THE ELDERLY QUALITY OF LIFE (E-QoL) AND RETIREMENT VILLAGE PREFERRED FEATURES BY MALAYSIAN GENERATIONS

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Abstract

Along with the continuous growth of the elderly population, Malaysia projected to become an ageing nation by 2030. The Retirement Villages are a Restricted Ageing Community that offers a complete range of services supplying the diverse housing demand of the elderly (seniors) generation. The World Health Organization (WHO) identified four broad domains universally relevant to the Quality of Life: physical and psychological health, social relationships, and environment. This study aims to provide an in-depth overview of the Retirement Villages in Malaysia. The objectives of this study are sets as follows: (i) To define the Elderly Quality of Life (QoL), and (ii) To determine the generational preferences features of Retirement Village in Malaysia. The Malaysian housing generations involved in this study are the Baby Boomers, Generation X (Gen-X), Generation Y (Gen-Y), and Generation Z (Gen-Z). With a mixed-methods approach, the derived findings revealed that preferred generational features of Retirement Villages are diverse for each main feature; (i) Location; (ii) Services; (iii) Design Criteria; (iv) Physical Environment; and (v) Social Activities. This study contributes more understanding of the main actors of property development and the real estate industry players on the preferred features for Retirement Villages in the Malaysian context.

*Keyword*s: Elderly (Seniors), Quality of Life (QoL), Age-Restricted Community, Retirement Village

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INTRODUCTION

As individuals age, housing expectations become more associated with health and care concerns. Among the houses related to the elderly is a non-assisted or independent living, assisted living and nursing homes (Tan & Lee, 2018). For seniors, various housing options are already accessible, varying from independent living to high-level care. Retirement villages are one of the options for an independent retirement lifestyle, providing the resident with comfort and flexibility in various ways (Hassan & Jiaqi, 2017). Retirement villages are multi-unit living communities that provide a variety of health, recreational, and support services to persons aged 65 and above (Sritharan et al., 2019). Elderly folks seeking a better lifestyle in the future will find a retirement village to be the ideal elderly housing option.

In Malaysia, just a few research have investigated the preferred attributes of Malaysian seniors housing (Ismail et al., 2020). To guarantee that the elderly's Quality of life is improved, the awareness of the need for proper retirement homes in Malaysia needs to be improved (Lim et al., 2019).

LITERATURE REVIEWS
The Generations and Elderly Generations Defined

Tung & Comeau (2014) described the generation as a group born within a specific time frame. Generations are defined as people born at the same time or gap, periods wherein economic and social movements occurred (Çelik & Gürcüoğlu, 2016). Table 1 shows different terms or names used to represent the generations according to each cohort group. Each generation may have a distinct personality and behaviour that will affect their needs and preferences. Every generation is influenced by their generational characteristics, beliefs, experiences, lifestyles, ideals, and demographic background. Each generation's timeframe has a significant impact on the next, and temporal gaps between them which increase disparities significantly (Çelik & Gürcüoğlu, 2016).

In addition, the definition of elderly, also known as senior citizens, varied across the literature. In Western countries, the beginning of old age correlates to retirement age ranging from 60 to 65 (World Health Organization, 2019). According to Jumadi et al. (2019), 60 years of age and above have been widely accepted as the start of the elder years, though definitions vary by country, community, and period. Morrison (2016) defined older people in a few terms, such as the caregivers, the aspirational downsizers, the older couple, and the typical adults aged 60-75 who might not employ, value their leisure time, and want to spend on themselves. The elderly, otherwise known as the Baby Boomers generation for those that, were born between 1946 and 1961 (Ismail et al., 2020). In the Malaysian context, the term elderly refers to people 60 years old and above following the Malaysian retirement age (Ismail et al., 2019). Yassin et al. (2018) describe retirement as when a person quits a career or paid job and starts to live

off their pension. Three necessities for retirees are finance, housing, and healthcare (Yassin et al., 2018). Retirement is a state of being or a relatively steady point in life.

