

Creating an Ideal Home Environment for the Accessibility, Comfort, and Well-being of Older Adults

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Abstract

Ageing poses new challenges for achieving sustainable development in the developing world. This study explores the characteristics of ideal home environments for older adults in Malaysia's first age-friendly city, Taiping. Using semi-structured interviews with twelve residents aged 60 and above, the research identifies key themes: the importance of comfort, accessibility modifications for safety, and proximity to social connections and essential services. These findings emphasise the need for user-centred design and affordable housing that promotes ageing-in-place, contributing to the development of age-friendly environments that support the well-being and independence of older adults.

Keywords: Age-friendly home environment; Accessibility; Comfort; Well-being

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1.0 Introduction

The global population is ageing rapidly, leading to significant demographic shifts. By 2024, the World Health Organisation (WHO) projects that the population of individuals over 65 in the European region will surpass those under 15. This trend highlights the importance of ageing-in-place, a concept gaining attention among researchers, policymakers, and urban planners (Carrera, 2023). Governments must ensure that older adults can access supportive, comfortable, and safe environments to age well and independently. However, most houses were not designed with ageing in mind, potentially leading to safety hazards and a decline in well-being as mobility decreases.

In Malaysia, statistics show that most older adults strongly prefer to remain in their homes and communities as they age. Studies reveal that many older adults choose to live independently in their current homes (Ismail et al., 2020), with 77.6% expressing a desire to age in place (The Star, 9 July 2017). However, existing studies primarily focus on the need for age-friendly housing for those with disabilities, leaving a gap in understanding the preferences of older adults who remain fit and independent. The primary aim of this study is to explore the preferred characteristics of the home environment as expressed by older adults who are still physically and cognitively independent. Specifically, the study seeks to identify features that support their desire to age in place, promote independence, and enhance quality of life. By addressing these objectives, the research contributes to the development of more inclusive and age-supportive housing designs.

2.0 Literature review

2.1 Age-Friendly Home Environment

The global demographic shift towards an ageing population presents significant challenges, particularly for low and middle-income countries. These countries face a rising burden of non-communicable diseases, disabilities, and chronic health conditions due to ageing populations and changing disease patterns (Kabir et al., 2016). The implications extend beyond health, affecting economic security, employment, and family structures, as the global older population is projected to increase from 9% in 2019 to 16% in 2050 (Muhammad et al., 2021). As these challenges grow, innovative home environments and independent living options become crucial for achieving sustainable ageing. A comprehensive strategy considering lifestyle changes, urbanisation, and globalisation's impact on health and well-being is urgently needed. The WHO's concept of age-friendly cities is key to supporting active ageing and well-being, with housing as a vital component. The demand for specialised housing is expected to rise as populations age. The WHO model identifies housing as one of the eight essential domains for creating supportive environments for older adults, alongside other domains like transportation and social participation.

Creating an age-friendly home environment is essential for older adults to age in place independently and comfortably. Such environments are designed to meet older adults' changing needs, supporting their well-being and quality of life. They help older adults adapt to age-related changes, maintain autonomy, safety, and comfort, and actively participate in their communities, promoting social connectedness and well-being (Hoof et al., 2018). Integrating of technology in these environments is also crucial, as it enables older adults to stay in their homes and communities (Peek et al., 2015). Moreover, designing living spaces that are accessible, safe, and comfortable for older adults, while considering housing conditions, community support, and social inclusion, contributes significantly to their satisfaction and well-being (Boer et al., 2020). These environments can also reduce loneliness and social isolation, which are linked to negative health outcomes like increased mortality, cognitive decline, and depression (Holt-Lunstad et al., 2015). Incorporating features encouraging social connectedness, such as well-lit common areas for gatherings, can help alleviate these issues.

