



The Different Aspects of the Housing Quality of Older Adults: Which Criteria Should Be Prioritized?

Richard Sendi, Maša Filipovič Hrast, Ajda Šeme & Boštjan Kerbler

To cite this article: Richard Sendi, Maša Filipovič Hrast, Ajda Šeme & Boštjan Kerbler (04 Nov 2024): The Different Aspects of the Housing Quality of Older Adults: Which Criteria Should Be Prioritized?, Journal of Aging & Social Policy, DOI: [10.1080/08959420.2024.2422668](https://doi.org/10.1080/08959420.2024.2422668)

To link to this article: <https://doi.org/10.1080/08959420.2024.2422668>



© 2024 The Author(s). Published with license by Taylor & Francis Group, LLC.



Published online: 04 Nov 2024.



Submit your article to this journal [↗](#)



Article views: 350




View related articles [↗](#)



View Crossmark data [↗](#)

The Different Aspects of the Housing Quality of Older Adults: Which Criteria Should Be Prioritized?

Richard Sendi ^a, Maša Filipovič Hrast^b, Ajda Šeme^a, and Boštjan Kerbler PhD^a

^aHousing Department, Urban Planning Institute of the Republic of Slovenia, Ljubljana, Slovenia; ^bFaculty of Social Sciences, University of Ljubljana, Ljubljana, Slovenia

ABSTRACT

Various studies have identified that older adults' assessment of their housing quality differs from that deemed as good-quality housing by housing professionals. This has prompted the need to advance academic discourse beyond simply reporting high levels of satisfaction in older adult's housing surveys. This study attempts to achieve this by using empirical data gathered through a mixed quantitative and qualitative research approach conducted with older adults in Slovenia. While the quantitative survey revealed generally high levels of satisfaction, the qualitative face-to-face interviews revealed numerous deficiencies, irrespective of whether older adults tended to express satisfaction with their dwellings. Therefore, our findings suggest that attributes such as ownership, period of residence, and neighborhood relations are far more important in determining housing satisfaction. Thus, we conclude that policies and programs for modifying housing for older adults must be based on a deeper understanding of their specific needs. During the policy formulation process and the implementation of specific housing improvement programs, emphasis should be placed on the social-historical aspects related to the lifestyle of each specific older adult.

ARTICLE HISTORY

Received 15 August 2023
Accepted 3 September 2024

KEYWORDS

Ageing in place; housing policy; housing quality; housing satisfaction; older adults' housing; quality of life

Introduction

As the population continues to steadily age, particularly in the more developed countries, the quality of life (QOL) of older adults is attracting growing attention of various scholars (Gabriel & Bowling, 2004; Nakhodaezadeh et al., 2017; Walker & Lowenstein, 2009). QOL is usually assessed by examining various dimensions, including economic, social, healthcare, and environmental indicators (Streimikiene, 2015). This study focuses on the housing dimension, which is included in the environmental indicators. A review of the literature in this field reveals various approaches to the subject. Some authors have focused on investigating

CONTACT Richard Sendi  richard.sendi@gmail.com  Urban Planning Institute of the Republic of Slovenia, Trnovski pristan 2, 1000 Ljubljana, Ljubljana, Slovenia

© 2024 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

key aspects of residential satisfaction among older adults (Adriaanse, 2007; Fernández-Carro et al., 2015; A. E. Smith et al., 2004). Others have examined matters concerning the modifications that may be necessary to enable people to continue to live independently in their homes during old age (J. Clark & Kearns, 2012; Costa-Font et al., 2009; Heywood, 2005; Howden Chapman et al., 1999; Milner & Madigan, 2004; Percival, 2002; Pynoos et al., 2012; Severinsen et al., 2016; S. K. Smith et al., 2012). Toward this objective, some have proposed novel solutions in the form of smart technologies that may simplify the life of older adults and enable them to achieve a higher QOL while aging at home (Barlow & Venables, 2004; Blackman et al., 2016; Brownsell et al., 2001; Fisk, 2001; Milner & Madigan, 2004).

This study approaches the housing dimension of older adults' QOL from the perspective of housing quality. Academic debates on the popular concept of "ageing in place" (Burton et al., 2011; Costa-Font et al., 2009; Han & Kim, 2017; Iecovich, 2014; Leeson, 2006; Means, 2007; Vasara, 2015; Wiles et al., 2012) have often been conducted simultaneously with concerns about the housing conditions and quality of housing in which older adults live (Fausset et al., 2011; James & Saville-Smith, 2018; Newman, 2003; Sweaney et al., 2004). The concept of housing quality can be defined in several ways. For homeowners, housing quality may primarily be the key determinant of its market value (Kain & Quigley, 1970) or may also be considered in terms of specific housing conditions, such as the availability of sufficient space (Percival, 2002; Streimikiene, 2015). Moreover, the Eurostat Income and Living Conditions database (Eurostat, 2023) regularly publishes data on housing quality, focusing primarily on structural deficiencies which may seriously impact housing quality with the potential to cause health hazards to users (Howden Chapman et al., 1999; Severinsen et al., 2016; Windle et al., 2006; Yeo & Heshmati, 2014). Furthermore, housing quality may be reflected in the level of satisfaction reported by residents of a particular dwelling. Various studies have revealed that people have often reported high levels of satisfaction with their dwellings when responding to survey questions on their housing quality (Herfert et al., 2013; Mandić, 2006; Milić & Zhou, 2018; Sendi, 2017; Sendi & Černič Mali, 2003) even when some of these dwellings would be described by professionals as substandard or poor-quality housing (Donald, 2009; García-Esquinas et al., 2016; Lord et al., 2006). In this study, the term "professionals" particularly refers to architects, urban planners, housing designers, social workers, health workers, housing and social care scholars, and all other actors that may play a role in the design and implementation of housing policies. This contribution focuses on the discussion regarding the housing quality for older adults from the perspective of the older adults themselves and their subjective assessments of their QOL and satisfaction with their housing.

Thus, this study aims to contribute to this debate through the presentation and discussions of the findings of a survey conducted in Slovenia. It highlights the important findings that older adults provided. A telephone survey revealed positive assessments of housing quality, whereas face-to-face interviews revealed various inadequacies in their housing quality. This suggests that telephone surveys may not always accurately reveal the actual housing quality for older adults. The key questions guiding this discussion are similar to those raised in the study by Farquhar (1995) on QOL. When determining housing quality, which standards should one compare? If older adults' perceptions of decent old-age housing quality differ from that propagated by professionals, whose perception of housing quality matters most, and why? What are the policy implications of these findings?

