

RESIDENTIAL PREFERENCES IN RESIDENTIAL LOCATION CHOICE

Household Preferences in Penang Island, Malaysia

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ABSTRACT

Residential mobility attempts to address problems on households' life adjustments or the mismatch between residents' present needs and housing consumption. The desired preferences of each household may be complex to determine, but the trends or preferences in a residential area can be captured. Residential location choice stimulates residential mobility decision on the selection of a particular area. This study aims to identify residential preferences on relocation using a selected sample of 323 households in Penang who intend to move in the near future. Results show that residents prefer to move to other states than Penang. Therefore, determining residential preferences is necessary to develop corresponding housing policies.

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INTRODUCTION

Residential preference refers to residents' choice on various things related to living, such as places, type of facilities provided, accessible resources available and housing price. Residents are looking for the ideal type of houses that meet their personal needs and necessities and those of their family. Howley (2010) argued that residential preference refers to future housing characteristics that are predictable from a spatial choice available in an area. Residential preference is also known as choosing or favouring certain housing characteristics or desires by surveying residents at a particular point in time (Kim, Woosnam, Marcouiller, Aleshinloye, & Choi, 2015). Apart from determining desired attempts for certain houses, residential preference can also describe residents' dissatisfactions with the current residential area and neighbourhood that trigger residents to move out (Poku-Boansi & Adarkwa, 2015). Nevertheless, residential preference explicit a wide scope of mobility intentions that begin with residents' desired choice of houses, neighbourhood and places.

Similar to residential preference, residential location choice specifies residents' desired housing location. Residents may want their house to be close to their children's school or the city centre to decrease their travel time regardless whether the desired area has traffic congestion during peak hours. Housing developers also attract buyers by specifying the benefits of the location through advertisement using pamphlets (Tan, 2011). Thus, residential location preference is affected mainly by location attributes. Residential location preference is similar to residential relocation preference, but their definition differs. Specifically, the former indicates only the physical factors of a housing site or the neighbourhood, whereas the latter weights the aggregate costs of a new residential location (Jabareen, 2005; Tan, 2011; Jansen, 2013).

Many studies have investigated residential preference from different perspectives and dimensions, such as residential preferences on lifestyle through the demand side of the housing market (Heijs, van Deursen, Leussink, & Smeets, 2011); residential preferences on values and expanding lifestyle (Jansen, 2013); residential preferences on comfortable living vis-à-vis socio-cultural familiarity (Alshuwaikhat & Alkhars, 1993; Jabareen, 2005); and residential preferences from the perspective of synergy, well-

being and safety in a Klang Valley neighbourhood, Malaysia (Tan, 2011). The current study presents residential location choice trends to show residential preference on location choice in Penang, which is listed amongst states with high housing price in Malaysia. The objective of the study is to determine whether residents genuinely attempt to reside in Penang territory. Perhaps, they might reconsider their residential preference based on financial ability instead of their desires or preferences on house location. The study provides details on residential preferences on location choice by selected households who intend to move in the near future.

LITERATURE REVIEW

Residential location choice arises when there is a mismatch between residents' housing consumption and their necessities. The perception of dissatisfaction towards residents' dwelling and neighbourhood shapes residential mobility intention in terms of residential preferences or characteristics of the house that residents personally admire. Residential mobility is often triggered by the need for better housing (Musterd, van Gent, Das, & Latten, 2014) and it indicates that future relocation depends on preferences on better housing. The mobility decision opens an insight into residential preferences of residents. Kim, Pagliara, & Preston, (2005) argued that residential location choice have a high correlation with mobility decision. In the meantime, residential satisfaction determines the difference or gap between residents' actual and desired neighbourhood and location (Galster & Hesser, 1981). Residential preferences of residents are derived from their dissatisfaction towards their house or neighbourhood location. This factor triggers them to favour some idealistic pictures of houses and location.

