Factors Affecting the Preferences of Housing in Gated and Guarded Communities in Negeri Sembilan

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Abstract-- Gated communities are growing rapidly, contributing to spatial transformation in a very significant way. This in turn, has a great influence on urban development and social integration at the local level. It is obvious that a lot more of this type of housing are being developed across the country and they seem to become almost a dominant feature of Malaysian housing development projects. Developers see gated and guarded projects as an important niche marketing strategy in a competitive environment. As the customers' preference on housing changes from time to time, analysers will not be able to perform independent judgement and minimise the risks of uncertainty regarding residential housing preference without deep understanding of this behaviour. There is urgency in studying these housing developments because they are growing uncontrollably. The preferences of residents' need to be studied to know the differences in their choice, so it can be applicable for urban planning and housing provisions. This study therefore focuses on examining residents' preferences for living in gated and guarded community in Negeri Sembilan, Malaysia.

The study through data collected from 200 respondents examines influences like environmental factor, property physical factor, luxury and financial factor on the preferences of housing in gated and guarded communities. The data was analysed in three ways: descriptive statistics were provided to determine the mean and standard deviation scores for the four factors; analysis of variance (ANOVA) tests were conducted to determine the relationship between the demographic profiles and respondents' preferences; and SPSS analysis was employed to assess the hypothetical relationships between the factors and preferences of housing in gated and guarded communities. Results of the analysis revealed that the factors (property physical factor, luxury and financial factor) showed a positive influence on the preferences of housing in gated and guarded communities in Nilai, Negeri Sembilan while environmental factor has no relationship with the preferences of the respondents. Implications of these findings for researchers and estate developers were further discussed.

Keywords--Preferences, Housing, Gated and Guarded, Homebuyers, Environment, Luxury
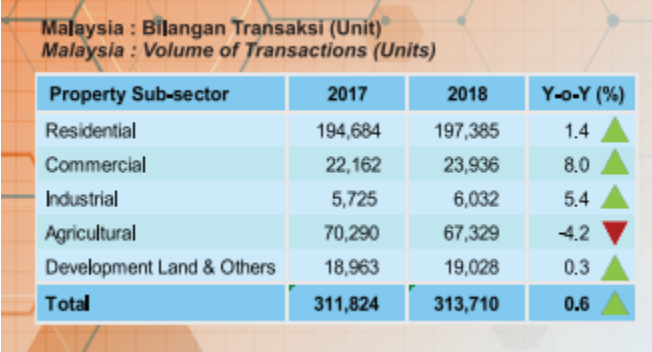
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I.   INTRODUCTION

The development of gated and guarded communities has grown tremendously. Within the context of residential property industry, gated communities are growing rapidly, contributing to spatial transformation in a very significant way. This in turn, has a great influence on urban development and social integration at the local level. In Malaysia, residential housing is the dominant properties in the real estate market. According to the Malaysia Property Market Report (JPPH, 2018),the property sector recorded 313,710 transactions (units) worth RM140.33 billion in 2018, an increase of 0.6% in volume and 0.3% in value compared to 2017. Residential property made up 197,385 transactions (units) worth RM68.75 billion recorded in 2018, an increase of 1.4% in volume and 0.4% in value (Figure 1). Residential property continued to support the overall property sector with 62.9% market share, followed by agriculture property with 21.5% share.Property market activity in 2019 is expected to stabilise judging from the increase in volume and value of total transaction at the end of 2018. Besides, house prices continued to record steady increase. The Malaysian House Price Index (MHPI) stood at 193.3 points, up by 3.1 points against 2017. By type, Terrace House Price Index remained to record the highest increase.

Malaysia : Bilangan Transaksi (Unit)
Malaysia : Volume of Transactions (Units)

Property Sub-sector	2017	2018	Y-o-Y (%)	
Residential	194,684	197,385	1.4	▲
Commercial	22,162	23,936	8.0	▲
Industrial	5,725	6,032	5.4	▲
Agricultural	70,290	67,329	-4.2	▼
Development Land & Others	18,963	19,028	0.3	▲
Total	**311,824**	**313,710**	**0.6**	▲

Figure 1: Volume of transactions (units)

Source: JPPH, (2018)

A gated community is a form of residential community of housing estate containing strictly-controlled entrances and often characterised by a close perimeter of wall or fences (Quintal D. and Thompson S., 2007).In the Malaysian context, gated and guarded communities are commonly identified with a cluster of houses surrounded by fence with controlled access. Nowadays, more of this type of housing is being developed across the country and they seem to become almost a dominant feature of Malaysian housing development projects. A number of measures of restrictions such as security guards, 24-hour patrol services, central monitoring systems and closed circuit televisions (CCTV) cameras are provided. The establishment of the neighbourhood concept is increasing, with some cases involving residential areas which are not categorised under the scheme, but has continued their efforts to improve security and reduce crime. Nevertheless, some of these gated communities in Malaysia offer more than just security, such as Kajang Country Height, Tropicana and The Mines residential areas where contemporary housing scheme are designed with up-market facilities such as golf courses, club houses and recreation areas. The prominence concept of developments shows a mixture of security, privacy and affluent lifestyle of their residents (Mariana et al, 2011).

