

REVIEW ARTICLE

# Socially sustainable environments for older adults ageing in place: a scoping review

Jodi L. Sturge<sup>1</sup> , Elke Miedema<sup>2</sup> , Alena Lindfors<sup>3</sup> and Susanna Nordin<sup>3</sup> 

<sup>1</sup>Department of Design, Production and Management, Faculty of Engineering Technology, University of Twente, Enschede, The Netherlands; <sup>2</sup>Domain Technology, Design and Computation, Division of Built Environment, Inholland University of Applied Science, Rotterdam, The Netherlands and <sup>3</sup>School of Health and Welfare, Dalarna University, Falun, Sweden

**Corresponding author:** Jodi L. Sturge; Email: [j.l.sturge@utwente.nl](mailto:j.l.sturge@utwente.nl)

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## Abstract

The ageing population is anticipated to encounter several challenges related to sustainability. While policies such as ageing in place can benefit older adults in terms of familiarity and independence, these policies can also lead to increased social isolation. To facilitate ageing in the right place, it is crucial to understand how the design of environments promotes social sustainability. This article presents a scoping review of empirical research focused on the characteristics of housing and surrounding environments that support social integration, cohesion and participation of older adults. The search strategy was conducted in five databases, resulting in 20,477 articles. After screening 7,550 titles and abstracts based on predetermined inclusion and exclusion criteria, 19 articles were selected. The findings of these articles are presented across three themes: (1) housing environments, (2) environments beyond the home and (3) the social environment. Although there is no one-size-fits-all housing model for older adults, the authors suggest that ageing in place policies should be reconceptualized as ageing in ‘places’ and ‘spaces’, emphasizing the diversity of social needs of older adults. Understanding the environmental characteristics, the role of accessible and safe environments beyond the home, and how people and culture support a sense of belonging provides a policy direction for how to design socially sustainable environments for older adults in the future.

**Keywords:** ageing; community; design; public health; review

## Introduction

The ageing population faces several challenges related to economic, environmental and social aspects of sustainability (Komp-Leukkunen and Sarasma 2024; Mavrodaris et al. 2021; Pillemer et al. 2011). Despite countries having different health and welfare systems, there are comparable policies dedicated to supporting older adults to age at

home as long as possible as opposed to moving to institutional care (World Health Organization 2018). This policy direction often includes a focus on ‘ageing in place’, which is a public health policy that aligns the desire of most people to age and have health-care services provided in their own homes (Pani-Harremman et al. 2021). Horner and Boldy (2008) define ‘ageing in place’ as the extent to which the needs of older persons are met, supporting them to live independently, or with some assistance, for as long as possible. The core of this definition is that support should be provided to meet the needs of older people to live in their own home and community safely, independently and comfortably, regardless of age, income or ability level, for as long as possible without moving to a long-term care facility (Grimmer et al. 2015).

It is critical to note that, regardless of the definition of ageing in place, little is known about the everyday experiences or social needs of older adults in different environmental circumstances (Grove 2021). The policy on ageing in place tends to focus on the housing environment and does not consider the need for interactions beyond the housing environment. Previous studies challenge the utopian view of ageing in place by highlighting barriers to person–environment interaction and the changing dynamic of places (Chaudhury and Oswald 2019; Gardner 2011; Lewis and Buffel 2020). Also, such policy often falsely assumes that a healthy family structure is available for support or that familiar public spaces are accessible for all inhabitants (D’herde et al. 2021; Golant 2017; Lewis and Buffel 2020; Severinsen et al. 2016; Sixsmith et al. 2017). But, without the right environmental conditions, ageing in place can be a lonely experience for some older adults, which has been identified as a risk for overall health and wellbeing (Courtin and Knapp 2017; Leigh-Hunt et al. 2017).

There are a number of interventions in place to reduce loneliness and health risks associated with social isolation for older adults (Barnes et al. 2022; Dahlberg et al. 2022; Donovan and Blazer 2020; Fakoya et al. 2020; Rudnicka et al. 2020; Victor and Pikhartova 2020), including an increasing interest in the role of technology to reduce social isolation and increase social participation (Baker et al. 2018). However, there is a need for more knowledge on how to create built environments that support social interaction, wellbeing and quality of life (Lami and Mecca 2020). According to Kohon (2018), the way we design and build environments has moved us away from a socially integrated and inclusive society. For instance, environmental features surrounding the home can support the mobility, social health and wellbeing of older adults with varying needs (Kerr et al. 2012; Ottoni et al. 2016; Sturge et al. 2021a), while poor quality and suitability of housing environments can cause older adults to be homebound (Lee et al. 2022; Wang and Durst 2023). Although other reviews have focused on how the built environment can support loneliness (Bower et al. 2023), there has yet to be a focus on how features of an environment can support the social integration and participation of older adults ageing in place. In the context of older adults ageing in place, we understand the environment on two levels. First, we identify the built environment as human-made infrastructure including buildings, building stock, neighbourhoods, cities and regions (Hassler and Kohler 2014). Second, we define the social environment as social structures and interpersonal relationships within and beyond the home environment (Hayward et al. 2015). Together, these environments can promote health and provide locations for activities for independence, social connection, feelings of self-worth, and physical and emotional wellbeing

**Table 1.** Descriptions of terms related to the concept of social sustainability

Term	Description
Social integration	Considers the size and quality of social networks embedded in a larger social and cultural context (Berkman et al. 2000; Vonneilich 2022). Meanwhile, negative attitudes, ageism and stereotypes of older adults can prevent social integration (Vitman et al. 2014).
Social cohesion	Includes levels of trust, reciprocity and social bonds provided within a particular region (macro-level) or neighbourhood (Cramm and Nieboer 2015; Kawachi and Berkman 2000; Vonneilich 2022). Lack of cohesion can result in poor psychological health and a sense of unease and unsafety, resulting in little interaction within the neighbourhood (Choi and Matz-Costa 2018; Forrest and Kearns 2001).
Social participation	Encompasses various interactions with friends, family and community members, including activities like helping neighbours, joining informal groups, dining out, attending religious services, meeting friends and engaging in cultural or fitness events (Carver et al. 2018).

for older adults (Barnett et al. 2018; Mazumdar et al. 2018; Molinsky and Forsyth 2018).

A promising way to design environments for older adults is to focus on the social aspects of environments which facilitate socially resilient and sustainable societies (Eizenberg and Jabareen 2017). To achieve this, Hu (2021) suggests a need for a social sustainability discourse related to the housing environments of the ageing population. The concept of social sustainability relates to an environment where individuals satisfy their social needs while allowing future generations to do the same (United Nations 1987). Unlike the other domains of sustainability (*i.e.* economic and ecological sustainability), social sustainability is not consistently defined or commonly reflected in government policies (Dempsey et al. 2011; Santosa et al. 2020; Shirazi and Keivani 2017). Ghahramanpouri et al. (2013) suggest that social equity, the satisfaction of the human need, wellbeing, quality of life, social interaction, cohesion and inclusion, sense of community and sense of place are all contributing factors in defining and conceptualizing social sustainability. Komp-Leukkunen and Sarasma (2024: 1) have linked the concept of social sustainability to ageing populations by stating a need for a ‘fabric of society’ that enhances social integration, cohesion and participation of current ageing populations and future generations. For this review, we have defined social integration, cohesion and participation in Table 1.

To contribute to the discussion related to ageing in place and social sustainability, this review provides an overview based on existing literature on the features of the housing and surrounding environments that support the social sustainability of older adults’ ageing in place.

## Design and method

This scoping review is based on the framework outlined by Arksey and O’Malley (2005) and subsequent studies (Heyn et al. 2019; Peters et al. 2022; Pollock et al. 2021). The original framework includes the following five stages: (1) identifying the research question; (2) identifying relevant articles; (3) selecting articles; (4) charting the data; (5)

collating, summarizing and reporting the results. The study selection process follows the Preferred Reporting Items for Systematic reviews and Meta-Analysis extension for Scoping Reviews (PRISMA-ScR) (Tricco et al. 2018) (Appendix A). The review is registered through the Open Science Framework repository (<https://osf.io/pr2nc>) and is part of a larger research project (Sturge et al. 2023).

*Identifying the research question and relevant articles*

The research question, keywords and search terms were developed in consultation with a specialist librarian (AL) and researchers with expertise in housing, older adults, health care, design and architecture. The research question that guided this review was ‘Which characteristics of housing and surrounding environments support the social sustainability and participation of older adults ageing in place?’.