Methods

A mixed-methods study was designed to examine the housing quality for older adults in Slovenia. The survey was conducted in two stages employing a telephone survey and face-to-face interviews. The follow-up face-to-face interviews obtained detailed perceptions, opinions, and attitudes that may not have been gathered through a telephone survey. Following Groves et al. (2009) proposal, the aim was to obtain a more comprehensive understanding of the housing and home environments of older adults.

Telephone survey

A close-ended standardized questionnaire was used for the telephone survey which comprised the following three chief sections:

- dwelling characteristics (tenure, size, period of residence, dwelling suitability, dwelling maintenance, distance to relatives, attachment to the dwelling, neighborhood relations, geographical location)
- household characteristics (household size, economic situation, health situation)
- demographic aspects (age, gender, educational level, employment status)

The telephone survey was conducted using a Computer Assisted Telephone Interviewing (CATI) method. The telephone numbers of respondents were randomly obtained from the Slovenian Telephone Directory and sampled proportionally according to the statistical region. The ratio of landline and mobile phone numbers was 50:50. The inclusion of mobile phone numbers enabled better coverage of the target population, thus improving the sample representativeness. Trained interviewers conducted surveys using a systematic random sampling method. The initial sample comprised 14,861 telephone

numbers, with 5,025 telephone numbers excluded because of age ineligibility. Therefore, 9,836 telephone numbers were used in this study. The survey was conducted using the Warp-it online survey software, which allows logical skip control i.e., the target person is called at a specific time and has parameters set to redial busy numbers and numbers that have not been answered. In this study, the numbers that were busy or unanswered were called five times. Ongoing checks of the interviewers' work were conducted. The poll was answered by 987 respondents, representing a response rate of 10%. The realized sample was representative of the population which enabled generalization within the survey age cohort. The survey was completed on an average of 18 minutes. Interviewers called telephone numbers from a computer-dialed list and asked persons in the household aged 65 years or older to participate.

Univariate statistical analyses were performed on the collected data. Owing to deviations in the population structure, the results were weighted by gender and statistical region of the respondents. The data were weighted according to population values applying the raking method. This weighting reduces the weight of the units that are in surplus and additionally weights the value of the units that are in short supply in the sample.

The gender ratio of the respondents was 65.3% women and 34.7% men, which represents a female response rate almost twice that of males. In addition to the likely natural gender bias in old age (women generally live longer than men), the predominance of female respondents, particularly in surveys conducted among older adults, has been recognized by Farquhar (1995) and confirmed by Taylor's (2000) explanation that women tend to participate in larger numbers of telephone surveys, while the response levels of men tend to be higher in the case of online surveys.

Among the respondents, the 65–75 years cohort accounted for 59.2%, 76–86 years for 34.5%, while the 87 years or older cohort was, understandably, the least represented with 6.3%. The minimum age of the respondents (as set by the survey) was 65 years, whereas the oldest respondent was 96 years old. Homeowners accounted for 96.6% (72.2% owned houses, and 24.4% owned apartments), whereas only 2.4% lived in rented dwellings. According to data provided by the Statistical Office of the Republic of Slovenia (upon our special request for this study), 86% of the total population aged 65 years or older were homeowners. Comparatively, the share of owner occupation in our survey sample was slightly higher than the share of owner occupation at the national level. Generally, at the national level, homeownership accounts for 94.5% of total housing stock.

Face-to-face survey

The face-to-face survey was conducted with specific individuals invited to participate in interviews. Participants were not recruited via telephone

surveys. The additional qualitative one-on-one survey was conducted with the aim to obtain a better contextual understanding and validate the information gathered through the telephone survey. Interviewers were trained before the interviews were conducted. The training specifically included ensuring objectivity and neutrality in the collection and interpretation of data. Interviewers were instructed not to influence the interviewees' personal views and attitudes. To ensure consistency in the event of repetition (according to the dependability concept), structured interviews were conducted with open-ended questions adapted from the telephone survey questionnaire. The following are the most relevant to this study:

- Are you satisfied with your dwelling?
- What are the major problems in your dwelling (e.g. dampness/mold, architectural barriers, absence of a lift)?
- Do you have any problems performing daily functions (e.g. moving around the dwelling, appropriateness of furniture, using domestic appliances)? Which elements of the dwelling present the greatest barriers?
- What would you like to have done to improve the quality of your dwelling (e.g. structural renovation, rearrangement of spaces, refurnishing)?
- What would be the ideal dwelling and immediate surroundings for old-age living?
- What is a suitable (or unsuitable) scenario for aging at home?
- Do you want to stay in your current dwelling, or would you like to shift to another dwelling, and why?
- Do you feel you belong to this dwelling?
- What do you value most in your dwelling and surroundings?

Purposeful sampling (Marshall, 1996) was applied, and therefore, interviewees were selected from urban and rural settings in different geographical regions of the country. The aim was to ensure gender balance, the coverage of different household types (i.e. single, couple, or intergenerational), and two age groups (65–79 years and 80 years or older), thus trying to reach a maximum variation sample. In all, 40 older adults participated in a face-to-face survey. Although each interviewer was asked to interview one woman and one man (to ensure a gender-balanced sample), eventually 26 women and 14 men participated, because some of the interviewers were unable to secure the consent of a sufficient number of men to participate in the survey. However, the methods described for conducting the interviews ensured that the interviewers gathered credible high-quality data. In addition to collecting the subjective opinions of the interviewees, the interviewers were instructed to gather information on inadequacies that could be visibly observed in the interviewees' homes. These observations were made using the European Union structural problems criteria which define

low-quality housing as a dwelling with a leaking roof, damp walls, floors, foundation, or rot in its window frames or floor (Eurostat, 2020). The interviewers had received prior training in observing, identifying, and assessing these factors. Although not instructed to perform a systematic assessment, some interviewees freely allowed interviewers to examine various rooms in their dwellings. These objective assessments provided additional insights into the subjective opinions of the interviewees, which are normally influenced by personal characteristics (Adriaanse, 2007) leading to personal residential satisfaction.