Table 1: The Generations Classifications

Author	Generation Name	Generation Classification Years
Conisbee & Reed (2006); Ismail et al., (2019)	Baby Boomers, Baby Boom, Boomers, Traditional generations, Post-war generations, Me Generations, Baboo, Love Generation, Woodstock Generation and Sandwich Generation	1946-1961
Ismail et al.,(2019); Conisbee & Reed (2006); Tung & Comeau (2014)	Generation X (Gen-X), Gen Xers, 2nd Boomers, Baby Bust, Slackers, Thirteenth Generation, Why me Generations, The Latchkey Generation, Communist Generations.	1962-1976
Ismail et al., (2019); Conisbee & Reed (2006);	Generation Y (Gen-Y), Millennials, Echo Boomers, Why Generation, Net Generation, Democracy generation, Gen Wired, We Generation, DotNet, Ne(x)t Generation, Nexters, First Globals, iPod Generation, and iYGeneration.	1977-1991
Ismail et al., (2019); Conisbee & Reed (2006);	Generation Z (Gen-Z), Post Millennials, 0 Generation, Digital Natives, Me Generation, Generation and Generation 2020	1992-2012

The Elderly (Senior) and Housing

There has been an increase in worldwide studies on various topics concerning seniors and housing (Mulliner et al., 2020). According to Yassin et al. (2018), housing for the elderly was described as a place where the elderly can be protected, as well as the amount of care given within that location. Folks can safely stay in their dwellings as they age as long as they have the appropriate supportive services (Iecovich, 2014). Many elderly desire to age in place in their homes as long as they can (Chan, 2017). When individuals get older, they have less intention and are more hesitant to consider migrating (Hui et al., 2014). Other research in the Netherlands (Jong et al., 2012), Hong Kong (Hui et al., 2014), Sweden (Abramsson & Andersson, 2016), and Ireland (Fox et al., 2017) shows that elderly people have a strong desire to age in place. However, Ismail et al. (2019) argue that although the elderly generations have shown the desire to age in place and live independently, there will come to a point when they have no option but to rely on others. As a result, the elderly may have no choice but to move and live with their family members or move to other options of senior housing.

According to Aini et al. (2016), the typical housing alternatives for the older population may be grouped into four categories: family home (ageing in place), elderly care, medical institution, and retirement community. Independent Living, Assisted Living, and Nursing Homes are the most popular forms of senior housing for seniors in the Western (Tan & Lee, 2018). Some researchers explain that various housing options are available, varying from independent living to total care packages. Yassin et al. (2018) mentioned that retired people can now live-in retirement villages instead of their own or older people's homes. Specialised housing for the elderly provides varying levels of assistance and care (Ball & Nanda, 2013). According to the housing demand and late-life mobility theories, elders would choose the home that best meets and suits their needs (Gibler & Clements, 2011). World Health Organization (2019) has outlined the framework for senior-friendly housing, which consists of a few elements: affordability, community connection, access to services, safety and security, essential services, design and many more.

Mulliner et al. (2020) mentioned that elder-friendly housing should be built with ageing-in-place criteria. Several studies in several nations have discovered a trend toward smaller dwellings and apartment living as people get older (Andersson et al., 2019). Elders prefer a home without stairs (Abramsson & Andersson, 2016; Chen, 2017). Jong et al. (2012) reveal that in the Netherlands, the younger generation of retired people favoured detached residences. The residential attributes of the elderly are commonly connected to their safety and social cohesion (Ossokina et al., 2018). According to Chen (2017), detailed considerations for seniors' housing architecture include privacy, social interaction, clear direction, security and comfort. The elderly will feel safe and secure by living in an area with good security, providing indoor parking or generally a smaller building to live in (Ossokina et al., 2018).

The Retirement Village
Retirement villages are complexes, including residential premises mainly designed to be occupied by retirees engaged in village agreements Counsel (2014). A retirement village is a type of multi-residence dwelling, mainly consisting of communities of individual accommodation for older people or for people aged 55 and above who may have retired from their jobs (Osei-Kyei et al., 2020). Even though the terminology used to define retirement villages varies across the country, a retirement village may usually be described as a senior-centred community which offers various services and amenities (Peri et al., 2020). Generally, a retirement village is a housing community for elders who are typically capable of caring for themselves (Hassan & Jiaqi, 2017). In addition, Malaysia offers simplified types of retirement village concepts known as the 'Pondok' system (Aini et al., 2016), emphasising religious programmes and activities (Ibrahim et al., 2012).

A retirement village must be able to fulfil the demands of the increasing amount of senior citizens (Ejau et al., 2021). Retirement villages are, therefore, more than just an older communities; they are also places where the elderly and younger generations may connect socially (Bernard et al., 2012). This idea has been designed to provide the elderly with a well-maintained, new and healthy setting, as Ng et al. (2020) mentioned. The higher-end consumer market typically targets retirement villages. Ball & Nanda (2013) mentioned that some wealthier elderly would alter their current private homes and hire personnel to fit their needs. However, this personalised alternative is not recognised as a specialised dwelling. Table 2 shows some definitions of Retirement Village.