A gated community is the latest trend in the supply of residential units in the urban areas in Malaysia. This is due to the increasing concern among urban dwellers on the safety levels of the housing environment as a result of rising crime rates. In recent years, crime rates in Malaysia have increased steadily. Residential break-ins do occur and are becoming more frequent in single family homes; these break-ins generally do not result in confrontations or injuries to the occupants. While uncommon, some burglars have entered when occupants were home, tied the residents up, and threatened them with weapons (Mohit and Hannan, 2010). Gated apartment complexes with 24-hour guards have a much lower burglary rate than other residential units, and apartments in general are burglarized less often (Malaysia 2015 Crime and Safety Report).

Most of the new housing developments in Negeri Sembilan area are gated communities. However, the number of researches discussing gated communities in Malaysia islimited. Petrus (2012) cited in Puvaneswary et al (2019) noted that it is a competitive residential property market in Malaysia because most of the residential property developers are utilising the sell-then-build concept. The homebuyers can only make a judgement based on the layout plan and description of the property to imagine how their future property will look alike. These will lead to some difficulties in the decision making to purchase property as they need to rely on many contributing factors to decide on the purchase such as type, location, and price. Hence, this paper focuses on the most critical factors in the preferences of residents' for living in gated and guarded communities in Negeri Sembilan, Malaysia. The findings from this research will also be helpful for the government by building upon the results to develop strategies for urban planning and housing provisions with the knowledge of homebuyers' preferences and the differences in their choices.

II.   LITERATURE REVIEW

Factors Affecting Residents' Preferences of Housing in Gated and Guarded Communities

Environment factor

The main reason of residents in choosing gated communities in Malaysia is security (Jurunilai, 2011). The increasing rate of crime has raised fear among urban dwellers. Homebuyers search for a place that offers a better security for their life and property (Mutalib et al., 2012). Gated communities have better security controls compared to the other housing developments. There are several common safety features in gated communities which are; fences, guard services, safety and security systems, intercom systems, and security control at the main entrance. Security provided by gated communities is often a major concern to the residents. A common feature of gated communities' development is a perimeter wall that encloses the whole residential area (Quintal, 2006). Fences or walls were used to create a secure and protected feeling, not only physically, but also gives a sense of privacy to the residents (Tahir &Hussin, 2012).

Gated communities can be safer from crime. As for unguarded houses, it is relatively easy to get past for the enterprising criminal. A research by Sanchez and Lang (2002) found that gated community is better in providing protection from crime especially for those in the lower-income groups. When purchasing a residential property in a gated community, homebuyers generally consider a variety of factors such as services provided, size of the living

space and neighbourhood surroundings (Kain & Quigley, 1970). Forrest and Kearns (2001) found that a sense of neighbourhood and a good environment are crucial in promoting positive personal development of a community. According to Ling (2006), physical design of the environment structures in gated community tends to bring long-term benefits to the residents, even for the future generation who stay in gated community. The quality of schools located near the residential houses in gated community may also attract homebuyers to own the relevant houses. Attractiveness of view is another important issue to be considered as well. Hence the following hypothesis;

H1: There is a relationship between environment factor and residents' preferences of housing in gated and guarded communities in Negeri Sembilan.

Property Physical Factor

The purchase preferences of buyers are highly correlated with the quality of the property (Abelson and Chung, 2005). The typical perception of gated community is that technological innovation and design increase segregation and privatism of the community in a country. Ling (2006) found that there is a relationship on the space area of houses and the preferences of residential housing in gated community. Gated community with large open space allotment can foster the cohesion of neighbourhood regardless of the location of the gated residential houses.According to Abelson and Chung (2005), the amount of management fees imposed, décor of houses, size of houses, and building of "green housing" were the consideration for house buyers to consider when making purchases on the relative houses. They also found that the neighbourhood was more important than neighbouring in affluent areas as people tend to involve in the social interaction with the neighbours among their living places by joining clubs in gated community.House buying preferences in gated community is highly dependent on the quality of a residential property.A study on the prices of houses in Australia between 1970 and 2003 by Abelson and Chung (2005) found that quality of houses tend to increase over the years. According to their findings, size of houses increased average 2% per year. Specific attributes of these findings also include the size of garage, gymnasium room, garage and kitchen.

H2: There is a relationship between property physical factor and residents' preferences of housing in gated and guarded communities in Negeri Sembilan.

Luxury

Besides the other factors, another attraction of gated communities is luxury lifestyle. Living behind the wall reflects the status of the resident who is wealthy, well-educated and married (Jurunilai, 2012). In the United States, about 30 percent of gated communities' developments are luxury development (Blakely &Synder, 1997). In Malaysia, prestige was the main reason that attracts buyers to invest in gated properties (Jurunilai, 2011). Roulac (2007) argued that the idea of branding can be applied to luxury properties and that brand,beauty and utility are three characteristics that buyers seek. It is estimated that one-third of the communities developed with gates are luxury developments for the upper and upper-middle class, and over one-third are retirement oriented. The remainder are mostly for the middle class, with a growing number for working-class communities (Blakely &Synder, 1997). Community space planning in a gated property is privatised and only available for the residents within gated

community. Some gated communities offer luxurious and prestige lifestyle for the residents such as golf course, club house and exclusive hall.