Residential location choice refers to preferences on dwelling and neighbourhood characteristics or location attributes (Tan, 2011). This concept merely describes the attraction and uniqueness of a physical location. This factor is determined by imperfections of present location combined with preferences on the future dwelling (Cronqvist, Munkel, & Siegel, 2014). The location choice may vary from person to person, but most local people may prefer certain locations due to their familiarity and attachment to those places. Residential preference indicates the speciality

locational attributes of dwelling and neighbourhood.

Residential location choice is a critical component in a system of integrated transportation and land use model (Lee & Waddell, 2010). Residents critically favour certain locations because of the availability of transportation systems with the usage of land use within their place. Residents' choice considers the residential environment, availability of amenities and opportunities, traffic and accessibility (Poku-Boansi & Adarkwa, 2015). Good accessibility and associated land use mixture are also possible attractions in residential location choice (Molin & Timmermans, 2003).

Similarly, residential location choice is dependent on the placement features and the consequences of such choice (Guo & Bhat, 2007; Næss, 2013; Pagliara, Preston, & Kim, 2010; Yi & Lee, 2014). Residential location choice is a subset of residential preference. These deductions indicate that location choice interprets the preferences of residents. Residents' location choice should be reachable to their destination within estimated times. Residing in their location choice may be more advantageous for residents than living in their present house location.

METHODOLOGY

The study used a quantitative approach to identify the preferences of residents on location in their future relocation. The households were chosen using stratified sampling from 10 locations in Penang Island as designated by a report published by the Malaysian Town and Planning Department (Profil Bandar Pulau Pinang, 2009). The 10 locations of housing schemes were as follows: Bayan Lepas, Bayan Baru, Sungai Ara and Balik Pulau in Barat Daya District; and Tanjung Bungah, Tanjung Tokong, George Town, Jelutong, Air Itam and Sungai Dua–Sungai Nibong in Timur Laut District. These locations are established as communities or town growth centres with public facilities, infrastructure and utilities. The report also describes the population and households' demographic composition of these cities and the physical features and uniqueness of each of these locations.

The respondents were selected from households who were interested and intended to move in the future. A total of 323 residents were identified for the questionnaire survey by using a cross-sectional approach. One of the questions asked residents whether they intend to move with only a dichotomous answer option of yes or no. Only 323 residents who answered positive were left eligible in this study. These sampled residents indicated residential preferences and desires on housing location choice. The limitation of the study using cross sectional approach is that it relies on one time data collection. While longitudinal approach employs more than one time data collection which is more suitable, accurate and reflects the residential preference. This method however required more time and resources to complete data collection. A chi-square test was conducted to determine the associations between mobility decision and future location. The preferred location of these residents was obtained using the frequency.

RESULTS AND DISCUSSIONS

As mentioned in the methodology, the original number of respondents is 717. After filtering, only 323 respondents revealed an intention to move in the future. Thus, the number of respondents in this study is only 323. Table 1 shows the mobility decision of residents who intend to move in the future (yes) or those who do not. Residential preference on locational choice within the districts shows that Timur Laut is highly favoured by residents who intend to move. The tendency of residential location choice within Barat Daya and Timur Laut districts and others (including Seberang Perai and other states) is obtained by $X^2(df = 2, n = 717) = 421.657$ with $p = .000$. The results show that 18.8%, 14.9% and 11.6% of residents prefer Timur Laut District, Barat Daya District and others, respectively, for future relocation.

Local residents mostly prefer to move to Timur Laut District than Barat Daya District with a difference of 3.9%. The trends of residential location choice can be transformed into intra- and inter-urban mobility, which are likely a move between Pulau Pinang districts and that between Malaysia's states. Intra-mobility is the movement within Malaysia, whereas inter-mobility is the movement within Penang. Residents mostly favour Timur Laut than Barat Daya or other districts in Penang. A housing market report in 2014 listed that Timur Laut recorded the most costly housing price

in Malaysia. However, only 16% of landed properties were built in Timur Laut compared with Barat Daya at 56%. Nevertheless, road accessibility in Timur Laut District is quite limited, whereas many alternative roads are provided in Barat Daya District. Therefore, the ultimate preferences of residents can be related to their location attachment and not to housing price. The subjective view on Timur Laut District as surrounded with nature and greenery panorama may be another factor.

