

HOUSING DECISION: THE CHOICE BETWEEN LOCATION, HOUSE AND NEIGHBOURHOOD AMONG MALAYSIAN GENERATIONS

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Abstract. Literatures on property development evidence demographics and population as one of the main factors influence property development process. Demographic changes would affect the economic and the property market thus contributes to dramatic change that affects the generations. The differences of attitudes and values between generations resulted diversification of housing decisions and the choice made. The generations are the population categorised by the age cohort; namely The Baby Boomers, Generation X (Gen-X), Generation Y (Gen-Y) and Generation Z (Gen-Z). The aim of this study is to provide an in-depth overview on housing decisions of choices made between location, house and neighbourhood among Malaysian generations. This study employs mixed methods approaches with Selangor, Malaysia as case study. The data were analysed using the Pair-wise and Analytic Hierarchy Process (AHP). The analysis reveals the Malaysian generations' housing choices as; (1) House; (2) Location and; (3) Neighbourhood. The findings show similarities and differences of housing decision by generations on the choices between location, house and neighbourhood. The findings is significant in providing better understanding to the actors of property development on the main housing choice attraction factors of the generations which useful for better housing provisions.

Introduction

Generational Differences would reflect difference of preferences among generations as result of dissimilarities on decision made. Diversifications of housing choice among generations occur as different generations are equipped with different needs, taste and preferences. Some people see housing as a shelter to fulfil their fundamental needs only (Bujang et. al. 2010). To most individuals, housing represents the largest single investment of a lifetime and view as one fundamental goods for consumer. The buyer behaviour is a study associated with the decision-making process an analysis of how the purchasers decide in choosing between two or more alternative products and the reason on why they decided to finally choose only one. The high volume of unsold properties in the local housing market is mainly caused by a mismatch between delivered housing characteristics and potential homebuyer needs (Tan and Khong, 2012). Hence, detail studies on housing especially by generations were needed for narrowing the mismatch gap and better housing provisions. The aim of this study is to provide an overview on the housing decisions of generations in Malaysia. The main findings will show how preferences differ across generations. The research objectives are; (i) To categorise generations; (ii) To explain housing decision; and (iii) To compare the housing decisions among Malaysian generations.

Literature Review

Housing and Generations

Housing is more than just a shelter (Ademiluyi, 2010). A house is an asset that was found to be associated with lifestyle which includes economic, social and

educational needs. Housing is different from other essential needs. It is unique due to its durability, cost and diversity which can be passed across generations (Skaburskis, 2002). The distinctive criteria of the housing market which heterogeneous with no central market compared to the other market making housing as special type of product. Housing markets associates with various interrelated factors to make it happen. The market are not in equilibrium with the actors as initiators do not have inclusive information and the buyers tend to be as not always being rational that would result the challenges in forecasting changes of the market. The issue on how demographics drive the demand for housing has been intensely debate and analyze by numerous researchers internationally but not by generations in specific by comparisons. Mulder (2006) who explores the relationship between population and housing emphasis that population change leads to changing demand of housing. The term population refer to the generations; the group of people categorised according to the year they were born or based on the age groups. For the purpose of this study, the generations were referring to name and age cohorts given by Reed and Conisbee (2006); The Baby Boomers (born 1946-1961), Generation X (Gen-Z) (born 1962-1976), Generation Y (Gen-Y) (born 1977-1991) and Generation Z (Gen-Z) (born after 1992).