However, residents are responsible and required to pay for the maintenance fees managed by the Management Corporation or joint management body, as agreed in the Deeds of Mutual Covenants (DMC) (Jurunilai, 2012). Even charged, most residents feel that the charges are still reasonable, commensurate with the comfort and privacy enjoyed. A gated community has limited public access from non-residents. The gates at the entrances are meant to exclude the unwanted (Atkinson & Blandy, 2005). Since the 1950s, the traditional city grid pattern has changed to suburban cul-de-sacs and non-connecting streets that contribute to suburban restructure and restrict the entry of outsiders (Blakely &Synder, 1997). Therefore the following hypothesis;

H3: There is a relationship between luxury and residents' preferences of housing in gated and guarded communities in Negeri Sembilan.

Financial Factor

Mortgage interest rate will affect the purchase intention of prospective house buyers towards residential houses in gated community. The higher the interest rate, the higher prospective buyers have to pay to finance the house. The ability to obtain loan/finance is another issue for homebuyers. To encourage home ownership among Malaysians, the government increased the borrowings limit of home loan for civil servants from RM360, 000 to a maximum of RM450, 000 effective from 1st January 2011. As for the lower income group house buyers, the ability to obtain borrowings from financial institution will be one of the reasons that affect their decision making in purchasing properties (The Star Newspaper, 2010).It was reported in The Star Newspaper that introduction of the new My First House Scheme (Skim RumahPertamaku) by the former Prime Minister, Datuk Seri Najib which allows first-time house buyers to obtain 100% loan if they have a family income of less than RM3000 per month, with the 10% down payment to be guaranteed by CagamasBerhad for houses priced below RM220,000. Besides, stamp duty exemption of up to 50% will be given for first-time home buyers on instruments of transfer for residences priced that are not more than RM350,000 and 50% stamp duty exemption for loan agreement instruments to finance fist-time home purchasers (The Star Newspaper, 2010).

Residents favour real estate as an investment if they are able to secure higher financing, lower transaction costs and capital requirements in owning the property (Tan, 2010). In view of the government's efforts to reign in speculation in the property market, Malaysian regulators have instructed banks to tighten property lending by raising the loan-to-value ratio to 70% on the third mortgage and by removing the Developer Interest Bearing Scheme (DIBS). The removal of DIBS and high loan-to-value ratio will make an impact on property investment due to the occurrence of high down payment in acquiring the property (The Sun Daily, 2013). Prices of residential houses are much higher as compared to houses in open spaces. People tend to purchase such houses depending on the level of disposable income (Bible&Hsieh, 2001; Blandy&Parsons, 2002; LaCour-Little&Malpezzi, 2001). High level of disposable income in a country increases the spending power of a nation. Owning a house is a major goal of a person. Long-term investment is also a key factor for the UK home owners in choosing their current primary

residents (Frank, 2007). In a nutshell, acquisition of a house is not only motivated by consumption purpose, but also as an investment purpose. Hence;

H4: There is a relationship between financial factor and residents' preferences of housing in gated and guarded communities in Negeri Sembilan.

Conceptual Framework

A theoretical framework was built to summarise the literature review. Figure 2 shows the conceptual framework of the independent variables that affect the residents' preferences of housing in gated and guarded communities in Negeri Sembilan.
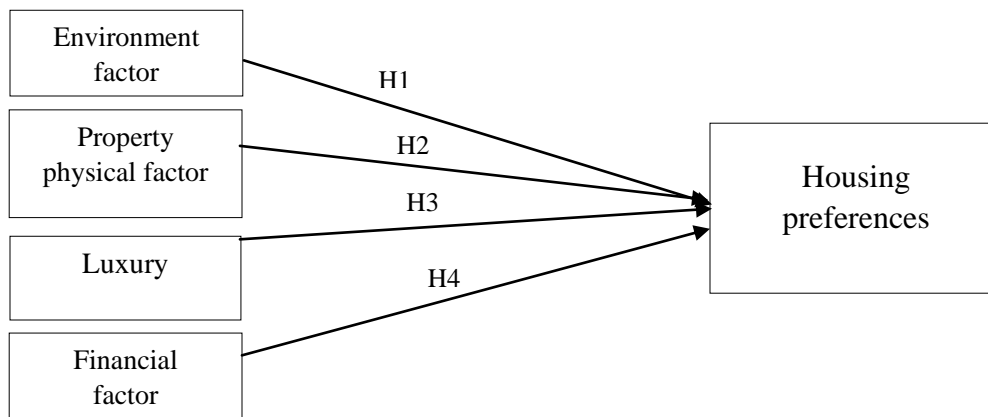

Figure 2: Conceptual framework

III. METHODOLOGY

The population for this study is the residents living in gated and guarded community in Negeri Sembilan. From this population, a sizeable sample size was drawn to ensure that data collected is sufficient for an objective analysis. The sample size of 200 residents living in gated and guarded community in Negeri Sembilan was used for the study. Convenience sampling was applied in this research. The researchers self-administered questionnaires to respondents at houses in gated and guarded community in Nilai, Negeri Sembilan, Malaysia.

