers or facilitators for health promotion. Therefore, it is necessary to deepen the relationship between children and the older people and the city, in order to highlight the role of these individuals in the use of public spaces and their inclusion in the city planning process, in order to value the active and relevant nature of their contributions. The recognition that there is no single setting model for use and appropriation represents a step forward in considering human specificities. This concept guided this study that was developed through observations, listening and records of demands in the contexts of childhood and old age in order to evaluate the physical and symbolic aspects of urban settings from the perspective of both children and older adults.

## Method

Using an exploratory, descriptive and qualitative approach, interviews with photographs were conducted with two groups in two locations. Site 1 (S-1) consisted of slums until the 1980s; over the years they expanded and were organized into a community. In the 1990s, the area underwent a subdivision process and residents received government assistance to regularize the area. Site 2 (S-2) is a regulated area that was designed between the 1960s and 1970s in accordance with the city's urban proposal and was occupied mainly by public servants.

The areas were chosen for convenience, considering the researchers' previous contact with the residents and the school principals in each location, considering the differences in terms of socioeconomic status (middle and high income), type of housing (houses and apartments) and service provision. The procedures followed the ethical parameters set forth in Resolution 466/2012 of the Conselho Nacional de Saúde (CNS, National Health Council) and in Complementary Resolution 510/2016, and were approved under opinion no. 2,894,872 by the Human Research Ethics Committee of the University of Brasília (UnB).

## Participants

Children aged between 8 and 11 years from schools in each study site were included, considering their reading and writing skills required to perform the proposed task. Among the older population, individuals aged 60 years or older who were willing to participate after being invited and after signing the Free and Informed Consent Form (FICF) were included. These participants were invited near their homes and the snowball recruitment technique was used to obtain a larger number of respondents.

## Instruments

The interviews followed a semi-structured script and photographs were presented according to the environmental characteristics of that location. The questions were asked as the respondent

observed the picture and included topics related to the possibilities of use of each location, facilitators and barriers to carrying out the activities mentioned, possibilities for improving the locations, individual skills and environmental demands. Finally, some sociodemographic data were requested: gender, age, education level, time and type of housing, with whom the person lives, health perception and daily activities.

The photographs used were prepared by the first author during a period of prior observation of local daily life and chosen according to the possibilities of use by the selected groups. Eight printed photographs (15 cm x 21 cm) were presented to each participant. In S-1, photographs were presented of: 1) Community Meeting Point (CMP), where there are work out equipment for the older population, with places to eat nearby; 2) Parking lot of the Agricultural Exhibition Park; 3) Local school; 4) Square with playground, benches and area for physical exercise; 5) Catholic Church; 6) Commercial area; 7) Multi-sports court and, 8) Route including sidewalk and main street, between residential and commercial areas. In relation to S-2, the photographs referred to: 1) Ground floor of an apartment block; 2) Square with playground, benches and area for physical exercise; 3) Multi-sports court; 4) Route between residential and commercial areas; 5) Local school; 6) Wooded and grassy area between residential area and the church; 7) Children's Playground and, 8) Route including sidewalk and street between the residential area and the church.

## Procedures

The instruments were applied individually in classrooms or in the schoolyard with the children and in the homes of the older adults participants. The interviews were audio-recorded and the content of the responses was transcribed in full in the formats necessary for analysis using the Iramuteq software (*Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires*). This free license program allows the analysis of textual data, producing indications of frequency, contrasts, similarities and hierarchy of the text segments that make up the textual corpus to direct the required analyses (Camargo & Justo, 2013).

To construct the analysis categories, the Descending Hierarchical Classification (DHC) was used, which classifies the texts (textual corpus) into text segments according to the frequency of specific vocabulary and their relationships, considering proximity and composition (Reinert Method). From the DHC, the software generates a Simplified Factor Analysis that helps visualizing the distribution of the categories identified based on the proximity of the text segments used.

