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### RESIDENTIAL SATISFACTION ON NEIGHBOURHOOD: RESIDENTIAL MOBILITY IN MALAYSIA

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#### *Abstract*

Residential mobility refers to adjustments of housing needs made by households in response to changes in family life cycle phases. Households may express dissatisfaction with current housing and neighbourhood environment, relative to their desired needs, characteristics and preferences. Residential mobility involves the actual moving thus implying changes in the neighbourhood composition and structure as the current residents may decide to move out or stay on, while the new residents may move in the neighbourhood. An assessment of the neighbourhood setting can capture residents' views and perceptions of the neighbourhood environment, be it satisfactory or otherwise; and subsequently, residents may decide whether to move out or stay on in the neighbourhood. The paper aims to establish linkages between residents' perceptions of the neighbourhood environment and residential mobility behaviour. Primary data were collected via a questionnaire survey of 589 households in selected neighbourhoods in Penang, Malaysia. Study results show that attributes of neighbourhood environment, neighbourhood interaction and neighbourhood attachment are significantly associated with residential mobility. Residents who expressed satisfaction with their neighbourhood are more likely to stay on, and vice versa. Hence, future housing policy in the country should take into consideration residential mobility behaviours to enhance the neighbourhood quality for the benefits of all residents.

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**Keywords:** Residential mobility, residential satisfaction, neighbourhood attributes, neighbourhood quality, residents' perception.



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## 1. Introduction

Residents' dissatisfaction with current housing needs and neighbourhood environment has been perceived as a key factor affecting residential mobility. Such dissatisfaction is reflected mainly in the residents' future mobility plans and behaviours as they look out for desired housing characteristics and quality neighbourhood in other locality (Varady, 1983). In essence, residents tend to move out when there is disequilibrium or imbalance in housing consumption. Indicators of residential mobility including actual moving and mobility intention are commonly used to denote residents' mobility plans and behaviours (de Groot, Mulder, & Manting, 2011). This paper aims to establish whether residents' perceptions and satisfactions of their neighbourhood environment are linked with intentions to move out of the neighbourhood, specifically in the context of Penang Island, Malaysia.

## 2. Problem Statement

Households' housing consumption is closely related to changes in family life cycle. Family life cycle including birth, death, marriage, divorce or separation can prompt considerable changes in households' housing needs, rental affordability and homeownership (Clark & Huang, 2003). Varying expenses on housing consumption can trigger housing adjustment or residential mobility (Clark, Deurloo, & Dieleman, 1984). Theoretical pioneer of residential mobility (Rossi, 1955) asserts that housing adjustments are necessary in parallel with changes in family structure and housing needs. Residents typically conduct actual mobility by literally moving to another house elsewhere (Mulder & Hooimeijer, 1999). On the other hand, mobility intention signifies residents' thought, intention and contemplation to move out in the future (de Groot et al., 2011). Actual mobility and mobility intention are both considered as manifestations of residential dissatisfaction with the neighbourhood.

A typical neighbourhood comprises rows or clusters of housing located within a locality, often with shared accessibility and facilities, social connection, neighbourhood interaction and attachment. Residential satisfaction indicates a detailed assessment based on human psychological view of residents' perceptions and satisfactions of their neighbourhood (Liu, 1999; Parkes & Kearns, 2003; Varady, 1983). Residential satisfaction is a measure of an apparent mismatch between actual neighbourhood conditions versus residents' expectations and future desires; and it is a true reflection of residents' feeling, perception and experience with the current housing and neighbourhood (Galster & Hesser, 1981; Mohit, Ibrahim, & Rashid, 2010). It is noteworthy that residents' experience with the neighbourhood and how they perceive their dwelling and neighbourhood can vary through time and space. In essence, residential mobility tends to decrease when residents are generally satisfied with their housing and neighbourhood, and vice versa. Hence, residential satisfaction is a key parameter in determining residential mobility (Boschman, 2018; Jiang, Feng, Timmermans, & Li, 2019; Speare, 1974). Unlike previous studies which have focused mainly on determinants of residential satisfaction based on neighbourhood assessments of various physical and social setting (Aulia & Ismail, 2013, 2016; Tan, 2016) this study aims to extend the notion of residential satisfaction by establishing linkages between attributes of neighbourhood quality and residential mobility behaviours, with a special focus on Penang Island.