The inclusion and exclusion criteria for the selected articles were based on the population, concept and context (PCC) framework (Peters et al. 2015). Broadly, articles were included if they mentioned or included people aged 65 years or older (population), described elements of social sustainability including social integration, social cohesion or social participation (concept) and related to the built housing or social environment (context) (Table 2). Furthermore, articles were included only if published in English between January 2008 and February 2023 without restricting the study location or country. The 15-year time frame was determined based on discussions within the research team who identified the Horner and Boldy (2008)

**Table 2.** PCC inclusion and exclusion criteria

	Inclusion criteria	Exclusion criteria
Population	Older adults aged 65 and older	Mixed sample populations
		Mixed generational household
		Focus on older adults with disabilities or long-term disease
Concept	Social sustainability, <i>i.e.</i> features that support social integration, social cohesion and participation	Pharmaceutical or biomedical focus
		Health outcomes in general
		Financial models
		Outcomes that focus on quality of life/wellbeing without specifically mentioning social aspects
Context	Housing environment	Hospital or institutional care
	Neighbourhood environment	Retirement homes
	Built environment	Assisted living
	Social environment	

ageing-in-place definition as a starting point for investigation. Peer-reviewed articles were included if they were based on empirical qualitative, quantitative and mixed-methods data. The search results were evaluated both through checking the found references for key articles and by manual scanning. Initially, the search strategy was constructed in Medline and then translated to the other databases (see Appendix B). The following bibliographic databases were searched: Medline (Ovid), CINAHL (Ebsco), Scopus and Embase (Elsevier). All database searches were performed by AL (anonymized for peer review). In addition, the search strategies were peer-reviewed by another librarian in accordance with the Peer Review of Electronic Search Strategies (PRESS) 2015 Guideline Evidence-Based Checklist (McGowan et al. 2016).

### *Article selection*

The search results were downloaded to EndNote and duplicates were removed according to the de-duplication method of Bramer et al. (2016). The initial selection based on the eligibility criteria was conducted by the first author (JS). Irrelevant papers were removed based on title, keywords, and abstract, including keywords associated with a different target population (e.g. children and older adults with diseases such as cancer, Alzheimer's, diabetes, stroke and Parkinson's). Also, papers were excluded if they mentioned health-care-related outcomes or life circumstances (e.g. fall prevention, homelessness). Grey literature, literature reviews, editorials, conference proceedings and research protocols were excluded. The remaining records ( $n = 7,550$ ) in the EndNote 20 library were then exported into the Covidence systematic review application ([www.covidence.org](http://www.covidence.org)).

### *Screening and extracting data*

Three reviewers (JS, EM, SN) blindly reviewed the titles, abstracts and full texts in Covidence. This software allowed for a simultaneous review by all reviewers, while keeping track of progress, conflicts and inclusion in the different stages in one place. Moreover, this guaranteed that a minimum of two reviewers assessed each record in each stage. In case of doubt or disagreement, records were further discussed and resolved by all reviewers. The first round focused on title and abstract screening, while the second stage focused on full text reviewing. After the first full-text review in Covidence, the included papers were exported to an Excel-sheet noting (ID number), authors, article title, publication year, journal, doi and abstract. A second round of full-text review allowed for further assessment and initial data extraction based on author, country of study, methodology, participant samples and study findings. This step resulted in a final list of 19 articles for which additional data were extracted (Figure 1).

### *Summarizing and reporting the results*

The characteristics of the articles and their findings were summarized narratively using a descriptive analysis. A basic qualitative analysis approach for scoping reviews (Elo and Kyngäs 2008) was used to extract data and group findings based on shared

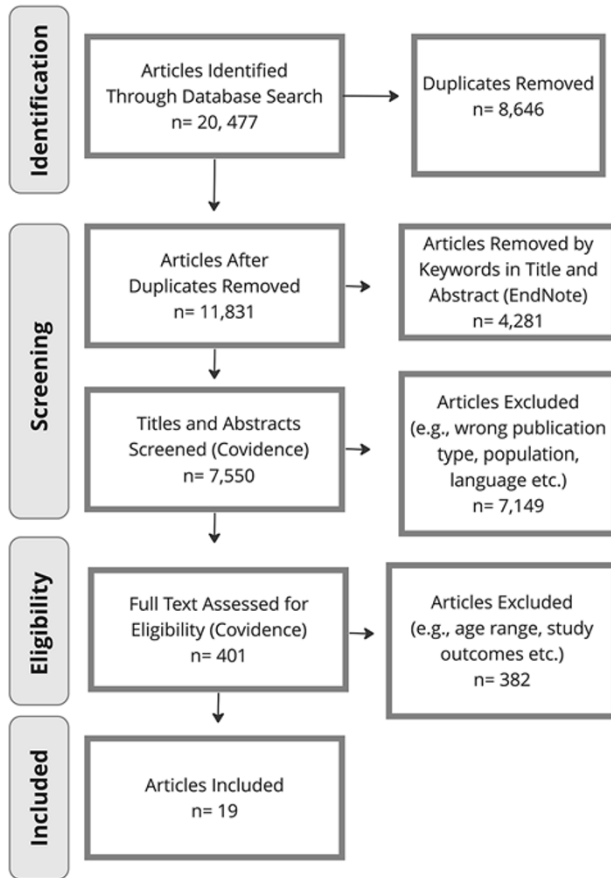


Figure 1. Search Strategy Flow Chart.

characteristics and common themes reflecting the research questions. The review team met regularly online to discuss initial thoughts, organize distinct themes and report based on the research question.

## Findings

### *Study characteristics*

Nineteen ( $n = 19$ ) articles were identified through the analysis (Table 3). The articles were published between 2011 and 2023, with a majority produced in the last five years. Only one article explicitly described measures for socially sustainable housing for older adults (Xia et al. 2021). The included studies were conducted in Asia ( $n = 4$ ), Europe ( $n = 5$ ), North America ( $n = 4$ ) and Oceania ( $n = 6$ ) and were predominantly mixed methods ( $n = 10$ ). There were six qualitative method papers where the use of semi-structured interviews was most prevalent. Four articles were quantitative in nature and involved the use of questionnaires. As per the inclusion criteria, all participants

Table 3. Summary of included articles

Author(s) and year	Country	Aims	Methods	Typology living environment	Outcomes
Aitken et al. (2023)	UK	To explore perspectives on the impact of home adaptations from recipients aged 65 and over	Qualitative interviews, with some informed by wearable camera data	Different types of housing, including bungalows, semi-detached houses, terraces and flats	Presents the impact of home adaptations around five themes: restorative outcomes; preventative outcomes; social outcomes; impacts on others; and home perceptions
Bigonnesse et al. (2014)	Canada	To explore older adults' housing needs through the concept of home in later life, to understand how older adults express the meaning of home and what their needs are regarding housing and relocation	Focus group and case study	Community-based housing for older adults by not-for-profit societies	Provides an overview of how older adults express the meaning of home and their housing and relocation needs – plus the implications for decision-makers and stakeholders
Franke et al. (2013)	Canada	To examine the key factors that facilitate physical activity in highly active community-dwelling older adults	Face-to-face interviews	Community dwellings – homes and apartments	Provides insight into and factors that facilitate older adults' physical activity Discusses implications for programmes (e.g. accessible community centres with appropriate programming throughout the lifecourse) and policies geared towards promoting physical activity (e.g. developing spaces that facilitate physical and social activities)
Hatcher et al. (2019a)	Australia	To understand the phenomenon of older people living at home from their own perspective by exploring their experiences and understanding the strategies they use to remain at home	Focus groups and ten individual interviews	Different dwelling types, including house, unit, duplex, retirement village and townhouse	Reveals that the central process participants use to hold momentum and sustain living at home is circular – in it, older people acknowledge change and make ongoing evaluations and decisions about ageing at home

(Continued)

Table 3. (Continued.)

Author(s) and year	Country	Aims	Methods	Typology living environment	Outcomes
Hatcher et al. (2019b)	Australia	To understand the experiences of older individuals in Australia living at home and transitioning to new living conditions, to inform policies and practices supporting continued home living or successful transitions to care accommodations for older adults	Focus group discussions and in-depth semi-structured interviews	Various – 12 participants living in a house, 6 in a unit and the other 3, respectively, in a townhouse, a retirement village and a duplex	Identifies four major categories – ‘anchoring self’, ‘enabling freedom’, ‘being comfortable’ and ‘staying in touch’ – which hold important implications for supporting older persons to both sustain living at home and adjust to changing circumstances, suggesting the value of drawing on the experiences of older persons themselves in developing strategies to promote successful ageing
Jolanki (2021)	Finland	To understand how different aspects of the manmade, natural and social environments are portrayed in residents’ descriptions of day-to-day life at a communal senior housing complex	Semi-structured qualitative interviews	A collaborative/communal senior housing complex	Shows senior housing that fulfils its promise of providing an accessible physical and social environment that encourages and enables residents to be physically active and independent while providing social activities and feeling safe – but leaves open the question of how social practices, in the form of government policies and market systems, can support the development of different kinds of senior housing that are affordable and accessible for all
Koss and Ekerdt (2017)	USA	To understand the motivators for the elderly to move homes (or stay) and how these relate to their perceptions of their future (4th age)	Semi-structured interviews	Twenty one participants living in age-integrated – neighbourhoods and seven in independent housing located in or associated with age-segregated communities	Shows that peers influence participants’ thinking about whether, when and where to move Relationships with spouses and offspring also commonly mentioned factors in residential reasoning regarding sources of support and perceived obligations

(Continued)



Table 3. (Continued.)