Table 1: Residential Preferences in Residential Location Choice of District

Future Location	Mobility decision			
	No	%	Yes	%
Timur Laut District	1	0.1	135	18.8
Barat Daya District	5	0.6	106	14.9
Outside Penang Island	388	54	82	11.6
Total	394	54.7	323	45.3
$\chi^2 (df = 2, n = 717) = 421.657$ with $p = .000$				

Source: Authors field studies and MBPP

A report highlighted the imbalance in ethnic distribution in Penang Island by the district (Draf Laporan Tinjauan Rancangan Struktur Negeri Pulau Pinang, 2030). It is unclear which ethnic group dominates the districts, but this situation indirectly influences residential preference therein. When minor ethnic groups encounter discomfort and isolation in the community, they may want to leave (Feijten & van Ham, 2009). They may also search other locations that they are familiar and satisfied with. The mix ethnic issue in residential areas should not be a problem because Malaysia has achieved independence for more than 60 years. However, ethnicity is still a factor of residential preference due to residents' culture and society background. Malaysians in the new era should terminate this negative mind set and instead strive for the unity of Malaysians. Residential preferences should be related to households' consumption for their necessities and are subjective depending on residents' views.

Table 2: Residential Preferences on Location Choice

Rank	Housing area	Frequency	%
1	Other states	60	18.6
2	George Town	29	9.0

3	Sg Ara	25	7.7
4	Balik Pulau	23	7.1
5	Seberang Perai	22	6.8
7	Bayan Lepas	20	6.2
7	Bayan Baru	20	6.2
9	Tanjung Bungah	18	5.6
10	Sg Dua	13	4.0
11	Pulau Tikus	12	3.7
12	Sg Nibong	10	3.1
13	Air Hitam	9	2.8
14	Batu feringghi	7	2.2
15	Jelutong	6	1.9
15	Tanjung Tokong	6	1.9
15	Sri Tanjung Pinang	5	1.5
18	Bandar Sri Pinang	3	0.9
18	Bayan Mutiara	3	0.9
18	Bayan Indah	3	0.9
18	Teluk Kumbar	3	0.9
22	Relau	2	0.6
23	Paya Terubong	1	0.3
23	Batu Maung	1	0.3
	Total	323	100

Source: Authors field studies and housing schemes from Profil Bandar Pulau Pinang 2009

As shown in Table 2, the results on location attributes show that ‘other states’ (18.6%) is mostly preferred by residents, followed by George Town (9%), Sg Ara (7.7%), Balik Pulau (7.1%), Gelugor and Seberang Perai (6.8%), Bayan Lepas (6.2%), Bayan Baru (6.2%), Tanjung Bungah (5.6%), Sg Dua (4%), Pulau Tikus (3.7%), Sg Nibong (3.1%), Air Hitam (2.8%), Batu Feringghi (2.2%), Jelutong and Tanjung Tokong (1.9%), Sri Tanjung Pinang (1.5%), Bandar Sri Pinang, Bayan Mutiara, Bayan Indah and Teluk Kumbar (0.9%) and Paya Terubong and Batu Maung (0.3%). These places are the choice that was filled by residents in the open-ended questionnaire.

The results show that ‘other states’ (all other states in Malaysia except Penang) is mostly selected by residents as their location choice. The trend indicates an inter-urban mobility, that is, residents prefer to move out of Penang Island. The reason may be due to the extremely costly housing price in Penang (Property Market Report, 2013). However, residents prefer to move to other states in Malaysia due to not only housing price but also housing consumption, such as family composition, retirement, financial and workplace.

George Town, which is the capital city of Pulau Pinang, is chosen as the next residential preference. The result indicates that residents prefer to live near the administrative centre that can provide all their necessities. George Town is also known as a tourist attraction wherein heritage buildings and cultural items are located. The city centre attracts crowd attention not because other locations do not have proper necessities but because the city is good for business and commercial purposes.

