

Housing conditions and the degree of home satisfaction of elderly riverside residents of the Amazon region

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Abstract

At the crossroads of environmental psychology and social gerontology, this descriptive and exploratory study investigates the housing conditions of the elderly who live close to an Amazonian river and assesses their degree of satisfaction with their housing. Using four instruments, we study 23 elderly residents of the river islands of the municipality of Cametá, Pará, Brazil. Despite high territorial isolation, low socioeconomic status, and largely inappropriate housing conditions, the results reveal the elderly's overall satisfaction with their home environment, except in relation to accessibility and safety. The data of this study give larger visibility to people's main needs in this context and provide relevant information for the planning of social and health policies aimed at bettering the quality of this stage of the life span.

Keywords: Housing for the elderly. Personal satisfaction. Amazon. Psychology.

Condições de habitação e grau de satisfação domiciliar entre idosos ribeirinhos amazônicos

Resumo

Condições de habitação e grau de satisfação domiciliar entre idosos ribeirinhos amazônicos Resumo: À perspectiva da Psicologia Ambiental e da Gerontologia Social, este estudo de caráter descritivo e exploratório objetivou investigar as condições habitacionais de idosos ribeirinhos amazônicos, assim como, descrever o grau de satisfação dos mesmos quanto ao ambiente de moradia onde vivem. Utilizando-se de quatro instrumentos metodológicos, foram investigados 23 idosos residentes das ilhas fluviais do município de Cametá, Pará, Brasil. Os resultados revelaram que apesar do grande isolamento territorial, do baixo nível socioeconômico e das condições pouco adequadas de habitação dos idosos ribeirinhos amazônicos inqueridos, os mesmos denotam bom grau de satisfação em relação ao ambiente domiciliar, exceto em relação à acessibilidade e segurança. Os dados apresentados neste estudo dão maior visibilidade às principais carências desse contexto e fornece subsídios para o planejamento de políticas sociais e de saúde que visem melhor qualidade nesta etapa da vida e neste contexto.

Palavras-chave: Habitação para idosos. Satisfação pessoal. Amazônia. Psicologia.

Las condiciones de vivienda y el grado de satisfacción del hogar entre ribereños amazónicos ancianos

Resumen

Desde la perspectiva de la Psicología Ambiental y Gerontología Social, este estudio de carácter descriptivo y exploratorio tuvo como objetivo investigar las condiciones habitacionales entre ancianos ribereños amazónicos, así como describir el grado de satisfacción de los mismos, con relación al ambiente de la vivienda donde habitan. Usando cuatro instrumentos metodológicos se investigaron 23 ancianos residentes en las islas fluviales del municipio de Cametá, Pará, Brasil. Los resultados revelaron que a pesar del gran aislamiento territorial, del bajo nivel socio-económico y de las condiciones poco adecuadas de habitación, los ancianos demuestran buen grado de satisfacción con el ambiente domiciliar, excepto en lo que se refiere a accesibilidad y seguridad. Los datos presentados en este estudio dan mayor visibilidad a las principales carencias de este contexto y proporcionan subsídios para la planificación de políticas sociales y de salud, dirigidas a una mejor calidad de vida en esta etapa y en este contexto.

Palabras-clave: Vivienda para ancianos, satisfacción personal, Amazonas, Psicología.

Introduction

One of the numerous concerns related to rapid population aging and the consequent demographic and epidemiological transition in Brazil is the challenge to reflect on the environmental conditions where these processes occur. This concern is particularly important with respect to the emerging fields related to the

study of aging because the physical and the social environments are considered important determinants of “active aging” (WHO, 2002). Therefore, it becomes necessary to know in greater detail the expression of these determinants to effectively promote the health and well-being of the elderly (Farias & Santos, 2012).

The aging process does not occur uniformly across all individuals, and it is modulated by various

determinants, being directly influenced by a multitude of internal and external factors (Batistoni & Namba, 2010). The aging process involves changes at different levels, including physical, psychological, and/or social changes, which in turn may be attenuated or exacerbated by the environment (Sequeira & Silva, 2002; Lawton, 1983).

