The Physical Housing Environment Preference Among Housing Consumers in Johor Bahru

Nur Syuhadah binti Said¹, Assoc Prof. Sr Dr.David Martin @ Daud Juanil²

Faculty of Technology Management and Business¹ UniversitiTun Hussein Onn Malaysia Johor, Malaysia hp120049@siswa.uthm.edu.my

Faculty of Technology Management and Business² UniversitiTun Hussein Onn Malaysia Johor, Malaysia martin@uthm.edu.my

Abstract—Education, grocery, restaurant, recreation, medical services, mosque and others are available facilities provided in residential areas. The availability and accessibility of facilities has to some degree affected the satisfaction among residents. However, the feeling of dissatisfaction in their housing environment might influence residents to become more cautious before deciding to rent or buy a new house. Therefore, this study offers developers to understand market needs of how they differ in preference of physical housing environment. The physical components refer to the houses, facilities, and utilities. The sampling location for this study is around Johor Bahru area and qualitative methods were used to approach this study by collecting variables from previous researchers. Therefore, in order for the industry to be sustainable, the interests of housing consumers need to be taken into serious consideration since property overhang becomes the central concern to the Malaysian housing industry.

Keywords—the physical components; housing consumer

I. Introduction

A house is no longer just representing a shelter from the outside elements (1). It is now described as a status symbol to the owner, becomes an asset for the housing consumers since it provides security, privacy, neighbourhood and social relations, status, community facilities and services, access to jobs and control over the environment (2). Thus, it makes them become more demanding and selective when choosing a location for a house. When buying or rent a house, the first concern among them in choosing a location is the quality of an area especially in terms of access to facilities and services, sense of community, safety and security rather than a concrete box(3)

Since property overhang becomes the central concern to the Malaysian housing industry, Teck (4) pointed that the majority of these unit remain unsold property because of price factor, ranging from poor location and to unattractive houses with lack of adequate amenities and facilities. The term property overhang means housing units have remained unsold nine months after its launch and have been issues with a certificate of fitness for occupation (CF) (5).

Teck suggest that for the efficiency of the housing delivery system, public and private sectors are required to carry out research to understanding the market needs as a lot of housing projects were started without proper plans. Therefore in such situations, this study offers housing developers to understand market needs of how Malaysian housing consumers differ in preference of physical housing environment.

п. Literature review

In this chapter, the relevant literature on housing environment will be discussed.

A. Views on housing environment

There are several researchers give an opinion about housing environment. According to Campbell & Rogers (6) housing environment consists of the housing unit, the neighbourhood and the community in which the residents are located. While Langsing & Marans (7) defined housing environment as

"An environment of high quality which conveys a sense of well-being and satisfaction to its population through characteristics that may be physical (housing style and condition, landscaping, available facilities), social (friendliness of neighbours, ethic, racial or economic composition) or symbolic (sense of identity, prestige values)"

Just as previous study, Elo (8) conceptualized environment into three parts: the physical, social and symbolical areas. Physical environment that supports wellbeing comprises the Northern Finland environment, an environment ensuring safety and a pleasant physical environment. A social environment supporting well-being embraces the availability of assistance, contact with family members, friends supporting well-being and a pleasant living community. A symbolic environment supporting well-being is made of the idealistic attributes of well-being, spirituality, the normative attributes of well-being and historicalness. Therefore planning for housing is the best way of approaching the conception of neighbourhood unit as recommended by Perry (9). Houses, infrastructure, utilities, green parks, school, shops, places of worship, employment opportunities, clinics, other social and public facilities, this conception is believed to be able to provide quality of life to residents (9). Quality of life is concerned with intimate relationships, family life, friendships, standard of living, work, neighbourhood, city or town of residence, the state of the nation, housing, education, health and self (10). It can be measured by the extent to which people's happiness requirements are met (11). The feelings of happiness towards the availability, accessibility and choice of facilities mean reflecting the sentiments of satisfaction to the housing place (12; 13). It can be summarized that residents in a neighbourhood will be satisfied and happy when they meet desired houses.