The next residential preference with 7.7% counts is Sg Ara which is next to Bayan Lepas and with borders to Relau and Bayan Baru. This area is more of a budding residential area than a bustling city due to its hilly terrain. Sg Ara is naturally known for its cool weather due to natural surroundings of the area. The unique nature appealed to the residents who prefer to live in Sg Ara.

The next preference location at 7.1% is Balik Pulau which is known as an agriculture area. Balik Pulau has reasonable housing prices for landed properties and is unique due to its closeness to nature and therefore less developed. Perhaps, residents’ eagerness to own landed properties influence their choice to live in Balik Pulau. Next in residential preference at 6.8% is Gelugor with a close link to Penang Bridge. One of the top public universities is located in Gelugor which is a strong influence to potential residents. Besides, this place is literally in the middle of Georgetown and Bayan Lepas. In fact, accessibility and market prices within Gelugor area should be a good prospect for investment, invariably boosting up housing price in the foreseeable future.

Seberang Perai recorded similar counts as Gelugor for residential preferences. In spite of the locations in Penang Island which are equipped

with good infrastructure and comfortable residential homes area, its high housing price could not win over residents due to financial unaffordability. Therefore, there will be options and choices for them to live off the island due to financial barriers. Designated as free industrial trade zone or FTZ, Bayan Lepas is chosen for the next residential preference at 6.2%. Residents prefer it because it is close to their workplace where many factories and companies are built in Bayan Lepas. Being close to transportation hub which is Penang International Airport and commercial areas such as Queensbay Mall are examples of facilities available in Bayan Lepas.

The next residential preference is Bayan Baru which recorded similar votes as Bayan Lepas. Residents favour this place because of the booming real estate due to rapid development in retail and commercial market prospects. Therefore, these prospects attract residents to choose Bayan Baru as their residential preferences.

Tanjung Bungah becomes the ninth place for residential preferences at 5.6%. This area has a high market value due to the fact it attracts the expatriate community and foreigners. Its geographical area and closeness to the beach and sea significantly influence the housing price. Most upcoming residential projects are extremely expensive which invokes a barrier for the local residents to own the houses. However, this study surveys strictly cover Malaysians only. Therefore, residents who choose the place are absolutely fine with the market price. Perhaps, the old settlements were built during the 1970s such as terrace and semi-detached houses belong to their parents or close relatives. Thus, attachment and familiarity to this place influence residents to relocate there in the future.

The next residential preference is Sungai Dua at 4% which is also the site of one of the public university, Universiti Sains Malaysia. Similar to Gelugor, the accessibility linkage to Penang Bridge as well as a hub for education influence residents to reside here. Hence, the facilities provided within the area attracts residents to choose for future mobility. The next residential preference is Pulau Tikus at 3.7%, which is located near to George Town. Its geographical area features a flat land with no slopping gradient. The advantage of Pulau Tikus is healthcare facilities such as the Adventist Hospital. Perhaps, that is one of the attraction to relocate to Pulau Tikus.

In 12th place with 3.1% votes, residents choose Sungai Nibong as the next residential preferences. Sungai Nibong has a public bus terminal hub to serve within Penang Island area and to the mainland. This might influence residents to relocate. In addition, Pesta Pulau Pinang is held annually at the end of the year once the school holidays begin resulting in a congregation of visitors from all over Malaysia. The next residential preference is Air Hitam at 2.8%. Tourism is the main attraction of Air Itam where Penang Hill and Kek Lok Si Temple are located. People have different tastes and preferences with regards to housing choices. Hence, these aspects potentially might attract residents for future mobility aside from attachment and a sense of belonging to a familiar place. \