Author(s) and year	Country	Aims	Methods	Typology living environment	Outcomes
Kylén et al. (2019)	Sweden	To understand the dynamics of meaning of home and health among community-living healthy younger older people, in the present and in a projected future	Semi-structured interviews	Ordinary housing	Suggests that 'home' becomes progressively important after retirement – need to consider the role of perceived aspects of home for health and wellbeing in early phases of the ageing process – could use these findings to raise awareness among policy makers, housing authorities and professionals involved in housing-related counselling
Mackenzie et al. (2015)	Australia	To explore how much older people consider their homes and neighbourhoods to be 'supportive' and to increase understanding of the needs and experiences of older people and their expectations of future housing needs	Postal survey and interviews	Different housing types, including house, flat, house on a farm, mobile home, retirement village (self-care unit) and more	Identifies six key themes: housing choice, attachment to place, financial issues, changes to the home over time, transport, and anticipating the future Suggests that housing policies and home/urban design should ensure that home and neighbourhood environments are safe and accessible, promote positive associations and are adaptable to facilitate independence and accommodate change as people age
Oswald et al. (2011)	Germany	To study the physical and social environmental aspects of the home and the surrounding neighbourhood as far as they represent resources for or risks to life satisfaction among young-old and old-old individuals	Survey questionnaire	Type of housing not indicated	Apartment size, perceived neighbourhood quality and outdoor place attachment independently explain life satisfaction, whereas social housing aspects play a minor role Separate analyses for both age groups reveal age-differential explanation patterns Apartment size positively relates to life satisfaction in the young-old but negatively relates in the old-old, who see neighbourhood quality and outdoor place attachment as more important than do the young-old Living with others positively relates to life satisfaction only for the young-old

(Continued)

Table 3. (Continued.)

Author(s) and year	Country	Aims	Methods	Typology living environment	Outcomes
Pedersen (2015)	Denmark	To investigate residents' experiences related to the social interaction in their living environment.	Mixed methods based on an older study using questionnaires	Senior co-housing communities with different types of ownership – social housing, private coop, personal, pension funded/mixed	Residents, despite having experienced challenges, generally report having adapted well to their new environment, and most hold positive views on how the resident group is organized Also provides a brief history of senior co-housing in Denmark
Petersen and Minnery (2013)	Australia	To explore how older people experience daily life in a residential complex	Interviews and photography of living spaces	A residential complex	Through Lefebvre's concepts of spatial practice and spaces of representation, captures the routines, activities, attachments and imaginations that help/hinder older people connecting to their living environment Provides theoretical insights and a nuanced understanding of how social space informs policy and public discussion of older people's living environments
Rioux and Werner (2011)	France	To identify the cognitive structure of residential satisfaction of elderly persons living in their own dwellings and to identify demographic and psychological variables related to this residential satisfaction.	Purpose-developed questionnaire, an environmental quality questionnaire	(Old) farmhouses, apartments (private dwellings as part of a complexes with additional services and common areas), suburbs, apartment buildings.	Indicates that residential satisfaction corresponds to a four-dimension structure organized by physical location rather than psychological or behavioural aspects The four components are local area, access to services, relations with neighbours, and the home itself Satisfaction with each component is related to different predictors, supporting the idea that elders hold complex and nuanced views of their homes and neighbourhoods

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Table 3. (Continued.)

















Author(s) and year	Country	Aims	Methods	Typology living environment	Outcomes
Schorr et al. (2017)	Israel	To examine the socio-spatial integration of older people living in two different regional areas (central and peripheral) and four different residential environments (metropolitan hub, city, town and rural settlements)	Self-administered questionnaire	Mixed – rural, town, city	Shows that older adults residing in town and rural settlements are more socio-spatially integrated in their living environments than their counterparts residing in cities The best predictors of socio-spatial integration are a combination of personal characteristics and environment characteristics (perceived accessibility), except for rural settlements, where none of the variables predicted socio-spatial integration
Severinsen et al. (2016)	New Zealand	To examine the experiences of older people ageing in place, with a particular focus on the accounts of those in ‘unsuitable’ housing	Qualitative interview	Housing	A home’s situation and condition are the backdrop to alternative narrative identities that require older people to remain in housing because of, or irrespective of, its unsuitability Understanding the limitations and the possibilities of ageing in place requires identifying the multiple narratives that structure older people’s lives – to support ageing-in-place processes that do not disrupt the strong identities developed in and through housing
Sixsmith et al. (2017)	Canada	To detail the intricacies of developing partnerships with low-income older people, local service providers and non-profit housing associations in the context of a housing development	Photovoice, appreciative inquiry, interviews, mapping workshops	A 3-storey apartment block and a 16-storey high-rise purpose-built apartment block	Presents a partnership that prioritized generating a shared vision with shared values and interests and the goal of co-creating meaningful housing solutions for older people transitioning into affordable housing Interviews and photovoice sessions with older people inform decision-making in support of ageing well and in the right place Paying attention to power dynamics, knowledge generation and feedback mechanisms enables all fields of expertise to be considered, including the experiential expertise of older residents – results in ability to use the functional, physical, psychological and social aspects of ageing in place to inform the newly built housing complex

(Continued)

**Table 3.** (Continued.)

Author(s) and year	Country	Aims	Methods	Typology living environment	Outcomes
Sun et al. (2020)	Hong Kong	To understand (1) how different environmental dimensions relate to each other and place attachment, and the mechanisms underlying the associations between environmental perceptions and place attachment; and (2) the meanings of place attachment and its implications for daily life	Face-to-face questionnaire surveys and semi-structured interviews	Public and private housing	Finds that ‘buildings and surroundings’, ‘community facilities and amenities’ and ‘social attributes of a place’ predict place attachment Residential satisfaction partially mediates the path from environmental perceptions to place attachment As urban renewal and population ageing are essential considerations for future urbanization, findings can inform guidelines on designing community landscapes and facilities, contributing to ageing in place policies worldwide
Wadu Mesthrige and Cheung (2020)	Hong Kong	To solicit the perceptions of elderly people on the effectiveness of ageing in place design elements and facilities	Survey questionnaire (mixed methods)	Four large-scale redeveloped public rental housing estates	Reveals that senior tenants are generally satisfied with the estates’ present living environments (on micro, meso and macro scales) Micro – seniors satisfied with privacy level and sense of autonomy derived from their homes’ present design features Meso – seniors particularly satisfied with design elements such as convenient transportation and accessibility, including convenient walkways Macro – community care service deemed necessary for seniors’ wellbeing Study provides policy makers and development authorities with insights on elderly housing provision
Xia et al. (2021)	Australia	To explore retirement village residents’ perceptions of the importance of 23 sustainable living environment features	Questionnaire survey	Retirement village	Contributes to the management and development of sustainable retirement villages, which will eventually improve quality of life for older people

**Table 4.** Thematic results by concepts of social sustainability

	Social integration	Social cohesion	Social participation
<b>Theme 1: housing environments</b>			
Housing typology			
Housing conditions			
Designated spaces			
Relocation and adaptations			
<b>Theme 2: environments beyond the home</b>			
Access to nature			
Safety and public space features			
<b>Theme 3: the social environment</b>			
Social networks – family and neighbours			
Cultural and community spaces			

were aged 65 years or older, and the number of participants ranged between 21 and 202 when indicated. The journals of the selected articles mainly published in ageing, gerontological, environmental and housing research.

### *Narrative summary*

The results are presented and structured across three overarching themes (Table 4) reflecting the study aim – housing environments, environments beyond the house environment and social environments – and three elements of social sustainability – social integration, social cohesion and social participation.

### *Theme 1: housing environments*

#### *Housing typology*

Housing typology, in terms of placement, formation and designated spaces, was found to create opportunities for social participation among older adults. The placement of free-standing homes on the street or arranged in culs-de-sac (dead-end streets) allows for opportunities to establish better relationships for older adults and creates a sense of a big family that supports social cohesion (Bigonnesse et al. 2014; Mackenzie et al. 2015; Pedersen 2015). Living in a multi-unit building (*i.e.* an apartment or a condominium) can provide older adults with direct proximity to neighbours, resulting in a friendly atmosphere in the building (Kylén et al. 2019; Pedersen 2015), opportunities for social interaction when meeting new people (Franke et al. 2013; Pedersen 2015) and a feeling of not living alone (Bigonnesse et al. 2014). Housing typology can differ across urban and rural settlements and impact social interaction. For instance, as seen in Schorr et al. (2017), older people living in a rural area perceive their environment to be more socially accessible compared to those living in a larger metropolitan area.

Housing formation in terms of the size and unit layout is reported to enhance social interactions. For instance, large residential complexes have the potential to positively

impact the life satisfaction of older adults (Oswald et al. 2011; Sun et al. 2020). However, in the Pedersen (2015) study, older adults preferred to live in a setting with between 15 and 25 housing units. Some older adults prefer smaller dwellings as they require less maintenance (Petersen and Minnery 2013). However, those living in smaller units need accessible surrounding neighbourhoods to support their social participation (Franke et al. 2013; Sun et al. 2020). On the contrary, small bedrooms and apartments can be negatively experienced by some older adults who want the same type of housing as everyone else, not smaller units because of their age (Bigonnesse et al. 2014).

### *Designated spaces*

Several articles described designated spaces as places for social participation. For example, front porches, balconies, small terraces and gardens constituted spaces where older adults can easily interact with neighbours and people of every generation (Bigonnesse et al. 2014; Kylén et al. 2019). Communal spaces in multi-unit buildings are arenas for social activities such as shared meals (Pedersen 2015), community coffee time, laundry and learning new skills such as woodwork and knitting (Bigonnesse et al. 2014; Jolanki 2021; Kylén et al. 2019). Further, communal spaces near the front entry can facilitate coincidental and spontaneous meetings as occupants pass through common areas to access their independent units (Petersen and Minnery 2013). This means of 'passing through' allow residents to use the space in a way that works for them, such as casually talking to others or watching television. Also, designated spaces can be activated with formal activities organized by a community coordinator to, for example, assist residents with computer use and online banking (Jolanki 2021).