The Consumer Behaviour Decision Making and Housing Consumer Behaviour

Consumer behaviour associates with the selection, purchase and consumption of goods and services for the satisfaction of their wants (Gajjar, 2013). The traditional five-stage model suggests that the client typically passes through five stages; (i) need recognition; (ii) information

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search; (iii) evaluation of alternatives; (iv) purchase decision; and (v) postpurchase behaviour. The five-stage model implies that the buying process starts long before the actual purchase and consequences long afterward (Kotler, 2012). Knowledge on housing buyer behaviour requires understanding on the consumers' buying decisions or housing choice. Two (2) main factors influence the consumer decision making process are; (1) the individual (personal); and (2) the social factors. The individual (personal) factors are contained by the consumer and differ to each person that includes perception, beliefs and attitudes, values, learning, self concept and personality. Social factors which effects the decision making process include all interactions between consumer and the external environment, family, opinion leaders, social class and culture. Dodoo (2007), further adds that families as the most important factors of buying decisions. The other factors shaping the purchases of consumer are such as social, cultural, personal and psychological. The consumer behaviour is also an important factor to indicate the decision making process in buying a house. Livette (2006) suggesting generic decision-making process for house-buyer behaviour model, which comprises the steps in column 1 to column 6 (from the left) (Figure 1).

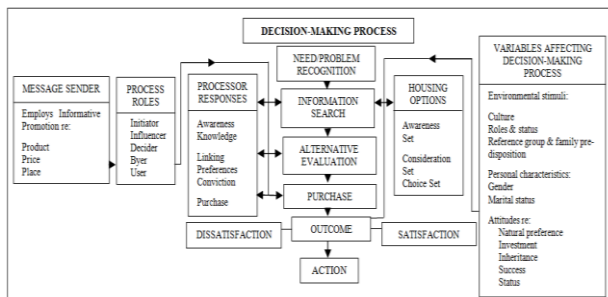


Figure 1: Model of house buyer behaviour (Livette, 2006)

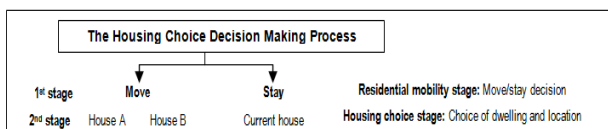


Figure 2: Sequence of The Housing Choice Decision-Making Process (Adapted from Kim et. al., 2005)

A household's housing decision-making process is tremendously complex and very contingent. Variety of approaches were used in analysing housing decision process. According to Kim et. al., (2005), the housing or residential decisions can be divided into two (2) major stages; (i) The Residential Mobility Stage (decision to move/stay); and (ii) The Housing Choice Stage (including residential search and choice of a new residence) (Figure 2).

Housing Decision: The Choice between house, location or neighbourhood?

Several studies suggested that the characteristics of housing namely dwelling, locational and neighbourhood attributes play an important role that affect housing selection (Wang & Li, 2006; Hurtubia et. al., 2010; Lachman, 2010; Tan, 2012). Housing selection were

made based on residential/housing choice stage referring to the important factors which influenced the residents' choice of their present housing. Residential or housing choice, to some extent also reflects a preferred lifestyle (Ge et. al., 2006). Traditionally mobility was associated with maximizing economic well-being and quality of life factors are becoming an important factor for residents in choosing their residential location (Howley et. al., 2008). Likewise, Clark et. al., (2006) establishes that individuals weight both the quality of the house and the neighbourhood in their decision process. In addition Kauko (2006, 2007) stressed that the locational factors of housing are much more important than the house itself. In addition, the combination of the physical built environment and a sense of neighbourhood were important in the process of community development. This is important not only to the community as a whole, but also to individual residents in any community for their own personal development (Li, 2007). The decision to move or stay is influenced by a range of pull and push factors (Montgomery and Curtis, 2006). The push factors may include an increase in externalities like pollution or crime, changes in housing affordability, dissatisfaction with the current dwelling or changes in household structure (as a result of a birth, death or divorce for example). The pull factors often include things like access to good quality public services (like schools and health care facilities), employment, leisure and recreational opportunities or the fulfilment of housing aspirations (Sanchez & Dawkins 2001). This paper focuses on three (3) main housing choice factors; decision between house, location and neighbourhood among the Malaysian generations.

