



KICSS2023

Kedah International Conference on Social Science and Humanities
UiTM Kedah (Online), Malaysia, 21-22 June 2023:
2nd International Conference on Business, Finance, Management and Economics
(BIZFAME)



Malaysian Smart Retirement Cities: Perspectives of retirees

Nazni Noordin¹, Zaherawati Zakaria¹, Mohd Zool Hilmie Mohamed Sawal², Muhammad Syahmizan Azmi^{1*}, Adnan Aminuddin¹

*Corresponding Author

¹ Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA, Kedah, Malaysia ² Faculty of Information Management, Universiti Teknologi MARA, Kedah, Malaysia

nazni@uitm.edu.my, zaherawati@uitm.edu.my, zoolhilmie@uitm.edu.my, syahmizan@uitm.edu.my & adnan708@uitm.edu.my
Tel: +6013-404 1010

Abstract

By 2050, the global population of 60 years and above is expected to double to 2 billion. Malaysia will also experience an increase, with 15.3% of its population over 60 by 2030. The government must establish a comprehensive retirement city framework to improve seniors' quality of life. This study proposes a sustainable smart retirement city framework through interviews with retired individuals using thematic analysis, which comprises Smart Living, Smart People, Smart Infrastructure, Smart Economy, and Smart Environment.

Keywords: Sustainable; Ageing; Retirement; Smart Retirement City

eISSN: 2398-4287 © 2023. The Authors. Published for AMER and cE-Bs by e-International Publishing House, Ltd., UK. This is an open-access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer-review under the responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), and cE-Bs (Centre for Environment-Behaviour Studies), College of Built Environment, Universiti Teknologi MARA, Malaysia DOI: https://doi.org/10.21834/e-bpj.v8iSI15.5103

1.0 Introduction

By the year 2030, the aging society in Malaysia is expected to cover almost 15.3 percent of the total population. As the percentage of this group becomes more significant soon, the government needs to have a proper strategic plan to cater for the needs and wants of this ageing population so that they will live comfortably while at the same time still being able to contribute to the development of the country. In promoting a better life for this group of people who reach 60 and above and are mostly retired, the Malaysian government must have a comprehensive retirement city framework in responding to older adults' needs. Back in February 2017, Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan (KPKT), or Ministry of Urban Well-being, Housing and Local Government revealed one of the planning for this group of aging people is to establish a community center for senior citizens in urban settlements by 2040. This center will become a meeting and interaction platform for them in the future, and many will make the city their hometown, not a real village (Samadi Ahmad, 2017).

In June 2019, the Malaysian Ministry of Housing and Local Government (KPKT) made an announcement regarding their plans to provide housing for the elderly and disabled individuals. This initiative aims to prepare for the expected growth of the "Old Community" status by 2025. Its minister, Zuraida Kamaruddin, said earlier preparations were necessary to address the situation of older people, especially in providing facilities, welfare, health, and expertise to reduce the country's expenditure. Zuraida further claimed that many developed countries, such as Japan and the United States had taken steps to address the status of the old community. Malaysia does not yet have a comprehensive framework for this type of city. We must stand on par with other established smart cities such as Amsterdam, London, Stockholm, Barcelona, Singapore, New York, King Abdullah Economic City, Masdar, Chicago, Rio de Janeiro, and Songdo (Angelidou, 2017). As an initial study, Kedah was chosen due to its significant aging population, ranking second in the country with 8.9% of its residents aged 65 and above, surpassing the national average of 6.8%. Based on the 2020 Malaysian Census, all Kedah districts except Langkawi have at least 7% of their population aged 65 and above (Zulkifli, 2022). Hence, this study aims to explore the

eISSN: 2398-4287 © 2023. The Authors. Published for AMER and cE-Bs by e-International Publishing House, Ltd., UK. This is an open-access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer-review under the responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), and cE-Bs (Centre for Environment-Behaviour Studies), College of Built Environment, Universiti Teknologi MARA, Malaysia DOI: https://doi.org/10.21834/e-bpj.v8iSI15.5103

need for a sustainable smart retirement city framework and to explore the local context, preferences, and requirements for a sustainable smart retirement city framework for Kedah, Malaysia.