## Results

### Sociodemographic Data

A total of 72 people participated, including 39 children and 33 older adults. Seventeen children ( $F = 7$ ;  $M = 10$ ) were interviewed in S-1 and 22 ( $F = 11$ ;  $M = 11$ ) in S-2. Regarding the older adults, 16 ( $F = 14$ ;  $M = 2$ ) participated in S-1 and 17 ( $F = 14$ ;  $M = 3$ ) in S-2. The average family income reported by them in S-1 was three minimum wages and in S-2, between six and ten minimum wages. The education level reported by the participants in S-1 was elementary school, often incomplete, and that of those in S-2 was between high school and higher education.

Regarding the profile of the children, in S-1 the age range was 8 to 10 years, with only one participant living in an apartment and six living outside the study area. Of the children interviewed, 12 live with their parents and siblings, four with their mother and another family member (without

their father) as uncles and grandparents, and only one lives with their grandmother, sister and aunt, without the presence of their parents. Regarding their health, eleven children rated it as good, three as very good and three as neither good nor bad. The criteria for this assessment were mainly diet and the frequency of illnesses throughout the year.

In S-2, the age range was 9 to 11 years old, with 16 living at home, three in an apartment and three of them, due to their parents' divorce, living at home and in an apartment, depending on the day of the week. One of the main limitations of the profile of the participants in S-2 was that none of them lived in the study area and most of them were taken to school on buses subsidized by the city government, for this reason only five had contact with the area. The other children lived in distant locations, but studied at the selected school. Of the children interviewed, five lived with their mother and a family member, with no contact with their father and the others lived and/or had weekly contact with their mother, father, siblings and other family members such as uncles and grandparents. One child in S-2 considered his health to be very good, 18 considered it good and three evaluated it as neither good nor bad, based on the same criteria as the children in S-1.

Regarding the profile of older participants, in S-1 all interviewees live in the study area and in houses with up to two floors, having lived there for between 10 and 45 years. Aged between 60 and 91, nine individuals rated their health as good, six as neither good nor bad, and one as bad. To assess their health, the individuals considered the frequency and amount of daily medication use, the presence of chronic diseases, and difficulties in carrying out daily activities. Of the 16 interviewed, six live with children or grandchildren, four with their spouse, three live alone due to widowhood, and three live with their spouse and children and/or grandchildren.

Regarding the older adults in S-2, eleven live in the study area and six participants have close contact with the location. The 17 interviewees live in apartments and have lived there for between 16 and 38 years. Their ages ranged from 64 to 78 years and the health assessment considered the same criteria as the residents of S-1, with ten participants considering their health as good, three considering their health as neither good nor bad, three as very good and one as bad. In S-2, eleven of the interviewees live with their spouse, three with their husband and children, two live alone (widowhood and divorce) and one lives with her daughter (widowhood).