As individuals age, their ability to adapt decreases, making them more sensitive to the environment. The elderly life stage and its related health restrictions make the environment either a facilitator of or a barrier to life (Lawton, 1983). Environmental psychology and developmental psychology have demonstrated the interactive relationship between developmental processes and living contexts, enabling a holistic understanding that takes into account the inter-relation between the characteristics of individuals and the characteristics of their environment (Lawton, 1983; Perracini, 2011).

Most studies conducted on this subject have mainly focused on issues inherent to the urban setting, mainly because the urban population is projected to increase worldwide (Bertuzzi, Paskulin, & Morais, 2012; Tavares, 2012). However, focusing on the rural setting, in particular the riverside environment, seems relevant to us because there is a significant number of individuals aging in such environments, which have their own unique sociocultural characteristics and which singularly dictate how individuals age in them. Furthermore, to date, there is little scientific evidence relating this context to age, particularly in the Amazon region.

Most Amazon riverside communities are located far from large urban centers; they exhibit huge shortages in basic infrastructure that determine peculiar behaviors and lifestyles, including in old age. Given the environmental pressures, family members spend most of their time indoors, where activities and relations are more intense, compared to families living in urban settings (Silva et al., 2010; Silva et al., 2011).

It is also of fundamental interest to study the satisfaction of the elderly with their home environment, which partly reflects individual subjective well-being. Santos and Chalhoub (2012) argue that the perception of the elderly regarding the environment where they live is closely linked to their psychological well-being. According to Sequeira and Silva (2002), based on the transactional analysis of the ecological unit person/environment, we can understand this subjective indicator of the elderly living in different backdrops, where each environmental scenario uniquely defines the aging experience.

At the crossroads of environmental psychology and gerontology, the objective of the present study is to investigate the elderly who live close to an Amazonian river and to assess their degree of satisfaction with their housing.

Method

Descriptive and exploratory cross-sectional study based on quantitative data analysis and interpretation.

Participants

The study sample was composed of 23 elderly residents, aged 60 years old or older, native to territorially isolated traditional riverside communities, i.e., locations without or with little proximity to urban centers, accessed only via small vessels, and who voluntarily agreed to participate in the study by signing the free and informed consent form.

The participants were recruited from seven river islands (Iem-Tem, Mutuacá, Mutuacá de Baixo, Mutuacá de Cima, Mutuacazinho, Gama, and Mapeuá) of the municipality of Cametá, located in northeastern Pará state, Brazil, 144 km from the state capital of Belém. This municipality is the oldest and most traditional of the lower tributaries of the Tocantins River, which comprises approximately 90 river islands in its course. In 2010, according to data from the Census of the Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística - IBGE), the elderly population in the municipality was 9,089 people. There are no accurate demographic data on the number of elderly individuals living in the islands of the municipality (IBGE, 2010).

The sample was chosen using a non-probabilistic and convenience method, which considered the ease of access to the home and the availability of the elderly individuals to answer the instruments. The elderly participating in the study were approached with the aid of native informants and/or Community Health Agents who had families living in the island for several generations and therefore were closer to the communities. No individual declined to participate in the study; on the contrary, intense receptivity and interest in the study on the part of the participants were observed.

Instruments

To ensure greater exploration of the theme, the following four standardized and previously tested instruments were used: the Sociodemographic

Inventory (Inventário Sociodemográfico - ISD), the Housing Conditions Inventory (Inventário sobre as Condições de Habitação - ICH), the Home Satisfaction Assessment Instrument (Instrumento de Avaliação da Satisfação Domiciliar - IASD), and a field journal (FJ).

Both the ISD and ICD were adapted by the researchers from the instruments designed by Pinto (2013). The ISD was used for the characterization of the sample and included items related to personal identification, gender, age, birthplace, marital status, education, number of children, and household composition. The ICH comprised nine items on the structural peculiarities of the environment and sanitation of the riverside homes, including the type of housing construction, the number and arrangement of rooms, the type of energy supply, the water supply, the sewer system and trash disposal method used, and ownership of furniture and appliances.