Each interviewer was required to prepare a comprehensive report of their work. The interviewers secured written informed consent and recorded the interviews, which were later transcribed and coded using the qualitative software NVivo 12. Both deductive and inductive coding approaches (Neuman, 2007) were applied to analyze the data, focusing on the following topics: quality of environment, quality of dwelling, access to services, renovation, attachment and satisfaction, feeling of safety and control, housing costs, identified problems, future outlook, considering moving, health, social networks, role of state, role of family, and free time. Coding was performed by the research team, who discussed and evaluated the codes used to ensure their reliability. This study presents the major findings in relation to the topics of dwelling quality and identified problems. The cases discussed here were selected as examples of typical living situations that may help illustrate the understanding of housing quality from the perspective of older adults.

Results

Results of the telephone survey

The survey question most relevant to the topic of this study was intended to obtain information regarding older adults' level of satisfaction with certain aspects of their current dwellings. Satisfaction with the QOL in the dwelling is generally investigated by asking respondents to indicate their level of satisfaction with the size of the dwelling, its layout (arrangement of spaces), and level of maintenance. The level of satisfaction was measured using a 5-point Likert scale (1= not at all satisfied to 5= very satisfied). The responses to this question generally revealed levels of satisfaction with the individual elements of the dwelling, with average values greater than 4. The respondents were found to be most satisfied (90.5%) with the QOL in their dwellings (average value 4.55), 86.7% with the layout (average value 4.48), 85.8% with the maintenance of the building (average value 4.46), and 81.1% with the size of their dwellings (average value 4.35).

A question similar to the previous one required respondents to state how much they agreed or disagreed with certain statements concerning the

Table 1. Usability/Functionality/Of dwelling.

It is difficult to	Do not at all agree (%)	Do not agree (%)	Neither-Nor (%)	Agree (%)	Fully agree (%)	Do not know (%)	Total (%)
move about	80.2	8.0	4.4	3.9	3.6	0.0	100
see things- inadequate daylight	84.0	8.2	2.3	1.8	3.4	0.3	100
reach high-mounted shelves	65.0	13.6	9.0	6.6	5.6	0.2	100
use some of the spaces due to poor maintenance	83.0	8.2	3.1	2.8	2.9	0.0	100
use external access way to dwelling	81.7	8.8	3.4	2.5	3.6	0.0	100
enter dwelling through entrance door	86.7	5.7	2.5	2.2	2.9	0.0	100
use kitchen counter	86.8	6.7	1.9	2.1	2.6	0.1	100
use kitchen appliances due to inappropriate height	85.6	7.3	2.5	1.5	2.6	0.5	100
use bedroom light switch – not next to bed	86.6	6.0	1.9	2.4	3.0	0.1	100
Get on and off bed due to inappropriate bed height	86.1	7.2	2.4	1.7	2.5	0.1	100
access bathroom from bedroom- located too far away	89.0	4.6	1.7	1.4	3.2	0.1	100
use bathroom due to slippery floor	87.6	6.7	2.0	1.2	2.2	0.3	100
use bath tub/shower due to height barriers	87.2	6.3	1.8	1.7	3.0	0.0	100
use toilet seat	91.4	4.3	0.4	1.5	2.3	0.0	100

usability or functionality of the dwelling (ease of movement, lighting, height, and accessibility of shelves, drawers, cupboards, kitchen appliances, and bathrooms/showers) [Table 1](#).

The responses revealed that the majority of the respondents did not have any serious problems with the functionality of their dwellings. The most commonly identified problem (12.2% of the total survey sample) was the height at which certain furniture elements were mounted (shelves, drawers). Once again, the responses indicated that a large majority of the older adults rated their dwellings as highly functional.

Nevertheless, some differences in functionality were observed according to the age of respondents, although only in specific cases. As respondents became older, they found it more difficult to move around the apartment, reach shelves, access the dwelling from the outside (owing to stairs and lack of handrails), and use the bed owing to its inappropriate height. However, it is noteworthy that these differences were minimal. For example, 6.7% of respondents aged 65–75 years reported difficulties moving around the dwelling compared with 16.2% of those aged 87 years and older.

The question on dwelling functionality was supplemented by a question to determine whether the dwellings were suited to their needs and use. The responses were positive, with a 4.25 average Likert value. In addition, 81% of the total number of respondents considered their dwellings to be fully or generally suitable for old age. Only 1.8% of the respondents admitted that they lived in a dwelling that was not at all suitable for their needs.

Table 2. Level of satisfaction with current dwelling according to tenure status.

Tenure/Satisfaction*	Very dissatisfied (%)	Dissatisfied (%)	Neither-Nor (%)	Satisfied (%)	Very satisfied (%)	Total (%)
Owner	0.9	1.5	6.4	22.6	68.6	100
Tenant	10.3	10.3	6.9	20.7	51.7	100

* $t(28.493) = -2.402, p = 0.023$.

Missing values and "Other" (4 responses) were excluded.

Regarding attachment to the dwelling, the "attached" and "very attached" responses together accounted for 91.8%. The responses indicated a slightly lower, however, high level of attachment ("attached" and "very attached" = 85.1%) to the neighborhood.

A more detailed analysis of the results of the telephone survey revealed that homeowners were more satisfied with their dwellings than tenants (Table 2). Statistically significant differences in satisfaction were also found regarding the size of the dwelling (the larger the apartment, the more satisfied the residents) and disability (residents without a disability tended to be more satisfied). However, for all the other variables (period of residence, income, age, gender and number of people in the household), there were no statistically significant differences in relation to housing satisfaction. Residents who had lived in a place for longer were not more attached than those who had lived there for a shorter period.

Moreover, the calculations revealed statistically significant differences in housing quality between homeowners and tenants. Tenants often indicated that they did not use rooms in the dwelling that were poorly maintained. There were no significant differences in the other variables (period of residence, disability, or age) regarding housing quality.

Considering these responses, the general impression was that older adults who participated in the telephone survey lived in fairly high-quality dwellings. Understandably, this would be a deduction based on the perspective of older adults on quality, and not based on an objective assessment. This raises the question of whether the housing conditions of older adults are truly as good as the results of the telephone survey imply. The responses obtained during the face-to-face interviews indicated otherwise.

Results of the face-to-face interviews

Similar to the telephone survey, the face-to-face interviews revealed high levels of satisfaction with the dwellings. However, they also revealed various housing deficiencies which were not identified through the telephone surveys.