### 3. Research Questions

This study aims to examine mobility behaviours among residents through their perceptions of residential satisfaction in designated neighbourhoods in Penang Island, Malaysia. The research question postulates on the residents' levels of satisfactions with regard to the neighbourhood environment, social interaction in the neighbourhood and sense of attachment in the neighbourhood. Based on residents' perceptions of the neighbourhood, it is important to solicit whether the residents have any intention to move out of their neighbourhood in the future. The primary research question is whether there is a significant relationship between residents' perceptions of residential satisfaction and mobility intention.

### 4. Purpose of the Study

The study is focused on residents' perceptions of current neighbourhood quality and posits linkages with residents' future mobility plan. The study presents three attributes (i.e. neighbourhood environment, frequency of interaction with neighbours, and sense of attachment in the neighbourhood) as those factors that can affect residential satisfaction; and subsequently trigger residents' mobility behaviours. Firstly, neighbourhood environment refers to a visual scene of desirable physical attributes in a neighbourhood including cleanliness, maintenance and security (Mohit & Adel Mahfoud, 2015; Savasdisara, Tips, & Suwannodom, 1989). Other residents may prefer other attributes such as privacy location (Alshuwaikhat & Alkhars, 1993), good sunlight orientation (Salleh, 2008) and good ventilation (Mohit & Azim, 2012) in respective neighbourhoods.

Secondly, neighbourhood interaction relates to a sense of connection and social ties among residents. Some common measures include neighbourhood relationship and sense of trust (Dassopoulos & Monnat, 2011), frequent interaction (Baum, Arthurson, & Rickson, 2010), visiting neighbours (Aziz & Ahmad, 2012) and participating in neighbourhood activities (Van Assche, Haesevoets, & Roets, 2019). Interaction with neighbours may be performed through communications aids such as telephone calls, text messages and emails (van den Berg, Arentze, & Timmermans, 2015). Frequency of interaction with neighbours can enhance residents' satisfaction towards the neighbourhood, builds up a community feeling and sense of togetherness among residents (Karuppanan & Sivam, 2011).

Finally, neighbourhood attachment refers to emotional bonds that exist between residents and the neighbourhood, which is often created through childhood memory, convenience and familiar places. Such emotive bonds are reflected in pleasant treatments of neighbours (Hamdan, Yusof, & Marzukhi, 2014), satisfaction with neighbourhood (Permentier, van Ham, & Bolt, 2009) and sense of attachment to the neighbourhood (Hashim, 2003). Residents may also express their favour or dislike of the neighbourhood through the action of staying or leaving (Lotfi, Despres, & Lord, 2019).

This study examines residents' perception towards attributes of neighbourhood physical environment, frequency of neighbourhood interaction and sense of neighbourhood attachment to determine the key factors that significantly influence residential mobility. Residents' perceptions of their neighbourhood may set off various possibilities of residential mobility in the future. While some residents may decide to leave right away, other residents supported by community groups may choose to rebuild their place through physical adjustments, house renovation and extension as well as upgrading the neighbourhood accessibility and environment to transform the existing neighbourhood landscape. On the

other hand, some residents may be very satisfied with the neighbourhood conditions and made no changes at all. Nonetheless, neighbourhood quality is a vital element of residential choice that contributes towards neighbourhood satisfaction and quality of life among residents.

Hence, a study of neighbourhood quality as an influencing factor on residential mobility is most timely especially in the context of Penang due to increased residential mobility patterns observed in the state in recent years (Department of Statistics Malaysia, 2014). Intra and inter urban mobility trends between Penang Island and the mainland have expanded rapidly with the introduction of mass transportation linkages in the northern region of Malaysia. Such mobility trends have had many policy implications particularly on the structure and hierarchy of cities as well as the socio-economic profile of multi-cultural Malaysian population. Therefore, this study aims to cross-examine neighbourhood attributes and residential mobility behaviours in order to establish linkages between residents' perception, rational intentions and future residential mobility.

## 5. Research Methods

The study embarks on a quantitative approach to investigate the relationship between residents' perceptions of neighbourhood and residential mobility behaviour. A cross-sectional approach rather than a longitudinal study is employed due to time and resource constraints. Accordingly, the study utilises a cross-sectional inquiry to solicit whether or not the residents have any intention to move out of their current house in future (Clark & Coulter, 2015). A longitudinal study on the contrary necessitates recording of actual mobility behaviours at future time intervals (Kley & Mulder, 2010). The study respondents consist of 589 residents of ten large neighbourhoods in Penang Island, Malaysia derived from the report *Profil Bandar Pulau Pinang 2009*. The respondents are selected using the stratified sampling method. The questionnaire used in the survey is developed based on detailed literature review to establish major constructs and items pertaining to neighbourhood environment, neighbourhood interaction and neighbourhood attachment.