The next residential preference is Batu Feringghi at 2.2%, which ranks at 14 in the survey. This place is full of natural beauty and therefore a tourist attraction. The high demand for residential area consequently led to an increase in the market price. Despite that, the fresh and soothing environment in Batu Feringghi appears more compelling to residents than the high market price. Undeniable natural beauty at a unique location on the island could not make up or compare with money value. Thus, the power of nature is a healing compensation for people which influence them to move in the future. The next residential preference is Jelutong and Tanjung Tokong which recorded similar ranks at 15 with 1.9%. Jelutong is quite developed with prominent infrastructure, namely the Tun Dr Lim Chong Eu Expressway. This infrastructure attracts more development in the surrounding area which sways others to live here in the future. Moreover Tanjung Tokong is mostly known for retail and commercial complexes such as Island Plaza and Straits Quays.

Tanjung Sri Pinang is a new residential area which is suburban of Tanjung Tokong. This area is previously reclamation land, it was chosen as next residential preferences with 1.5%. This new township has gated communities as well as landed properties and public housing such as low-cost flats. This area is close to Tesco outlet and other retail complexes for easy accessibility and convenience. The next residential preference shared with similar figures of 0.6%. The locations include Bandar Sri Pinang, Bayan Mutiara, Bayan Indah and Teluk Kumbar. These locations were developed on reclamation land and known as new residential area except Teluk Kumbar, Teluk Kumbar is known as a rural area which is less developed. Despite

that, this place has great environmental nature.

The next residential preference is Relau with 0.6%, place at 22nd. The residential area has been developed in this area in the last thirty years. Therefore, all residents necessities are well provided within the place which includes schools, retails and commercial areas. The last residential preference is Paya Terubong and Batu Maung. These places share the same counts with 0.3% by residents at 23rd. Based on voters registration, Paya Terubong is recorded as having the highest population density areas. In addition, its geographical area suits agricultural activity before being transformed into the residential site in the 1980s. The latest development in Batu Maung is the second Penang bridge to Bandar Cassia in Seberang Perai. Previously, Batu Maung is known for fishing and agricultural activities. Residential preferences towards these places indicate less favourable choice due to scarce development despite Penang second bridge linkage at Batu Maung. While the choice of Paya Terubong seems isolated in the middle of Penang Island and less attractive compared to other places.

Indeed, the location choices in Penang purely reflect its own attractions and advantages. The location choices ranked in Table 2 indicate that residents will likely move to these places in the future. As mentioned in the methodology, the locations are established as communities or town growth centres. Therefore, the locations cannot completely satisfy the necessities of people. Overall, the results show the tendency of location choice towards these locations in Penang.

CONCLUSION

This study presents residential preference on location choice. Residents are likely to favour certain locations that surely benefit them. The mismatch between necessities and housing consumption and the dissatisfaction with present house and location also trigger residents to look for other houses and places to move in. This situation results in residential mobility decision that allures residents to wonder and desire their preferred house. This study identifies residential preference on location choice in Penang Island including 10 locations of neighbourhood. The results show that residents are more likely to move to Timur Laut District than in Barat Daya District

and others. They are likely to choose other states than Penang Island itself and favours Timur Laut than Barat Daya district. The location choices in Table 2 show that 'other states' is mostly preferred by residents for future relocation, followed by George Town, Sungai Ara and the rest. Overall, the tendency of residential preference shows a residential mobility pattern based on residents' desires and aspirations. Residential preference is subjective and may vary from person to person. Notably, residents prefer locations that satisfy basic necessities of people. The findings are necessary to develop corresponding housing provisions and policies that cater to the trends of residents or buyers. These results can also be adopted in improving housing development.