To facilitate a more meaningful discussion of the findings of the face-to-face survey, we present summarized transcripts of 6 of the 40 interviews. These

selected interviews are representative of the typical housing situations experienced by the older adults who participated in the study. This selection includes mostly participants from rural areas, where housing situations generally tend to be more difficult.

Interviewee 1

Female, 83 years old, living on the ground floor of a 77 m² house, homeowner, dwelling inadequately maintained, period of residence – 40 years (rural area).

“The house is too large to clean; the distance between the bedroom and bathroom is large; the water supply system and roof need repairs.”

“I have not yet made any adaptations for myself. I believe I will have to move to the living room when I am unable to climb the stairs. All sections of the house will be closer to access.”

“Together with my husband we built this house which is an ideal home for me. I have everything I need.”

“I am happy to be at home, with my family, although we do not spend much time together. I do not want to be in an old people’s home or hospital. Home is the best place to live.”

Interviewee 2

Female, 84 years old, 60 m² house, homeowner, dwelling extremely poorly maintained, period of residence – 55 years (rural area).

“I live in a tiny old house, which is sufficient for me. I do not miss anything, I have everything. We bought new things, for example, a new cooker and television since the previous one was not working properly.”

“Mould appears in some places on the walls; that is a major defect in my house, and the roof is very old, it needs renovation. My niece said that we could change the windows, but I do not see the need for that. I have lived with them so far, so I can continue to live with them.”

“My home is good as it is since I am used to it.”

“My major worry is when I will no longer be able to independently look after myself. I would not like to move to an old people’s home because I would not feel good there.”

Interviewee 3

Male, 67 years old, living in a 45 m² two-room apartment on the 4th floor of a five-floor multifamily housing block (without a lift), homeowner, dwelling fairly well-maintained, living with wife, period of residence – 40 years.

“I am generally satisfied because I live with my wife.”

“The main problem is my being disabled ... I do not really need a wheelchair, but I have difficulties moving about; the block has no lift and I have a problem since we live on the fourth floor. It is difficult for me to walk down the stairs. I cannot do it alone; I always need someone to help me.”

Interviewee 4

Male, 76 years old, living on the ground floor of a 70 m² house, homeowner, dwelling poorly maintained, living with wife, period of residence – 50 years (rural area).

”My wife and I built this house ourselves, and we have lived in it for 50 years. The house is large. As you can see, we built a one-storey house, particularly because of the children. The upper floor, which I rarely see, is a problem in the house. It was not the best idea. My heart and legs no longer allow me to go upstairs.”

”Our façade is inadequately insulated; it often becomes cold during winter. Mould is also penetrating through the corners of the house.”

”I want to continue staying here. This is my home, and I did my best to create it in such a way that enables me to live in it for as long as possible. However, one never knows what will happen.”

Interviewee 5

Male, 68 years old, living alone on the ground floor of a 40 m² house, homeowner, dwelling poorly maintained, period of residence – 68 years (since birth) (rural area).

”I am happy with my dwelling. I have lived here since birth. The most important is that the dwelling is warm . . . the rest I can live with.”

”The house is modest, however, I am used to it from childhood . . . we also lived a modest life then. The advantage is that I live in my own house and I do not have to pay rent. I have neighbors nearby and can chat with someone every day.”

”On the negative side, I live alone and there are moments when I feel lonely. Moreover, I do not have daily assistance; I have to do much work by myself, and if I have to go somewhere, I have to ask others for transport since I do not have my own means.”

”Yes, there is much that needs improvement. The windows ought to be changed because they are too old, the bathroom needs adaptation, and I would need a better stove because it is the one that I use to heat the entire dwelling. I ought to install a central heating system to heat the entire house, or at least the most urgent areas.”

Interviewee 6

Female, 72 years old, living in a 70 m² apartment on the 4th floor of a multifamily housing block, homeowner, living with a disabled husband, wheelchair user, period of residence – 40 years (medium-sized town).

”I am the happiest woman on earth because I have a husband; the children, grandchildren, and great grandchildren live nearby. I am very satisfied with the dwelling and its floor height, size, the surrounding traffic . . . aha, I have a car but do not use it often. What can I say, I am happy and satisfied with dad

[husband] ... we are happy ... and that is that the children understand me; they love me.”

“Our dwelling has no negative aspect, we have changed everything, everything is organized, there is nothing more to do ...”

“We have done all the necessary refurbishment ... there is nothing more to do ... we have central heating. We would not change anything; we tried to ensure that we changed all that needed changing and that we have organized the dwelling so that we can live in it.”

“We have a lift; I think that is that for now.”

The results of the face-to-face survey revealed two important findings. First, all interviewees (apart from Interviewee 6) specified numerous major deficiencies in their houses while simultaneously expressing general satisfaction with their living situation. Second, as instructed, the interviewers reported various inadequacies that they observed in the homes of the older adults they visited, several of which were not mentioned by the interviewees. The most frequently observed deficiencies included barriers posed by stairs or other forms of steps; absence of handrails on stairs; high-mounted furniture elements (in the kitchen and bathroom); mold; insufficient lighting; slippery bathroom floor; absence of grab bars in the bathroom; and necessary repairs on the roof, doors, and window frames. Although our survey did not specifically investigate heating systems, some interviewees specified poor heating and thermal insulation as major deficits in their homes. Despite these inadequacies, all interviewed older adults were, nonetheless, generally satisfied and happy with their homes and living environments. For a large majority, moving to an old person's care home is not an option they currently consider.

The second important finding is that, as instructed, the interviewers reported various deficiencies they observed during face-to-face interviews based on specific quality assessment criteria. The findings of this segment would normally be a cause for alarm, prompting professionals to propose intervention measures intended to improve “inappropriate” housing situations. Such responses have frequently been the “natural” reaction of the professionals who have often proposed top-down solutions either in the form of policy measures at the national level or fiscal measures both at the national and local levels. Although, positive results may sometimes be achieved through this approach, we argue that this may not always be the most appropriate way to deal with the complex issues of older adults' housing and their specific life needs. Instead, focus should be placed on the dwelling and living environment of the older person and their specific individual circumstances. As Felix et al. (2015) explained, simply removing thresholds and other hazards may not necessarily be the optimum solution for the needs of an older adult.