The IASD was also adapted by the researchers from the instrument designed by Brito (2014). This instrument assesses the degree of satisfaction of the elderly with their housing environment using a three-point Likert scale (satisfied; neither satisfied nor unsatisfied; dissatisfied) according to five characteristics: size, comfort, accessibility, hygiene, and safety. In addition, through open-ended questions, the participants could indicate positive and negative aspects of their housing as well as the aspects that they would like to change to facilitate discussion about their satisfaction with their environment.

Because this study addressed different contexts, an FD was used to guide the analyses of data obtained through a broader view of the subject, enabling greater familiarity with the study problem. In this manner, the understanding of aspects centered on the reality of elderly riverside residents that could not be quantified could be deepened. The directions of Afonso, Silva, Bridges, and Koller (2015) were followed, and the methodological path consisted of recording verbal and non-verbal aspects in field notes during the course of data collection, including speeches heard in informal situations and behaviors understood as relevant to the discussion of the subject, in addition to complaints, confrontations, and other aspects that could denote the form and content of the culture of the elderly group investigated.

Procedures

This study is part of a larger project whose goal is to investigate the health conditions and predictors of

frailty among elderly riverside residents of the Amazon region, searching for relationships with demographic and socioeconomic indicators. Thus, the investigation of the ecological context addressed in the present study, involving the physical and social riverside environment, is one of the important domains of the project.

The present study was approved by the Ethics in Research Committee of the Center for Tropical Medicine, Federal University of Pará (Núcleo de Medicina Tropical/Universidade Federal do Pará - NMT/UFPA) under opinion no. 926.744/2014, in accordance with Resolution 466/2012 of the Brazilian Ministry of Health. After study approval, the sample selection and data collection were initiated. The elderly were contacted through home visits made in January 2015, and the data were collected at the homes of the participants at the time of the visit. The instruments were individually applied by two previously trained researchers in a single session for each participant, with an average duration of 30 minutes.

The data were obtained using the ISD, ICH and IASD. The data were then tabulated in a spreadsheet and subjected to descriptive statistical analysis including frequency distribution and the respective 95% confidence intervals (95% CI) in Epi-Info® 6.04.

Results

All 23 elderly participants were native to the region and aged between 63 and 96 years old, with a mean age of 71.2 ± 7.8 years. The sample representation in relation to gender was approximately equal, including 12 (52.2%) women and 11 (47.8%) men. The majority (56.5%) were married or living with a partner. More than half (approximately 56%) of the elderly had never attended school and were thus illiterate. With regard to income, it is noteworthy that the household income of all elderly participants was based a combination of the rural retirement benefit, which is equal to one minimum monthly wage, and occasional revenue generated by selling fruits (in particular, açaí) and animals, such as chickens, ducks, and pigs. Only two individuals reported that the family received assistance from the *Bolsa Família* ("Family Allowance") government program. Regarding household composition, a mean of 4.47 residents were observed per household; despite a diversified arrangement, 34.8% of the elderly respondents reported living with spouses, children, and grandchildren (Table 1).

In relation to the housing conditions of the sample studied, all of the elderly owned their homes

Table 1
Sociodemographic characteristics of the elderly riverside residents, Cametá, Pará, Brazil, 2015

Characteristics	N	%	95% CI
Birthplace			
Cametá	23	100	100-100
Other regions	0	0	0-0
Age			
60-69	13	56.5	34.5-76.8
70-79	6	26.1	10.2-48.4
80 or over	4	17.4	5.0-38.4
Gender			
Female	12	52.2	30.6-73.2
Male	11	47.8	26.8-69.4
Marital status			
Married/with a partner	13	56.5	34.5-76.8
Single	5	21.7	7.5-43.7
Widowed	5	21.7	7.5-43.7
Education			
None	13	56.5	34.5-76.8
1 to 3 years	6	26.1	10.2-48.4
4 to 7 years	4	17.4	5.0-38.8
Children			
Yes	19	82.6	61.2-95.0
No	4	17.4	5.0-38.8
Household composition			
Live alone	2	8.7	1.1-28.0
Spouse/children	4	17.4	5.0-38.8
Spouse/children/grandchildren	8	34.8	16.4-57.3
Children/grandchildren	5	21.7	7.5-43.7
Other relatives	4	17.4	5.0-38.8

and resided in houses built from wood. These homes had, on average, four rooms, including a living room, a bedroom, a kitchen and a rudimentary bathroom (outhouses¹).