The five-point Likert scale is used in the questionnaire to assess residents' satisfaction on the neighbourhood environment, ranging from Very Dissatisfied, Dissatisfied, Moderate, Satisfied to Very Satisfied. For neighbourhood interaction and neighbourhood attachment, the study employs measures of frequency of neighbourhood interaction and agreement on sense of neighbourhood attachment, instead of the satisfaction dimensions. [The five-point Likert scale measurement for frequency of neighbourhood interaction ranges from Never, Occasionally, Seldom, Frequently to Always. Similarly, measurement for agreement on a sense of neighbourhood attachment ranges from Strongly Disagree, Disagree, Moderate, Agree to Strongly Agree.

For purposes of analyses, responses of 'Very Dissatisfied' and 'Dissatisfied' are combined and reclassified as 'Dissatisfied'. Likewise, responses of 'Satisfied' and 'Very Satisfied' are grouped together and reclassified as 'Satisfied'. Merging of scaled responses allows for a dichotomy of residents' perceptions, of either negative ('Very Dissatisfied' and 'Dissatisfied') or positive ('Satisfied' and 'Very Satisfied'). Such clear dichotomy also facilitates in analysing the results of analyses. Responses of 'Moderate' remain unchanged due to some difficulty in meaning and interpretations. A similar method of combining the responses also applies for neighbourhood interaction and attachment measurement. Analysis

of Chi-square is utilised to determine the relationship between neighbourhood perceptions and residential mobility behaviour.

## 6. Findings

Analysis in this study shows that 318 residents (54%) have no intention of leaving their neighbourhood; while 271 residents (46%) plan to move out in the future. Out of the 296 residents (50.3%) who are moderately satisfied with the neighbourhood environment, 143 residents (48.3%) plan to move out in the future. Residents' satisfaction with neighbourhood environment is found to be significantly related to residents' mobility intention,  $\chi^2$  (df=2, n=589) =64.23 with p =.000 (refer Table 1).

**Table 01.** Satisfaction with neighbourhood environment and mobility intention

Mobility Intention	Neighbourhood Environment						Total (%)
	Dissatisfied	%	Moderate	%	Satisfied	%	
Not Move	51	39.2	153	51.7	114	69.9	318 (54)
Move Out	79	60.8	143	48.3	49	30.1	271 (46)
Total	130	100.0	296	100.0	163	100.0	589 (100)
$\chi^2$ (df=2, n=589) =64.23 with p =.000							

Table 1 shows 79 residents (60.8%) who are dissatisfied with the neighbourhood environment are making plans to move out. Comparatively, 114 residents (69.9%) who are satisfied with the neighbourhood environment plan to stay on in the neighbourhood. These results parallel with previous studies which indicate quality neighbourhood environment plays a major role in influencing residential mobility (Dawkins, Jeon, & Pendall, 2015; Moser, 2009). Intentions to rebuild the neighbourhood may apply to these satisfied residents who intend to stay. Nonetheless, 49 residents (30.1%) who are satisfied with the neighbourhood environment have made plans to leave. It is possible other attributes of neighbourhood environment including design, aesthetics, landscape, privacy and security which are important for residential satisfaction may also cause residential mobility (Amérigo & Aragonés, 1997). Many Malaysians have since upgraded or renovated their physical home and existing neighbourhood for better living quality and residential satisfaction (Saji, 2012).

Neighbourhood interaction refers to residents' connection with the neighbours as portrayed by frequency of chatting, neighbourhood visits etc. This study shows that the frequency of neighbourhood interaction is significantly associated with mobility intention,  $\chi^2$  (df=2, n=589) =33.78 with p =.000 (refer Table 2). Some 52 residents (71.2%) who frequently interact with their neighbours intend to stay on in the neighbourhood. Another 129 residents (61.1%) who occasionally interact with neighbours intend to move out. However, 21 residents (28.8%) who frequently interact with neighbours also plan to move out; this situation is possibly due to other family, job-related or financial matters. The results are well supported by the notion that frequency of neighbourhood interaction builds up trust, faith and shared values within neighbours (Dassopoulos & Monnat, 2011). It is noteworthy that community linkage is a key element in neighbourhood interactions (van den Berg et al., 2015).