Despite challenges, Malaysia has taken steps towards creating age-friendly environments. In 2019, Taiping was selected for the first phase of the Age-Friendly Cities pilot project, marking an initial step towards inclusiveness for the ageing population (The Star, 31 October 2019). However, the specific characteristics of Taiping as Malaysia's first age-friendly city remain unclear, as most studies have focused on other cities (Azmi et al., 2021; Md. Yassin et al., 2018). Nonetheless, an ideal home environment that supports older adults' desire to age in place is crucial for promoting independence, enhancing social connectedness, reducing loneliness, and improving overall well-being and quality of life. By optimising living spaces to be age-friendly, older adults can maintain their independence and engage with their communities as they age.

2.2 Creating an Age-Friendly Home Environment

To create an age-friendly home environment, it is crucial to incorporate universal design principles that cater to the changing needs of individuals as they age. Universal design focuses on creating spaces that are accessible to individuals of all ages and abilities. In educational environments, this approach emphasises inclusivity and aims to reduce barriers for individuals with disabilities (McGuire et al., 2006). Moreover, when applied to home environments, this principle can enhance accessibility and safety for older adults. According to Waller et al. (2016), in designing living spaces for older adults, the designers must consider specific needs, such as cognitive impairments, and at the same time, implement environmental assessment tools that can support the development of homes that are conducive for them to age in place. Other than that, frameworks like the 5S Aged-Friendly Spaces Guideline by Aziz et al. (2020) can provide practical guidance for creating age-friendly environments that promote sustainability and well-being. Moreover, Tiraphat et al. (2017), in their studies, not only emphasised the significance of physical but also social neighbourhood attributes in contributing to the well-being of older adults. Factors such as social support from family, friends, and neighbours can enhance comfort and satisfaction for older adults, creating a sense of belonging and security within their living environment. Luciano et al. (2020) proposed measuring the age-friendliness of housing by considering factors such as social support and autonomy within the home environment.

Overall, integrating universal design principles, environmental assessment tools, and specific guidelines for age-friendly spaces can contribute to the development of homes that support healthy ageing and quality of life for older adults.

3.0 Methodology

Perak has the highest percentage of the ageing population in Malaysia, with 14.6% of its 2,511,900 residents aged 60 years and above as of 2023 (Department of Statistics Malaysia, 2023). The state has shown a strong commitment to fostering age-friendly environments, with Taiping and Ipoh taking the initiative by submitting commitment letters to the WHO in 2019. This study employed a qualitative approach, collecting data through semi-structured interviews with 12 older adults in Taiping, chosen due to its role as the pioneer city for the Age-Friendly Cities pilot project in Malaysia (The Star, 31 October 2019).

The study focused on older adults aged 60 years and above who have lived in Taiping for at least three years and reside within the community rather than in institutional settings. The study and interview questions were validated by experts and approved by the Human Research Ethics Committee of USM (JEPeM) (USM/JEPeM/21120784). Using snowball sampling, the researchers conducted one-on-one interviews with open-ended questions, allowing for detailed exploration of personal experiences and challenges. Once saturated, the data were transcribed and analysed using NVivo 11 Pro with thematic analysis.

4.0 Findings

There are 12 older adults participated in this study, and Table 1 presents their demographic profiles in terms of age, gender, living arrangement, and housing ownership.

Table 1: Demographic Profiles of the older informants

Older informants	Age (years old)	Gender	Living arrangement	Housing ownership
Older Adult 1	60	Male	Spouse and daughter	Own
Older Adult 2	63	Female	Children and grandchildren	Own
Older Adult 3	66	Male	Spouse	Own
Older Adult 4	69	Female	Daughter	Own
Older Adult 5	60	Female	Alone	Own
Older Adult 6	65	Male	Alone	Inherited
Older Adult 7	63	Male	Spouse and children	Own
Older Adult 8	66	Female	Alone	Own
Older Adult 9	67	Male	Spouse and daughter	Own
Older Adult 10	61	Male	Spouse	Own
Older Adult 11	67	Female	Children	Own
Older Adult 12	70	Female	Spouse	Inherited

Source: Researchers' data

The first demographic profile of the older informants is age. Based on the findings, all 12 older informants who participated in this study were between 60 to 70 years old. At this age, most of them are still in good health and were able to participate in the interview sessions. The second demographic profile of the older informants is gender. Among the 12 older informants, half were males, while the remaining half were females. The third demographic profile of the older informants is living arrangements. Three older informants lived alone without close family members, while the remaining participants either resided with their spouses only or lived together with their children and grandchildren. The fourth demographic profile of the older informants is housing ownership. 2 out of 12 older informants resided in houses inherited from their parents. Meanwhile, the rest owned their homes independently, along with their families.