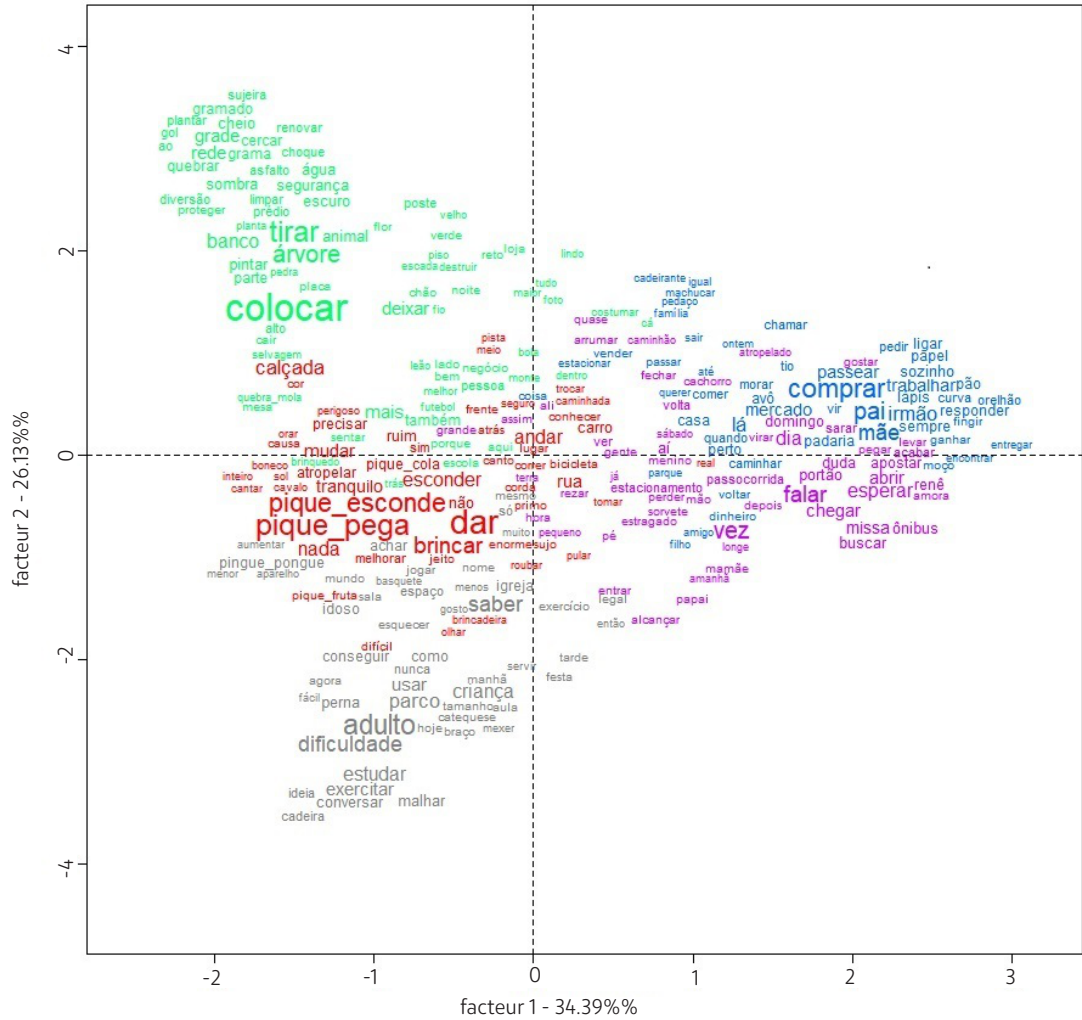
## Interviews

The first analysis of the content of the interviews with the children in S-1 resulted in seven very entangled classes, which made classification difficult. Therefore, it was decided to redo the analysis using as a parameter the speeches associated with each photograph presented. In the first stage, 17 texts were analyzed considering the individual speech of each child and, in the second analysis, eight texts with more robust content were submitted to Descending Hierarchical Classification (DHC) which organized the text into segments according to the frequency of specific vocabulary and their relationships. This alternative proved to be more effective, resulting in the emergence of 5 classes. Descriptive statistics reported a number of 616 text segments, 20,753 occurrences, 1,061 forms and 422 hapax (forms that have only one occurrence throughout the texts). The number of hapax represented 2.03% of the occurrences, a value that supports the analysis of the data.

The DHC generated five classes of text segments. Classes 1 (16.6%) and 2 (21.3%) are similar to each other and are spatially located in the same quadrant. Class 3 is the most independent, representing 21.0% of the text segments. Classes 4 (22.5%) and 5 (18.6%) also show signs of similarity due to their proximity in the simplified factor analysis graph (Figure 1), in which it is possible to observe a detailed organization of the classes according to the vocabulary associated with each one of them.