### *Housing conditions*

Our findings indicate that the condition of a housing environment does not need to be pristine to support social integration for older adults. As described in four articles, even in circumstances where the condition and the façade of the housing remain unchanged or in poor condition, older adults relate to these environments (Kondo et al. 2009; Rioux and Werner 2011; Severinsen et al. 2016; Sun et al. 2020).

### *Relocation and adaptations*

For many older adults, especially those who have stayed in their neighbourhood for a long time, relocating to a new house can disrupt long-established social networks (Aitken et al. 2023; Hatcher et al. 2019a). The decision to move is often dependent on several factors, including being closer to family (Hatcher et al. 2019b; Jolanki 2021; Koss and Ekerdt 2017), preparing for future needs by choosing to live on a single level (Koss and Ekerdt 2017), or relocating to a smaller dwelling or avoiding home maintenance concerns by renting instead of owning (Koss and Ekerdt 2017; Pedersen 2015). Housing choices can be dependent on several social factors such as older adults having enough space for relatives to stay (Bigonnesse et al. 2014; Mackenzie et al. 2015), living in an environment that allows pets (Koss and Ekerdt 2017; Sixsmith et al. 2017) and being able to manage their time in their own way (*i.e.* not being over-programmed) (Hatcher et al. 2019a; Petersen and Minnery 2013). For instance, in some residential

complexes, older adults can feel restricted by the rules – not being allowed to stay at a friend's house overnight (Petersen and Minnery 2013), having set hours of the day when they can use certain areas or leave the premises, and being unable to decorate the space in a personal way (Bigonnesse et al. 2014).

Adaptations to the housing environment can support social participation in several different ways. Modifications, such as a garage door opener or a ramp, can make it easier for older adults to leave their homes or receive guests or packages (Aitken et al. 2023; Bigonnesse et al. 2014). Further, some older adults continue to live in larger homes but use the space differently, such as deciding to live on one floor of the home (Mackenzie et al. 2015). At the same time, adaptations can result in a sense of social stigma as the changes made to the environment (e.g. installations to support mobility) can be interpreted as symbols of old age (Aitken et al. 2023).

## *Theme 2: environments beyond the house*

### *Access to nature*

In several articles, contact with nature is found to support social participation. The design and the accessibility of natural environments (e.g. walking paths, transportation and no hills) near the homes of older adults facilitate the possibilities of maintaining social contacts (Jolanki 2021). Neighbourhood aesthetic features, such as green spaces, parks, lakes or the ocean, encourage older adults to leave their home environments for daily exercise and interaction with others (Bigonnesse et al. 2014; Franke et al. 2013; Jolanki 2021; Kylén et al. 2019; Rioux and Werner 2011). Also, built environment features such as sidewalks and footpaths, paved pathways, bike paths, benches and spaces for walking dogs can enhance opportunities for social participation (Franke et al. 2013).

### *Safety and public space features*

A sense of safety can influence how older adults socially interact and engage in activities outside the home. Features such as night lighting, safety guards and security systems (to buzz in visitors) can facilitate social cohesion and a feeling of safety in a housing environment (Bigonnesse et al. 2014; Mackenzie et al. 2015; Pedersen 2015). Meanwhile, feeling safe in a neighbourhood can support an older adult's positive perception and social participation level (Wadu Mesthrige and Cheung 2020; Oswald et al. 2011). For instance, living in a safe, calm and quiet residential area that has good access to public transportation (Bigonnesse et al. 2014; Oswald et al. 2011; Rioux and Werner 2011) and/or public seating is essential for supporting spontaneous social interaction (Wadu Mesthrige and Cheung 2020). Also, adequately timed traffic lights to lengthen the time allotted for pedestrians to cross the road safely can provide safe access to services (Sixsmith et al. 2017).

On the contrary, safety risks such as crime (Mackenzie et al. 2015), poorly maintained sidewalks and traffic concerns (Franke et al. 2013; Mackenzie et al. 2015; Wadu Mesthrige and Cheung 2020; Rioux and Werner 2011), noise levels (Bigonnesse et al. 2014; Mackenzie et al. 2015) and having to navigate stairs (Hatcher et al. 2019b) can present barriers resulting in older adults being hesitant to leave their house environment.

### **Theme 3: the social environment**

#### ***Social networks – family and neighbours***

The social interaction of older adults can be supported by the proximity of a network of family members, friends, neighbours and services (Rioux and Werner 2011) and prevent social isolation (Bigonnesse et al. 2014; Franke et al. 2013; Hatcher et al. 2019a; Jolanki 2021; Pedersen 2015). Neighbours can provide a sense of social connectedness but also assist with house maintenance and other day-to-day needs (Aitken et al. 2023; Bigonnesse et al. 2014; Kylén et al. 2019; Rioux and Werner 2011; Sun et al. 2020). Some older adults prefer to live in a mixed-age-group environment for more social participation with other generations (Bigonnesse et al. 2014). Communication between neighbours and shop owners, sharing food or even enjoying casual chats can provide a sense of security (Kylén et al. 2019; Petersen and Minnery 2013; Sun et al. 2020) and a sense of familiarity, as reciprocal support for older adults (Bigonnesse et al. 2014; Hatcher et al. 2019b). These positive relational aspects of their housing situation can support older adults in remaining in their housing environments longer (Severinsen et al. 2016).

Social networks are not easily accessible for all older adults. For some, changes in the community, with neighbours or friends moving away or dying, lead to not wanting to socialize (Hatcher et al. 2019a), which impacts their ability to stay socially connected (Hatcher et al. 2019b). Further, not all neighbours provide positive interactions. In some articles, participants describe nosey neighbours who intrude on people's privacy (Bigonnesse et al. 2014; Rioux and Werner 2011). In other settings, established social groups and dynamics can be challenging to join or integrate with (Bigonnesse et al. 2014; Petersen and Minnery 2013).

#### ***Cultural and community spaces***

Cultural and community environments provide culturally diverse experiences with like-minded and culturally similar people (Franke et al. 2013; Jolanki 2021; Oswald et al. 2011; Sixsmith et al. 2017; Xia et al. 2021). For example, accessing spaces to express cultural practices (*i.e.* saunas in the Finnish culture [Jolanki 2021]), participating in activities to reminisce about a region where they grew up (Franke et al. 2013) and engaging in opportunities to speak native languages mitigate the risk of social isolation among older adults with a migrant or immigrant background (Sixsmith et al. 2017). Further, non-culturally specific activities, such as recreational activities and community health-care services, also provide opportunities for older adults to engage in new social relationships (Franke et al. 2013; Hatcher et al. 2019b; Sun et al. 2020). In addition, less formalized settings in terms of nearby essential services such as shops, grocery stores and health services provide a familiar and accessible social network for older adults (Hatcher et al. 2019b, 2019a; Rioux and Werner 2011; Sixsmith et al. 2017).

### **Discussion**

As more older adults age in place, there is a need to focus on designing environments that support the health and wellbeing of this growing population. The concept of sustainability related to ageing in place is unexplored, yet it fosters a vision of a society that promotes health, autonomy and wellbeing. This scoping review contributes to



knowledge of older adults and social sustainability by identifying the characteristics of housing and social environments that support older adults' social integration, cohesion and participation. This research angle offers new insights into ageing in place, which can be of interest to researchers, policy makers and professionals in gerontology, urban planning and public health.

This scoping review identifies characteristics of housing environments (*i.e.* typology, designated spaces, housing conditions and relocations and adaptations), environments beyond the housing environment (*i.e.* access to nature, sense of safety and security) and social environments, including social networks as well as cultural and common spaces. Although elements of these environments are critical to support ageing in place, it is how these environmental characteristics come together that make a home environment that can meet the social integration, social cohesion and participation needs of older adults. As several articles in this review describe, the home environment is not merely physical. The home can also be a familiar social setting that enables a sense of autonomy and personal space to engage and connect with others (Hatcher et al. 2019a, 2019b; Kylén et al. 2019; Mackenzie et al. 2015; Wadu Mesthrige and Cheung 2020).

To design more socially sustainable environments for older adults, the home environment needs to be understood not just as a concrete place but as places of experience that include the home (private space) and the neighbourhood (social space) (Lebrusán and Gómez 2022). The housing typology for older adults goes beyond physical space and combines interconnected spatial, social and organizational layers for social interaction (Hamers et al. 2024). A home environment can be understood as a combination of private and public environments where older adults have spent most of their lives and experienced social roles, such as parents and grandparents (Bigonnesse et al. 2014), or a place where significant life changes occurred, such as the death of a spouse (Hatcher et al. 2019a). For some Indigenous people, home is beyond the built and social environment as it is a place of connection to their land and ancestors (Severinsen et al. 2016). In relation to social sustainability, ageing in place can be more dynamically, temporally and spiritually understood as ageing in 'places' and 'spaces' instead of a singular focus on the physical housing environment. This focus aligns with the proposed new definition of ageing in place, which emphasizes choice, independence and the ability to participate in activities (Rogers et al. 2020).