2.0 Literature Review

The demographic profile of people around the globe is changing; one of them is aging people. This group is increasing and will reach more than 1.5 billion in 2050. In 2020, the United Nations (2020) reported that over 727 million people are in this category. This situation needs to be appropriately handled by the related authorities since this group of aging people also needs a better living arrangement since it will impact their life satisfaction (Henning-Smith et al., 2018). The Department of Statistics Malaysia highlighted an alarming trend as it indicates that the aging community in this country to reach more than 15% of the total population by the year 2030. Therefore, proactive preparation is needed in dealing with that scenario. A study by Rashid et al. (2016) states rapid population aging would pose serious challenges for a country, including economic and social implications. As a response, the Malaysian government, through National Key Economic Areas, initiated three Seniors Living Entry Point Projects (EPPs), namely Mobile Healthcare Services, Institutionalized Aged Care and Retirement Villages where the government aims to establish elderly-friendly property developments that cater for a range of services including medical and personal assisted living services.

The smart city concept would be one of the key solutions to fulfil the needs and expectations of the aging community. A smart city is a city that uses information and communications technology to enhance liveability, workability, and sustainability (Smart City Handbook: Malaysia, 2021). The KPKT has introduced the concept of a smart city to be implemented in Malaysia and identified seven significant areas to focus on which include (1) a smart economy, (2) smart living, (3) a smart environment, (4) smart people, (5) smart government (6) smart mobility and (7) smart digital infrastructure. All these features are instrumental for a smart city to operate and deliver its functions effectively. Concerning that, aging in place has become a fundamental criterion in meeting the needs of older people (Lecovich, 2014). Many of them prefer to remain in their homes because they strongly desire to do so or have no other option (Barken, 2021; Granbom et al., 2021). They live near their family members or independently (Ismail et al., 2020). Barken (2021) further highlighted that aging in place makes senior citizens feel safe and always have social support to live in their homes. Finlay et al. (2020) and Odzakovic et al. (2021) claimed that older people's communities and homes should be comfortable and safe, have easy access to essential services and have a harmonious social connection with people surrounding them. Senior citizens will be satisfied and happy if they can engage and participate in the community (Bayar & Türkoğlu, 2021; Jakubec et al., 2019; Kwan & Tam, 2021) and receive support, either formal or informal, from others (Wagner, 2021; Yu & Rosenberg, 2020).

Azlina Md Yassin et al. (2018) pointed out finance, housing, and health care are among the basic needs closely related to the community of elders. Therefore, a smart retirement city would be a good choice as it caters to all those needs in the package. There is a growing demand for sustainable retirement city concepts to start taking place in Malaysia, and the same trend also can be found in other countries. World Health Organization (WHO) also introduced its Age-Friendly City model and set the priorities on eight domains, namely outdoor spaces and buildings, transportation, housing, civic participation and employment, respect and social inclusion, social participation, communication and information, and community support and health services in Figure 1, below.



Figure 1: World Health Organisation (WHO) Model of Age-Friendly Cities as cited in van Hoof et al. (2021)

In Malaysia, smart retirement city has the potential to grow (Azlina Md Yassin et al., 2018). According to a study initiated by Md Mansor et al. (2016), smart retirement cities refer to a relatively new housing demand mostly related to facilities, environment, lifestyles, and healthcare status. As a result, living in a smart city that compensates for the requirements and wants of the elderly community is a viable option. Living in a retirement city or village would benefit the elderly and provide security. Furthermore, it is practical because the community can use the facilities while participating in various social activities. Moreover, the retirement city is now being hailed as a feasible option for the elderly, as it may encourage and enhance freedom, choice, and quality of life (Gardner et al., 2005; Bernard et al., 2004; Jian et al., 2014 as cited in Azlina Md Yassin et al., 2018).