Figure 1

Graphical representation of the dendrogram on a Cartesian plane - Children - S-1



The classes were defined based on three categories: 1) Affordances: represented by classes 1 and 2 (red and gray), totaling 37.9% of the text segments, referring to the possibilities of using the spaces presented through photographs and encompassing different types of play and less turbulent activities such as talking and exercising, most commonly identified as possibilities of use for adults and the older people; 2) Obstacles and Changes: represented by class 3 (green), incorporating aspects identified as obstacles to the use of the space and alternatives for modifying the scenario so that it becomes a more child-friendly place; and 3) Relationships and Daily Life: represented by classes 4 and 5 (blue and pink), totaling 41.1% of the text segments, encompassing the experiences of children in contact with the spaces and relationships with family and friends in these contexts.

When describing affordances, children report that “*you can run a lot, ride a bike, because this is a very large space and there is nothing stopping you*” [emphasis added]. Their statements reflect playing as the main possibility for using the spaces. However, perceived obstacles are revealed when children say “*I can’t reach this [gym equipment] here because it’s too high, and this one here, which is the big one, I can reach the small one, but I can’t reach the big one because my arm doesn’t reach up there [...]*” or “*no, you can’t play here because it’s dangerous for a car to run over a child [...]*” [emphasis

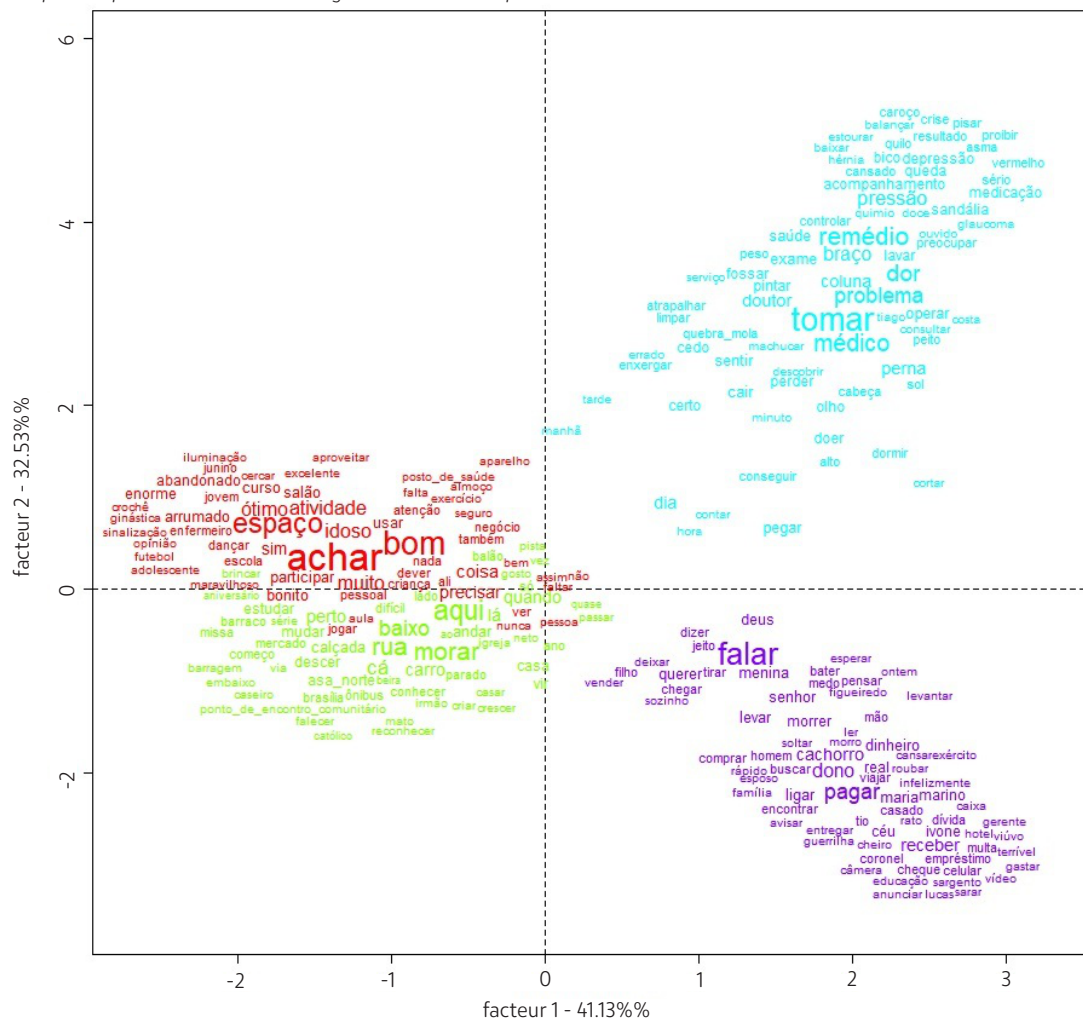
added]. At other times, the perception of obstacles was mixed with possibilities for improvements such as “the basketball hoop is too high, the goal is too big [...] I was going to put a beautiful lawn here, put a pool under this tree here, put a bench there too because there’s a lot of shade and I was going to put a bunch of posts around this court”. Regarding relationships and aspects of daily life, the recognition of spaces occurs through experiences such as “I ride my bike with my father in the park, then yesterday I came here to go to the city hall, to go to the bakery, to go home, then I passed by this place, you understand?”. [emphasis added]