Table 2: Retirement Village Definition

Definition	Keywords	Authors
Retirement village comprises "a residential environment that is specifically designed to provide older people with accommodation, services and facilities to meet their requirements"	• Older people • Accommodation, Services and Facilities	(Hu et al., 2018)
A retirement village is " an age-segregated community that provides diverse services and facilities to meet the residents' unique needs in later life."	• Age-segregated community. • Diverse services and facilities • Meet needs in later life	(Hu et al., 2019)
Retirement villages and communities are defined as "structured, low-density, age-segregated developments built with private funds that provide comprehensive recreational facilities and generally low-cost housing for the senior."	• They are structured, low-density, age-segregated development. • It was built with a private fund. • Recreational facilities	(Hassan & Jiaqi, 2017)

A retirement village can offer several benefits to the resident (Yeung et al., 2017). Independent living has long been seen as a necessary component of good health (Ball & Nanda, 2013) which can be experienced in the retirement village as described by Yassin et al. (2018). Furthermore, a retirement village's amenities and social activities allow older people to connect and mingle with other residents (Yassin et al., 2018). Social relationships can assist the elderly in achieving happiness, a healthier life, and long life (Shah et al., 2021). Being in retirement villages could also minimise loneliness, enhance wellness, and enable elderly adults to age in place with confidence, according to a recent study in the United States (Graham et al., 2014). The facilities and amenities within walking distance in the retirement village promote ageing in place (Jolanki, 2021). Various services like transportation, meal delivery and medical treatment are also benefits of retirement villages (Siegler et al., 2015). Living in retirement villages has been shown to have a positive influence on improving individuality, well-being, standard of living and social connectivity and positive satisfaction with the living arrangement (Yeung et al., 2017)

The Elderly Quality of Life (E-QoL) Concept
The World Health Organization explain the Quality of life as a person's assessment of their place in life in line with objectives, goals and concerns. Following that, the established idea of health-related Quality of Life is described as how an individual performs in their life and also their overall wellness in physical, mental, and social (Köves et al., 2017). Cai et al. (2021) mentioned four components of the health dimension Quality of life are physical, mental, social, and functional health. Ferreira et al. (2018) describe the Quality of life of elders as a broad notion that encompasses not just physical health but also psychological well-being, independence, socialisation, personal views, and other aspects of an individual's lifestyle, such as goals, expectations, standards, and concerns. Numerous challenging conditions like changes in health condition, dealing with new constraints and new responsibilities are connected with older age effect on Quality of life. Seraji et al. (2017) also revealed that variables such as loss in cognitive compatibility and a decline in self-reliance might influence the Quality of life of senior people. Some prevalent factors used in measuring the Quality of life of the elderly are economic stability, privacy, physical health and more (Cantarero & Potter, 2014).

RESEARCH METHODOLOGY
The locality area of Johor Bahru City Council has been chosen as the case study. Johor Bahru City Council is one of the local authorities in the state of Johor, Malaysia. The Johor Bahru City Council governs the city of Johor Bahru and other parts of the Iskandar Malaysia region. The Johor Bahru City Council covers an area of 220 km². Based on the data from the Johor Bahru City Council, the total number of populations in the administration of Johor Bahru City Council are approximately 797,882 as of 2017.

This study employs a mixed-method research strategy. Combining both data in a convergent design will allow a researcher to acquire a strong understanding of the one provided by the quantitative or qualitative results (Dawadi et al., 2021). Furthermore, the employment of mixed methods in each study gives a more profound knowledge of research challenges than one alone (Ismail et al., 2020). Thus, research which adopts both approaches with a combination of qualitative and quantitative data gathering will eventually create robust research outcomes. For this research, five (5) property players as experts were interviewed (5th November 2021 until 3rd December 2021 to get their overview on the current Retirement Village preferences features. Convenient sampling has been chosen for the quantitative part of this study. The survey questionnaires were distributed through GoogleForm to the targeted population from 17th November 2021 to 10th December 2021). One hundred

sixty-one (161) collected survey questionnaire responses were further analysed using the software SPSS (version 26). Next, the quantitative variables were calculated with inferences from the significant population sample.