Methodology

This study employs mixed method research strategies with combination of qualitative and quantitative approaches. Mixed methods research is a design for collecting, analyzing, and mixing both quantitative and qualitative research/data) in a single study or series of studies to understand a research problem (Creswell, 2006; Creswell and Plano, 2007). The reason for adopting mixed methods as this study is under consumer behavioural type of study and the advantages of the method which according to Cresswell (2009) provides a better understanding of research problems than either approach alone. The value that mixed methods add can be made on several grounds (Cresswell, 2009). Interviewing, administering questionnaire, and observing people and phenomena are the three main data collection methods in survey research (Sekaran and Bougie, 2010). The qualitative data were needed in showing demographics (population) as the main factor to be considered in property development especially for housing provision that closely relate with demand and supply for housing. This was done through interviews with the local authorities and housing developers in Selangor. The quantitative data via survey questionnaires to the housing consumers were primarily necessary in ascertaining the residential environment preferences of

the Malaysian generations. A total of 1,067 respondents were contacted through several forms of survey methods; drop-off, face-to-face interview, postal interview and internet survey (web-survey).

This study adopted three (3) separate methods of data analyses namely; (i) The Descriptive Analysis Techniques (*Excell & SPSS*); (ii) The Comparison Analysis (*Pair-wise Method*); and (iii) The Analytic Hierarchy Process (*AHP*) Method. Firstly, the data was analysed by using the Excell and SPSS 16.0 software package in obtaining basic and general statistical indications derived from the results readings on respondents' characteristics, current housing status, the general features for future housing preferences, housing mobility and residential environment preferences. Next, a descriptive method known as Paired Comparison (Pair-wise) were employed to work out the relative importance of housing choices between house, location and neighbourhood as main attraction factors for housing. Findings from past studies correspond location as one of the most important factors affecting the individual's decision making in purchasing a house (Daly et al., 2003; Kaynak and Stevenson, 2007; Sengul et al. 2010; Xiao and Tan, 2007). House features are found to have a significant relationship with house purchase intention (Chia et. al. 2016). A property that is located in a good neighbourhood is more preferable and house buyers are willing to pay extra money for a house with good environmental qualities (Tan Teck-Hong, 2011). The Pair-wise require respondents to decide the most and least preferred housing choice (house, location, neighbourhood) between two (2) given options at a time. The findings were referring to the higher percentage shown from the data analysis results. A score were assigned (maximum response– minimum response) to show how much more important one options it is as compared to the other given options. These values were then converted into percentage of total score for better understanding of the relative importance. The Pair-wise method is an advanced management method of asking questions with the use of scaling technique. According to Kumar et. al. (2013), the various types of scaling techniques used in research can be classified into two (2) categories; (i) comparative scales; and (ii) non-comparative scales. In comparative rating scale, the respondents evaluates (assign a value) to a particular item/brand/product in comparison to other items/brands/products. The evaluation cannot be possible without comparison. Finally, the Analytic Hierarchy Process (AHP) Method was adopted. Plenty of papers have been published based on the AHP, which include application of AHP in different fields, such as planning, selecting a best alternative, resource allocations, resolving conflict, optimization, and numerical extensions of AHP (Validya and Kumar, 2006). Multi-attribute modelling is a suitable method for evaluation of other than monetary values (Wu, 2010). There are numbers of published papers on housing consumer behaviour applies the Analytic Hierarchy Process (AHP) method in their studies (Kauko, 2006, 2007; Wu, 2010). The AHP has been used extensively in research of built environment, house selection, and house quality. The

AHP has been successfully applied for residences' selection, enabling the decision makers to connect the subjective and the objective factors involved in the multi-criteria decision. Wu (2010) further noted that Analytical Hierarchy Process (AHP) offer a simple and effective method for determining the appropriate weighting of different environmental qualities. The use of Pair-wise and AHP method for this study is suitable in determining housing choice of the Malaysian generations.

Results and Discussions

For qualitative, the interviews were conducted with local authorities and main housing developers in Selangor revealed that population is being considered in the planning for housing. Although there is study conducted on population and housing by the housing developers however it is very general which covers the market and feasibility study a study determining the 'saleability' and market demand for housing but not specific in detail study by generations Therefore, this supported the needs of conducting this study in determining the housing decisions made by generations on the choices made between house, location or neighbourhood. This findings will later be used in continuation of other detail studies on housing.