Sixteen texts were analyzed considering the individual speech of each older person from S-1. Considering that the average interview time for this group was 47 minutes and 57 seconds, and the content was longer, there was no difficulty in the analysis process. The DHC generated 4 classes from 2,141 text segments. Descriptive statistics accounted for 72,279 occurrences, 2,839 forms and 1,068 hapax, which represented 1.48% of the occurrences. A total of 1,782 text segments were classified, which corresponds to 83.23% of the textual corpus.

The DHC generated the four classes of text segments. Classes 1 (25.3%) and 2 (31.6%) are close, but remain in different quadrants in the simplified factor analysis (Figure 2). Classes 3 (16.7%) and 4 (26.4%) appear to be quite independent when the distribution is visually analyzed.

**Figure 2**

Graphical representation of the dendrogram on a Cartesian plane – Older adults - S-1



This breakdown led to the definition of four categories of analysis: 1) Resources: represented by class 1 (red), it concerns the services available in the area and the possibilities of services to be offered to make the place more friendly; 2) Memories: represented by class 2 (green), it incorporates the largest number of text segments, presenting aspects of past and current experiences with the surroundings and the possibilities of using the perceived resources; 3) Skills: represented by class 3 (blue), it mentions the health problems identified by the older people that make it difficult to carry out their daily activities and increase the pressure exerted by the environment; and 4) Relationships and Daily Life: represented by class 4 (purple), it encompasses the experiences of them in contact with the spaces and the relationships with family and friends in these contexts.

Regarding resources, the participants indicate needs such as “[...] *I would really like the bus to pass through here, through the streets, because, for example, if the bus passed here, there would be a stop there, it would be much easier, that’s all, and that there would be a course like this for the older people because there is nothing here to spend time [...]*” [emphasis added], among other services associated with local security and infrastructure. Regarding memories, the reports evoke personal and collective memories “[...] *I raised my children here, I got married [...], we built here and came here, up here must have been around 20 years ago, I came as a child, I grew up here, I got married here, my brothers all grew up here, the whole family came, they came, we came here in 1958 [...]*” [emphasis added]. The difficulties identified in terms of skills stand out in statements such as “*I don’t walk much because it makes me short of breath*” and “*I also take medicine for my leg, which I still have a problem with, and I can’t walk. If I walk ten steps from here to there, I can’t handle the pain anymore, my legs hurt so much [...]*” [emphasis added]. However, daily relationships are recognized and valued, which is evident when the participants say that “*I know everyone, that’s good, the neighbors do help, I can count on the neighbors and they can count on me*” [emphasis added].