Some built environment features, such as balconies, porches and communal spaces, can enhance social participation. However, this review highlights that no one size fits all and environments cannot be simply designed for social integration, cohesion or participation. For instance, when spaces in the built environment are created for social participation, these spaces may not work for all residents as intended. Housing projects may have designated spaces for a social purpose; however, the design of the space is not considered welcoming or used by all resident groups (Tersteeg and Pinkster 2016) or it requires staff to activate the space to make it more engaging (Jolanki 2021). Further, while some older adults enjoy ageing in place in designated housing environments, such as community-based housing models or naturally occurring retirement communities (NORCs) (Chum et al. 2022; Seetharaman et al. 2020), these models are not widely available; nor can they address all the unique social needs of all residents. For example, some older adults regard these housing models as environments that are

segregated from society (Bigonnesse et al. 2014), that is, removed from the ‘fabric of society’ (Komp-Leukkunen and Sarasma 2024).

### *The future of socially sustainable environments for ageing in place*

As we develop housing and interventions to support social sustainability among older people, the individuality of the experience across the lifecourse, not just focusing on the older years of life (Dahlberg et al. 2022), needs to be considered. To translate the concept of social sustainability to support ageing in place related to the home environment, it is critical to ensure that context, culture and choice are translated into the design of interventions for older adults. This research direction relates to the growing interest in how the design of housing, technology and the built environment can alleviate the loneliness and social isolation of older adults (Fakoya et al. 2020; Landeiro et al. 2017; Nakanishi and Black 2015; Shah et al. 2019). The needs and values of older adults are diverse and can be challenging to address with one design. Therefore, policies and interventions that suit the needs of individuals, specific groups and the degree of loneliness experienced need to be developed. Moreover, focusing on individual and community assets that people enjoy can provide valuable insights that support social health and wellbeing to allow people to age at home successfully (Sturge et al. 2021b). A co-creation approach, inspired by system-based thinking and co-design, is an increasingly promising practice and direction to develop solutions for ageing in place (Kastl et al. 2024; Nordin et al. 2024; Robertson et al. 2022) that reflect the needs and expectations of older adults. Engaging older adults and stakeholder in design research can result in outside-the-box thinking and solutions to allow us to rethink housing policy, resulting in more creative ways to support ageing in place (Gomes 2021). For instance, exploring older adults’ willingness to share a home with a roommate (Gibson et al. 2023) or designing new housing environments with designated spaces for caregivers (Cohen and Allweil 2020). Further, designing socially sustainable environments for older adults also has a digital element – research suggests that bridging the digital divide (often experienced by older adults) can drastically improve the social connection and ageing in place of older adults (Arieli et al. 2023; Peine et al. 2024).

### *Policy and planning implications*

This study has socially sustainable planning implications. For instance, changes in the neighbourhood, such as over-development and gentrification, can result in a loss of a sense of cohesion and impact the social participation of older adults (Mackenzie et al. 2015). For instance, ‘third places’ (Littman 2021) that enrich social participation (*i.e.* corner stores and shopping centres) can shut down or disappear, which can result in loneliness (Finlay et al. 2019). As these places close, replacing them with similar sites needs to be considered to support social sustainability. Furthermore, when city planners select sites for housing developments for older adults, the location should be close to essential services (Bigonnesse et al. 2014) and not necessarily designated as ‘senior only’ as that housing policy label can segregate, not integrate, older people from society (Koss and Ekerdt 2017). Planners can avoid organizing services for older adults to be in

one location (as typically seen in retirement communities), where a single location can prevent older adults from going beyond the housing environment, impacting social integration and cohesion in society (Bigonnesse et al. 2014). To ensure that public policy directions support social sustainability, policy makers can consider the earlier work of Henri Lefebvre (Petersen and Minnery 2013), who highlighted the need for variety in the lives of people and the environment to reflect individual identity and how people seek to shape their place and their ongoing engagement with life. This approach would allow public space policy to reflect the social needs of older adults in a similar way as it considers environmental impact regulations when planning for new developments and community renewal projects. This emphasis and policy direction would enhance the quality and suitability of housing environments for ageing in place in terms of size, location and design for inclusion for future generations.

### **Limitations**

There are limitations to acknowledge in this review. First, despite our having taken a systematic approach to identifying and screening articles, it is possible that some relevant articles are not identified. This review included only articles published in English and excluded grey literature such as books, reports and conference papers. These alternate sources could have provided insights into various innovative and emerging practices related to the research question and topic. Further, our inclusion and exclusion criteria might have complicated decision-making. The interdisciplinary backgrounds of the reviewers – spanning geography, architecture and nursing – along with the diverse disciplines of the articles led to challenges and ongoing discussions during the screening process. Similarly, differences in welfare systems and inconsistent definitions of housing models and terminologies across disciplines and countries may have resulted in missing or excluded relevant studies. Also noted, the studies identified focused on a population aged 65 years and older. While this age is commonly used to define older adults, some contexts and countries consider individuals younger than 65 as part of the older adult population, and these people are excluded from this review. Finally, the review suggests that successful and sustainable ageing requires social integration, cohesion and participation. It is critical to note that older adults are a particularly heterogeneous group, not a homogeneous population (Xia et al. 2021). Therefore, this concept does not apply to everyone, as some individuals may choose not to socialize or face physical or financial barriers that prevent social sustainability.

### **Conclusion**

As the population ages, more older adults will live at home than ever before. As a result, older adults risk becoming more socially isolated, which can impact public health and wellbeing. This review presents ageing in place related to the concept of social sustainability in the context of the home environment and beyond. Through this review, we have explored several places and spaces that older adults engage with to understand how ageing in place relates to social sustainability. Understanding the environmental characteristics, the role of accessible and safe environments beyond the home, and how people and culture support a sense of belonging provides a policy direction for

designing socially sustainable environments for older adults in the future. Therefore, more knowledge is needed based on engaging people in the design and policy process of housing and surrounding environments. Co-designing environments based on the needs of older adults – their routines, activities, attachments and imaginations – will provide limitless opportunities and solutions for designing socially sustainable housing environments for all citizens now and in the future.

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## References

- Aitken D, Wilson-Menzfeld G, Hodgson P and Bailey C (2023) Recipient perspectives on the impact of home adaptations in later life in England. *Journal of Housing and the Built Environment* **38**, 629–649. <https://doi.org/10.1007/s10901-022-09959-9>
- Arieli R, Faulhaber ME and Bishop AJ (2023) Bridging the digital divide: Smart aging in place and the future of gerontechnology. In Ferdous F and Roberts E (eds.), *(Re)designing the Continuum of Care for Older Adults: The Future of Long-Term Care Settings*. Cham: Springer, pp. 3–19. [https://doi.org/10.1007/978-3-031-20970-3\\_1](https://doi.org/10.1007/978-3-031-20970-3_1)
- Arksey H and O'Malley L (2005) Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology: Theory and Practice* **8**, 19–32. <https://doi.org/10.1080/1364557032000119616>
- Baker S, Warburton J, Waycott J, Batchelor F, Hoang T, Dow B, Ozanne E and Vetere F (2018) Combatting social isolation and increasing social participation of older adults through the use of technology: A systematic review of existing evidence. *Australasian Journal on Ageing* **37**, 184–193. <https://doi.org/10.1111/ajag.12572>
- Barnes TL, MacLeod S, Tkatch R, Ahuja M, Albright L, Schaeffer JA and Yeh CS (2022) Cumulative effect of loneliness and social isolation on health outcomes among older adults. *Aging and Mental Health* **26**, 1327–1334. <https://doi.org/10.1080/13607863.2021.1940096>
- Barnett A, Zhang CJ, Johnston JM and Cerin E (2018) Relationships between the neighborhood environment and depression in older adults: A systematic review and meta-analysis. *International Psychogeriatrics* **30**, 1153–1176. <https://doi.org/10.1017/S104161021700271X>
- Berkman LF, Glass T, Brissette I and Seeman TE (2000) From social integration to health: Durkheim in the new millennium. *Social Science and Medicine* **51**, 843–857. [https://doi.org/10.1016/S0277-9536\(00\)00065-4](https://doi.org/10.1016/S0277-9536(00)00065-4)
- Bigonnesse C, Beaulieu M and 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**, 357–382. <https://doi.org/10.1080/02763893.2014.930367>
- Bower M, Kent J, Patulny R, Green O, McGrath L, Teesson L, Jamalishahni T, Sandison H and Rugel E (2023) The impact of the built environment on loneliness: A systematic review and narrative synthesis. *Health and Place* **79**, 102962. <https://doi.org/10.1016/j.healthplace.2022.102962>