3.0 Methodology

This qualitative study delves into the discerning factors that shape retirees' preferences for a smart retirement city in Kedah. The research employed a purposive sampling technique and conducted in-depth interviews with a cohort of 13 retired individuals, segmented into three categories: former government employees, former private sector employees, and former self-employed individuals. The data collection process entailed recorded interviews, transcription, and coding, facilitated by thematic analysis using Nvivo software. The findings of the study could be influenced by the characteristics and perspectives of the 13 individuals interviewed. If these participants share similar backgrounds or views, it could introduce bias into the results.

4.0 Findings and Discussion

4.1 Demographic Profile of Informants

The demographic profile has three components: status of informants, gender, and race. All informants are aged 55 years and above. Informants were classified into three categories, namely former government employees (GS), former private sector employees (PS), and former self-employed (SE). Table 1 displays the informants' profiles.

Table 1: Demographic Profile of Informants No. Informants Status Gender Race **GS = Former Government Employee** PS = Former Private Sector Employee SE = Former Self- Employed PS1 Former Private Employee Female Malay PS2 Former Private Employee Female Malay 3. Former Private Employee PS3 Male Malay 4. 5. Malay PS4 Former Private Employee Male GS1 Former Government Employee Male Malay 6. 7. GS2 Former Government Employee Male Malay Former Government Employee Male Malay GS3 GS4 Former Government Employee Male Malay GS5 Former Government Employee Male Malay 10. SE1 Former Self- Employed Male Chinese Former Self- Employed SF2 11 Female Chinese 12. SE3 Former Self- Employed Female Indian SE4 Former Self- Employed Male 13. Malav

(Source: Field Study, 2022)

Table 2 below indicates there were 69.2% male informants, while the remaining 30.8% were female. Most of the informants were Malay (76.9%), followed by Chinese (15.4%), and the rest were Indian (7.7%). Lastly, former government employees dominated as informants with 38.4%, while former private employees and former self-employed represented the same rate of 30.8% each.

Table 2: Summary of Demographic Profile of Informants

| No. | Items | Levels | Counts | Percentage (%) |
|-----|--------|--------------------------------|--------|----------------|
| 1. | Gender | Male | 9 | 69.2 |
| | | Female | 4 | 30.8 |
| | Total | | 13 | 100 |
| 2. | Race | Malay | 10 | 76.9 |
| | | Chinese | 2 | 15.4 |
| | | Indian | 1 | 7.7 |
| | | | 13 | 100 |
| 3. | Status | Former Government Employee | 5 | 38.4 |
| | | Former Private Sector Employee | 4 | 30.8 |
| | | Former Self-Employed | 4 | 30.8 |
| | Total | | 13 | 100 |

4.2 Research Findings

The first research objective is to explore the need for a sustainable smart retirement city framework and the local context, preferences, and requirements for a sustainable smart retirement city framework in Kedah.

4.2.1 Research Objective 1: To explore the need for a sustainable smart retirement city framework for Kedah. Malaysia

Table 3: Summary of requirements for a sustainable smart retirement city framework

| ub.0 0 | . Carrillar y or roquiror | nonto for a cactaina | DIO CITICITE I CUI CITIC | in only mannomon |
|--------|---------------------------|----------------------|--------------------------|------------------|
| No. | Informants | Need | Don't Need | Not Sure |
| 1. | PS1 | V | | |
| 2. | PS2 | | | |
| 3. | PS3 | | | |

| 4. | PS4 | $\sqrt{}$ | |
|-----|-----|-----------|--------------|
| 5. | GS1 | | \checkmark |
| 6. | GS2 | $\sqrt{}$ | |
| 7. | GS3 | $\sqrt{}$ | |
| 8. | GS4 | $\sqrt{}$ | |
| 9. | GS5 | $\sqrt{}$ | |
| 10. | SE1 | $\sqrt{}$ | |
| 11. | SE2 | | \checkmark |
| 12. | SE4 | $\sqrt{}$ | |
| 13. | SE5 | $\sqrt{}$ | |

Table 3 indicates that 84.6% (11 informants) agreed with the question. Only 15.4% (2 informants) needed clarification about that issue. Hence, based on the informants' views, there is a need for a framework for the sustainable smart retirement city in Kedah. Based on the findings, most informants agreed that a sustainable smart retirement city should be seriously considered. The results suggest an urgent call for the idea to be mooted. Moreover, Malaysia is heading towards an aging nation in the year 2030, therefore, the need to create such a vibrant, conducive, and aging-friendly city is timely. Comprehensive efforts need to be initiated to understand the dimension of services, infrastructures, and additional support systems that the community of retirees requires to ensure the well-being element materializes.