Twenty-two texts were analyzed considering the individual speech of each child in S-2. The average interview time for the group was 28 minutes and 5 seconds. The DHC generated four classes from 1,199 text segments. Descriptive statistics accounted for 40,938 occurrences, 2,515 forms and 586 hapax, which represented only 1.43% of the occurrences. A total of 984 text segments were classified, corresponding to 82.07% of the textual corpus submitted for analysis. Classes 1 (26.7%) and 4 (27.9%) present a greater degree of independence, remaining in distinct and opposite quadrants of the simplified factor analysis graph. Classes 2 (27.6%) and 3 (17.8%) are closer and more similar in terms of content, which can be visually analyzed through the distribution of text segments in Figure 3.

Based on this information, three categories of analysis were defined: 1) Relationships and Daily Life: represented by class 1 (red), it encompasses the children’s experience in contact with the spaces and their relationships with family and friends in these contexts; 2) Obstacles and Changes: represented by classes 2 (green) and 3 (blue), totaling 45.4% of the text segments, it incorporates aspects identified as obstacles to the use of the space and alternatives for modifying the scenario so that it becomes a more child-friendly place; and 3) Affordances: represented by class 4 (purple), it refers to the possibilities of using the spaces presented through photographs and encompasses different types of play and less turbulent activities such as talking and exercising, most commonly identified as possibilities of use for adults and the older people.

The relationships and daily experiences identified from the photographs presented were mainly associated with activities promoted by the school or routes between the school and the parents’ workplaces, such as “*I think I know this place, I think it’s near my mother’s work [...]*”. Regarding obstacles and possibilities for changes, the children suggested “[...] *there’s something we could*





The memories and relationships mainly focus on the changes perceived in the area, for example, *“The [avenue] was empty like that, the bakery, so, it was really difficult, a shock, then from here from my window I saw the growth of everything [...]”* [emphasis added] and the bonds that were built over the years that changed the profile of the residents *“these are properties that are 35 to 40 years old, so those who came here during that period, if they came here and stayed here until today, there are many people who came here at the beginning and are still here today, they are already old, their children have already left home, so I would say that it is a predominantly older adults area”* [emphasis added]. The affordances are associated with the activities observed in the daily lives of the residents who mention that *“here there are many people who meet down there, especially parents who let their children play, have birthdays, almost every weekend there is a birthday party under this gazebo, so it is used a lot there”* [emphasis added].

## Discussion

In terms of the evaluation of urban settings by each group of children and older adults in the study sites, similarities and specificities relevant for discussion were identified. The seven categories of analysis described allow for approximations with the literature in environmental psychology and human development studies.

The categories defined by the children interviewed in both locations were similar, including the identification of affordances, obstacles and possibilities for altering spaces in order to make them more user-friendly, and in the description of relationships and daily activities. However, comparatively, the children in S-1 presented more content related to the category relationships and daily life (41.1%), demonstrating greater importance attributed to established bonds and daily activities. Affordances represented 37.9% of the statements and refer mainly to plays (tag, hide and seek, cops and robbers, playing ball, riding a bike, using playground equipment, running, climbing trees, among others) perceived as possible occurrences in each space presented through the photographs. The category related to obstacles and alterations, composed of 21.0% of the statements, refers mainly to difficulties such as the use of gym equipment, which are considered high and difficult to understand in terms of functionality, the reach of the ping-pong tables in the square area and the basketball hoop in the multi-sports court. Another obstacle is the presence of cars, perceived as a risk factor for bicycle, rollerblade or skateboard traffic between streets, since the sidewalks do not allow this type of activity, due to poor maintenance conditions.