B. Housing satisfaction

From the above, it can be concluded that living in satisfactory housing conditions is one of the most important aspects of people's lives. Housing satisfaction can be defined as "the perceived gap between a respondent's needs and aspiration and the reality of the current residential context" (14). The concept of housing satisfaction is often employed to evaluate resident's perceptions of and feelings for their housing units and the environment (15). It can be shown from recent studies. "Housing support services, followed by public and neighbourhood facilities and then by housing features and the social environment" are found as the factors that moderately satisfied among residents in Kuala Lumpur (16). Meanwhile Abdul Karim (1) found residents are quite happy with their low cost flats environment which includes the provision of community facilities. In Salleh (17), the neighbourhood factors were the predominant ones affecting housing satisfaction in Pulau Pinang and Terengganu. The variety of housing choices then makes housing more than shelter and the complexity of people's lives makes housing choice a decision that is influenced by a variety of factors (18). For instance, Tan (19) found that house buyers in Klang are generally opting for gated-guarded landscape compound. This is due to the problem of snatch-theft which makes them are concerned about their security.

Thus, through the findings from past study, it highlights that the physical components are important. According to Abdul Karim (1) there is some variance in the choice of facilities which affect the satisfaction of residents towards their housing environment. This is because residents can choose any of these facilities according to their needs and wants which can be called as preferences and choices activity. Housing preferences can be defined as the expression of the quantity and quality of housing features that residents would like to have (20). For instance, Bayoh *et al.* (21) concluded that school quality is the most influential factor in choosing a new home location. While Karsten (22) found that residential location is influenced by

workplace. It can be concluded that once preferences are known, people enters the housing market and makes a choice. Their choice would be influenced by the housing stock that is available. Table 1 illustrated physical component from past studies which consists of the houses, facilities and utilities as below:

Table 1: Conceptualised physical housing environment (Researcher, 2013)

Authors	Characteristics	g environment (Researcher, 201 Components	
1) Bender <i>et al</i> .	Physical	1.Quietness of the area	(23)
(1997)	components	2.Public transport	
		3.Distance to city centre	
		4.Good view	
		5.Distance to schools	
		6.Distance to commercial	
		facilities	
		7.Distance to a green area	
2)Fiadzo et al.	Physical	1.Distance to nearest	(24)
(2001)	components	hospital	(24)
		2.Distance to secondary	
		school	
		3.Distance to nearest	
		market	
		4.Distance to nearest	
		primary school	
		printing series	
3)Reed & Mills	Physical	1.Proximity to school	
(2007)	components	2.Proximity to shops	(25)
(2007)	components	3.Proximity to parks	
4)Berkoz et al.	Physical	1.Factors of centrality:	
	•		(26)
(2009)	components	-Shopping centre	. ,
		-City Centre	
		-Work	
		-Places of entertainment	
		-Market	
		2.Factors of accessibility	
		to education institutions:	
		-Elementary schools	
		-High schools	
		3.Factors of accessibility	
		to open areas:	
		-Parking areas	
		-Walking areas	
		-Sport centres	
		4.Factors of accessibility	
		to health institutions:	
		-Local clinics	
		-Hospital	
		5.Factors of accessibility:	
		-Public transport	
5)Levy & Lee	Physical	1.Proximity to shops	
(2011)	components	The forming to shops	(27)
	components	2. Proximity to good	(= ·)
		schools	
		3.Proximity to central	
		business district (CBD)	
		4.Proximity to work	
6)Tan (2011)	Physical	1.Distance to the	(10)
6)Tan (2011)	Physical components	workplace (Worktime)	(19)
6)Tan (2011)		workplace (Worktime) 2.Retailing outlets	(19)
6)Tan (2011)		workplace (Worktime) 2.Retailing outlets (Retailtime)	(19)
6)Tan (2011)		workplace (Worktime) 2.Retailing outlets (Retailtime) 3.Hospital (Hosptime)	(19)
6)Tan (2011)		workplace (Worktime) 2.Retailing outlets (Retailtime) 3.Hospital (Hosptime) 4.Sport and recreation	(19)
6)Tan (2011)		workplace (Worktime) 2.Retailing outlets (Retailtime) 3.Hospital (Hosptime) 4.Sport and recreation centres (Sportime)	(19)
6)Tan (2011)		workplace (Worktime) 2.Retailing outlets (Retailtime) 3.Hospital (Hosptime) 4.Sport and recreation centres (Sportime) 5.Public transport stations	(19)
		workplace (Worktime) 2.Retailing outlets (Retailtime) 3.Hospital (Hosptime) 4.Sport and recreation centres (Sportime) 5.Public transport stations (Transtime)	(19)
6)Tan (2011) 7)Fan (2010)		workplace (Worktime) 2.Retailing outlets (Retailtime) 3.Hospital (Hosptime) 4.Sport and recreation centres (Sportime) 5.Public transport stations (Transtime) 1.Mobility:	(19)
	components	workplace (Worktime) 2.Retailing outlets (Retailtime) 3.Hospital (Hosptime) 4.Sport and recreation centres (Sportime) 5.Public transport stations (Transtime)	(19)