4.1 How an age-friendly home environment affects comfort, accessibility, and well-being in later life

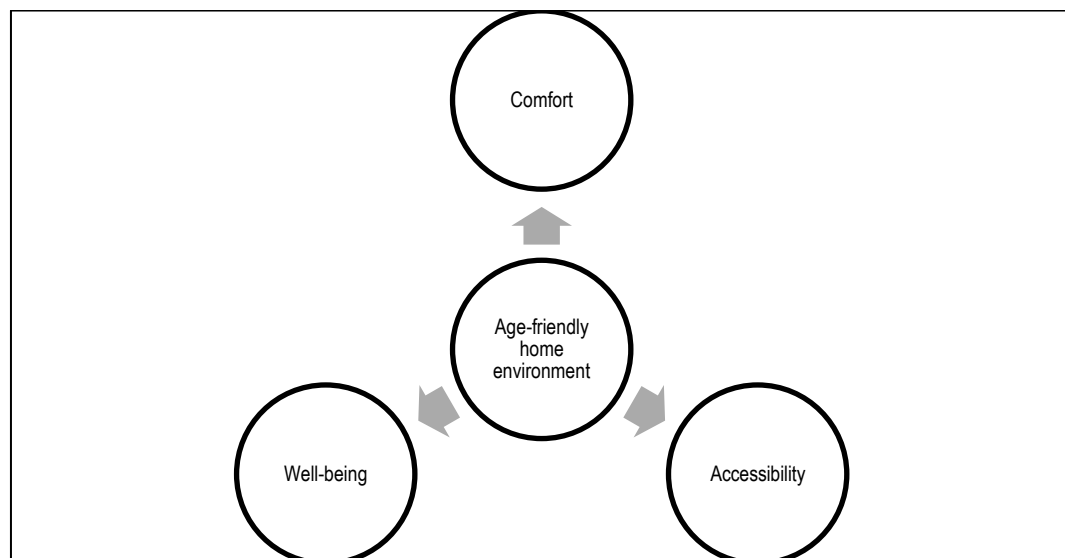


Fig. 1: Themes representing the informant's experiences of an age-friendly home environment

Source: Researchers' data

In this study, the availability of housing units designed or modified for older adults was one of the physical characteristics of an age-friendly home environment for them to reside in. Housing that is comfortable, accessible, safe, and affordable can contribute to their well-being and enable them to age in place with ease, as older adults are prone to injuries, falls, and other health problems associated with inadequate living conditions (Figure 1).

Ageing-in-place is an ideal option for older adults as it allows them to maintain their quality of life and independence as they age. Older Adult 1, who had recently retired, decided to age in place in his house with his spouse. Despite having the option to live with their children, both Older Adult 1 and his wife prioritise their preferences and needs during their retirement years:

"After retiring in February, I decided to age in place in the comfort of my own home and community. Having resided here for over 40 years, I am familiar and content with my surroundings. Living with my wife, we prefer to remain in our own house rather than moving in with our children."
Older Adult 1

In addition, Older Adult 2 was reportedly satisfied with her current house since it could accommodate her needs. For example, in this case, Older Adult 2 stated the importance of having good bathroom facilities. As she has her own bathroom, she can clean and manage herself without requiring help from her children. Older Adult 2 stated the following:

"I am content with the state of the house, and its size is perfect for me and my family. Furthermore, I have the luxury of having my own private bathroom in my bedroom, allowing me the freedom to maintain the room on my own." Older Adult 2

A comfortable and appealing house can make a significant difference for older adults. It is crucial to include age-friendly home features, such as access to outdoor spaces, familiar furnishings, and personal touches, to make the space more welcoming. Additionally, creating personalised rooms that cater to older adults' preferences can contribute to their overall contentment. For example, Older Adult 5 was content with her current size and house condition, as there was a personal touch in the design and furniture that she chose:

"The house is suitable for me in terms of its size and condition, and I am capable of maintaining and arranging it with ease. As you can see, I have decorated my living areas with my personal belongings, such as family photographs. Furthermore, I invested in comfortable furnishings, including cushioned chairs and sofas, which serve as my preferred spot to unwind each evening." Older Adult 5

House modifications can promote safety, convenience, and well-being among older adults in several ways. For instance, these modifications can create a more comfortable living environment that enhances the overall quality of life for older individuals. According to Older Adult 9, he modified his house by considering its accessibility. He aimed to provide comfort to his wife and other family members. He mentioned the following:

"The condition of the house is okay. We have made some improvements to make it more suitable for our needs. For instance, I renovated the flooring because it was slippery, and my wife now prefers to perform seated tasks in the kitchen, so I updated the countertops accordingly." Older Adult 9

In terms of accessibility, Older Adult 7 chose to stay in Taiping after retiring due to the city's strategic location, which provides access to healthcare services, banking facilities, and government buildings, all of which are located at the center of the city. Therefore, it is easy for older adults to access these facilities and services in one area.

Furthermore, housing in close-knit communities encourages social connections as older adults interact with fellow residents and ultimately develop a sense of community. As ageing-in-place involves remaining within a familiar environment, older adults usually establish routines and form relationships. As such, housing that allows older adults to maintain their daily routines and stay close to friends and neighbours can significantly contribute to their overall well-being and participation in community activities. In this study, Older Adult 11, Older Adult 8, and Older Adult 3 highlighted their strong connections with their neighbours, friends, and even relatives. They always look out for one another, creating a sense of community and reducing the likelihood of social isolation.

Older Adult 4, a 69-year-old widow, shared her attachment to her house and how it served as a source of comfort and well-being. Despite having Parkinson's disease, she experienced great happiness and satisfaction by continuing to live in her lifelong home in Taiping City. For Older Adult 4, her house is more than just a place to live; it holds deep emotional significance, provides her with a sense of control over her environment, and offers the familiarity she needs:

"I enjoy living in my own house. The reason for this is that it happens to be my very own house, which makes it quite convenient for me. With my own house, I have the freedom to do whatever I desire. When my daughter is at work, I can watch television, cook for myself, and attend to my plants. Overall, I am extremely content with my current living situation." Older Adult 4

To Older Adult 6, he continued living in his parents' house, even after his parents and spouse passed away. When his late parents asked him to take care of them, he and his late wife agreed and stayed there after marriage. After they passed away, he continued to reside there since his siblings agreed that he was the best person to take care of the house:

"This house belongs to my parents, and I have lived here even before they passed away. After they passed away, I continued to live here with my wife while my siblings had already built their own homes. Before she passed away, my late mother requested that my late wife and I take care of this house. Therefore, I still live here." Older Adult 6

The above statement suggests that Older Adult 6's attachment is not only to the physical structure but also to the family associated with the house. He feels a familial obligation to keep and maintain the house and, at the same time, preserve family property. Similarly, Older Adult 12 also experienced a similar attachment to her in-laws' house as Older Adult 6, as she continued to stay at her inherited house due to the circumstances of her husband's inheritance:

"This house is owned by my husband's family, and we have the right to stay here. After his parents passed away, my husband inherited the house. Additionally, his siblings have entrusted us with the responsibility of caring for this house. This house holds a great deal of sentimental value and cherished memories for us. We are happy and comfortable in this house." Older Adult 12

Lastly, Older Adult 10's decision was influenced by practical considerations related to housing availability; therefore, he opted for ageing-in-place since he did not have other options, such as moving to his children's house. Moreover, he has lived in his own house for a long time with his wife. Older Adult 10 explained the following:

"Although we would like to visit our children's house, we are unable to do so due to a lack of alternative options. We have only this house, and thus we remain. As long as my spouse is by my side, we will stay here." Older Adult 10

These findings indicate that the design of a house must be age-friendly, which promotes well-being, accessibility, convenience, security, safety, and comfort for older people. Thus, the owner of a house must consider spaces that can serve multiple purposes, particularly as lifestyles evolve.