Discussion

Both the telephone survey and face-to-face interviews indicated a generally high degree of satisfaction with the dwellings (and surrounding environment). However, in-depth face-to-face interviews revealed several inadequacies in the houses of the older adults who were interviewed. This study focuses on the apparent satisfaction expressed by the face-to-face interviewees, irrespective of the various deficiencies in their houses which they narrated to the interviewers. Apart from Interviewee 6, who lived in a dwelling that had no major deficiencies, each of the remaining interviewees stated numerous defects (structural and/or housing design inadequacies) which are already complicating living there, and therefore present a poor person-environment fit or present the potential to cause serious discomfort and, eventually, an incapacity for the older adults to continue living independently in the dwelling at a later stage in their aging process. A critical question emerges regarding why older adults express satisfaction with living in dwellings that are evidently substandard and, in some cases, not suitable for old age. To address this question, we discuss this phenomenon within the context of two important theoretical concepts associated with older adults' housing and their living environment: the meaning of home and attachment to the living environment, and social ties and the importance of social relationships.

Various aspects of the meaning of home to older adults and their attachment to their living environments have been widely discussed in the literature (Dahlin-Ivanoff et al., 2007; Dupuis & Thorns, 1996; Sabia, 2008; Stones & Gullifer, 2016). Based on these discussions, it has been suggested that the home and immediate home environments become more important as people age. Acknowledging the growing importance of the home and its meaning to older homeowners is critical for understanding its role in later years (Oswald & Wahl, 2005).

In the case of interviewees 1 and 4, the self-built home held an important personal value, which outweighed all other inadequacies. Described by Gilbert (1999) as sweat equity, self-built homes have a value attached to them by the owners, which normally exceeds the real property market value. In the case of older adults, this considerably minimizes the prospect of leaving home, even when independent living becomes difficult (W. A. V. Clark & Deurloo, 2006; Sendi et al., 2019).

Similarly, interviewee 2, who lived in a tiny old house with moldy walls and a roof that needs renovation, stated that their home was sufficient, and they did not miss anything. She was proud that they bought a new cooker and television, as they were not working properly. It is important to note that, rather than focusing on potential problems or deficiencies, the older person was content with their possessions. Studies (Rubinstein, 1987) have revealed

that personal objects play an important role in the lives of older adults. Personal objects have a special meaning, and older adults continue to use them as long as they are usable. They replace them only when they completely break down and are no longer repairable. This statement from the interviewee underscores the strong attachment to one's own property: "My niece said that we could change the windows, but I do not see the need for that. I have lived with them so far, so I can continue to live with them."

In the case of Interviewee 3, who was disabled, the fact that the respondent lived with his wife outbalanced all other shortcomings, including the serious absence of a lift in the residential block where he lived on the fourth floor. Furthermore, social ties, particularly family relations, are major factors to consider within the context of attachment to one's living environment (Forrest & Kearns, 2001; Galster & Hesser, 1981; Han & Kim, 2017). The importance of attachment to the living environment may be observed in the responses of Interviewee 5, who, despite the life inadequacies specified (loneliness and lack of daily assistance), was nonetheless happy with his home because he had lived there since birth. The home had a particularly special meaning for the older adult who had lived there since birth. The interviewee was happy to live in his own house rather than a rented house. It was important for him that he had neighbors with whom he could converse daily, which once again stresses the importance of neighborhood relations. Social contact in everyday life among neighbors reinforces social ties and feelings of social support (Bigonnesse et al., 2014).

Furthermore, face-to-face interviews revealed that older adults are capable of managing situations independently when assistance from others is not available. Living in circumstances where there is no daily assistance available, Interviewee 5 explained that he did much work by himself and only asked for transportation if he needed to go somewhere. This is an example of the coping strategies often adopted by older adults (Forrest & Kearns, 2001; Guest et al., 2006; Lelieveldt, 2004), which demonstrates that they are capable of finding solutions to their problems and are far more creative than professionals often realize (Felix et al., 2015). Mackenzie et al. (2014) determined that older adults are capable of changing their behaviors and expectations rather than their living environment. In such instances, a supportive and responsive environment enables older adults, such as Interviewee 5, to maintain a sustainable person-environment fit (Aldwin & Igarashi, 2012; Peace et al., 2011). "By understanding how older persons are maintaining their homes, designers of person-related and environment-related solutions can enable aging in place" (Fausset et al., 2011, p. 136).

An in-depth examination of the responses provided by the face-to-face participants helps us understand more clearly that the experience of a home extends beyond what we observe at first glance. It is crucial to acknowledge that housing is a complex and multilayered phenomenon

that links people to places (Blunt & Dowling, 2006), and it is necessary to ensure that all actions and measures adopted in this area are based on a preliminary and thorough investigation of this complexity. Focusing on the deeper meaning of home and considering the specific underlying aspects and circumstances of each individual is essential. As Schriener and Kephart (2010) cautioned, the traditional focus on removing thresholds and other hazards is insufficient. It is necessary to avoid professional assessments on housing quality that ignore older adults' views and priorities, which have not been tested adequately for content and validity (Gabriel & Bowling, 2004). However, it is important to realize that prioritizing the preferences of older adults does not mean totally abandoning the efforts of professionals and public policy actions geared toward removing the housing deficits that may exist. The interventions of various stakeholders remain vital and should be carefully considered together with individual preferences in the search for optimum solutions to the housing situation of older adults. As some studies have revealed (Mauritzson et al., 2023), domestic hazards such as those posed by steps in a dwelling may result in accidents and injuries that can hinder the independent living of older adults. Thus, there is an urgency to adopt approaches such as the one propagated by Mackenzie et al. (2014), who saw the need for professionals to collaborate more fully with older adults, particularly regarding efforts to reduce hazards in the home.

Limitations

However, this study had some limitations that must be acknowledged. The first limitation emerges from the difficulty of finding people willing to participate in one-on-one interviews. To overcome this obstacle, we opted for a method in which the interviewers were asked to invite people they knew personally to participate in face-to-face interviews. This approach inevitably introduces a familial or familiarity relationship that may affect the manner of conducting and reporting interview proceedings. However, we ensured an evenly distributed geographical coverage of the entire territory by hiring interviewers from all major regions of Slovenia, as well as from urban and rural areas. Second, the responses to the question on dwelling size indicate that a high proportion of respondents (54.7%) lived in relatively large dwellings (average size 76 m²). This deduction cannot be generalized across the entire older population without performing additional analyses that would consider other factors such as the number of persons in the household, number of rooms, and age structure of household members. Such an empirical study would also be useful for examining the asset-based potential of

older adults' dwellings and the possibilities for exploiting such capital to improve their QOL. Finally, in the future, it would be useful to design such a survey to ensure that the sample for the face-to-face survey is drawn from the sample that participated in the telephone survey. In our case, this was an important limitation, because there was no way of knowing whether any of the participants in the face-to-face survey also participated in the telephone survey.