		-Proximity to urban center
		-Proximity to workplace
		2.Community facilities:
		-Education facilities
		-Medical and health
		facilities
		-Retail service
		-Sport facilities
		-Green space and view
8)Abdul Mohit &	Physical	1.Public facilities
Nazyddah (2011)	components	components:
		-Open space
		-Play area
		-Parking
		-Prayer and multi-purpose
		halls
		-Perimeter roads
		-Pedestrian walkways
		-Public phone
		-Local shops
		2.Neighbourhood
		facilities components:
		-Distance to town centre
		-School
		-Police station
		-Hospital
		-Market
		-Shopping centres
		-Public library
		-Mosque
		-Ligh Rail Transit (LRT)
		-Bus and taxi stations

C. Corporate Social Environment (CSR)

Throughout globalization process, as the housing consumers become more informed and discerning, people's expectations from the housing and the residential environment have been altering as a result of the changing life conditions (26). There is increasing public awareness and interest among them who are beginning to demand houses with living styles that have more greens and landscaping in Johor Bahru (30). Existing studies indicated that Malaysia is facing an increase in construction waste material generation and energy waste (31; 32). Thus, it is imperative for the housing sector to strive towards sustainable approach (33). It can do this through CSR elements.

CSR is defined as "the obligations of businessman to pursue those policies, to make those decisions or to follow those lines of action which are desirable in terms of the objectives and values of our society" (34). In other words, CSR refers to voluntary activities undertaken by a company to improve local living conditions or reduce environmental impacts. CSR elements include more greens and landscaping, recreational parks, security facilities with gated and guarded features, sport club facilities, good infrastructure, attractive house design and availability of community activities (30). A summary of CSR elements is depicted in Table 2

CSR element	Examples
Environmental sustainability	Landscaping, sustainable timber supplies, environmentally-friendly materials, sustainable building designs

Social amenities	Recreational facilities, parks, play grounds, sport facilities, meeting places, school
Safety of houses and surrounds	Safety of ingress and egress, and building materials, security facilities with gated and guarded features
Quality of the environment	Development density, proximity of public transportation, mix with industrial and commercial, development, community activities
Sound infrastructure	Quality roads, wider roads
Quality product	Quality finishes and design

Through the findings, Yam (30) revealed that most housing developers in Johor Bahru are claiming to have included CSR elements in their housing projects. While Yam & McGreal (35) found that house buyers in Johor Bahru expected a housing developer to provide more CSR elements. It can be concluded that house buyers are willing to pay extra money for a house with good environmental qualities and these facilities were important for their family health living.

Thus, as more educated and wealthier consumers can pressure developers to be address urgently to ensure that housing needs of all people could be met (36). Through this study, it can enhance the understanding of housing developers about what exactly are the market needs among housing consumers.

III. Research methodology

A. Qualitative approach

(29)

The data will be a qualitative exploration of a physical housing environment by collecting variables from previous researchers at secondary sources.

B. Consideration using qualitative methods

Qualitative methods should be considered when the research aim is to investigate complex phenomena that are difficult to measure quantitatively (37), to generate data necessary for a comprehensive understanding of a problem, to gain insights into potential causal mechanisms, to develop sound quantitative measurement processes or to study special populations (38). Little was known about the exact meaning of physical housing environment which is not conveyed in quantitative data and the variables used to characterise such environment. A qualitative research design therefore is chosen to obtain variables from previous researchers (19; 21; 27; 28; 29; 30) to charaterise physical housing environment in the context of Johor Bahru (see fig. 1).

C. Theoretical framework

The model of housing environment quality by researcher (28) is the basis for the theoretical framework of this study. This model was developed from previous studies on housing environments and location preference (19; 21; 27; 28; 29; 30). Since the limitation is relative small database, the researcher adds two variables from CSR element in property to fulfill the gap suggested from Fan (28). Fan suggests to further studies to take more issues into account such as noise, house structure and house function. With the

additional two variables from CSR element it is believed that this can offer a better perspective on physical housing environment in the context of Johor Bahru. Figure 1 exhibits a model of physical housing environment quality for the study.