The quantitative data on the housing consumers were analysed by using SPSS, Paired Comparison Analysis (Pair-wise method) and Analytical Hierarchy Process (AHP) Method. The use of Pairwise was to highlight the most and least preferred attraction factors (location, neighbourhood and house) based on three (3) pairs of given choices (option); 1st pair – choice between Location and House; 2nd pair – choice between Location and Neighbourhood and; 3rd pair – choice between House and Neighbourhood.

Table 1: The Important Attraction Factors for Future Housing – SPSS

SPSS	
Attraction factor	Level of importance (percent)
Location	66.7
House	33.3
Neighbourhood	0.0

Table 2: The Important Attraction Factors for Future Housing – The Pairwise Method

THE PAIRWISE METHOD		
Pair	Most preferred	Percent
Location vs. House	Location	63.9
Location vs. Neighbourhood	Location	56.5
House vs. Neighbourhood	House	64.2

The results show that in general (Table 1), location (66.7 percent) was chosen as primary attraction factor for future housing followed by house (33.7 percent). Conversely, in the first run of the analysis (by using SPSS) neighbourhood were not considered at all by the respondents to be as one of the attraction factors of housing. Nevertheless, in the second run of the analysis (by using the Pair-wise method) in general (Table 2); for the first pair of given option of between the factors of location and house most of the respondents choose location (63.9 percent). Meanwhile, for the second pair of given option of between the factor of location and

neighbourhood most of the respondents still choose location (56.5 percent) as the main attraction factors for future housing. While as for the third pair of given option, between the factors of house and neighbourhood the respondents choose house (64.2 percent).

Additionally, in the third run of the analysis (Table 3) the responses were further analysed by using the Analytic Hierarchy Process (AHP Method). The AHP method was adopted in weighting the housing choice of the generations detail together with the use of Pair-wise. The AHP in this study employed a five-point scale questionnaire to allow the respondents to choose among “Indifferent”, “Weakly prefer”, “Considerably prefer”, “Strongly prefer” or “Absolutely prefer”. The actual input into the analysis was based on Pair-wise weights of 1 to 5. The results of the weighting of each factor generated from the 43 qualified (95%) showing consistent results of equal or lower than 0.1 while 409 showed inconsistent results that were higher than 0.10.

Table 3: The Important Attraction Factors for Future Housing - The Analytic Hierarchy Process (AHP)

No	Location	House	Neighbourhood	CR
1	0.609	0.120	0.272	0.060
2	0.097	0.620	0.284	0.073
3	0.097	0.620	0.284	0.073
4	0.104	0.665	0.231	0.073
5	0.620	0.284	0.097	0.073
6	0.587	0.122	0.320	0.113
7	0.106	0.634	0.260	0.029
8	0.097	0.620	0.284	0.073
9	0.609	0.272	0.120	0.060
10	0.360	0.127	0.512	0.090
11	0.648	0.122	0.229	0.000
12	0.634	0.260	0.106	0.029
13	0.634	0.260	0.106	0.029
14	0.634	0.260	0.106	0.029
15	0.120	0.609	0.272	0.060
16	0.106	0.634	0.260	0.029
17	0.581	0.309	0.109	0.000
18	0.106	0.634	0.260	0.029
19	0.097	0.620	0.284	0.073
20	0.097	0.620	0.284	0.073
21	0.104	0.665	0.231	0.073
22	0.620	0.224	0.155	0.090
23	0.097	0.620	0.284	0.073