Conclusion

The findings of the survey indicate that, for older adults, the quality of the dwelling and the comfort it provides are of secondary importance. Attributes such as ownership, period of residence, and neighborhood relations are far more important. The professionals ought to recognize that satisfaction (any type of satisfaction) is a priority and therefore, always a personal and subjective concept. Therefore, the professionals' frequently presumptuous approaches that assume superior knowledge may not always lead to the achievement of the bona fide goals if these are not based on a thorough understanding of the specific circumstances and preferences of the individual older adult. Policies and programs for the modification of older adults' housing should not be approached as a standard, mechanical process, because inappropriate, standardized solutions may have an adverse outcome such that people feel stigmatized and perceive the changes as signifiers of old age (Heywood, 2005). Thus, enforced solutions must be avoided and replaced by relevant solutions that are based on, and suitably address, the specific needs of the particular older adult. Policymakers need to recognize that an older adult may not necessarily want to live in, for example, high-tech automated dwellings somewhere in a collective housing institution, simply because this would enable them to live comfortably. During the policy formulation process, and particularly during the implementation of concrete housing programs in this area, an urgent need exists to focus more on, understand, and consider the specific social-historical aspects related to the lifestyle of the specific older adult.

Simultaneously, the implementation of modifications to remove current hazards and other inadequacies based on meaningful consultations and the participation of older adults must remain a constitutive part of public policies aimed at improving the living conditions of older adults. Adopting such an approach may go a long way toward minimizing the need to move older adults to a care home which, consequently, may also have a positive impact on easing the pressure on public expenditure.

Key Points

- Older adults' sense of satisfaction with housing is determined by considerations that differ from those of other professionals.
- Ownership, duration of residence, and neighborhood relations are far more important in determining housing satisfaction.
- Policies and programs must be based on the specific needs of older adults and address them appropriately.

Data availability statement

The data are in the process of submission to the publicly accessible Social Science Data Archives (Arhiv družboslovnih podatkov), Faculty of Social Sciences, University of Ljubljana.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The research was financially supported by ARIS (Slovenian Research and Innovation Agency), grant no. J5-2568 and grant no. J5-8243.

ORCID

Richard Sendi  <http://orcid.org/0000-0003-0463-0985>

References

- Adriaanse, C. C. M. (2007). Measuring residential satisfaction: A residential environmental satisfaction scale (RESS). *Journal of Housing and the Built Environment*, 22(3), 287–304. <https://doi.org/10.1007/s10901-007-9082-9>
- Aldwin, C., & Igarashi, H. (2012). An ecological model of resilience in late life. *Annual Review of Gerontology & Geriatrics*, 32(1), 115–130. <https://doi.org/10.1891/0198-8794.32.115>
- Barlow, J., & Venables, T. (2004). Will technological innovation create the true lifetime home? *Housing Studies*, 19(5), 795–810. <https://doi.org/10.1080/0267303042000249215>
- Bigonnesse, C., Beaulieu, M., & Garon, S. (2014). Meaning of home in later life as a concept to understand older adults' housing needs: Results from the 7 age-friendly cities pilot project in Québec. *Journal of Housing for the Elderly*, 28(4), 357–382. <https://doi.org/10.1080/02763893.2014.930367>
- Blackman, S., Matlo, C., Bobrovitskiy, C., Waldoch, A., Fang, M. L., Jackson, P., Mihailidis, A., Nygård, L., Astell, A., & Sixsmith, A. (2016). Ambient assisted living technologies for aging

- well: A scoping review. *Journal of Intelligent Systems*, 25(1), 55–69. <https://doi.org/10.1515/jisys-2014-0136>
- Blunt, A., & Dowling, R. (2006). *Home*. Routledge. <https://doi.org/10.4324/9780203401354>
- Brownsell, S. J., Bradley, D. A., Bragg, R., Catling, P., & Carlier, J. (2001). An attributable cost model for a telecare system using advanced community alarms. *Journal of Telemedicine and Telecare*, 7(2), 63–72. <https://doi.org/10.1258/1357633011936174>
- Burton, E. J., Mitchell, L., & Stride, C. B. (2011). Good places for ageing in place: Development of objective built environment measures for investigating links with older people's well-being. *BMC Public Health*, 11(1), 839. <https://doi.org/10.1186/1471-2458-11-839>
- Clark, J., & Kearns, A. (2012). Housing improvements, perceived housing quality and psychosocial benefits from the home. *Housing Studies*, 27(7), 915–939. <https://doi.org/10.1080/02673037.2012.725829>
- Clark, W. A. V., & Deurloo, M. C. (2006). Aging in place and housing over-consumption. *Journal of Housing and the Built Environment*, 21(3), 257–270. <https://doi.org/10.1007/s10901-006-9048-3>
- Costa-Font, J., Elvira, D., & Mascarilla-Miró, O. (2009). 'Ageing in place'? Exploring elderly people's housing preferences in Spain. *Urban Studies*, 46(2), 295–316. <https://doi.org/10.1177/0042098008099356>
- Dahlin-Ivanoff, S., Haak, M., Fänge, A., & Iwarsson, S. (2007). The multiple meaning of home as experienced by very old Swedish people. *Scandinavian Journal of Occupational Therapy*, 14(1), 25–32. <https://doi.org/10.1080/11038120601151714>
- Donald, I. P. (2009). Housing and health care for older people. *Age & Ageing*, 38(4), 364–367. <https://doi.org/10.1093/ageing/afp060>
- Dupuis, A., & Thorns, D. C. (1996). Meanings of home for older home owners. *Housing Studies*, 11(4), 485–501. <https://doi.org/10.1080/02673039608720871>
- Eurostat. (2020). *Quality of life indicators—Material living conditions*. Eurostat. Retrieved March 3, 2024, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Quality_of_life_indicators_-_material_living_conditions
- Eurostat. (2023). *Income and living conditions database—Eurostat*. Eurostat. Retrieved March 3, 2024, from <https://ec.europa.eu/eurostat/web/income-and-living-conditions/database>
- Farquhar, M. (1995). Elderly people's definitions of quality of life. *Social Science & Medicine*, 41(10), 1439–1446. [https://doi.org/10.1016/0277-9536\(95\)00117-P](https://doi.org/10.1016/0277-9536(95)00117-P)
- Fausset, C. B., Kelly, A. J., Rogers, W. A., & Fisk, A. D. (2011). Challenges to aging in place: Understanding home maintenance difficulties. *Journal of Housing for the Elderly*, 25(2), 125–141. <https://doi.org/10.1080/02763893.2011.571105>
- Felix, E., De Haan, H., Vaandrager, L., & Koelen, M. (2015). Beyond thresholds: The everyday lived experience of the house by older people. *Journal of Housing for the Elderly*, 29(4), 329–347. <https://doi.org/10.1080/02763893.2015.1055027>
- Fernández-Carro, C., Módenes, J. A., & Spijker, J. (2015). Living conditions as predictor of elderly residential satisfaction: A cross-European view by poverty status. *European Journal of Ageing*, 12(3), 187–202. <https://doi.org/10.1007/s10433-015-0338-z>
- Fisk, M. J. (2001). The implication of smart home technologies. In S. M. Peace & C. Holland (Eds.), *Inclusive housing in an ageing society: Innovative approaches* (1st ed., pp. 101–124). Bristol University Press, Policy Press. <https://doi.org/10.2307/j.ctt1t895gc.10>
- Forrest, R., & Kearns, A. (2001). Social cohesion, social capital and the neighbourhood. *Urban Studies*, 38(12), 2125–2143. <https://doi.org/10.1080/00420980120087081>
- Gabriel, Z., & Bowling, A. (2004). Quality of life from the perspectives of older people. *Ageing and Society*, 24(5), 675–691. <https://doi.org/10.1017/S0144686X03001582>