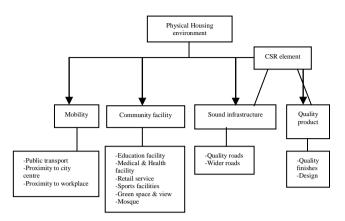


Fig. 1: Modified model of physical housing environment quality for the study

There are four categories; mobility, community facility, sound infrastructure and quality product from CSR element. Definition of attributes is explained as follows (28;39):

- 1. Mobility
 - Public transport refers to the quality of public transport system connected to the neighbourhood, such as bus lines and metro system.
 - Proximity to city centre refers to the proximity to the urban centre where the commerce and service trade of a city is concentrated.
 - Proximity to workplace refers to the proximity to employment of residents.
- 2. Community facilities
 - Education facility refers to high quality kindergartens, primary schools, high schools and libraries near the neighbourhood.
 - Medical and health facility refers to the neighbourhood hygiene and the quantity and quality of clinics or hospitals near the neighbourhood.
 - Retail service refers to the presence of an adequate number of shops, stores, market and supermarkets.
 - Sport facility refers to the presence of arena and gymnasiums near the neighbourhood.
 - Green space and view refers to the closeness to gardens, open areas or lake

and general unobstructed view to surroundings.

• Mosque

Corporate Social Responsibility (CSR):

- 3. Sound infrastructure
 - Refers to quality roads and wider roads. The level of quietness means absence of noise from road traffic.
- 4. Quality product
 - Refers to quality finishes and design.

v. Conclusion

The physical components are displayed by modeling in the context of Johor Bahru in order to achieve the objective of the study. Two variables from CSR element were added to offer a better perspective on physical housing environment quality. An understanding of what housing consumers preferences should be taken into consideration among housing developers where housing consumers can find the place within the neighbourhood to work and fulfill recreation needs.

References

- (1)Abdul Karim, H. (2008). The Satisfaction of Residents on Community Facilities in Shah Alam, Malaysia. *Asian Social Science*, Vol. 4, No. 11, pp. 131-137.
- (2)Vera-Toscano, E. & Ateca-Amestoy, V. (2008). The Relevance of Social Interactions on Housing Satisfaction. Soc Indic Res, Vol. 86, pp. 257-274.
- (3)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.
- (4)Teck, H. T. (2011). Sustainability and Housing Provision in Malaysia. *Journal of Strategic Innovation and Sustainability*. Vol. 7(1), pp. 62-71.
- (5)Ministry of Finance's Valuation and Property Service Department.(2006).*Property Overhang*. Kuala Lumpur: Government Printer.
- (6)Campbell, A. P., Converse, E. & Rogers, W. L. (1976). *The Quality of American Life: Perceptions, Evaluations and Satisfactions.* New York: Russell Sage Foundation.
- (7)Langsing, J. B. &Marans, R. W. (1969).Evaluation of Neighbourhood Quality.*Journal of the American Planning Association*.Vol. 35 No. 3, 5.
- (8)Elo, S. (2006).A Theory of an Environment Supporting the Wellbeing of Home-Dwelling Elderly from Northern Finland.*International Journal of Circumpolar Health*.65:5.

- (9)Perry, C. A. (1910). *Wider Use of the School Plant*. New York: Charities Publication Committee. 366,372.
- (10)Campbell, A. (1981). The Sense of Well-being in America. New York: McGraw-Hill.
- (11)MacCall, S. (1975).Quality of Life.Social Indicators Research. Vol.2, pp. 229-248.
- (12)Gold, J. R. (1980).*An Introduction to Behavioural Geography*. Oxford: Oxford University Press.
- (13)Weidemann, S. & Anderson, J. (1985). A Conceptual Framework for Residential Satisfaction. *Home Environments*. Vol. 8, pp.153-182.
- (14)Galster, G. C. (1987).Identifying the Correlates of Dwelling Satisfaction: An Empirical Critique. *Environment and Behavior*.Vol. 19(5), pp. 539 568.
- (15)Ogu, V. I. (2002). Urban Residential Satisfaction and the Planning Implications in a Developing World Context: The Example of Benin City, Nigeria. *International Planning Studies*.Vol. 7(1), pp. 37 53.
- (16)Mohit, M. A., Ibrahim, M. &Razita, Y. (2010). Assessment of Residential Satisfactionof Newly Designed Public Low-cost Housing in Kuala Lumpur.*Habitat International*.Vol. 34(1), pp. 18 27.
- (17)Salleh, A. G. (2008). Neigbourhood Factors in Private Low-cost Housing in Malaysia. *Habitat International*. Vol. 32(4), pp. 485-494.
- (18)Beamish, J. O., Goss, R. C. &Emmel, J. (2001). Lifestyle Influences on Housing Preferences. *Housing and Society*.Vol. 28, No. 1&2.
- (19)Tan, T. H. (2011). Neigbourhood Preferences of House Buyers: The Case of Klang Valley, Malaysia. *InternationalJournal of Housing Markets and Analysis.* Vol. 4, No.1, pp. 58-69.
- (20)Morris, E. W. &Winter, M. (1978). *Housing, Family* and Society. New York: John Wiley and Sons.
- (21)Bayoh, I., Irwin, E. G. &Haab, T. (2006). Determinant of Residential Location Choice: How Important are Local Public Goods in Attracting Homeowners to Central City Locations?.*Journal of Regional Sciences.* 46(1), pp. 97-120.
- (22)Karsten, L. (2007). Housing as a Way of Life: Towards an Understanding of Middle Class Families Preference for an Urban Residential Location. *Housing Studies*. Vol. 22, No. 1, pp. 83-98.
- (23)Bender, A., Din, A., Favarger, P., Hoesli, M. &Laakso, J. (1997).An Analysis of Perceptions Concerning the Environmental Quality of Housing in Geneva. Urban Studies. Vol. 34, No. 3, pp. 503-513.
- (24)Fiadzo, E. D., Houston, J. E. & Godwin, D. D. (2001). Estimating Housing Quality for Poverty and Development Policy Analysis: CWIQ in Ghana. Social Indicators Research. Vol. 53, No. 2, pp. 137.