Children in S-2 attributed greater importance to obstacles and possibilities for change, which accounted for 45.4% of their statements. It is important to emphasize that, in this case, most children did not have direct contact with the spaces shown in the photographs. Therefore, a number of changes were indicated that were linked to the microsystem of each of them, such as the inclusion of more toys in the playgrounds, maintenance of the sidewalks, expansion of the school's leisure area, planting of trees and grass around the buildings, as well as improvements to their living spaces so that they would be more similar to the spaces shown. As for affordances, they were mentioned in 27.9% of the statements analyzed and, in addition to the plays mentioned by the children in S-1, the possibility of picnics, playing with dolls, rollerblading, skateboarding and practicing parkour were also included, an activity present in the daily lives of the children in S-2, as some mentioned taking classes with this type of exercise after school. The category about relationships and daily life comprised 26.7% of the interviewees' statements.

The relationship between children and their places of residence demonstrated a broader appropriation of space based on the perceptions of the S-1 participants, which is justified by the proximity of the spaces mentioned in the interviews. These differences may be related to the fact that the children in S-2 do not live in the interview location, but also, they may be due to socioeconomic aspects. While the children in S-1 go to school on foot or by bicycle, the children in S-2, because they live far from the location, usually go by government-subsidized school bus, private van or private car, brought by their parents or guardians. In this sense, the appropriation of the space surrounding the school occurs differently, allowing the incorporation of a greater or lesser number of elements that make up the scenarios studied (Depeau, 2017).

The types of plays mentioned seem to be influenced by the financial conditions and whether or not the spaces shown in the photographs are recognized, since children in S-1 propose simpler plays that depend almost exclusively on their individual skills, while children in S-2 incorporate more of the surrounding elements and resources. Thus, the availability of physical resources has an impact on development.

In this way, the experiences were characterized more closely and based on the everyday reality among the children in S-1, and the children in S-2 defined their statements based on the perceptions constructed when viewing the photographs. The promotion of child mobility was also more present among the children in S-1, which encouraged the proposal of improvements closer to the reality of the spaces (Broberg et al., 2013; Lacerda Júnior & Higuchi, 2020). The modes of travel also contribute to this mobility, which constitutes an influencing factor for satisfaction with the urban environment (Aragónés et al., 2017).

In addition to the physical aspects, the relevance of the subjective dimension for children is highlighted in terms of affective experiences associated with the bonds established in their daily lives (Ferreira, 2016). The children in S-1 demonstrated that they valued this affectivity by presenting their daily relationships and experiences as a central category. In this context, social characteristics were more relevant for the children in S-1 and functional characteristics were more accentuated in the statements of the children in S-2. For collaborative urban planning processes, such characteristics help in understanding aspects related to the friendliness of spaces (Fornara et al., 2010).

In the statements of the older population, the discourses referred to experiential aspects more forcefully in both neighborhoods. Older adults in S-1 mentioned personal and collective memories of their relationships with the surroundings in 31.6% of the talks and in 26.4% of them they reported daily bonds and activities. The identification of affordances did not appear as a category in this framework, and it was perceived that in S-1 they had difficulty in verbalizing possibilities of actions, activities or community involvement in the current reality of their surroundings. When such possibilities were mentioned, they referred to past moments, in which courses or fitness activities were promoted on an ad hoc basis, but due to the low participation by residents, they were terminated. Physical attributes were represented by the services and resources mentioned in 25.3% of the speeches and individual attributes linked to skills were highlighted in 16.7% of the content.

Just like the older population in S-1, in S-2 the main category mentioned brought elements associated with personal and collective memories of the surroundings and the bonds built over the years (34.3%). However, affordances were evident in 30.9% of the statements of this group, indicating activities and uses observed in daily life. Participants reported the days when the court is used by children to play soccer, the use of the gazebo for gatherings, the use of local stores for daily shopping, going to the gym or other types of physical activities and the circulation of people in the area. Environmental pressure, present in 19.3% of the statements, brought to light problems related

to the local infrastructure that hinder accessibility and mobility for residents. Despite the recognition of the proximity of resources and services in the area, highlighted in 15.5% of the statements, older adults reiterated the difficulty in accessing such services on foot due to the perception of insecurity and the poor condition of the sidewalks in some sections.