- Bramer WM, Giustini D, de Jonge GB, Holland L and Bekhuis T (2016) De-duplication of database search results for systematic reviews in EndNote. *Journal of the Medical Library Association (JMLA)* **104**, 240. <https://doi.org/10.3163/1536-5050.104.3.014>
- Carver LE, Beamish R, Phillips SP and Villeneuve M (2018) A scoping review: Social participation as a cornerstone of successful aging in place among rural older adults. *Geriatrics* **3**, 75. <https://doi.org/10.3390/geriatrics3040075>
- Chaudhury H and Oswald F (2019) Advancing understanding of person-environment interaction in later life: One step further. *Journal of Aging Studies* **51**, 100821. <https://doi.org/10.1016/j.jaging.2019.100821>
- Choi YJ and Matz-Costa C (2018) Perceived neighborhood safety, social cohesion, and psychological health of older adults. *Gerontologist* **58**, 196–206. <https://doi.org/10.1093/geront/gnw187>
- Chum K, Fitzhenry G, Robinson K, Murphy M, Phan D, Alvarez J, Hand C, Laliberte Rudman D and McGrath C (2022) Examining community-based housing models to support aging in place: A scoping review. *Gerontologist* **62**, e178–e192. <https://doi.org/10.1093/geront/gnaa142>
- Cohen S and Allweil Y (2020) Towards non-ageist housing and caring in old age. *Urban Planning* **5**, 155–170. <https://doi.org/10.17645/up.v5i4.3413>
- Courtin E and Knapp M (2017) Social isolation, loneliness and health in old age: A scoping review. *Health and Social Care in the Community* **25**, 799–812. <https://doi.org/10.1111/hsc.12311>
- Cramm JM and Nieboer AP (2015) Social cohesion and belonging predict the well-being of community-dwelling older people. *BMC (BioMed Central) Geriatrics* **15**, 1–10. <https://doi.org/10.1186/s12877-015-0027-y>
- Dahlberg L, McKee KJ, Frank A and Naseer M (2022) A systematic review of longitudinal risk factors for loneliness in older adults. *Aging and Mental Health* **26**, 225–249. <https://doi.org/10.1080/13607863.2021.1876638>
- Dempsey N, Bramley G, Power S and Brown C (2011) The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development* **19**, 289–300. <https://doi.org/10.1002/sd.417>
- D'herde J, Gruijthuijsen W, Vanneste D, Draulans V and Heynen H (2021) 'I could not manage this long-term, absolutely not': Aging in place, informal care, Covid-19, and the neighborhood in Flanders (Belgium). *International Journal of Environmental Research and Public Health* **18**, 6482. <https://doi.org/10.3390/ijerph18126482>
- Donovan NJ and Blazer D (2020) Social isolation and loneliness in older adults: Review and commentary of a national academies report. *American Journal of Geriatric Psychiatry* **28**, 1233–1244. <https://doi.org/10.1016/j.jagp.2020.08.005>
- Eizenberg E and Jabareen Y (2017) Social sustainability: A new conceptual framework. *Sustainability* **9**, 68. <https://doi.org/10.3390/su9010068>
- Elo S and Kyngäs H (2008) The qualitative content analysis process. *Journal of Advanced Nursing* **62**, 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Fakoya OA, McCorry NK and Donnelly M (2020) Loneliness and social isolation interventions for older adults: A scoping review of reviews. *BMC (BioMed Central) Public Health* **20**, 1–14. <https://doi.org/10.1186/s12889-020-8251-6>
- Finlay J, Esposito M, Kim MH, Gomez-Lopez I and Clarke P (2019) Closure of 'third places'? Exploring potential consequences for collective health and wellbeing. *Health and Place* **60**, 102225. <https://doi.org/10.1016/j.healthplace.2019.102225>
- Forrest R and Kearns A (2001) Social cohesion, social capital and the neighbourhood. *Urban Studies* **38**, 2125–2143. <https://doi.org/10.1080/004209801200870>
- Franke T, Tong C, Ashe MC, McKay H, Sims-Gould J and Team TWTT (2013) The secrets of highly active older adults. *Journal of Aging Studies* **27**, 398–409. <https://doi.org/10.1016/j.jaging.2013.09.003>
- Gardner PJ (2011) Natural neighborhood networks – Important social networks in the lives of older adults aging in place. *Journal of Aging Studies* **25**, 263–271. <https://doi.org/10.1016/j.jaging.2011.03.007>
- Ghahramanpouri A, Lamit H and Sedaghatnia S (2013) Urban social sustainability trends in research literature. *Asian Social Science* **9**, 185. <https://doi.org/10.5539/ass.v9n4p185>
- Gibson A, Pope N, Loeffler D, Ratliff S and Engelhardt E (2023) Identifying aging adults' housing preferences: An age-friendly initiative. *Journal of Gerontological Social Work* **66**, 43–63. <https://doi.org/10.1080/01634372.2022.2113490>

- Golant SM** (2017) Aging in the right place coping repertoires: The substitutability of connectivity alternatives. *Innovation in Aging* **1**(Suppl 1), 664. <https://doi.org/10.1093/geroni/igx004.2354>
- Gomes CC** (2021) Ageing in Place: A Design (er) Challenge. In Raposo D, Neves J, Silva J, Correia Castilho L and Dias R (eds.), *Advances in Design, Music and Arts: 7th Meeting of Research in Music, Arts and Design, EIMAD 2020, May 14–15, 2020*. Cham: Springer International, pp. 489–505. [https://doi.org/10.1007/978-3-030-55700-3\\_34](https://doi.org/10.1007/978-3-030-55700-3_34)
- Grimmer K, Kay D, Foot J and Pastakia K** (2015) Consumer views about aging-in-place. *Clinical Interventions in Aging* **10**, 1803–1811. <https://doi.org/10.2147/CIA.S90672>
- Grove H** (2021) Ageing as well as you can in place: Applying a geographical lens to the capability approach. *Social Science and Medicine* **288**, 113525. <https://doi.org/10.1016/j.socscimed.2020.113525>
- Hamers K, Moor N and Mohammadi M** (2024) A typology of clustered housing for older adults towards opportunities for social interaction: A case study of Dutch social housing. *Frontiers of Architectural Research* **13**, 561–574. <https://doi.org/10.1016/j.foar.2024.02.010>
- Hassler U and Kohler N** (2014) Resilience in the built environment. *Building Research and Information* **42**, 119–129. <https://doi.org/10.1080/09613218.2014.873593>
- Hatcher D, Chang E, Schmied V and Garrido S** (2019a) Exploring the perspectives of older people on the concept of home. *Journal of Aging Research* **1**, 2679680. <https://doi.org/10.1155/2019/2679680>
- Hatcher D, Chang E, Schmied V and Garrido S** (2019b) Holding momentum: A grounded theory study of strategies for sustaining living at home in older persons. *International Journal of Qualitative Studies on Health and Well-Being* **14**, 1658333. <https://doi.org/10.1080/17482631.2019.1658333>
- Hayward E, Ibe C, Young JH, Potti K, Jones P, Pollack CE and Gudzone KA** (2015) Linking social and built environmental factors to the health of public housing residents: A focus group study. *BMC (BioMed Central) Public Health* **15**, 1–8. <https://doi.org/10.1186/s12889-015-1710-9>
- Heyn PC, Meeks S and Pruchno R** (2019) Methodological guidance for a quality review article. *Gerontologist* **59**, 197–201. <https://doi.org/10.1093/geront/gny123>
- Horner B and Boldy DP** (2008) The benefit and burden of 'ageing-in-place' in an aged care community. *Australian Health Review* **32**, 356–365. <https://doi.org/10.1071/AH080356>
- Hu X** (2021) Sustainability perceptions of home modification service providers for older Australians. *Engineering Construction and Architectural Management* **28**, 2754–2771. <https://doi.org/10.1108/ecam-12-2019-0681>
- Jolanki OH** (2021) Senior housing as a living environment that supports well-being in old age. *Frontiers in Public Health* **8**, 589371. <https://doi.org/10.3389/fpubh.2020.589371>
- Kastl A, Rauner YN, Mayer-Huber S, Oestreich C, Benstetter F and Fette U** (2024) Stakeholder needs assessment for developing ageing in place solutions – A qualitative study. *BMC (BioMed Central) Geriatrics* **24**, 104. <https://doi.org/10.1186/s12877-024-04722-x>
- Kawachi I and Berkman L** (2000) Social cohesion, social capital, and health. *Social Epidemiology* **174**, 290–319. <https://doi.org/10.1093/med/9780195377903.003.0008>
- Kerr J, Rosenberg D and Frank L** (2012) The role of the built environment in healthy aging: Community design, physical activity, and health among older adults. *Journal of Planning Literature* **27**, 43–60. <https://doi.org/10.1177/0885412211415283>
- Kohon J** (2018) Social inclusion in the sustainable neighborhood? Idealism of urban social sustainability theory complicated by realities of community planning practice. *City, culture and society* **15**, 14–22.
- Komp-Leukkunen K and Sarasma J** (2024) Social sustainability in aging populations: A systematic literature review. *Gerontologist* **64**, gnad097. <https://doi.org/10.1093/geront/gnad097>
- Kondo K, Lee JS, Kawakubo K, Kataoka Y, Asami Y, Mori K, Umezaki M, Yamauchi T, Takagi H, Sunagawa H and Akabayashi A** (2009) Association between daily physical activity and neighborhood environments. *Environmental Health and Preventive Medicine* **14**, 196–206. <https://doi.org/10.1007/s12199-009-0081-1>
- Koss C and Ekerdt DJ** (2017) Residential reasoning and the tug of the fourth age. *Gerontologist* **57**, 921–929. <https://doi.org/10.1093/geront/gnw010>
- Kylén M, Löfqvist C, Haak M and Iwarsson S** (2019) Meaning of home and health dynamics among younger older people in Sweden. *European Journal of Ageing* **16**, 305–315. <https://doi.org/10.1007/s10433-019-00501-5>
- Lami IM and Mecca B** (2020) Assessing social sustainability for achieving sustainable architecture. *Sustainability* **13**, 142. <https://doi.org/10.3390/su13010142>