- (25)Reed, R. & Mills, A. (2007).Identifying the Drivers Behind Housing Preferences of First-time Owners. *Property Management*. Vol. 25, No. 3, pp. 225.
- (26)Berkoz, L., Turk, S. S. &Kelleckci, O. L. (2009). Environmental Quality and User Satisfaction in Mass Housing Areas: The Case of Istanbul. *European Planning Studies*. Vol. 17, No.1, pp. 161-174.
- (27)Levy, D. & Lee, K. C. C. (2011).Neighbourhood Identities and Household Location Choice: Estate Agents Perspectives. *Journal of Place Management and Development*. Vol. 4, No.3, pp. 243-263.
- (28)Fan, W. (2010).Housing Environment Preference of Young Consumers in Guangzhou, China.*Property Management*. Vol. 28, No. 3, pp. 174-192.
- (29)Abdul Mohit, M. &Nazzydah, N. (2011).Social Housing Programme of Selangor Zakat Board of Malaysia and Housing Satisfaction. *Journal Housing and the Built Environment*. 26, pp. 143 164.
- (30)Yam, L. H. S., Ismail, M. & Tan, S. Y. (2008). Corporate Social Responsibility in Malaysia Housing Development-The Developer's Perspective. *Pacific Rim Property Research Journal*. Vol. 14, No. 2, pp. 177-198.
- (31)Begum, R. A & Pereira, J. J. (2008). Environmental Problems in Malaysia: A View of Contractors Perception. *Journal of Applied Sciences*. Vol. 8(22), pp. 4230-4233.
- (32)Mohd Rosli, M. & Kamaruddin, W. N. (2005). The Trend of Energy Consumption in Residential and Commercial Sectors. *Energy Smart.* Vol. 17, pp. 26-31.
- (33)Abidin, N. Z. & Awang, N. Y. H. (2012). A Foresight into Green Housing Industry in Malaysia. Universiti Sains Malaysia (USM): World Academy of Science, Engineering and Technology.
- (34)Carrol, A. B. (1999). Corporate Social Responsibility. Business and Society. 38(3), 268-295.
- (35)Yam, L. H. &McGreal, W. S. (2010).House-buyer's Expectations with Relation to Corporate Social Responsibility for Malaysian Housing. *International Journal of Housing Markets and Analysis.* Vol. 3, No. 2, pp. 132-145.
- (36)McWilliams, A. & Siegel, D. (2001). Corporate Social Responsibility: A Theory of the Firm Perspective. *Academy of Management*. Vol. 26, No. 1, pp. 117 127.
- (37)Patton M. Q. (2002). Qualitative Research and Evaluation Methods 3rd ed. Thousand Oaks, California:Sage.
- (38)Curry, L. A. & Bradley, E. H. (2009). Qualitative and Mixed Methods Provide Unique Contributions to Outcomes Research. *Circulation 119:1442-1452*.
- (39)Kauko, T. (2006). What Makes a Location Attractive for the Housing Consumers? Preliminary Findings

from Metropolitan Helsinki and Randstad Holland Using the Analytical Hierarchy Process. *Journal of Housing and the Built Environment*. Vol. 21, No. 2, pp.159