Table 2 shows the distributions, percentages, and 95% CI of the data regarding the type of power supply, public water supply, sewer system, and trash disposal method used, in addition to the ownership of furniture and appliances by the elderly participants. Most

(60.9%) used makeshift electrical power (illegal connections), 52.2% used a mixed water supply (from the river and public), and almost none of the households were connected to a sewage network (91.3%). In addition, the practice of burning trash still prevails in these communities (69.6% of the households). In relation to owning appliances, the majority of the homes visited had a variety of consumer goods, including a refrigerator (73.9%), a stove (91.3%) and a television with satellite dish (82.6%).

The perceptions of the characteristics of the physical environment of the homes where the elderly

¹ Small wooden buildings not attached to the home, typically built in the backyard. In this type of structure, all waste is deposited directly into the soil.

Table 2
Housing conditions of elderly riverside residents, Cameta, Pará, Brazil, 2015

Characteristics	N	%	95% CI
Electrical power			
Private generator	8	34.8	16.4-57.3
Improvised (illegal connection)	14	60.9	38.5-80.3
Lamp	1	4.3	0.1-21.9
Water supply			
River	11	47.8	26.8-69.4
River + Public	12	52.2	30.6-73.2
Sewage disposal			
Open air	21	91.3	72.0-98.9
Cesspit	2	8.7	1.1-28.0
Trash disposal			
Collection	2	8.7	1.1-28.0
Burned	16	69.6	47.1-86.8
Buried	3	13	2.8-33.6
Mixed	2	8.7	1.1-28.0
Ownership of appliances			
Refrigerator	17	73.9	51.6-89.8
Stove	21	91.3	72-98.9
Television + satellite antenna	19	82.6	61.2-95.0
Stereo system	18	78.3	56.3-92.5
Washing machine	17	73.9	51.6-89.8
Furniture	2	8.7	1.1-28.0
Bed	12	52.2	30.3-73.2
Fan	3	13	2.8-33.6
Açaí processor	6	26.1	10.2-48.4
Rural telephone service	11	47.8	26.8-69.4
Other	17	73.9	51.6-89.8

participants reside are grouped and shown in Figure 1. Although the residents were satisfied with most of the characteristics (65.5% for size, 82.6% for comfort, and 60.9% for hygiene), there was greater dissatisfaction with the safety and accessibility of the homes (56.5% and 39.1%, respectively).

In addition to these data, it is important to highlight the desire of the elderly participants to stay in the place where they reside. Most of the elderly participants were emphatic in demonstrating this interest due to reasons that included custom/ingrained habit, the peacefulness of the setting, and strong proximity to family.

Discussion

The descriptive analysis of the demographic findings shows that most riverside residents who participated in the study were young elderly (with a mean age of 71.2 years old). These data differ from those reported by Silva (2006), who studied a riverside community of Marajó Island, where the age of the oldest individuals was approximately 40 to 50. This important difference seems to reinforce that, over time, population aging has also occurred in these settings, similarly to in urban environments.