**Table 02.** Frequency of neighbourhood interaction and mobility intention

Mobility Intention	Neighbourhood Interaction						Total
	Occasionally	%	Seldom	%	Frequently	%	
Not Move	82	38.9	184	60.3	52	71.2	318 (54)
Move Out	129	61.1	121	39.7	21	28.8	271 (46)
Total	211	100.0	305	100.0	73	100.0	589 (100)
$\chi^2(df=2, n=589) = 33.78$ with $p = .000$							

The study findings also revealed that sense of neighbourhood attachment is significantly linked with mobility intention,  $\chi^2$  (df=2, n=589) =64.28 with  $p = .000$  (refer Table 3). Table 3 shows 91 residents (72.2%) who disagree with sense of neighbourhood attachment wish to move out; while 95 residents (78.5%) who agree with sense of neighbourhood attachment decide to stay on in the neighbourhood. Residents' strong feelings of attachment towards the neighbourhood prompt them to remain in the neighbourhood. Similarly, previous studies found that a sense of neighbourhood attachment correlates with a lesser desire to move out of a neighbourhood (Clark & Coulter, 2015). Healthy neighbourhood interactions reveal amicable engagements among neighbours; while strong neighbourhood attachments show solid bonds within the neighbourhood. Low sense of attachment among neighbours was expressed by 91 residents (72.2%) who wanted to move out. Residents' sense of attachment towards the neighbourhood may be linked to social resilience of the city. A sense of contentment of local neighbourhood characteristics influence them to stay in the neighbourhood, rather than leave.

**Table 03.** Sense of neighbourhood attachment and mobility intention

Mobility Intention	Neighbourhood Attachment						Total
	Disagree	%	Moderate	%	Agree	%	
Not Move	35	27.8	188	55.0	95	78.5	318 (54)
Move Out	91	72.2	154	45.0	26	21.5	271 (46)
Total	126	100.0	342	100.0	121	100.0	589 (100)
$\chi^2(df=2, n=589) = 64.28$ with $p = .000$							

Empirical evidence from this study clearly shows residents' high level of satisfactions towards the neighbourhood environment, interaction and attachment are significantly associated with an intention to stay on in the neighbourhood. The study finding is consistent with previous studies which indicate residents' satisfaction with the neighbourhood attributes is closely linked with lesser mobility intentions (Jiang, Feng, Timmermans, & Li, 2019). It is noted that the residents' decision to move out of the neighbourhood is an outcome of dissatisfaction with housing and neighbourhood environment concerning residents' future residential needs and preferences.

## 7. Conclusion

This paper examines residents' perceptions of the neighbourhood environment, whether satisfactory or otherwise, and aims to establish a linkage between those residents' perceptions and residential mobility behaviours, with special reference to Penang Island, Malaysia. Residential satisfaction indicates a mismatch or gap between households' actual housing consumption and their future residential needs and preferences.

Under consumption of housing and feeling of dissatisfaction among residents may trigger residential mobility. Perceptions of neighbourhood attributes of the physical environment, interaction and attachment in this study revealed a mixed assessment of satisfaction levels among residents. Nonetheless, the study results showed significant relationships between residents' perceptions of neighbourhood environment, interaction and attachment with mobility intentions. Those residents who have voiced strong dissatisfactions with their neighbourhood environment, interaction and attachment are more likely to move out of the neighbourhood, and vice versa. Moving behaviour is however related to financial means which may pose an obstacle to those residents of lower-income groups. In essence, this study shows interesting linkages between satisfaction of neighbourhood quality and residential mobility behaviour. The study findings reflect good dimensions of residential satisfaction ranging from the micro context of the dwelling to the macro-setting of the neighbourhood ( Aragonés, Amérigo, & Pérez-López, 2016; Mohit & Adel Mahfoud, 2015; Wang & Wang, 2015). This study has also revealed significant relationships between residential satisfaction measurements based on residents' perceptions, and residential mobility behaviours.

From a policy perspective, residential mobility is a consistent and pervasive behaviour that affect land use and urban planning policies and influence their spatial outcomes especially in expanding urban areas. Studies on the impact of intra and inter-urban mobility patterns including its projection and estimation would provide policy makers with the necessary tools to assess and monitor changes in residential land use patterns and spatial distribution of population demographics across cities and regions. Adopting sustainable housing layouts and integrating quality neighbourhood attributes can facilitate in shaping and rebuilding good neighbourhood landscape and enhancing the fabric of urban neighbourhood that supports sustainable living for all residents.

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