Profile of Respondents

The demographic data of the respondents were collected to provide a background of the respondents used for the study. Basic demographic data such as gender, age, race, highest educational level attained, and monthly income were collected from all the respondents. The table below showed the summary of the respondent's profile.

Table 1: Summary of Respondents Demographic Data

Demographics	Classification	Frequency	Percentage %
Gender	Male	149	74.0
	Female	51	25.5
	Total	200	100
Age	29 and below	8	4.0
	30- 39	70	35.0
	40 – 49	78	39.0
	50 and above	44	22.0
	Total	200	100.0
Highest Educational Level	Primary school	-	-
	Secondary school	16	8.0
	Higher education	142	71.0
	Professional qualification	42	21.0
	Others	-	-
	Total	200	100
Race	Malay	58	29.0
	Chinese	87	43.5
	Indian	52	26.0
	Others	3	1.5
	Total	200	100
Monthly Income	Below RM1, 999	-	-
	RM2, 000-RM3, 999	35	17.5
	RM4, 000-RM5, 999	71	35.5
	RM6, 000-RM9, 999	86	43.0
	RM10, 000 above	8	4.0
	Total	200	100.0

Table 1 showed that 149 males, representing 74.5% and 51 females, representing 25.5%, participated in the survey. The high participation rate of males show that males are more willing to help the researchers in answering the survey questionnaires voluntary compared to female respondents. In terms of age, the respondents range between 29 and below to 50 years old and above. Most of the respondents are between 40 – 49 years old (39.0%), followed

by those who are between 30-39 years old (35.0%). Respondents who are 29 and below represent 4.0%. In terms of the highest educational level attained, about 71.0% completed higher education, while 21.0% have professional qualifications. The remaining 8.0% are secondary school leavers. The different races in Malaysia were also represented. Out of those surveyed, 29.0% of them are Malays, 43.5% are Chinese while Indians made up 26.0%. The other ethnic groups, which are mainly Punjabi and Chindia, made up 1.5% of the total respondents. In addition, the results showed that the monthly income of respondents who earn RM2, 000-RM3, 999 is 17.5%, those who earn between RM4, 000-RM5, 999 made up 35.5% and those who earn between RM10, 000 above represent 4.0% of the sample. The highest are those who earn between RM6, 000-RM9, 999 with 43.0%.

IV. FINDINGS AND DISCUSSION

Factor Analysis

Factor Analysis was applied to group the scale instruments into smaller dimensions. Given that multiple items were used to measure each of the variables, factor analysis was used to group items together to enable multiple-item measurement. Items that did not fit (did not meet the assumptions of factor grouping) were removed accordingly; some were tested individually and others were discarded. The following are the results of the factor analysis conducted for all the variables. The correlation matrix was first inspected to ensure that there was a sufficient number of correlations greater than 0.3 to justify the use of factor analysis.

The Bartlett's test of sphericity and the KMO-MSA were also used to determine whether sufficient correlations existed among the variables. Bartlett's test of sphericity should be statistically significant (sig. >0.05), and the KMO-MSA should have an index of between 0 and 1, with an index closer to 1 signifying that each variable is perfectly predicted without error by the other variables (Hair et al., 2006). The following are the results of the reliability and factor analysis conducted for the dependent variable.Table 2 shows both the KMO-MSA and Bartlett's test of sphericity indicated that the data were appropriate for factor analysis.

Dependent Variable

Table 2: KMO and Bartlett's Test – Preferences

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.701
Bartlett's Test of Sphericity		
	Approx. Chi-Square	283.223
	df	6
	Sig.	.000

Based on suggested criteria (Bearden et al., 1989; Nunnally & Bernstein, 1994), Table 3 shows three of the items measuring the dependent variable (preferences) were considered adequate.

Table 3: Factor analysis of the dependent variable (Preferences)

	Correlation Matrix (>0.3)	MSA (>0.6)	Communalities (>0.5)	Eigen Value	Variance Explained	Cronbach's Alpha (>0.7)
Scale Instrument				2.429	60.593	0.769
I prefer gated and guarded house because of environmental factor.	0.407	0.633	**0.239**			
I prefer gated and guarded house because of property physical factor.	0.621	0.746	0.733			
I prefer gated and guarded house because of luxury factor.	0.576	0.683	0.690			
I prefer gated and guarded house because of financial factor.	0.706	0.700	0.762			

Results in Table 4 shows that three out of the four items used to measure preferences were dependable. The communality for one of the items namely; I prefer gated and guarded house because of environmental factor (0.239) did not meet the cut-off value of 0.5.as a result, the item was discarded. The elimination of the first item improved the overall significance of the other items as shown in Table 4.