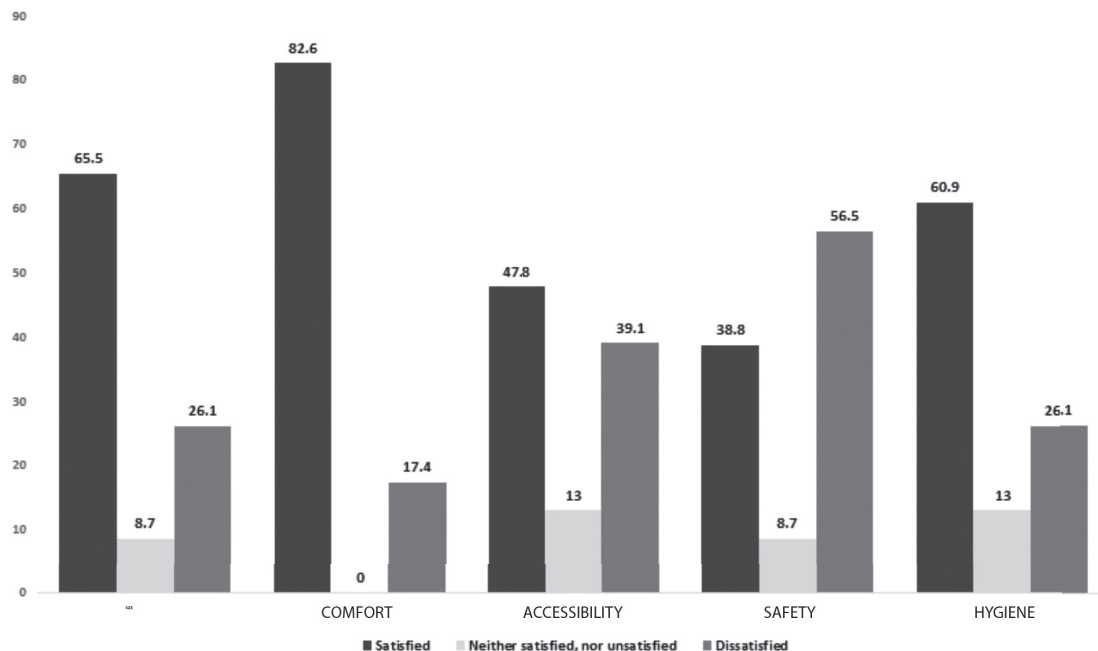


Figure 1. Distribution of the degree of satisfaction of the elderly riverside residents with their housing environment, Cameta, Pará, Brazil, 2015

The ratio between the genders of the elderly study participants was close to 1:1, but the majority were female. These data agree with the current demographic trends observed in rural settings. According to Camarano and Kanso (2011), although the proportion of elderly females has increased exponentially in Brazil, this phenomenon is typically urban; therefore, the male population still predominates in rural areas.

Regarding household composition, the data of the present study points to a predominance of intergenerational households, with a low density of residents. This finding is in contrast to the study by Silva (2006), who reveals a predominance of nuclear family arrangements in which the intergenerational families studied had a very high density of residents of approximately eight to 12 in the home.

According to the perspective of Batistoni (2014), the themes addressed in this study traverse a continuum of analysis involving both the macrocontext, represented by the conditions of access to basic living resources and sanitation issues that permeate the aging experience in the riverside setting, and the microcontext of the elderly, represented by the households and their degree of satisfaction with these environments.

Some studies on Amazon riverside communities are emphatic in characterizing them in terms of a high

degree of isolation and social exclusion compared to urban communities. This picture still highlights serious shortcomings and diverse problems, from basic services, such as sanitation, health, and education, to difficulties in organization and social mobility as well as low political influence. Hidden in the generic designation of rural workers, riverside residents are mostly forgotten by public actions, which implies a greater condition of social vulnerability (Scherer, 2004; Silva et al., 2010).

The socioeconomic characteristics and housing conditions investigated in this study corroborate this scenario. The data on education and income demonstrate the low socioeconomic status of the sample. In addition, in the riverside setting analyzed, it seems possible to suggest that the elderly also function as income generators for their families, as in the population base study with poor elderly conducted by Cesar et al. (2008). We observed that although considered low, the rural retirement benefit received by the elderly participants has improved the purchasing power of the elderly, who have been able to invest in durable consumer goods for their homes, among other material and housing resources.