4.2.2 Research Objective 2: To explore the local context, preferences, and requirements for a sustainable smart retirement city framework for Kedah, Malaysia

Table 4: Summary of preferences and requirements for a sustainable smart retirement city

| No | Requirement | | Informants | | | | | | | | | | | |
|----|-------------------------|-----------|------------|-----------|-----|-----------|-----|-----------|-----------|-----|-----------|-----|---------|-----|
| | | PS1 | PS2 | PS3 | PS4 | GS1 | GS2 | GS3 | GS4 | GS5 | SE1 | SE2 | SE3 | SE4 |
| 1 | Health services | √ | √ | √ | √ | √ | √ | | 1 | | | | $\neg $ | |
| 2 | Social Participation | $\sqrt{}$ | | | | | | | | | | | | |
| 3 | Community Support | | | | | | | | | | | | | |
| 4 | Communication & | $\sqrt{}$ | | $\sqrt{}$ | | | | $\sqrt{}$ | $\sqrt{}$ | | $\sqrt{}$ | | | |
| | Information | | | | | | | | | | | | | |
| 5 | Housing area for senior | | | | | | | | | | | | | |
| | citizen | | | | | | | | | | | | | |
| 6 | Employment | | | | | | | | | | | | | |
| 7 | Transportation | $\sqrt{}$ | $\sqrt{}$ | | | $\sqrt{}$ | √ | √ | | | | | | |
| 8 | Outdoor spaces | | | | | | | | | | | | | |

Table 4 summarizes preferences and requirements for a sustainable smart retirement city. All informants prioritized health services (smart living) and social participation (smart people) as the main criteria. Secondly, 69.2% of informants rated community support (smart people) and communication and information (smart infrastructure) as secondary priorities. Thirdly, 46.2% of informants chose transportation (smart infrastructure) as a preference and requirement. Furthermore, employment (smart economy) was rated by 38.5% of informants as an important element. Lastly, outdoor spaces (smart environment) and housing areas for senior citizens (smart living) were recorded at the same rate of 23% each.

The study revealed that informants expressed several key preferences for a smart retirement city. Health services were unanimously considered as a crucial feature, with informants emphasizing the importance of well-placed, accessible, and carefully designed health services that cater for their needs. This aligns with the age-friendly cities framework the World Health Organization (WHO) suggested. Thus, health services should be a priority for authorities and housing developers when designing a smart city concept targeting retirees as potential buyers. Other essential dimensions for a sustainable smart retirement city are social participation and community support. Many retirees are searching for activities and opportunities that allow them to utilize their expertise and skills meaningfully post-retirement. Appreciating and capitalizing on the knowledge and experience of retirees would benefit the local community. Additionally, employment opportunities for capable individuals should be highlighted. Infrastructure, information, and transportation were also crucial factors.

Communication platforms such as user-friendly mobile applications were deemed essential for community settlement. Transportation posed a challenge for retirees as limited mobility due to physical and cognitive factors restricted their abilities to travel. Relevant stakeholders, including authorities, private sector agencies, and NGOs, should consider integrated systems providing convenient transportation services. In a smart retirement city, having accessible outdoor spaces is considered important. People want to have vibrant environments and recreational parks available so that they can engage in physical activities such as cycling, walking, and fitness classes. These activities contribute to the mental and physical well-being of the retirees.