Socioeconomic aspects also had an impact on the differences between the study sites when considering the interviews with the older population. In this sense, it is necessary to reflect on these aspects when discussing the data. For example, residents of S-2 reported attending gyms and clubs to work out, which may justify the reduced number of observations of active outdoor leisure activities. In addition, they use hospitals and private clinics located nearby, as they have health insurance. Thus, the ease of medical care has an impact on the positive self-assessment of quality of life. The reality in S-1 is different, as the older adults did not report practicing physical exercise daily, admitted difficulties in accessing public health services, and seven out of the 16 interviewees rated their health as neither good or bad or poor. In S-1 there is a basic health unit, but its infrastructure is considered quite precarious by users, overlapping with the quality of care provided by the multidisciplinary team.

The emphasis given to memories and social relationships by the older population recovers the relevance of the characteristics mentioned by the children of S-1 in the context of evaluating spaces (Fornara et al., 2010) and aroused affection for the place. These perceptions and affections associated with the surroundings were strengthened by statements that presuppose a rooting with the place, highlighting the need to grow old there. The temporal dimension proved to be more prominent for the older population due to this time of residence, but also due to the personal and professional development linked to it. After all, these older adults were not born in the city where they currently live and at a given moment, they migrated and constituted themselves as new subjects, in spatial arrangements completely different from their origins; they adapted, molding themselves to this new configuration, but also molding it according to their needs.

Affection strengthens the concept of aging-in-place (Iecovich, 2014) and combines with high levels of satisfaction, resulting in less interest in other places and a reduced number of trips by the older population, who remain in the vicinity of their residence (Fornara & Manca, 2017). These issues meet the demand for resources. The studies by Amâncio (2020) and Woolrych et al. (2019) demonstrate their relevance in this sense, as they indicate that the availability of services in the vicinity of the residence is closely related to environmental docility, as it is a support element. Therefore, it is configured as a catalyst to make the environment more friendly to aging.

Considering the ecological model of aging proposed by Lawton and Nahemow (1973), it is worth noting that the older people in S-1 valued behavioral skills and their repercussions in their statements for relating to the environment. In contrast, the older people in S-2 highlighted aspects of the physical environment in this interrelationship. For both, the centrality of the home was highlighted.

The elements involved in the evaluations of the study sites allow us to consider that, just like the general adaptation process described by Baltes (1987), recognized today as applicable to the life cycle, the ecological model of Lawton and Nahemov (1973) can also be expanded to consider how the processes of selection, optimization and compensation operate in different periods of development. Instead of thinking about successful aging, contemporary perspectives propose the idea of successful development, taking into account the specificities of each period, yet allowing us to affirm that developmental changes do not cease in childhood or adolescence, but extend until the end of life.

## Final Considerations

The results of this study reveal that home resides in daily relationships and experiences, in personal and collective memories, in perceived affordances and in resources destined for leisure, social interaction, security and provision of supplies. Facilitators and barriers intertwine in these daily lives, requiring alternative uses of spaces and modifications of scenarios in order to make them more user-friendly. Children and older adults showed that, despite being at different stages of development, they share the search for independence and autonomy in the use of spaces, according to their abilities to deal with situations.

The strategy of recruiting children through schools located in each location studied proved to be ineffective in S-2, extending the data collection period and creating a group of participants who had few experiences associated with the research site. Conducting the interviews in the school environment also limited the time spent in contact with the children. Regarding older adults some were recruited by invitation during activities that took place at the location and by referral among themselves, however, not all of those indicated were available. The number of participants involved did not emerge as a significant factor in the data analysis, but it is important to emphasize that other forms of recruitment can be considered to engage this group, especially with regard to the male audience.

The challenging nature of the results and discussion of the data of this investigation aims to instigate new perspectives on human development and person-environment studies, in an attempt to fill theoretical and methodological gaps that still exist. Possible developments may help address current sociodemographic changes and support guidelines update for public policy agendas aimed at these populations with regard to discussions on child-friendly and older-friendly cities.

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