In the visited homes, for example, most of the elderly owned a variety of consumer goods, including

those typical of conventional homes, which, in addition to facilitating routine domestic activities, also function as sources of well-being. As discussed by Martikainen et al. (2003), ownership of goods not only reflects the material needs of life but also contributes to a positive perception of health and is therefore considered an important marker of comfort and social well-being.

Regarding the housing and sanitation conditions of the elderly included in this study, which correspond to the determinants of the riverside macrocontext, we observed that they were marked by serious precariousness, especially in terms of basic housing infrastructure (improvised electrical power, a scarce drinking water supply, and poor basic environmental sanitation). Concerning these studied domains, Cesar et al. (2008) highlight the fact that most studies that involve the elderly do not describe their housing conditions, as though they were not a major determinant to their well-being and health status.

In relation to the degree of satisfaction with the characteristics inherent to their own homes in the riverside environment, the elderly reported a good degree of satisfaction in relation to variables of size, comfort, and hygiene of the household, whereas the variables of accessibility and safety had the largest proportion of dissatisfaction. It is important to highlight that these data are unprecedented, given that no other studies that elucidate such evidence in the elderly who live in other riverside communities were found.

When we analyze the microcontext shared by the elderly and their families, it seemed evident in most of the homes that the structuring of the rooms, which are almost always wide and airy, and the zeal for cleaning and organizing the objects in the rooms provide comfort and warmth to these environments, despite their being modest from an urban perspective. This was confirmed by the high degree of satisfaction of the elderly with the variables of size, comfort, and hygiene.

In this same analysis, other important factors observed in the riverside homes visited must also be considered because they seem to positively contribute to this positive satisfaction and are also noted in multiple studies as being determinants of well-being in old age. These include the low density of residents sharing the same environment; the close contact with nature, indicated as providing tranquility, quietude, and well-being; proximity and coexistence with the family, which represents an excellent source of social support; and the acquisition of basic appliances, which enables better living conditions and other forms of

communication and entertainment in old age (Sequeira & Silva, 2002; Khoury & Günther, 2008; Rosel, 2003; Macedo, Oliveira, & Günther, 2008).

In a study with the elderly living in the interior of São Paulo state, Joia, Ruiz, and Donalisio (2007) conclude that satisfaction with the comfort of the home was the factor most closely associated with life satisfaction. In addition, these authors suggest that the factors that are associated with this satisfaction with life in old age are somehow related to the sense of comfort and well-being, independent of being indicators or social status.

On the other hand, the results of the present study also reveal a moderate degree of dissatisfaction with accessibility, defined as difficulty in accessing residences and rooms, particularly the outhouses, which are traditionally located in the backyards. Approximately 39% of the elderly were dissatisfied and considered the environment difficult to access. The critical analysis of the structure and accessibility of the bathrooms is relevant if we consider that when the IASD questioned the participants about the possibility of modifying something in their homes to improve their living conditions, most of the elderly riverside residents reported the desire to build bathrooms attached to the homes. According to Pereira et al. (2011), this finding may be explained by the fact that it is more difficult for the elderly to access a bathroom located outside the home, especially at night; doing so can cause embarrassment in relation to individuals who do not live in the home.

Based on the results, the adjustment of the elderly to the environment was another source of relevant and complementary discussion that led us to reflection, though part of the participants reported dissatisfaction. It is important to note that from the urban perspective, moving over long staircases for the daily bath in the river and accessing the homes of relatives and/or friends and even the bathroom by bridges and boardwalks, despite being everyday tasks, are not easy. In their study, Silveira and Bassalo (2012) make important references to the irregular and unstable physical composition of riverside environments. For these authors, the everyday experience of living in these suspended environments, built from wood, certainly requires greater agility and body balance, which in turn are skills acquired starting in childhood.

During data collection, the set of reports recorded in the field notes made it clear that the dissatisfaction with the safety of the riverside environment is an important factor generating fear among the elderly in

the study, which challenges the idea that these are essentially peaceful, quiet, and relatively safe communities that favor freedom, as has been previously postulated about riverside communities.