5.0 Conclusion and Recommendation

In conclusion, it can be said that there is a need for a sustainable smart retirement city framework in Kedah. Out of seven significant areas highlighted by the Ministry of Local Government Development for an ideal concept of a smart retirement city to be implemented in Malaysia, this study successfully identified five concepts, namely smart living, smart people, smart infrastructure, smart economy, and

smart environment (refer Figure 2). Hence, it is strongly advised that the relevant authorities incorporate a framework that takes into account input from informants when planning and developing a sustainable smart retirement city in alignment with the National Policy for Older Persons in Malaysia Plan. This study emphasizes the importance of addressing health services, social participation, community support, infrastructure, information, transportation, and accessible outdoor spaces when designing a sustainable smart retirement city.

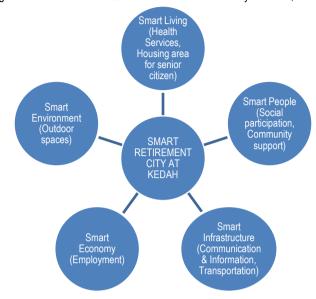


Figure 2: Framework for Sustainable Smart Retirement City in Kedah, Malaysia

Acknowledgment

The authors would like to express their gratitude to the UiTM Kedah Branch, especially to Bahagian Penyelidikan dan Jaringan Industri (PJI) for funding this research under Dana Penyelidikan Khas (DPK2021) (Reference No: 600-UiTMKDH.PJI.5/4/1, 1/2021).

Paper Contribution to Related Field of Study

This study is relevant to The Sustainable Development Goals Indicators for Malaysia under Goal No.3 (Good Health and Well-being) and Goal No.11 (Sustainable Cities and Communities). This study is also relevant to an extra SDG of Malaysia, Societal Harmony, and Happiness. It also tackles KEGA 8, 12, and 14 (Logistics, Transportation and Sustainable Mobility; Green Economy and Advanced and Modern Services). Besides, it also serves MySITE under the Smart Cities and Transportation and Environment and Biodiversity category.

References

Angelidou, M. (2017). The Role of Smart City Characteristics in the Plans of Fifteen Cities. Journal of Urban Technology, 1(28). Doi: 10.1080/10630732.2017.1348880

Azlina Md Yassin, Haidaliza Masram & Ong Suet Khim (2018). Potential Development of Retirement Village in Malaysia. International Journal of Property Science,8(1).

Barken, R. (2021). The temporal aspects of mobility intentions: Older peoples reflections on present and future support arrangements. Ageing and Society, 41 (3), 561–581. https://doi.org/10.1017/S0144686X19001223

Bayar, R., & Türkoğlu, H. (2021). The relationship between living environment and daily life routines of older adults. A/Z ITU Journal of the Faculty of Architecture, 18(1), 29–43. https://doi.org/10.5505/itujfa.2021.43410

Department of Statistics, Malaysia (2018). The Initial Assessment of The Sustainable Development Goals Indicators for Malaysia 2018. Putrajaya, Malaysia.

Finlay, J. M., Gaugler, J. E., & Kane, R. L. (2020). Ageing in the margins: Expectations of and struggles for "a good place to grow old" among low-income older Minnesotans. Ageing and Society, 40(4), 759-783. https://doi.org/10.1017/S0144686X1800123X

Granbom, M., Nkimbeng, M., Roberts, L. C., Gitlin, L. N., Taylor, J. L., & Szanton, S. L. (2021). "So I am stuck, but it's OK": Residential Reasoning and Housing Decision-making of Low-income Older Adults with Disabilities in Baltimore, Maryland. Housing and Society, 48(1), 43–59. https://doi.org/10.1080/08882746.2020.1816782

Henning-Smith, C., Shippee, T., & Capistrant, B. (2018). Later-Life Disability in Environmental Context: Why Living Arrangements Matter. Gerontologist, 58(5), 853–862. https://doi.org/10.1093/geront/gnx019

Ismail, H., Muhamad Halil, F., Zainan Abidin, A. W., & Hasim, M. S. (2020). The Elderly (Senior) Housing Preferences among Generations in Malaysia. Environment-Behaviour Proceedings Journal, 5(13), 145. https://doi.org/10.21834/e-bpj.v5i13.2102

Jakubec, S. L., Olfert, M., Choi, L. L. S., Dawe, N., & Sheehan, D. (2019). Understanding belonging and community connection for seniors living in the suburbs. Urban Planning, 4(2), 43–52. https://doi.org/10.17645/up.v4i2.1896

Kwan, C., & Tam, H. C. (2021). Ageing in place in disaster-prone rural coastal communities: A case study of Tai O village in Hong Kong. Sustainability (Switzerland), 13(9). https://doi.org/10.3390/su13094618

Lecovich, I. (2014). Ageing in Place: From Theory to Practice. Anthropological Notebooks, 20(1).