Table 4: Factor analysis of Preferences after item deletion

	Correlation Matrix (>0.3)	MSA (>0.6)	Communalities (>0.5)	Eigen Value	Variance Explained	Cronbach's Alpha (>0.7)
Scale Instrument				2.270	75.660	0.831
I prefer gated and guarded house because of property physical factor.	0.621	0.783	0.698			
I prefer gated and guarded house because of luxury factor.	0.576	0.699	0.769			
I prefer gated and guarded house because of financial factor.	0.706	0.672	0.802			
KMO and Bartlett's test (sig. = 0.000) Overall MSA = 0.711						

Independent Variables

Cronbach's alpha, item-to-total correlation, and factor loading was used as the criteria for item reduction. All items to measure the financial variable were adequate; however the communality for some of the items did not meet the cut-off value of 0.5 as shown in Table 5.

Table 5: Factor analysis of Independent Variables

	Correlation Matrix (>0.3)	MSA (>0.6)	Communa lities (>0.5)	Eigen Value	Variance Explained	Cronbach's Alpha (>0.7)
Environment factor				2.351	58.773	0.764
I purchased a gated and guarded house based on the condition of the neighbourhood	0.581	0.642	0.565			
I purchased a gated and guarded house based on the attractiveness of the area.	0.623	**0.586**	0.700			
I purchased a gated and guarded house based on the security and safety available.	0.460	0.639	**0.429**			
I purchased a gated and guarded house based on the effects of traffic noise.	0.362	0.613	0.657			
KMO and Bartlett's test (sig. = 0.000) Overall MSA = 0.615						
Property physical factor				2.325	58.123	0.755
I purchased a gated and guarded house based on the size of house.	0.743	0.659	0.733			
I purchased a gated and guarded house based on the number of bedrooms available.	0.555	0.630	0.815			
I purchased a gated and guarded house based on the house was well built.	0.486	0.828	0.570			
I purchased a gated and guarded house based on the house type (such as gated community).	0.311	0.786	**0.207**			
KMO and Bartlett's test (sig. = 0.000) Overall MSA = 0.687						
Luxury				2.286	57.148	0.746
I purchased a gated and guarded house based on the creation of wealth to me.	0.397	0.733	**0.380**			
I purchased a gated and guarded house based on the	0.522	0.763	0.580			

	Correlation Matrix (>0.3)	MSA (>0.6)	Communalities (>0.5)	Eigen Value	Variance Explained	Cronbach's Alpha (>0.7)
happiness it promotes to me,						
I purchased a gated and guarded house based on the feeling of achievement.	0.440	0.705	0.667			
I purchased a gated and guarded house based on the feeling of ownership.	0.580	0.680	0.658			
KMO and Bartlett's test (sig.=0.000) Overall MSA = 0.720						
Financial factor				2.789	69.960	0.856
I purchased a gated and guarded house based on the mortgage interest rate.	0.656	0.718	0.639			
I purchased a gated and guarded house based on the maximum monthly repayments.	0.608	0.760	0.734			
I purchased a gated and guarded house based on the value of the house.	0.696	0.705	0.671			
I purchased a gated and guarded house based on the ability to save deposit.	0.598	0.739	0.754			
KMO and Bartlett's test (sig.=0.000) Overall MSA = 0.731						

All items that did not meet the communality cut-off value were deleted. All the other items were considered adequate as shown in Table 6. The communality for the environment variable namely; 'I purchased a gated and guarded house based on the security and safety available (0.429)' did not meet the cut-off value of 0.5. Other items that did not meet the cut-off value for communality include the physical property factor 'I purchased a gated and guarded house based on the house type (such as gated community) (0.207) and luxury factor 'I purchased a gated and guarded house based on the creation of wealth to me (0.380). As a result, these items were discarded. The elimination of the items improved the overall significance of the other items as shown in Table 6.

Table 6: Factor analysis of Independent Variables after Items Deletion

	Correlation Matrix (>0.3)	MSA (>0.6)	Communalities (>0.5)	Eigen Value	Variance Explained	Cronbach's Alpha (>0.7)
Environment factor				2.052	68.394	0.763

I purchased a gated and guarded house based on the condition of the neighbourhood	0.581	0.663	0.598			
I purchased a gated and guarded house based on the attractiveness of the area.	0.623	0.576	0.813			
I purchased a gated and guarded house based on the effects of traffic noise.	0.362	0.637	0.641			
KMO and Bartlett's test (sig. = 0.000) Overall MSA = 0.616						
Property physical factor				2.196	73.192	0.817
I purchased a gated and guarded house based on the size of house.	0.743	0.641	0.771			
I purchased a gated and guarded house based on the number of bedrooms available.	0.555	0.617	0.821			
I purchased a gated and guarded house based on the house was well built.	0.486	0.810	0.604			
KMO and Bartlett's test (sig. = 0.000) Overall MSA = 0.665						
Luxury				2.030	67.673	0.759
I purchased a gated and guarded house based on the happiness it promotes to me,	0.522	0.730	0.618			
I purchased a gated and guarded house based on the feeling of achievement.	0.440	0.681	0.672			
I purchased a gated and guarded house based on the feeling of ownership.	0. 580	0.640	0.740			
KMO and Bartlett's test (sig.=0.000) Overall MSA = 0.678						