MAIN FINDINGS AND DISCUSSIONS
### The Retirement Village Preferred Features by Generations in Malaysia
Table 1 shows the summarised details of the respondents for this study. The gained responses comprised males (44.1 per cent) and females (55.9 percent). By generations; Baby Boomers Generation (19.3 percent); Generation X (19.3 percent); Generation Y (21.7 per cent); and Generation Z (39.8 per cent). Many of the respondents were employed (53.4 per cent), followed by unemployed (21.1 per cent), and the remaining were unemployed and retirees (25.5 per cent). Most of the respondents were married (54.7 per cent), and the remaining were single (45.3 per cent).

Table 1: Demographic Background of the Respondents

Characteristic	Details	Number of Respondents	Percentage (%)
Gender	Male	71	44.1
	Female	90	55.9
Generations	Baby Boomer	31	19.3
	Generation X	31	19.3
	Generation Y	35	21.7
	Generation Z	64	39.8
Occupation	Employed	86	53.4
	Unemployed	34	21.1
	Retired	41	25.5
Marital Status	Single	73	45.3
	Married	88	54.7
	Others	0	0
Ethnicity	Malay	101	63.0
	Chinese	37	23.0
	Indian	22	14.0
	Other (Iban)	1	1.0
Income Level	Below RM1,500	50	31.1
	RM1,501-	41	25.5
	RM5,000	54	33.5
	RM5,001-	16	9.9
	RM10,000		
	Above RM10,000		
Health Status	Excellent	56	34.8
	Good	66	41.0
	Fair	37	23.0
	Poor	2	1.2

Next, by ethnicity; Malay (63 percent); Chinese (23 per cent); Indian (14 per cent); and Others (Iban) (1 percent). Finally, by income groups, most of

the respondents (33.5 per cent) had an income level of between RM5,001-RM10,000, followed by an income level below RM1,500 (31.1 per cent). Next is the respondents' income level; the income level is between RM1,501-RM5,000 (25.5 per cent) and the income level group above RM10,000 (9.9 per cent). Lastly, the respondents were also asked to rate their health status. Most respondents have excellent health conditions (34.8 per cent), followed by good health conditions (41.8 per cent). While the other 23 per cent of the respondents have fair health conditions, and only 1.2 per cent have poor health conditions.
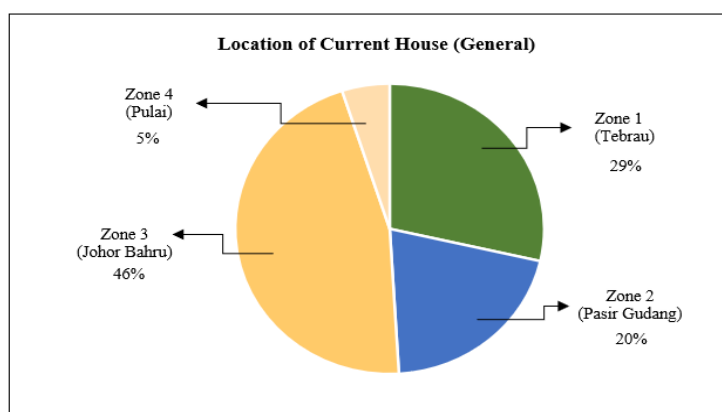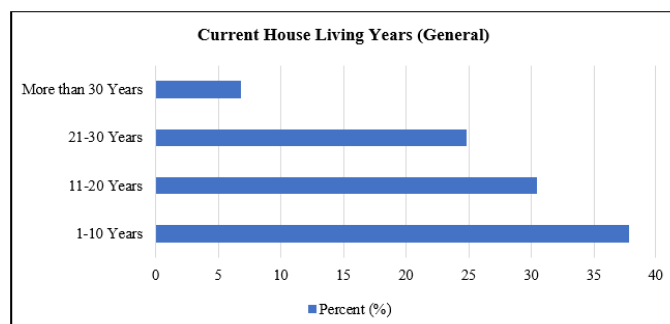

Figure 1: Location of Current House (Overall)

Location of Current House by Generation (Detail)								
Generations	**Baby Boomer**		**Generation X**		**Generation Y**		**Generation Z**	
Location	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
Zone 1 (Tebrau)	6	13.0	8	17.4	9	19.6	23	50
Zone 2 (Pasir Gudang)	9	27.3	7	21.2	11	33.3	6	18.2
Zone 3 (Johor Bahru)	12	16.2	15	20.3	13	17.6	34	45.9
Zone 4 (Pulai)	4	50.0	1	12.5	2	45.9	1	12.5
Total	31	19.3	31	19.3	35	21.7	64	39.8

Figure 2: Location of Current House by Generations

As illustrated above (Figure 1), the results show that most respondents live in Zone 3 – Johor Bahru (46 per cent). The respondents' location is followed by Zone 2 – Pasir Gudang (20 per cent) and Zone 1 – Tebrau (29 per cent). Finally, the least respondents live in Zone 4 – Pulai (5 per cent).