- Galster, G. C., & Hesser, G. W. (1981). Residential satisfaction: Compositional and contextual correlates. *Environment & Behavior*, 13(6), 735–758. <https://doi.org/10.1177/0013916581136006>
- García-Esquinas, E., Pérez-Hernández, B., Guallar-Castillón, P., Banegas, J. R., Ayuso-Mateos, J. L., & Rodríguez-Artalejo, F. (2016). Housing conditions and limitations in physical function among older adults. *Journal of Epidemiology & Community Health*, 70(10), 954–960. <https://doi.org/10.1136/jech-2016-207183>
- Gilbert, A. (1999). A home is for ever? Residential mobility and homeownership in self-help settlements. *Environment & Planning A: Economy & Space*, 31(6), 1073–1091. <https://doi.org/10.1068/a311073>
- Groves, R. M., Fowler, F. J., Jr., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). *Survey methodology* (2nd ed.). Wiley.
- Guest, A. M., Cover, J. K., Matsueda, R. L., & Kubrin, C. E. (2006). Neighborhood context and neighboring ties. *City & Community*, 5(4), 363–385. <https://doi.org/10.1111/j.1540-6040.2006.00189.x>
- Han, J. H., & Kim, J.-H. (2017). Variations in ageing in home and ageing in neighbourhood. *The Australian Geographer*, 48(2), 255–272. <https://doi.org/10.1080/00049182.2016.1240021>
- Herfert, G., Neugebauer, C. S., & Smigiel, C. (2013). Living in residential satisfaction? Insights from large-scale housing estates in central and eastern Europe. *Tijdschrift voor economische en sociale geografie*, 104(1), 57–74. <https://doi.org/10.1111/j.1467-9663.2012.00727.x>
- Heywood, F. (2005). Adaptation: Altering the house to restore the home. *Housing Studies*, 20(4), 531–547. <https://doi.org/10.1080/02673030500114409>
- Howden Chapman, P., Signal, L., & Crane, J. (1999). Housing and health in older people: Ageing in place. *Social Policy Journal of New Zealand*, 13, 14–30 <https://api.semanticscholar.org/CorpusID:149698305>.
- Iecovich, E. (2014). Aging in place: From theory to practice. *Anthropological Notebooks*, 20(1), 21–32.
- James, B. L., & Saville-Smith, K. (2018). Designing housing decision-support tools for resilient older people. *Architectural Science Review*, 61(5), 305–312. <https://doi.org/10.1080/00038628.2018.1505597>
- Kain, J. F., & Quigley, J. M. (1970). Measuring the value of housing quality. *Journal of the American Statistical Association*, 65(330), 532–548. <https://doi.org/10.1080/01621459.1970.10481102>
- Leeson, G. W. (2006). My home is my castle: Housing in old age. *Journal of Housing for the Elderly*, 20(3), 61–75. https://doi.org/10.1300/J081v20n03_05
- Lelieveldt, H. (2004). Helping citizens help themselves: Neighborhood improvement programs and the impact of social networks, trust, and norms on neighborhood-oriented forms of participation. *Urban Affairs Review*, 39(5), 531–551. <https://doi.org/10.1177/1078087404263601>
- Lord, S. R., Menz, H. B., & Sherrington, C. (2006). Home environment risk factors for falls in older people and the efficacy of home modifications. *Age & Ageing*, 35(suppl_2), ii55–ii59. <https://doi.org/10.1093/ageing/afl088>
- Mackenzie, L., Curryer, C., & Byles, J. E. (2014). Narratives of home and place: Findings from the housing and independent living study. *Ageing and Society*, 35(8), 1684–1712. <https://doi.org/10.1017/S0144686X14000476>
- Mandič, S. (2006). Stanovanje in kakovost življenja. In S. Mandič & A. Cirman (Eds.), *Stanovanje v Sloveniji 2005* (pp. 15–53). Fakulteta za družbene vede.
- Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522–526. <https://doi.org/10.1093/fampra/13.6.522>