Financial factor				2.789	69.960	0.856
I purchased a gated and guarded house based on the mortgage interest rate.	0.656	0.718	0.639			
I purchased a gated and guarded house based on the maximum monthly repayments.	0.608	0.760	0.734			
I purchased a gated and guarded house based on the value of the house.	0.696	0.705	0.671			
I purchased a gated and guarded house based on the ability to save deposit.	0.598	0.739	0.754			
KMO and Bartlett's test (sig.=0.000) Overall MSA = 0.731						

The three items for environment had a Cronbach's alpha coefficient of 0.763. The correlation matrix ranged from 0.362 to 0.743. Based on suggested criteria (Bearden et al., 1989; Nunnally & Bernstein, 1994;), all items for environment were considered adequate (see Table 6). The three items for measuring property physical factor and luxury had Cronbach's alpha of 0.817 and 0.759 respectively. Communalities were between 0.598 and 0.821. All items measuring financial factor were considered adequate. Table 7 shows the factor analysis of all the constructs. Items that did not fit (did not meet the assumptions of factor grouping) were removed accordingly. Following are the results of the factor analysis conducted for all the variables.

Table 7: Items factor loadings

Construct	Item	Factor loading
Environment factor	ENV1	.774
	ENV2	.902
	ENV4	.800
Property physical factor	PPF1	.878
	PPF2	.906
	PPF3	.777
Luxury	LUX2	.786
	LUX3	.820
	LUX4	.860
Financial factor	FF1	.800
	FF2	.857
	FF3	.819
	FF4	.868
Preferences	PRE2	.836
	PRE3	.877
	PRE4	.896

V. HYPOTHESIS TESTING

Multiple Regression

Multiple regression analysis was carried out to check the relationship between the independent variables and the dependent variable and to also test the hypothesis. Results are presented in Table 8.

H1: There is a relationship between environment factor and residents' preferences of housing in gated and guarded communities in Negeri Sembilan.

H2: There is a relationship between property physical factor and residents' preferences of housing in gated and guarded communities in Negeri Sembilan.

H3: There is a relationship between luxury and residents' preferences of housing in gated and guarded communities in Negeri Sembilan.

H4: There is a relationship between financial factorand residents' preferences of housing in gated and guarded communities in Negeri Sembilan.

Table 8: Results of Regression Analysis

Model (R^2=0.762)	Unstandardised Coefficients		Standardised Coefficients			
	B	**Std. Error**	**Beta**	**t**	**Sig**	
Constant	.104	.328			.317	.752
Environment factor	-.138	.081	-.120	-1.708	.089	
Property physical factor	.357	.092	.295	3.875	.000	
Luxury factor	.389	.088	.281	4.428	.000	
Financial factor	.382	.085	.383	4.479	.000	

Notes: The dependent variable is Preferences where R^2=0.762, F=67.503, sig=0.000.

The F test of 67.503 shows that the general regression is significant and has a reasonable fit. R^2 measures how much the variability of the outcome is accounted for by the predictor. With regards to multicollinearity, the VIFs is less than 10, which means that there is no multicollinearity. As a result, it will not be hard to determine the separate influence of the independent variables on the dependent variable. Table 8 is the result of the multiple regression to show the relationship between the independent variables and housing preferences.

The t value of -1.708 indicates that environment factor has no positive influence towards the dependent variable (housing preferences). The result differs with the study of Kain & Quigley, (1970) that when purchasing a residential property in gated community, householders generally consider the neighbourhood surroundings to buy a house in gated community. The implication is that in Negeri Sembilan, environment factor has no effects on housing

preferences of residents in purchasing a residential property, all other things being equal. Environment is not a factor for homebuyers to look into before purchasing a property. Additionally, the finding is not consistent with Wang and Li (2006) who stated that households will place concern on crime and other security problems in the neighbourhood when making decision for home ownership. It could be due to the fact that homebuyers who buy the properties do not necessarily stay in the area. They are hoping for more of the capital gains as well as monthly rental returns. Therefore, as long as the property gives them either one or both of these windfalls, it would still be a good purchase regardless of the neighbourhood conditions. Hypothesis 1 is therefore not supported.

Property physical factor is a significant factor affecting preferences of housing in gated and guarded communities in Negeri Sembilan (t=3.875 and sig=0.000) (Table 8). The finding is consistent with Abelson and Chung (2005) who pointed out that purchase preferences of buyers are highly correlated with the quality of the property. The authors also postulated that the amount of management fees imposed,décor of houses, size of houses were the consideration forhouse buyers to consider when making purchases on the relative houses.This finding is also consistent with the study by Hurtubia et al. (2010) who revealed that the number of rooms or bathrooms in a house is an important feature to be considered by households. Besides, households comprising of one to three persons will typically prefer a small number of spacious rooms while larger families will rather opt for large number of rooms. Hypothesis 2 is therefore supported.