Figure 3: Current Housing Location (Years) (Overall)

Next, for the current house years of living, 37.9% (61) respondents currently live in their house for a duration of 1-10 Years, followed by 30.4% (49) respondents who lived in the house between 11-20 Years. 24.8% (40) of respondents have lived in their house for 21-30 Years. Meanwhile, only 6.8% (11) of respondents lived in their current house for more than 30 years.

Current House Living Years by Generations (Detail)								
Generations	**Baby Boomer**		**Generation X**		**Generation Y**		**Generation Z**	
Years	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
1-10 Years	3	4.9	1	1.6	28	45.9	29	47.5
11-20 Years	18	36.7	5	10.2	5	10.2	21	42.9
21-30 Years	9	22.5	16	40.0	2	5.0	13	32.5
More than 30 Years	1	9.1	9	81.8	0	0	1	9.1
Total	31	19.3	31	19.3	35	21.7	64	39.8

Figure 5: Current Housing Location (Years) by Generations

Table 2 shows the Retirement Village preferred features by Malaysian generations. For the Location Factors, the features of nearness to family, friends, and social networks were Ranked-1 by both Baby Boomers and Gen-X, Ranked-2 by Gen-Y and Ranked-3 by Gen-Z. Nearness to social meeting spots and leisure centres was also regarded as the most important locational preference; Ranked-1 (Gen-X and Gen-Y) and Ranked-2 (Baby Boomers). This finding shows that most generations prefer to live independently during retirement and are willing to consider residing in Retirement Village. However, the location of the Retirement Village must be near family and friends to able them to still have close contacts to be visited at any time or at least near social community centres for continuity of social engagements. This finding shows signs of Active-Ageing among the elderly or during elderly age. Next, the locational features of accessibility to health care centres/health services were Ranked-2 by both older generations (Baby Boomers and Gen-X).

In contrast, the feature was Ranked-1 by Gen-Y and Gen-Z younger generations. The contrast of preferences shows that the younger generations regard accessibility to medical services as the main priority feature for a Retirement Village. This finding shows that the younger generations are willing to live in Retirement Village not near the nearby family and friends. Thus, emergency service availability is most important compared to social aspects. Interestingly, the locational features regarding accessibility to local amenities were believed to be necessary to three generations, Ranked-2 by Gen Z and Ranked-3 by both the older generation (Baby Boomers) and the younger generation (Gen-Y). This finding shows that amenities are one of the most critical preferred features of housing location, including for a Retirement Village. Nearness to public transportation was Ranked-4 by the Baby Boomers, Gen-X and Gen-Z. This finding is because most of the Retirement Village will provide scheduled services of in-house transportation charter for the occupants of the Retirement Village.

As for the services factor, all three service preferences features, access to various services and amenities, healthcare services and support services, were regarded as most important by Baby Boomers (Ranked-1 Retirement Village. This feature is significant for the elderly to relocate to a Retirement Village Gen-X and Gen-Y are both Ranked-1 support services features and are accessible to varieties of services and amenities as Ranked-2.

For the design criteria preferences features, the elderly and user-friendly design were perceived as the most critical features (Ranked-1 and Ranked 2) by all generations (Baby Boomers, Gen-X, GenY and Gen-Z). A good Retirement Village should be equipped with elderly-friendly design features in the buildings and surroundings to able the elderly generation occupants to be having good Quality of life. This feature is also vital, including for each non-assisted Retirement Village. Developing senior-friendly surroundings which facilitate mobility and participation in fundamental activities might help elders to age in place even more (World Health Organization, 2019).

As for the physical environment preferences factor, green spaces allocation (Ranked-1 by Baby Boomers and Ranked-2 by Gen-X), Quality environmental conditions and layout orientation features were both Ranked-2 by Baby Boomers and Ranked-1 by Gen-X. These vital features show that the generation considers all three physical environment features; green space allocation, environmental conditions and layout orientation are crucial for a Retirement Village. Furthermore, the need for these physical environment preferred features shows that the elderly and the younger generations (Gen-X, Gen-Y and Gen-Z) appreciate the Quality of life (QoL), which emphasises physical, psychological and environmental features should be available in each Retirement Village.