24	0.260	0.106	0.634	0.029
25	0.104	0.665	0.231	0.073
26	0.097	0.620	0.284	0.073
27	0.106	0.634	0.260	0.029
28	0.104	0.665	0.231	0.073
29	0.102	0.592	0.366	0.082
30	0.613	0.267	0.121	0.038
31	0.360	0.127	0.512	0.090
32	0.346	0.110	0.544	0.046
33	0.346	0.110	0.544	0.046
34	0.634	0.260	0.106	0.029
35	0.198	0.312	0.490	0.046
36	0.360	0.127	0.512	0.090
37	0.360	0.127	0.512	0.090
38	0.224	0.620	0.155	0.090
39	0.334	0.141	0.525	0.040
40	0.620	0.224	0.155	0.090
41	0.272	0.120	0.609	0.060
42	0.609	0.120	0.272	0.060
43	0.634	0.106	0.260	0.029

CR: Consistency Ratio Index

Table 4: The Important Attraction Factors for Future Housing – The AHP Method

THE AHP METHOD		
Factor	Mean factor weight	Rank
Location (n = 43)	0.3353	2
House (n = 43)	0.3701	1
Neighbourhood (n = 43)	0.2947	3

Table 5: Preference for Attraction Factors by Gender

Factor	Group mean factor weight			
	Male (n = 15)	Rank	Female (n = 30)	Rank
Location	0.4044	1	0.3019	3
House	0.2736	3	0.4167	1
Neighbourhood	0.3221	2	0.3344	2

Table 6: Preference for Attraction Factors by Generation

Factor	Group mean factor weight							
	Baby Boomer (n = 3)		Generation X (n = 10)		Generation Y (n = 24)		Generation Z (n = 6)	
Location	0.4063	2	0.3008	3	0.3638	2	0.2433	3
House	0.1610	3	0.3460	2	0.3952	1	0.4143	1
Neighbourhood	0.4330	1	0.3533	1	0.2410	3	0.3428	2

A summary of the average factor weights presented in Table 4 with comparisons of important attraction factors such as location, house and neighbourhood for future housing were examined. In general, the results suggest that the respondents opt house as their first choice (rank – 1) of attraction factors for future housing. This is followed by location as their second choice (rank – 2) and neighbourhood as their last choice (rank – 3). Adversely, when these pairs of given options (location vs. house, location vs. neighbourhood

and house vs. neighbourhood) were analysed and compared by gender and across generations the results differ by ranking (Table 5). Male respondents choose location as their main attraction factor for housing (rank - 1), followed by neighbourhood (rank - 2) and house (rank - 3). In contrary, the female respondents regard house (rank – 1) as most important followed by location (rank – 2) and location (rank – 3). In detail (Table 6), referring to the distribution according to each generation, the ranking of the attraction factors for the Baby boomers were; (1) Neighbourhood ; (2) Location ; and (3) House. For Gen-X the ranking for the factors of attraction were; (1) Neighbourhood, (2) House, and (3) Location. As for Gen-Y the preference according to rankings; (1) House ; (2) Location ; and (3) Neighbourhood and Gen-Z; (1) House ; (2) Neighbourhood ; and (3) Location. The housing decision made were influenced primarily by spouse/partner/husband or wife and Family/family members.

Table 7: Preferred Factors of Attraction for Future Housing: Paired Comparison Analysis (Pair-wise) and Analytical Hierarchy Process (AHP)

Factor	Paired Comparison Analysis (Pair-wise)	Analytical Hierarchy Process (AHP)	
	Importance (percent)	Mean factor weight	Rank
Location (n = 43)	66.7 (1)	0.3353	2
House (n = 43)	33.3 (2)	0.3701	1
Neighbourhood (n = 43)	0.0 (3)	0.2947	3