Furthermore, results show that luxury factor has a positive significant relationship to housing preferencesin gated and guarded communities (Table 8). The findings support Jurunilai (2011) that prestige and luxury lifestyle are the main reasons that attracts buyers to invest in gated properties. He posited that living behind the wall reflect the status of the resident which is wealthy, well-educated and married. Besides, in today's world, housing is a lifestyle issue. A house is no longer just a dwelling. It is now described as a lifestyle or space to reflect the owner's personality, self-image and character. Based on the findings of this study, it is highly recommended that housing developers build freehold gated-guarded properties rather than just attractive properties in their housing development plans. It is reasonable to believe that neighbourhood characteristics play a role in determining the residential values of a property. In order to meet the demands and needs of the increasingly affluent and discerning house buyers, instead of just offering dream homes in prime locations, housing developers should provide intangible benefits in the neighbourhood that are just as sought after by today's house buyers such as a sense of security and a feeling of harmony and happiness with one's surroundings. Hence, Hypothesis 3 is supported.

Financial factor is another significant factor affecting preferences of housing in gated and guarded communities in Negeri Sembilan with results (t=-4.479 and sig=0 .000). Standardised Coefficient Beta of 0.383 shows that financial factor has the strongest influence on preferences of housing in gated and guarded communities. This supports the finding that mortgage interest rate will affect the purchase intention of prospective house buyers towards residential houses in gated community. As for the lower income group house buyers, the ability to obtain borrowings from financial institutions will be one of the reasons that affect their decision making in purchasing.This finding was in line with Tan (2008) that people generally depend on the amount of interest rate, maximum monthly repayments, value of the house and the ability to save deposit to purchase a gated and guarded house. This is

because they would have to calculate their ability to take down loans as different built-ups have different prices. Also, they gauge the markets in terms of price. This is because property investment has the largest initial capital requirements compared to other investment vehicles such as fixed income security and shares. It also has the lowest liquidity among all investment vehicles as they are many procedures for the sale and purchase of property; therefore, easy financing schemes such as low Base Lending Rate (BLR) and Developer Interest-Bearing Scheme (DIBS) matter to residents seeking to purchase properties in gated and guarded communities in Negeri Sembilan. Hypothesis 4 is therefore supported.

VI.   IMPLICATION FOR MARKETERS AND RECOMMENDATION

This study is relevant to housing developers as they have to be cautious before undertaking any new housing project since property overhang becomes the central concern to the Malaysian housing industry. Instead of focusing merely on price competitiveness to drive price, Malaysian housing developers should adopt a longer term and more holistic vision of value adding to their housing products. They should plan and design their products to take cognizance of the changing lifestyles of Malaysians. A good housing development project should be designed to help households develop a safe and secure neighbourhood. Therefore, housing developers should put efforts in spearheading the initiative to ensure that safety, security and well-being of every house buyers are guaranteed in the neighbourhood. A house is no longer just a dwelling. It is now described as a lifestyle or space to reflect the owner's personality, self-image and character. It is highly recommended that housing developers should consider gated and guarded properties rather than just unattractive properties in their housing development plans. It is reasonable to believe that neighbourhood types play a role in determining the residential values of property. In order to meet the increasingly affluent and discerning house buyers, developers instead of just offering dream homes in prime locations, they should provide intangible benefits in the neighbourhood that are sought after by today's house buyers, such as design and layout of the house, a sense of security, a feeling of harmony with one's surroundings and an infrastructure which supports the lifestyle of house buyers.

VII.   LIMITATIONS OF THE STUDY AND FUTURE RESEARCH

Since there are large numbers of different types of residential housing in the gated community in Negeri Sembilan, the researchersrandomly selected few types of housing in the gated and guarded communities. Different types of residential housing might have different purchase intention towards residential housing in such areas. Therefore, the sample size taken might not be accurate enough to represent certain types of residential housing in gated and guarded community. It is advisable for further researchers to focus on single or several identified types of residential property such as terrace house, double-storey, single storey and condominium in studying their type of purchase intention.As for the adoption of sampling, the researchers focused on one city which is Nilai in Negeri Sembilan. As the research adopted the convenience sampling, this meant that all the respondents were chosen at the convenience of the researchers. It is advisable for further researchers to adopt the stratified sampling method to obtain a more accurate result within these areas.