Table 2: The Retirement Village Preferred Features by Malaysian Generations

Generations	Baby Boomer			Generation X			Generation Y			Generation Z		
Preferences Factors/Features	Mean	Standard Deviation	Rank	Mean	Standard Deviation	Rank	Mean	Standard Deviation	Rank	Mean	Standard Deviation	Rank
Location												
Near to family, friends, and social networks	3.94	0.250	1	3.68	0.475	1	3.89	0.323	2	3.45	0.733	3
Accessible to local amenities	3.77	0.425	3	3.39	0.558	4	3.80	0.406	3	3.64	0.601	2
Accessibility to health care center or health services	3.87	0.499	2	3.58	0.502	2	3.91	0.284	1	3.73	0.512	1
Near to public transportations	3.71	0.588	4	3.48	0.626	4	3.89	0.323	2	3.08	0.948	4
Near social meeting spots and leisure centers	3.87	0.499	2	3.68	0.475	1	3.91	0.284	1	3.11	0.857	5
Services												
Accessible to varieties of services and amenities	3.84	0.523	1	3.74	0.445	2	3.91	0.284	2	3.45	0.733	3
Healthcare Services	3.84	0.523	1	3.19	0.534	3	3.94	0.236	2	3.77	0.527	1
Support Services	3.84	0.523	1	3.81	0.402	1	3.91	0.284	2	3.59	0.555	2
Design Criteria												
Elderly and user-friendly design	3.90	0.301	1	3.61	0.558	1	3.89	0.404	2	3.64	0.627	2
Ageing in place criteria	3.84	0.374	3	3.32	0.475	3	3.80	0.473	3	3.50	0.690	3
Safety and Security Features	3.87	0.499	2	3.58	0.502	2	3.94	0.338	1	3.77	0.463	1
Physical Environment												
Quality Environmental Conditions	3.77	0.560	2	3.58	0.502	1	3.91	0.284	1	3.48	0.690	1
Green Spaces Allocation	3.81	0.534	1	3.42	0.502	2	3.83	0.382	2	3.47	0.712	2
Layout Orientation	3.77	0.560	2	3.58	0.502	1	3.80	0.406	3	3.33	0.736	3

CONCLUSIONS AND RECOMMENDATIONS

The findings from the study reveal four (4) main features for a Retirement Village in the Malaysian context; (1) Location; (2) Services; (3) Design Criteria; and (4) Physical Environment Preferred Features. The preferred Retirement Village Features derived from the study show signs of the willingness of the Malaysian Elderly and the generations to the idea of Retirement Village as an example of an Age-Restricted Concept in the promotion of Active and Healthy Ageing. The Retirement Village concept is widely accepted overseas as it is perceived as the

best option for the elderly to age in place independently yet still be valid to the community. In addition, the elderly-friendly housing design features and the social engagement features such as social activities and green physical environment surroundings embedded in the Retirement Village may assist in the idea of active ageing among the elderly.

This study focuses on Retirement Village features without considering specific features preferred by different religions or gender. Therefore, for future studies, a similar study on Retirement Housing in Malaysia is recommended to focus on the Quality of Life (QoL) of an Islamic Retirement Village. Including the Islamic Retirement Village preferred features is crucial for improving the 'Pondok' system as one of the available options for Age-Restricted Housing for the Muslim elderly in Malaysia.

REFERENCES
Abramsson, M., & Andersson, E. (2016). Changing preferences with ageing–housing choices and housing plans of older people. *Housing, theory and society*, *33*(2), 217-241.

Aini, A. M., Murni, N., & Abd Aziz, W. N. A. W. (2016). Housing aspirations of the elderly in Malaysia: A comparison of urban and rural areas. *Journal of design and built environment*, *16*(2).

Andersson, E. K., Abramsson, M., & Malmberg, B. (2019). Patterns of changing residential preferences during late adulthood. *Ageing & Society*, *39*(8), 1752-1781.

Ball, M., & Nanda, A. (2013). Household attributes and the future demand for retirement housing. *International Journal of Housing Markets and Analysis*, *6*(1), 45-62.

Bernard, M., Liddle, J., Bartlam, B., Scharf, T., & Sim, J. (2012). Then and now: evolving community in the context of a retirement village. *Ageing & Society*, *32*(1), 103-129.