Lawton, M. (1977). An Ecological Theory of Aging Applied to Elderly Housing, Journal of Architectural Education, 31(1), 8–10, DOI:10.1080/10464883.1977.11102585

Md Mansor, Mohamad Naqiuddin & Maon, Siti & Ahmad, Mumtaz & Daud, Norzaidi. (2016). Attracting Factors of Retirement Village Migration: A Literature Review. Advances in Business Research International Journal,2(48).10.24191/abrij.v2i2.10024.

Ministry of Housing and Local Government (2018). Malaysia Smart City Framework; accessed May 4, 2021, from: https://www.kpkt.gov.my/resources/index/user_1/GALERI/PDF_PENERBITAN/FRAMEWORK/FRAMEWORK_SMART_CITY_FINAL_REPORT_190328.pdf

Ministry of Housing and Local Government (2018). Smart City Handbook: Malaysia; accessed April 20, 2022,from: https://www.kpkt.gov.my/kpkt/resources/user_1/GALERI/PDF_PENERBITAN/FRAMEWORK/Malaysia_Smart_City_Handbook_21062021_Final.pdf

National Policy for Older Persons (NPOPs), 2011

Odzakovic, E., Kullberg, A., Hellström, I., Clark, A., Campbell, S., Manji, K., Rummery, K., Keady, J., & Ward, R. (2021). It's our pleasure; we count cars here: An exploration of the neighbourhood-based connections for people living alone with dementia. Ageing and Society, 41(3), 645–670. https://doi.org/10.1017/S0144686X19001259

Rashid SA, Ghani PA, Daud N, et al. (2016). Malaysia's ageing population trends, Chapter 88. In: Amli Abdullah M, Kalthom Yahya W, Ramli N, Rosiah Mohamed S, Ahmad BE, editors. Regional Conference on Science, Technology and Social Sciences (RCSTSS 2014). Singapore: Springer Science & Business Media; 2016. doi:10.1007/978-981-10-1458-1_88

Samadi Ahmad (2017, February 28). Tubuh pusat komuniti warga emas di bandar. Berita Harian, pp.15

United Nations. (2020). World Population Ageing 2020 Highlights: Living Arrangements of Older Persons. In Department of Economic and Social Affairs. http://link.springer.com/chapter/10.1007/978-94-007-5204-7_6

Van Hoof, J., Marston, H. R., Kazak, J. K., & Buffel, T. (2021). Ten questions concerning age-friendly cities & communities and the built environment. Building and Environment, 199, Article 107922. https://doi.org/10.1016/j.buildenv.2021.107922

Wagner, A. (2021). Ageing in place with age-related cognitive changes: The impact of caregiving support and finances. Societies, 11(2). https://doi.org/10.3390/soc11020031

Xin Jin Lim, Siew Imm Ng & Norazlyn Kamal Basha (2019). To Retire or Not to Retire: Intention towards Concept of Retirement Village in Malaysia. Asian Journal of Business Research, 9(1). DOI: 10.14707/ajbr.190056

Yu, J., & Rosenberg, M. W. (2020). Ageing and the changing urban environment: the relationship between older people and the living environment in postreform Beijing, China. Urban Geography, 41(1), 162–181. https://doi.org/10.1080/02723638.2019.1643172

Zulkifli, A. (2022, July 22). Kedah has the second oldest population after Perak [Review of Kedah has the second oldest population after Perak]. New Straits Times. https://www.nst.com.my/news/nation/2022/07/814445/kedah-has-second-oldest-population-after-perak