5.0 Discussion

The primary aim of this study is to explore the preferred characteristics of the home environment by older adults. According to Choi (2022), greater availability of age-friendly features in all domains was significantly associated with ageing-in-place intention. Housing is one of the domains consistently associated with ageing-in-place intention other than outdoor spaces and buildings. Meanwhile, Annink and van Hees (2023) discovered in their study that the key factor that leads to the happiness of older adults living independently in their homes is their attachment to their homes. Other than autonomy and independence, older adults often relate their feelings of joy, relaxation, safety, comfort, freedom, and a sense of connection to others through their home environment, contributing to their overall happiness.

In addition, an age-friendly home environment can significantly affect comfort in later life for older adults. By incorporating age-friendly modifications and features, older adults can experience improved comfort and quality of life within their living spaces. The modifications and features, such as grab bars and non-slip surfaces, are all designed to promote safety and accessibility for older adults. Additionally, incorporating universal design principles and smart home technologies can further enhance comfort by providing convenience, safety, and ease of use for older adults (Stefanov et al., 2004).

The reviewed literature revealed a gap in understanding housing preferences of fit, independent older adults, as most studies focus on those with declining health. This study addresses that gap, offering insights that extend age-friendly housing frameworks by highlighting the lived experiences and needs of healthy older adults living autonomously.

Moreover, developing an age-friendly home environment suitable for older adults can also influence their accessibility in later life by promoting independence, safety, and well-being. Notably, age-friendly neighbourhood designs, including well-connected streets and proximity to public places, can promote active ageing and facilitate community engagement for older adults (Aziz et al., 2020). Accessing community resources and services, such as social support and home-delivered meals, also plays a crucial role in preventing social isolation and promoting mental well-being among older adults (Westcott et al., 2022).

Furthermore, the well-being of older adults in later life has been significantly influenced by the development of an age-friendly home environment. Age-friendly environments, including social and physical neighbourhood attributes, are closely linked to the well-being and life satisfaction of older individuals. Moreover, an age-friendly environment can help reduce loneliness and social isolation among older adults, promoting psychological well-being (Hsu, 2020). Social connectedness, fostered by age-friendly communities, enhances the quality of life and well-being as individuals age (Emlet & Moceris, 2012). At the same time, a sense of community, facilitated by age-friendly characteristics, mediates life satisfaction among older adults living in the community (Au et al., 2020).

The findings highlight the need for policies that support flexible housing designs, home modifications, and age-friendly planning. Planners should enhance social cohesion and service access. Future research should explore diverse preferences across contexts and use longitudinal studies to track changes in older adults' housing needs over time.

Therefore, ageing-in-place offers emotional and physical benefits for older adults. It allows individuals to live in their own homes and communities safely, independently, and comfortably. Additionally, living in a familiar environment promotes a sense of autonomy, control, and well-being. This study adds to the growing body of literature advocating for age-friendly environments and highlights the importance of integrating older adults' voices into housing and community design processes.

6.0 Conclusion & Recommendation

This study explored the home environment preferences of older adults who wish to age in place, revealing key priorities like comfort, familiarity, accessibility, affordability, social connection, and location. Older adults value homes that are comfortable, with personal touches and easy access to outdoor spaces, and safe, with features like grab bars. Affordability and proximity to friends, family, and essential services are also crucial for maintaining independence and well-being. This study's limitation lies in its small, homogenous sample from Taiping, Malaysia, which may not reflect the broader older population. Future research should include diverse demographics and abilities. Broader studies on age-friendly communities' impact on well-being are needed to understand how specific features support active ageing, guiding more inclusive planning and policy development for older adults.

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Paper Contribution to Related Field of Study

This paper contributes to the field of gerontology and age-friendly urban planning by providing empirical insights into the housing preferences of older adults in Malaysia.

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