- Landeiro F, Barrows P, Musson EN, Gray AM and Leal J (2017) Reducing social isolation and loneliness in older people: A systematic review protocol. *BMJ (British Medical Journal) Open* 7, e013778. <https://doi.org/10.1136/bmjopen-2016-013778>
- Lebrusán I and Gómez MV (2022) The importance of place attachment in the understanding of ageing in place: 'The stones know me'. *International Journal of Environmental Research and Public Health* 19, 17052. <https://doi.org/10.3390/ijerph192417052>
- Lee J, Suh Y and Kim Y (2022) Multidimensional factors affecting homebound older adults: A systematic review. *Journal of Nursing Scholarship* 54, 169–175. <https://doi.org/10.1111/jnu.12724>
- Leigh-Hunt N, Bagguley D, Bash K, Turner V, Turnbull S, Valtorta N and Caan W (2017) An overview of systematic reviews on the public health consequences of social isolation and loneliness. *Public Health* 152, 157–171. <https://doi.org/10.1016/j.puhe.2017.07.035>
- Levac D, Colquhoun H and O'Brien KK (2010) Scoping studies: advancing the methodology. *Implementation science* 5, 1–9.
- Lewis C and Buffel T (2020) Aging in place and the places of aging: A longitudinal study. *Journal of Aging Studies* 54, 100870. <https://doi.org/10.1016/j.jaging.2020.100870>
- Littman DM (2021) Third place theory and social work: Considering collapsed places. *Journal of Social Work* 21, 1225–1242. <https://doi.org/10.1177/1468017320949445>
- Mackenzie L, Curryer C and Byles JE (2015) Narratives of home and place: Findings from the Housing and Independent Living Study. *Ageing & Society* 35, 1684–1712. <https://doi.org/10.1017/S0144686X14000476>
- Mavrodaris A, Mattocks C and Brayne CE (2021) Healthy ageing for a healthy planet: Do sustainable solutions exist? *Lancet Healthy Longevity* 2, e10–e11. [https://doi.org/10.1016/s2666-7568\(20\)30067-2](https://doi.org/10.1016/s2666-7568(20)30067-2)
- Mazumdar S, Learnihan V, Cochrane T and Davey R (2018) The built environment and social capital: A systematic review. *Environment and Behavior* 50, 119–158. <https://doi.org/10.1177/0013916516687343>
- McGowan J, Sampson M, Salzwedel DM, Cogo E, Foerster V and Lefebvre C (2016) PRESS peer review of electronic search strategies: 2015 guideline statement. *Journal of Clinical Epidemiology* 75, 40–46. <https://doi.org/10.1016/j.jclinepi.2016.01.021>
- Molinsky J and Forsyth A (2018) *Housing, the Built Environment, and the Good Life*. Hastings Center Report 48. <https://doi.org/10.1002/hast.914>
- Nakanishi H and Black J (2015) Social sustainability issues and older adults' dependence on automobiles in low-density environments. *Sustainability* 7, 7289–7309. <https://doi.org/10.3390/su7067289>
- Nordin S, Sturge J, Meijering L and Elf M (2024) A 5-day codesign sprint to improve housing decisions of older adults: Lessons learned from Sweden and the Netherlands. *International Journal of Social Research Methodology* 27, 661–673. <https://doi.org/10.1080/13645579.2023.2247290>
- Oswald F, Jopp D, Rott C and Wahl HW (2011) Is aging in place a resource for or risk to life satisfaction? *Gerontologist* 51, 238–250. <https://doi.org/10.1093/geront/gnq096>
- Otoni CA, Sims-Gould J, Winters M, Heijnen M and McKay HA (2016) 'Benches become like porches': Built and social environment influences on older adults' experiences of mobility and well-being. *Social Science and Medicine* 169, 33–41. <https://doi.org/10.1016/j.socscimed.2016.08.044>
- Pani-Harreman KE, Bours GJ, Zander I, Kempen GI and van Duren JM (2021) Definitions, key themes and aspects of 'ageing in place': A scoping review. *Ageing & Society* 41, 2026–2059. <https://doi.org/10.1017/S0144686X20000094>
- Pedersen M (2015) Senior co-housing communities in Denmark. *Journal of Housing for the Elderly* 29, 126–145. <https://doi.org/10.1080/02763893.2015.989770>
- Peine A, Meissner A and Wanka A (2024) Digitalisation and population ageing: Social policy dimensions of the digital divide and innovation. In Leichsenring K and Sidorenko A (eds.), *A Research Agenda for Ageing and Social Policy*. Cheltenham: Edward Elgar, pp. 131–149. <https://doi.org/10.4337/9781802208139.00017>
- Peters MD, Godfrey C, McInerney P, Khalil H, Larsen P, Marnie C, Pollock D, Tricco AC and Munn Z (2022) Best practice guidance and reporting items for the development of scoping review protocols. *JBI (Joanna Briggs Institute) Evidence Synthesis* 20, 953–968. <https://doi.org/10.11124/JBIES-21-00242>
- Peters MD, Godfrey CM, Khalil H, McInerney P, Parker D and Soares CB (2015) Guidance for conducting systematic scoping reviews. *JBI (Joanna Briggs Institute) Evidence Implementation* 13, 141–146. <https://doi.org/10.1097/XEB.0000000000000050>
- Petersen M and Minnery J (2013) Understanding daily life of older people in a residential complex: The contribution of Lefebvre's social space. *Housing Studies* 28, 822–844. <https://doi.org/10.1080/02673037.2013.768333>

- Pillemer K, Wells NM, Wagenet LP, Meador RH and Parise JT (2011) Environmental sustainability in an aging society: A research agenda. *Journal of Aging and Health* 23, 433–453. <https://doi.org/10.1177/0898264310381>
- Pollock D, Davies EL, Peters MD, Tricco AC, Alexander L, McNerney P, Godfrey CM, Khalil K and Munn Z (2021) Undertaking a scoping review: A practical guide for nursing and midwifery students, clinicians, researchers, and academics. *Journal of Advanced Nursing* 77, 2102–2113. <https://doi.org/10.1111/jan.14743>
- Rioux L and Werner C (2011) Residential satisfaction among aging people living in place. *Journal of Environmental Psychology* 31, 158–169. <https://doi.org/10.1016/j.jenvp.2010.12.001>
- Robertson JM, Gibson G, Greasley-Adams C, McCall V, Gibson J, Mason-Duff J and Pengelly R (2022) ‘It gives you a reason to be in this world’: The interdependency of communities, environments and social justice for quality of life in older people. *Ageing & Society* 42, 539–563. <https://doi.org/10.1017/S014686X20000859>
- Rogers WA, Ramadhani WA and Harris MT (2020) Defining aging in place: The intersectionality of space, person, and time. *Innovation in Aging* 4, igaa036. <https://doi.org/10.1093/geroni/igaa036>
- Rudnicka E, Napierała P, Podfigurna A, Męczekalski B, Smolarczyk R and Grymowicz M (2020) The World Health Organization (WHO) approach to healthy ageing. *Maturitas* 139, 6–11. <https://doi.org/10.1016/j.maturitas.2020.05.018>
- Santosa A, Ng N, Zetterberg L and Eriksson M (2020) Study protocol: Social capital as a resource for the planning and design of socially sustainable and health promoting neighborhoods – A mixed method study. *Frontiers in Public Health* 8, 581078. <https://doi.org/10.3389/fpubh.2020.581078>
- Schorr AV, Iecovich E, Alfasi N and Shamai S (2017) Socio-spatial integration of older adults in four types of residential environments in Israel. *Journal of Applied Gerontology* 36, 1243–1271. <https://doi.org/10.1177/0733464815614917>
- Seetharaman K, Mahmood A and Chaudhury H (2020) A scoping review of innovative housing for older adults: Focus on homesharing, cohousing, NORC-SSPs, and villages. *Innovation in Aging* 4, 31–32. <https://doi.org/10.1093/geroni/igaa057.102>
- Severinsen C, Breheny M and Stephens C (2016) Ageing in unsuitable places. *Housing Studies* 31, 714–728. <https://doi.org/10.1080/02673037.2015.1122175>
- Shah SGS, Noguera D, Van Woerden H and Kiparoglou V (2019) Effectiveness of digital technology interventions to reduce loneliness in adults: A protocol for a systematic review and meta-analysis. *BMJ (British Medical Journal) Open* 9, e032455. <https://doi.org/10.1136/bmjopen-2019-032455>
- Shirazi MR and Keivani R (2017) Critical reflections on the theory and practice of social sustainability in the built environment – A meta-analysis. *Local Environment* 22, 1526–1545. <https://doi.org/10.1080/13549839.2017.1379476>
- Sixsmith J, Fang ML, Woolrych R, Canham SL, Battersby L and Sixsmith A (2017) Ageing well in the right place: Partnership working with older people. *Working with Older People* 21, 40–48. <https://doi.org/10.1108/WWOP-01-2017-0001>
- Sturge J, Klaassens M, Jones CA, Légaré F, Elf M, Weitkamp G and Meijering L (2021b) Exploring assets of people with memory problems and dementia in public space: A qualitative study. *Wellbeing, Space and Society* 2, 100063. <https://doi.org/10.1016/j.wss.2021.100063>
- Sturge J, Klaassens M, Lager D, Weitkamp G, Vegter D and Meijering L (2021a) Using the concept of activity space to understand the social health of older adults living with memory problems and dementia at home. *Social Science and Medicine* 288, 113208. <https://doi.org/10.1016/j.socscimed.2020.113208>
- Sturge J, Miedema E, Elf M and Nordin S (2023) Socially sustainable housing and built environments to support the health and social inclusion of older adults: Protocol for a scoping review and stakeholder consultation. *BMJ (British Medical Journal) Open* 13, e075447. <https://doi.org/10.1136/bmjopen-2023-075447>
- Sun Y, Fang Y, Yung EH, Chao TYS and Chan EH (2020) Investigating the links between environment and older people’s place attachment in densely populated urban areas. *Landscape and Urban Planning* 203, 103897. <https://doi.org/10.1016/j.landurbplan.2020.103897>
- Tersteeg AK and Pinkster FM (2016) ‘Us up here and them down there’ how design, management, and neighborhood facilities shape social distance in a mixed-tenure housing development. *Urban Affairs Review* 52, 751–779. <https://doi.org/10.1177/1078087415601221>



- Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, Moher D, Peters MDJ, Horsley T, Weeks L, Hempel S, Akl EA, Chang C, McGowan J, Stewart L, Hartling L, Aldcroft A, Wilson MG, Garrity C, Lewin S, Godfrey CM, Macdonald MT, Langlois EV, Soares-Weiser K, Moriarty J, Clifford T, Tunçalp Ö and Straus SE (2018) PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine* **169**, 467–473. <https://doi.org/10.7326/M18-0850>
- United Nations (1987). *Report of the World Commission on Environment and Development: Our Common Future*. [www.un-documents.net/wced-ocf.htm](http://www.un-documents.net/wced-ocf.htm) (accessed 6 May 2025).
- Victor CR and Pikhartova J (2020) Lonely places or lonely people? Investigating the relationship between loneliness and place of residence. *BMC (BioMed Central) Public Health* **20**, 1–12. <https://doi.org/10.1186/s12889-020-08703-8>
- Vitman A, Iecovich E and Alfasi N (2014) Ageism and social integration of older adults in their neighborhoods in Israel. *The Gerontologist*, **54**(2), 177–189.
- Vonneilich N (2022) Social Relations, Social Capital, and Social Networks: A Conceptual Classification. In *Social Networks and Health Inequalities: A New Perspective for Research* (pp. 23–34). Cham: Springer International Publishing.
- Wadu Mesthrige J and Cheung SL (2020) Critical evaluation of 'ageing in place' in redeveloped public rental housing estates in Hong Kong. *Ageing & Society* **40**, 2006–2039. <https://doi.org/10.1017/S0144686X19000448>
- Wang W and Durst NJ (2023) Planning for active aging: Exploring housing preferences of elderly populations in the United States. *Journal of Housing and the Built Environment* **38**, 795–809. <https://doi.org/10.1007/s10901-022-09962-0>
- World Health Organization (2018) *The Global Network for Age-Friendly Cities and Communities: Looking Back Over the Last Decade, Looking Forward to the Next*. [www.who.int/publications/i/item/WHO-FWC-ALC-18.4](http://www.who.int/publications/i/item/WHO-FWC-ALC-18.4) (accessed 6 May 2025).
- Xia B, Chen Q, Buys L, Skitmore M and Walliah J (2021) Sustainable living environment in retirement villages: What matters to residents? *Journal of Aging and Environment* **35**, 370–384. <https://doi.org/10.1080/26892618.2020.1848965>

## Appendix A

### PRISMA-ScR checklist

## Appendix B

### Appendix B – Medline (Ovid) Search Strategy

(Literature search performed 23 February 2023)

1. exp aged/
2. ag?ing.ti,ab,kf.
3. centenarian\*.ti,ab,kf.
4. elder\*.ti,ab,kf.
5. (late\* adj2 life).ti,ab,kf.
6. nonagenarian\*.ti,ab,kf.
7. octogenarian\*.ti,ab,kf.
8. old\* adult\*.ti,ab,kf.
9. old\* age\*.ti,ab,kf.
10. old\* citizen\*.ti,ab,kf.
11. old\* lady.ti,ab,kf.
12. old\* ladies.ti,ab,kf.
13. old\* m#n.ti,ab,kf.
14. old\* people.ti,ab,kf.
15. old\* person\*.ti,ab,kf.
16. old\* population\*.ti,ab,kf.
17. old\* wom#n.ti,ab,kf.
18. pensioner\*.ti,ab,kf.

Section	Item	PRISMA-ScR checklist item	Reported on page
Title	1	Identify the report as a scoping review.	p. 1
<b>Abstract</b>			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results and conclusions that relate to the review questions and objectives.	p. 1
<b>Introduction</b>			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	pp. 3–5
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g. population or participants, concepts, context) or other relevant key elements used to conceptualize the review questions and/or objectives.	p. 4
<b>Methods</b>			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g. a web address); and, if available, provide registration information, including the registration number.	p. 4

(Continued)

- 19. senior\*.ti,ab,kf.
- 20. septuagenarian\*.ti,ab,kf.
- 21. sexagenarian\*.ti,ab,kf.
- 22. or/1-21
- 23. empowerment/
- 24. health promotion/
- 25. personal autonomy/
- 26. exp 'quality of life'/
- 27. social inclusion/
- 28. exp social integration/
- 29. social interaction/
- 30. social isolation/
- 31. social participation/
- 32. exp social support/
- 33. accessib\*.ti,ab,kf.
- 34. autonomy.ti,ab,kf.
- 35. communit\*.ti,ab,kf.
- 36. empower\*.ti,ab,kf.
- 37. engagement.ti,ab,kf.
- 38. equity.ti,ab,kf.
- 39. health promotion.ti,ab,kf.
- 40. (health adj2 (impact\* or outcome\* or improv\*)).ti,ab,kf.

(Continued.)

Section	Item	PRISMA-ScR checklist item	Reported on page
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g. years considered, language, publication status) and provide a rationale.	pp. 3–4 (Table 2)
Information sources*	7	Describe all information sources in the search (e.g. databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	p. 5
Search	8	Present the full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	p. 6 (Appendix B)
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e. screening and eligibility) included in the scoping review.	p. 6
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g. calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	p. 6
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	pp. 5–6
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	N/A
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	pp. 7–13
<b>Results</b>			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	p. 7 (Figure 1)
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	p. 7
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	N/A
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	p. 7 (Table 3)

(Continued)

(Continued.)

Section	Item	PRISMA-ScR checklist item	Reported on page
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	pp. 7–13
<b>Discussion</b>			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	pp. 7–13 (Table 4)
Limitations	20	Discuss the limitations of the scoping review process.	p. 18
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	p. 19
<b>Funding</b>			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	p. 19

JBIG = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

\*Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms and websites.

<sup>†</sup>A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g. quantitative and/or qualitative research, expert opinion, policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

<sup>‡</sup>The frameworks by Arksey and O'Malley (2005) and Levac and colleagues (2010) and Peters et al., 2022 is a better source) refer to the process of data extraction in a scoping review as data charting.

<sup>§</sup>The process of systematically examining research evidence to assess its validity, results and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of 'risk of bias' (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g. quantitative and/or qualitative research, expert opinion, policy documents).

Source: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. (2018) PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine* 169, 467–473. <https://doi.org/10.7326/M18-0850>.

- 41. inclus\*.ti,ab,kf.
- 42. participation.ti,ab,kf.
- 43. quality of life.ti,ab,kf.
- 44. social cohesion.ti,ab,kf.
- 45. social exclusion.ti,ab,kf.
- 46. social integration.ti,ab,kf.
- 47. social interaction.ti,ab,kf.
- 48. social isolation.ti,ab,kf.
- 49. social mix\*.ti,ab,kf.
- 50. social participation.ti,ab,kf.
- 51. social support.ti,ab,kf.
- 52. social\* sustainab\*.ti,ab,kf.
- 53. well-being.ti,ab,kf.
- 54. wellbeing.ti,ab,kf.
- 55. or/23-54

56. exp environment design/
57. exp 'facility design and construction'/
58. home environment/
59. 'housing for the elderly'/
60. exp social planning/
61. ((accommodation? or apartment? or condominium? or domestic or dwelling? or flat? or home? or house? or household? or mansion? or residen\* or villa?) adj2 (design\* or planning)).ti,ab,kf.
62. ag?ing in place.ti,ab,kf.
63. architectural accessibility.ti,ab,kf.
64. architectural barrier\*.ti,ab,kf.
65. built environment\*.ti,ab,kf.
66. environment\* design\*.ti,ab,kf.
67. facility design\*.ti,ab,kf.
68. home environment\*.ti,ab,kf.
69. (housing adj3 (sustainab\* or suitab\* or secure or social or acces\* or inclu\* or elder\* or old\*)).ti,ab,kf.
70. living environment\*.ti,ab,kf.
71. social planning.ti,ab,kf.
72. or/56-71
73. 22 AND 55 AND 72
74. exp animals/
75. exp animal experimentation/ or exp animal experiment/
76. exp models, animal/
77. nonhuman/
78. exp vertebrate/ or exp vertebrates/
79. or/74-78
80. exp humans/
81. exp human experimentation/ or exp human experiment/
82. or/80-81
83. 79 not 82
84. 73 not 83
85. 84 and 2008:2023.(sa\_year).
86. 85 and English.lg.

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