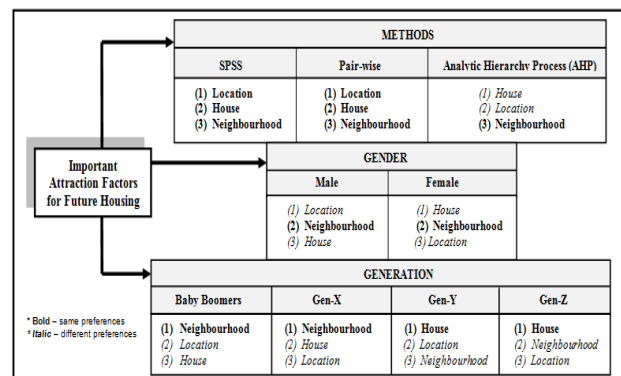


Figure 3: Summary of Findings – Important Attraction Factors for Future Housing

The most important finding shows that the results of analysis by using SPSS and Pair-wise method. Although similar results were derived from two (2) analyses (SPSS and Pair-wise method) were in contrary with the results by using the AHP method (Table 7), the results is still considered to be valid and significant since the results derived from the SPSS and Pair-wise methods constantly show that the factors of location and house were still being regard as the prime factors of attraction for future housing. Although the results (findings) from three (3) different types of analyses (methods) shows some inconsistency or differences (Figure 3) yet, this can still considered to be valid as the factors is significant due to the fact that different methods of analyses were used for the purpose of different types of findings (findings in general/overall, findings in detail/specific according to each generations). The differences of housing decision between generations found in this study

shows that different generations were equipped with different needs, taste and preferences. Differences of housing decision by gender were due to their nature of perceptions. Male consider location as their prime choice for housing as compared to female who put neighbourhood as their main choice for housing. Purchasing behaviours of consumers present difference according to the gender. Such a difference makes it necessary the female and male consumers to purchase and make positioning, considering the products purchased (Özturk and Ceylan, 2016). According to Mitchell and Walsh (2004), males and females want different products and they are likely to have different ways of liking and obtaining these. Gender has an important role in consumers' behaviour. The differences between men and women about expectation, wants, needs, preferences and life-style signify their consumption behaviours. When it comes to actually making the decision, women generally make purchase decisions on a more emotive level, whereas men go more with the facts and data (Siddiqui, 2016).

Conclusion

Decision making means the selection of the best alternative. This paper presents the housing decisions of the Malaysian generations (The Baby Boomers, Gen-X, Gen-Y and Gen-Z) on the choices of between three (3) main alternatives of preferences; (i) House; (ii) Location; and (iii) Neighbourhood. The Pair-wise method were used together with the Analytic Hierarchy Process (AHP) as the best decision making methods that can be applied in housing decision among the Malaysian generations. The findings show that there were differences in terms of preferences among generations (generational differences) and between genders on the attraction factors for future housing choice.

By generations, the older generations; The Baby Boomers and Gen-Y choose neighbourhood as their first option compared to the younger generations; Gen-Y and Gen-Z with the view of house as the most important attraction factor for future housing. The view of considering neighbourhood as the most important attraction factor by the Baby Boomers and Gen-Y show some indication that these generations would appreciate other related factors of residential environment such as community and sense of belonging. Baby boomers were the empty nesters, prefer to be independent and with tendency of staying right where they are (same neighbourhood) for their entire elderly life. Thus, better housing policies for the elderly generations should be made available for better elderly housing provisions. As a start, relevant housing concept such as the multi-family housing, walkable and elderly friendly housing neighbourhood can be introduced to the Malaysian Baby Boomers and the Gen-X as the younger elderly generation. As for younger generations, Gen-Y and Gen-Z consider house as their prime option of housing choice. This is due to the fact that owning a house is an essential and was set to be the main priority to the younger generations as the first-time house buyers acting

as the first-timer of household formation (own family and house after first-marriage and leaving parental house). Besides housing ownership, this choice of house physically by the younger generations may as well include high preferences on either the structure of the house or the design of the housing unit itself. Hence, more affordable housing should be made available for these younger generations to support their accessibility as well as their needs for home ownership. The issue of affordable housing is very significant for the younger generations who are still struggling in owning a house as this generation is still in their early career life with limited of source of income. Finally, by genders it show that male housing consumers favour location as their most preferred attraction factor for housing choice. The female put highest preference on the house itself due to their personality which equipped with different expectation that reflect their consumption behaviour. The findings of this study shows generational differences on the housing decisions and the choices. The Pair-wise and AHP methods were the best method of decision making in the consumer behavioural study on housing decision by generations.

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