REFERENCES

1. Abelson P and D Chung (2005), 'The Real Story of Housing Prices in Australia from 1970 to 2003', Australian Economic Review, 38(3), pp 265–281.
2. Atkinson, R., & Blandy, S. (2005). Introduction: International perspectives on the new enclavism and the rise of gated communities. Housing Studies, 20(2), 177–186. doi:10.1080/0267303042000331718
3. Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of consumer susceptibility. Journal of Consumer Research, 15, 473-481.
4. Bible, D. S. & Hsieh, C. (2001) Gated Communities and Residential Property Values. Appraisal Journal, 69, 140.
5. Blakely, E. J., &Synder, M. G. (1997). Divided we fall: Gated and walled communities in the United States. In N. Ellin (Ed.), Architecture of Fear. Princeton Architectural Press.
6. Forrest, R.&Kearns, A. 2001, „Social cohesion, social capital and the neighbourhood‟, Urban Studies, Vol. 38 No. 12, p. 2125.
7. Frank, K. 2007, 07 Annual Wealth Report: Prime Residential Property, Knight Frank LLP, London, pp.1-30.
8. Hair, J.F., Anderson, R.E., Tatham, R.L. & Black W.C. (2006). Multivariate Data Analysis (6th ed.) Upper Saddle River, NJ: Prentice Hall.
9. Hurtubia, R., G. Flötteröd, F. Martinez and M. Bierlaire (2010) Comparative analysis of hedonic rents and maximum bids in a land-use simulation context, paper presented at Swiss Transport Research Conference 2010.
10. JabatanPenilaian dan PerkhidmatanHarta [JPPH] (2018). Property Market Report (2018). Putrajaya: Ministry of Finance Malaysia.
11. Jurunilai, B. (2011). Gated communities: A world phenomenon. Retrieved June 16, 2019, from http://www.jurunilai.com.my/gatedcomunitypar1.html
12. Jurunilai, B. (2012). Social issues of gated communities. Retrieved June 16, 2019, from http://www.jurunilai.com.my/gatedcommunitypart2s.html
13. Kain, J.F. & Quigley, J.M. 1970, „Measuring the value of housing quality‟, Journal of the American Statistical Association, vol. 65 no. 330, pp. 532-548.
14. LaCour-Little, M. &Malpezzi , S. 2001, Gated Communities and Property Values,McGraw- Hill,United States.
15. Ling, H.L. 2006, „The physical environment and a "sense of neighbourhood" in residential communities in Hong Kong‟, Property Management, Emerald Group Publishing Limited,vol26, no.1, pp.7-24.
16. Mariana, M.O; Noor, S.; &Syahriah B. B.; (2011). An Investigation of Factors Influencing Communities Decision to Reside in Gated Development in Kuala Lumpur and Selangor. APSA Congress. Page 1-12.
17. Mohit, M.A. & Hannan, M.H.E. (2010). Crime and Housing in Malaysia: Case Study of Taman Melati Terrace Housing in Kuala Lumpur. Asian Journal of Environment-Behaviour Studies, 1 (3), 25-36.
18. Mutalib, N. F. A., Aziz, W. N. A. W. A., Noor, N. A. M., & Eves, C. (2012). Gated and Guarded Community (GACOS) in Malaysia: Worth or not? In International Conference On Real Estate 2012 (INTEREC 2012) (Vol. 2012). Kuala Lumpur. Retrieved from http://eprints.qut.edu.au/56928/
19. Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). New York:
20. Petrus, V. (2012). Study on the key factors influencing buyers' preferences for house purchase in Kota Kinabalu (Master's thesis), Universiti Malaysia Sabah, Malaysia
21. Puvaneswary T., Puteri A.M.K., Nur Hafizah J., Sheelah S., &Nurhayati M. K (2019). Factors Affecting the Housing Preferences of Homebuyers in Kuala Lumpur. Journal of the Malaysian Institute of Planners. Volume 17 Issue 1. Page 138 – 148.
22. Quintal, D. (2006). Gated communities in Sydney: A search for security. The University of New South Wales. Retrieved from https://149.171.158.103/sites/default/files/upload/pdf/schools_and_engagement/resources/_notes/5A2_10.pdf.
23. Quintal, D., & Thompson, S. (2007). Gated communities: The search for security. In State of Australian Cities Conference (pp. 1034–1044). Retrieved from http://soac.fbe.unsw.edu.au/2007/SOAC/gatedcommunities.pdf
24. Roulac, S.E. (2007), "Brandþbeautyþutility¼property value", Property Management, Vol. 25 No. 5, pp. 428-446.
25. Sanchez, T. & Lang, R. 2002, „Security Versus Status: The Two Worlds of Gated Communities', Draft Census Note, Metropolitan Institute, vol.2, no.2, Virginia.

26. Tahir, Z., &Hussin, K. (2012). Security aspects of gated community housing and the concept of Safe Townships. Chinese Business Review, 11(2), 242–250. Retrieved from http://www.davidpublishing.com/davidpublishing/Upfile/4/10/2012/2012041066957257.pdf

27. Tan, T. H (2008), "Determinants of Homeownership in Malaysia", Habitat International, Vol. 32, pp. 318 – 335.

28. Tan, T. H. (2010b). Base lending rate and housing prices: Their impacts on residential housing activities in Malaysia. Journal of Global Business and Economics, 1(1), 1- 14.

29. The Sun Daily (2013). Property developers express mixed views on Budget 2014. Retrieved from, http://www.thesundaily.my/news/865996

30. Thestar (2015). Available at http://www.thestar.com.my. Accessed on 27/07/2019.

31. Wang, D., & Li, S. M. (2006), Socio-economic differentials and stated housing preferences in Guangzhou, China. Habitat International, 30:305-326.