REFERENCES

- Alshuwaikhat, H. M., & Alkhars, S. (1993). Residential Relocation in a Transitional Urban Environment: The case of Al-Hasa city, Saudi Arabia. *Habitat International*, 17(3), 137–147.
- Cronqvist, H., Münkler, F., & Siegel, S. (2014). Genetics, Homeownership, and Home Location Choice. *The Journal of Real Estate Finance and Economics*, 48(1), 79–111.
- Draf Laporan Tinjauan Rancangan Struktur Negeri Pulau Pinang (2030). Jabatan Perancangan Bandar dan Desa (JPBD) Negeri Pulau Pinang.
- Feijten, P., & van Ham, M. (2009). Neighbourhood Change Reason to Leave? *Urban Studies*, 46(10), 2103–2122.
- Galster, G., & Hesser, G. W. (1981). Residential Satisfaction: Compositional and Contextual Correlates. *Environment and Behavior*, 13(6), 735–758.
- Guo, J. Y., & Bhat, C. R. (2007). Operationalizing the Concept of Neighborhood: Application to Residential Location Choice Analysis. *Journal of Transport Geography*, 15(1), 31–45.
- Heijs, W., van Deursen, A. marie, Leussink, M., & Smeets, J. (2011). Researching the Labyrinth of Life-styles. *Journal of Housing and the Built*

Environment, 26(4), 411–425.

Howley, P. (2010). “Sustainability versus Liveability”: An Exploration of Central City Housing Satisfaction. *International Journal of Housing Policy*, 10(2), 173–189.

Jabareen, Y. (2005). Culture and Housing Preferences in a Developing City. *Environment and Behavior*, 37(1), 134–146.

Jansen, S. J. T. (2013). Different Values, Different Housing? Can Underlying Value Orientations Predict Residential Preference and Choice? *Housing, Theory and Society*, 31(3), 254–276.

Kim, H., Woosnam, K. M., Marcouiller, D. W., Aleshinloye, K. D., & Choi, Y. (2015). Residential Mobility, Urban Preference, and Human Settlement: A South Korean Case Study. *Habitat International*, 49, 497–507.

Kim, J.-H., Pagliara, F., & Preston, J. (2005). The Intention to Move and Residential Location Choice Behaviour. *Urban Studies*, 42(9), 1621–1636.

Lee, B. H. Y., & Waddell, P. (2010). Residential Mobility and Location Choice: A Nested Logit Model with Sampling of Alternatives. *Transportation*, 37(4), 587–601.

Molin, E., & Timmermans, H. J. P. (2003). *Accessibility Considerations In Residential Choice Decisions: Accumulated Evidence From The Benelux*. In Präsentiert auf dem „82nd Annual Meeting of the Transportation Research Board “(TRB), Washington, DC.

Musterd, S., van Gent, W. P., Das, M., & Latten, J. (2014). Adaptive Behaviour in Urban Space: Residential Mobility in Response to Social Distance. *Urban Studies*, 53(April 2014), 1–20.

Næss, P. (2013). Residential Location, Transport Rationales and Daily-Life Travel Behaviour: The case of Hangzhou Metropolitan Area, China. *Progress in Planning*, 79(0), 1–50.

- Pagliara, F., Preston, J., & Kim, J. (2010). *The Impact of Transport Policy on Residential Location*. In F. Pagliara, J. Preston, & D. Simmonds (Eds.), *Residential Location Choice SE - 6* (pp. 115–136). Springer Berlin Heidelberg.
- Poku-Boansi, M., & Adarkwa, K. K. (2015). Determinants of Residential Location in the Adenta Municipality, Ghana. *GeoJournal*, 81(5), 779-791.
- Profil Bandar Pulau Pinang (2009). Jabatan Perancangan Bandar dan Desa Semenanjung Malaysia. Kementerian Perumahan dan Kerajaan Tempatan.
- Property Market Report. (2013). Pulau Pinang. Jabatan Penilaian dan Perkhidmatan Harta (JPPH), Kementerian Kewangan Malaysia. Putrajaya
- Tan, T.-H. (2011). Neighborhood Preferences of House Buyers: the Case of Klang Valley, Malaysia. *International Journal of Housing Markets and Analysis*, 4(1), 58–69.
- Yi, C., & Lee, S. (2014). An Empirical Analysis of the Characteristics of Residential Location Choice in the Rapidly Changing Korean Housing Market. *Cities*, 39(0), 156–163.