- Mauritzson, E., McKee, K. J., Elf, M., & Borg, J. (2023). 'Experiences, worries and preventive measures regarding home hazards: A survey on home safety in Sweden. *International Journal of Environmental Research and Public Health*, 20(2), 1458. <https://doi.org/10.3390/ijerph20021458>
- Means, R. (2007). Safe as houses? Ageing in place and vulnerable older people in the UK. *Social Policy & Administration*, 41(1), 65–85. <https://doi.org/10.1111/j.1467-9515.2007.00539.x>
- Milić, J., & Zhou, J. (2018). Residential satisfaction among young people in post-socialist countries: The case of Serbia. *Journal of Housing and the Built Environment*, 33(4), 715–730. <https://doi.org/10.1007/s10901-017-9579-9>
- Milner, J., & Madigan, R. (2004). Regulation and innovation: Rethinking 'inclusive' housing design. *Housing Studies*, 19(5), 727–744. <https://doi.org/10.1080/0267303042000249170>
- Nakhodaezadeh, M., Jafarabadi, M. A., Allahverdipour, H., Matlabi, H., & Dehkordi, F. R. (2017). Home environment and its relation with quality of life of older people. *Journal of Housing for the Elderly*, 31(3), 272–285. <https://doi.org/10.1080/02763893.2017.1280583>
- Neuman, W. L. (2007). *Basics of social research: Qualitative and quantitative approaches* (2nd ed.). Allyn and Bacon.
- Newman, S. (2003). The living conditions of elderly Americans. *The Gerontologist*, 43(1), 99–109. <https://doi.org/10.1093/geront/43.1.99>
- Oswald, F., & Wahl, H. W. (2005). Dimensions of the meaning of home. In G. D. Rowles & H. Chaudhury (Eds.), *Home and identity in late life: International perspectives* (pp. 21–45). Springer. <https://www.older tenants.org.au/content/dimensions-the-meaning-home-later-life>
- Peace, S., Holland, C., & Kellaher, L. (2011). 'Option recognition' in later life: Variations in ageing in place. *Ageing and Society*, 31(5), 734–757. <https://doi.org/10.1017/S0144686X10001157>
- Percival, J. (2002). Domestic spaces: Uses and meanings in the daily lives of older people. *Ageing and Society*, 22(6), 729–749. <https://doi.org/10.1017/S0144686X02008917>
- Pynoo, J., Steinman, B. A., Nguyen, A. Q. D., & Bressette, M. (2012). Assessing and adapting the home environment to reduce falls and meet the changing capacity of older adults. *Journal of Housing for the Elderly*, 26(1–3), 137–155. <https://doi.org/10.1080/02763893.2012.673382>
- Rubinstein, R. L. (1987). The significance of personal objects to older people. *Journal of Aging Studies*, 1(3), 225–238. [https://doi.org/10.1016/0890-4065\(87\)90015-6](https://doi.org/10.1016/0890-4065(87)90015-6)
- Sabia, J. J. (2008). There's no place like home: A hazard model analysis of aging in place among older homeowners in the PSID. *Research on Aging*, 30(1), 3–35. <https://doi.org/10.1177/0164027507307919>
- Schriener, J., & Kephart, M. (2010). *Building for boomers: Guide to design and construction* (1st ed.). McGraw Hill.
- Sendi, R. (2017). Lastništvo stanovanj v Sloveniji: Iskanje alternativne teorije o njegovi čezmerni rasti = Homeownership in Slovenia: Searching for an alternative theory on its excessive growth. *Urbani Izziv*, 28(1), 55–66. <https://doi.org/10.5379/urbani-izziv-2017-28-01-005>
- Sendi, R., & Černič Mali, B. (2003). Present housing conditions and future housing needs of the elderly in Slovenia. In *Making cities work: Comparing between transitional and developed urban and housing models: Book of abstracts*. Co-Plan, Institute of Habitat Development. 112–129.
- Sendi, R., Filipovič Hrast, M., & Kerbler, B. (2019). Asset-based welfare: Is housing equity release a viable option for pensioners in Slovenia. *Journal of European Social Policy*, 29(4), 577–589. <https://doi.org/10.1177/0958928718804930>

- Severinsen, C., Breheny, M., & Stephens, C. (2016). Ageing in unsuitable places. *Housing Studies*, 31(6), 714–728. <https://doi.org/10.1080/02673037.2015.1122175>
- Smith, A. E., Sim, J., Scharf, T., & Phillipson, C. (2004). Determinants of quality of life amongst older people in deprived neighbourhoods. *Ageing and Society*, 24(5), 793–814. <https://doi.org/10.1017/S0144686X04002569>
- Smith, S. K., Rayer, S., Smith, E., Wang, Z., & Zeng, Y. (2012). Population aging, disability and housing accessibility: Implications for sub-national areas in the United States. *Housing Studies*, 27(2), 252–266. <https://doi.org/10.1080/02673037.2012.649468>
- Stones, D., & Gullifer, J. (2016). At home it's just so much easier to be yourself: 'perceptions of ageing in place. *Ageing and Society*, 36(3), 449–481. <https://doi.org/10.1017/S0144686X14001214>
- Streimikiene, D. (2015). Environmental indicators for the assessment of quality of life. *Intellectual Economics*, 9(1), 67–79. <https://doi.org/10.1016/j.intele.2015.10.001>
- Sweaney, A. L., Mimura, Y., & Meeks, C. B. (2004). Changes in perceived housing quality among elderly movers: Does neighborhood and tenure matter? *Journal of Housing for the Elderly*, 18(2), 3–16. https://doi.org/10.1300/J081v18n02_02
- Taylor, H. (2000). Does internet research work? Comparing online survey results with telephone survey. *International Journal of Market Research*, 42(1), 1–11. <https://doi.org/10.1177/147078530004200104>
- Vasara, P. (2015). Not ageing in place: Negotiating meanings of residency in age-related housing. *Journal of Aging Studies*, 35, 55–64. <https://doi.org/10.1016/j.jaging.2015.07.004>
- Walker, A., & Lowenstein, A. (2009). European perspectives on quality of life in old age. *European Journal of Ageing*, 6(2), 61–66. <https://doi.org/10.1007/s10433-009-0117-9>
- Wiles, J. L., Leibing, A., Guberman, N., Reeve, J., & Allen, R. E. S. (2012). The meaning of “aging in place” to older people. *The Gerontologist*, 52(3), 357–366. <https://doi.org/10.1093/geront/gnr098>
- Windle, G. S., Burholt, V., & Edwards, R. T. (2006). Housing related difficulties, housing tenure and variations in health status: Evidence from older people in Wales. *Health & Place*, 12(3), 267–278. <https://doi.org/10.1016/j.healthplace.2004.08.010>
- Yeo, M., & Heshmati, A. (2014). Healthy residential environments for the elderly. *Journal of Housing for the Elderly*, 28(1), 1–20. <https://doi.org/10.1080/02763893.2013.837421>