Regarding the feeling of dissatisfaction, the variable with the greatest relevance in this study was safety. Even possessing a more present and larger social support network (family and friends), as is characteristic of rural communities, the elderly participants expressed dissatisfaction as a consequence of the advance of crime in these regions. From a gerontological perspective, the perception that the elderly have of the environment in which they live can be a determinant of their social relations with the community. However, elderly individuals who feel unsafe in performing their social activities out of fear that thieves will invade their homes and take their belongings end up cloistered in their own homes (Guedes, 2012; Lopeç & Goldoftas, 2009).

Remaining on this subject, it is important to note some information that the elderly revealed during the dialogs and that raised important discussions recorded in the field notes. The unsafe climate, according to the elderly, mainly stems from thefts/robberies in the region due to several possible driving factors, namely: the migration of new individuals who were raised without strict values and traditional customs into the region; the fact that the elderly are territorially isolated and unassisted by the government; the fragility of the homes, which are mainly stilt-style and have few security mechanisms; and the greater possession of technological goods (televisions and stereos, among others), which are the main targets of thieves.

In view of the fact that the aging process is partly determined by the environmental context where the elderly are inserted, some important implications concerning the role of the environment in the development of the elderly emerge in this discussion. Baltes and Baltes (1990) explain that all biopsychosocial changes that arise in old age may be shaped by the physical and the social environments where the elderly are included. Remaining in this direction, Sequeira and Silva (2002) and Tavares (2012) argue that, in fact, all changes that are experienced throughout life by the elderly can be alleviated or exacerbated by the same determinant.

Therefore, the aging process is highly individualized, i.e., there are different aging patterns. All of these patterns, stitched together with individual adjustments and behavioral adaptations, in turn compose one of the dimensions most relevant to adequate aging with good quality of life (Sequeira & Silva, 2002; Tavares, 2012).

However, according to Lawton and Nahemow (1973), precursors and creators are one of the most relevant approaches to this issue, and the issue of environmental adjustment must be relativized because it involves a multidimensional complex of attributes and variables, both with regard to the environment and with regard to the individual.

Considering the undisputed relevance of the subject to gerontological studies and in light of the results found, some limitations of this study, which must be overcome in future investigations on the subject, must be noted. Because the sample was probabilistic and selected by convenience, the results cannot be generalized to all elderly individuals residing in riverside communities in the Amazon. In addition, the sample size was relatively limited, and the cross-sectional study design does not allow a causal relationship to be established because both the riverside macro- and microcontexts can undergo constant changes, directly influencing the elderly's perception of these environments.

Suggestions for future studies include using a larger sample size and deepening the investigation into the environmental conditions of other distinct Amazon riverside communities. In addition, including questions on health conditions of a biopsychosocial nature and on the functional performance of the elderly can clarify and deepen the inter-relations between the elderly and the Amazon riverside setting.

Final Considerations

The objective of the present study was to investigate the housing conditions of elderly riverside residents in the Amazon region and to describe their degree of satisfaction with their home environment. Overall, the study found evidence that, despite the territorial isolation, low socioeconomic status, and inadequate housing conditions, the overall degree of satisfaction with their home environment of the elderly studied was good, except in relation to safety (56.5%) and accessibility (39.1%). Thus, these results seem to point to a satisfactory adaptation to the context where the elderly are inserted.

The elucidation of the housing conditions and how the elderly population perceives this environment provides subsidies for a differentiated planning of social and health policies, particularly in relation to psychological health, aimed at improving the quality of life in this stage of life. Inevitably, the evidence presented

gives greater visibility to the main shortcomings that continue to plague this context, especially in riverside communities such as that studied here.

The concern with the environment where an individual ages not only is socioeconomic in nature but also involves cultural issues that are unique to each regional context. Given that psychological well-being in this stage of life is a fundamental human need, perhaps the great professional challenge to be discussed and confronted is providing a satisfactory and functional environment to the elderly while respecting the psychosocial and cultural aspects rooted over the course of the lifetime. Thus, another positive reflection of this study is the riverside environment, which emerges as a fertile ground for the work of professional psychologists with the elderly.

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