Cai, T., Verze, P., & Bjerklund Johansen, T. E. (2021). The Quality of Life Definition: Where Are We Going?. *Uro*, *1*(1), 14-22.

Cantarero, R., & Potter, J. (2014). Quality of life, perceptions of change, and psychological well-being of the elderly population in small rural towns in the Midwest. *The International Journal of Aging and Human Development*, *78*(4), 299-322.

Çelik, S., & Arslan Gürcüoğlu, E. S. R. A. (2016). Generations and their relations in social processes. *Security Strategy and Political Studies*, *1*(1), 117-127.

Chan, P. H. (2017). *Ideal Design and Services for Aging Housing Development* (Doctoral dissertation, UTAR).

Chen, K. (2017). *Sustainable Design For The Elderly: Senior Housing Design Guidelines* (Doctoral dissertation, University of Florida).

Conisbee, N., & Reed, R. (2006). Identifying linkages between generations and the property market: the effect on residential and retail property. *Australian Property Journal,* 39(1), 32-41.

Counsel, A. P. (2014). Retirement Villages Act 2012. *Australia: Australian Capital Territory*.

Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-methods research: A discussion on its types, challenges, and criticisms. *Online Submission*, *2*(2), 25-36

Ejau, R. L., Julaihi, F. A., Amat Rais, S. L., & Mohamad Bohari, A. A. (2021). Exploring the sustainable retirement village concept in the Malaysian context: An initial review. *International Journal of Service Management and Sustainability*, *6*(1), 21-34.

Ferreira, L. K., Meireles, J. F. F., & Ferreira, M. E. C. (2018). Evaluation of lifestyle and quality of life in the elderly: a literature review. *Revista Brasileira de Geriatria e Gerontologia*, *21*, 616-627.

Fox, S., Kenny, L., Day, M. R., O'Connell, C., Finnerty, J., & Timmons, S. (2017). Exploring the Housing Needs of Older People in Standard and Sheltered Social Housing. *Gerontology & geriatric medicine*, *3*, 2333721417702349. https://doi.org/10.1177/2333721417702349

Gibler, K. M., & Clements, J. S. (2011). Testing a forecast model to predict movement of older Americans into retirement housing. *International Journal of Housing Markets and Analysis*, *4*(1), 18-30.

Graham, C. L., Scharlach, A. E., & Price Wolf, J. (2014). The impact of the "village" model on health, well-being, service access, and social engagement of older adults. *Health Education & Behavior*, *41*(1_suppl), 91S-97S.

Hassan, N., & Jiaqi, T. (2017). Preference For Purpose Built Retirement Neighbourhood Among the Chinese Elderly in Small Towns in Malaysia. *Planning Malaysia*, *15*.

Hu, X., Xia, B., Chong, H. Y., Skitmore, M., & Buys, L. (2019). Improving the sustainable retirement village framework: From theory to practice. *Journal of Cleaner Production*, *248*, 119290.

Hu, X., Xia, B., Skitmore, M. and Buys, L. (2018), "Providing a sustainable living environment in not-for-profit retirement villages: A case study in Australia", Facilities, *36*(5-6), 272-290. https://doi.org/10.1108/F-02-2017-0013

Hui, E. C., Wong, F. K., Chung, K. W., & Lau, K. Y. (2014). Housing affordability, preferences and expectations of elderly with government intervention. *Habitat International*, *43*, 11-21.

Ibrahim, W., & Zainab, I. (2012). Living Arrangement of Older Population in Rural Malaysia. *Advances in Natural and Applied Sciences*, *6*(3), 383-388.

Iecovich, E. (2014). Aging in place: From theory to practice. *Anthropological notebooks*, *20*(1).

Ismail, H., Aziz, F., & Wahab, M. A. (2019, November). The Elderly (Senior) Housing Options Preferences Among Malaysian Generations. In *IOP Conference Series: Earth and Environmental Science*, *385*(1), 012039. IOP Publishing.

Ismail, H., Nordin, M. S. A., & Abidin, A. W. Z (2020). The Elderly-Friendly Housing Design Features Preferences by Generations in Malaysia. *Environment-Behaviour Proceedings Journal*, *5*(15), 141–148.

Jolanki, O. H. (2021). Senior Housing as a Living Environment That Supports Well-Being in Old Age. *Frontiers in public health*, *8*, 914.

Jong, P., Rouwendal, J., Hattum, P., & Brouwer, A. (2012). Housing preferences of an ageing population: Investigation in the diversity among Dutch older adults. Netspar Discussion Paper No. 07/2012-024. Available at https://dx.doi.org/10.2139/ssrn.2120458

Jumadi, N., Noor, N. A. M., Bujang, A. A., Maimun, N. H. A., Ismail, W. I. F. W., Yusoff, N. S. M., & Rahman, M. S. A. (2019). Active ageing and housing environment concept among elderly Muslims. *Planning Malaysia*, *17*.

Köves, B., Cai, T., Veeratterapillay, R., Pickard, R., Seisen, T., Lam, T. B., ... & Wullt, B. (2017). Benefits and harms of treatment of asymptomatic bacteriuria: a systematic review and meta-analysis by the European Association of Urology Urological Infection Guidelines Panel. *European urology*, *72*(6), 865-868.

Lim, X. J., Ng, S. I., & Basha, N. K. (2019). To retire or not to retire: Intention towards concept of retirement village in Malaysia. *Asian Journal of Business Research*, *9*(1), 60-80.

Morrison, A. (2016). Housing suitable for an ageing population. *Working with Older People*, *20*(4), 204-208.

Mulliner, E., Riley, M., & Maliene, V. (2020). Older people's preferences for housing and environment characteristics. *Sustainability*, *12*(14), 5723.

Ng, S. I., Zhao, F., Lim, X. J., Basha, N. K., & Sambasivan, M. (2020). Retirement village buying intention: A case study on the Muslim and non-Muslim Malaysian elderly. *Asia Pacific Journal of Marketing and Logistics*, 32, 1451-1473.

Osei-Kyei, R., Wuni, I. Y., Xia, B., & Minh, T. T. (2020). Research trend on retirement village development for the elderly: a scientometric analysis. *Journal of Aging and Environment*, *34*(4), 402-416.

Ossokina, I. V., Arentze, T. A., van Gameren, D., & van den Heuvel, D. (2020). Best living concepts for elderly homeowners: combining a stated choice experiment with architectural design. *Journal of Housing and the Built Environment*, 35, 847-865.

Peri, K., Broad, J. B., Hikaka, J., Boyd, M., Bloomfield, K., Wu, Z., ... & Connolly, M. J. (2020). Study protocol: older people in retirement villages. A survey and randomised trial of a multi-disciplinary invention designed to avoid adverse outcomes. *BMC geriatrics*, *20*(1), 1-9.

Seraji, M., Shojaeizadeh, D., & Goldoost, F. (2017). Quality of life of the elderly residing in Zahedan (South East of Iran). *Iranian Rehabilitation Journal*, *15*(3), 215-220.

Shah, S. A., Safian, N., Ahmad, S., Wan Ibadullah, W. A. H., Mohammad, Z. B., Nurumal, S. R., ... & Shobugawa, Y. (2021). Factors Associated with Happiness among Malaysian Elderly. *International journal of environmental research and public health*, *18*(7), 3831.

Siegler, E. L., Lama, S. D., Knight, M. G., Laureano, E., & Reid, M. C. (2015). Community-based supports and services for older adults: A primer for clinicians. *Journal of geriatrics*, *2015*.

Sritharan, K., Yiin, H. K., Krishnan, K., Nee, K. B., Manickam, M. K., Uei, P. C., ... & Wais, Y. W. S. (2019). Factors That Influences the Intention of Middle-Aged Adults' in Johor to Move Into A Retirement Village. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, *4*(5), 34-42.

Tan, T. H., & Lee, J. H. (2018). Assessing the determinants of retirement home ownership among Malaysian young-old seniors. *International Journal of Housing Markets and Analysis*. *11*(4), 687-700.

Tung, L. C., & Comeau, J. D. (2014). Demographic transformation in defining Malaysian generations: The seekers (pencari), the buiders (pembina), the developers

(pemaju), and generation Z (generasi Z). *International journal of academic research in business and social sciences*, *4*(4), 383.

World Health Organization. (2019). *World Report on Ageing and Health. 148*, 148–162.

Yassin, A. M., Masram, H., & Khim, O. S. (2018). Potential development of retirement village in Malaysia. *International Journal of Property Sciences (E-ISSN: 2229-8568)*, *8*(1), 40-51.

Yeung, P., Good, G., O'Donoghue, K., Spence, S., & Ros, B. (2017). What matters most to people in retirement villages and their transition to residential aged care. *Aotearoa New Zealand Social Work*, *29*(4), 84-96.