

## **RESIDENT'S PERCEPTION ON LIVABILITY IN AFFORDABLE HOUSING IN MALAYSIA**

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### **Abstract**

Housing affordability has always been an issue worldwide. With the increase in human population and spiraling house price, governments have been scrambling to build sufficient affordability house to meet the forever increasing demand. In light of this there is concern on the livability aspect of these affordability houses built have been compromised. This research identifies the livability attributes and studies the perception of residents' in affordable housing towards these attributes. Findings revealed that there is compromise in location of the affordable housing schemes. The findings also signified that the most important issues to the residents were safety and accessibility to health facilities. Interestingly this research suggest that many residents within the affordable housing schemes tend to make do with the situation and would seriously consider moving to better dwellings if the opportunity arises.

**Keywords:** *affordability; livability; housing; perception*

## **1.0 Introduction**

Housing forms one of the basic needs of human; Maslow's Theory Hierarchy of Needs (1943) (Maslow, 1943) describes that housing forms the foremost important need. Previous research (Oberlink, 2008) specifies housing is such a fundamental necessity that people often question about where to live largely on the basis of what kind of housing options are available and whether these options meet their current budget and requirement. Today, housing affordability is a sore point for many world wide with house price spiraling out of control. Most governments through out the world strive to come up with solutions to solve housing woes by developing affordable housing as fast as possible. For instance in Malaysia, the government through the 10th Malaysia Plan (10MP) , has targeted 78,000 units of affordable houses to be built, consisting of 38,950 units under the People's Housing Programme (PHP) and 39,050 units under programmes related to the Ministry of Rural and Regional Development to meet the needs of the low- income groups and squatters. Although the National Housing Policy Malaysia 2013 (NHP), does emphasise on essentials such as quality construction and provision of public amenities, there is fear that in trying to meet such targeted affordable housing numbers, the livability aspect can be somewhat compromised. This is especially so in light of high land and building construction cost.

There have been few attempts to investigate people's perceptions about the places they currently live, especially what makes their neighbourhood a good or bad place to live in. Many studies have generally focused on residents' satisfaction with their living environment (Carp, 1982; Turkoglu, 1997; Savasdisara, 1988; Parkes et al. 2002; Dekker, 2007) and rarely on the attributes or dimensions that are important to them. As mentioned by García-Mira (1997), a person's response to physical and social environmental stimuli are "coded" subjectively on internal scales in the individual's mind. They further elaborated that most perception studies take this for granted by assuming that all individuals will accord the same importance to the underlying attributes or dimensions. Clark (1984) in their studies have reviewed various authors' studies, and concluded that not everyone finds the same characteristics to be important in their neighbourhood or evaluates neighbourhood satisfaction on the basis of the same criteria.

A comprehensive literature search revealed some research on livability in Malaysia. Most scholarly research revolved on local urban living environments that are clustered around well being (Dasimah, 2005; Nurizan, et. al 2004b) quality of life and satisfaction (Norhaslina, 2002; Shah, 2012; Mohit, 2014) livability dimensions and attributes (Jasmine, 2010). A majority of neighbourhood quality perception studies to date have been conducted in western countries and culture. As such, it is questionable whether the data from these studies are applicable to assess housing livability issues in the Malaysian context, which is multi racial, multi cultural and multi religion. Local environment quality studies are critical and useful in formulating doable urban policies. Hence in view of the above scenario, the authors embarked on research aimed to identify the attributes that residents consider in evaluating the livability of their affordable homes and to appraise the importance of these attributes.

## **2.0 Literature Review**

Affordability is well-defined by the relationship between household's income and housing expenditure. Affordability is also apparent as interrelated to incomes, employment, housing availability, housing costs, patterns of new construction, and maintenance of the existing affordable housing stock (Singaravello, 2010). However, Pivo (2013) in his study stated three critiques of the 30% of income criteria typically used to define housing affordability includes shelter poverty issue, area affordability costs and housing condition problems.

Shelter and poverty issues had been determined as the first concern where, lower income families that pay 30% of their income for housing may not have enough money remaining to cover other essential needs. Stone (2006) stated that shelter poverty, which linked to lack of affordability is related to household's incompetence to meet non-housing needs at a minimum level after housing

payment such as food, clothing, medical care, transportation and others. This happens, as stated by Harrell (2013) in their study, when households spend 30 percent or more their income on housing costs and is considered as cost burden. This would lead to negativity to homeowners on term of housing affordability.

Whereas, affordable housing is housing that is pertinent for the needs of a range of very low to moderate income households and priced so that these households are also able to meet other basic living costs such as food, clothing, medical care, transport and education. Most countries indicated housing, which will be considered affordable if it costs less than 30 percent of gross household income (New South Wales, The Department of Family and Community Services).

Affordable housing may add substance to additional "area affordability" costs such as where these houses may be located to endure additional costs due to environmental, social, or transportation conditions. For instance some developers built houses in less accessible locations, where people must drive alone to work, own more cars, or face longer commute times. Other than accessibility, neighbourhood socioeconomic conditions and public safety also need to be put in account of area affordability cost. This resulted higher area affordability costs for house owners. Additional facts related to neighbourhood conditions, accessibility, and the ability of families to afford their non-housing needs should be given more consideration (Pivo, 2013).

## **2.1 Understanding Livability**

Across the board a number of researchers find that livability as a concept that is difficult to define and measure (Wheeler, 2001; Balsas, 2004; Heylen, 2006; Throsby, 2005) explained that livability encompasses the characteristics of urban environments that make them attractive places to live and pointed out that such characteristics could be divided into tangible features, particularly with regard to the availability of public infrastructure and intangible features, such as sense of place, local identity and social networks. Whereas according to Heylen (2006) livability refers to the environment from the perspective of the individual and also includes a subjective evaluation of the quality of the housing conditions. While Litman (2011) deems that livability refers to the subgroup of sustainability impacts that directly affect people in a community, such as economic development, affordability, public health, social equity and pollution exposure.

Omuta (1988), in his research to determine the livability of various neighbourhoods in Benin City, Nigeria utilised five broad dimensions: employment, housing, amenities, nuisances and socio-economic factors. Similarly Holt-Jensen (2001) in a study to improve a deprived neighbourhood took into account of four factors considered by residents to be important for a good living location, which were aesthetics, functionality, social relations and individual factors. Interestingly the said factors paralleled Wheeler (2001) definition of livability that included the quality of being pleasant, safe, affordable and supportive of human community. Balsas (2004) elaborated on the same theme that a livable place should be safe, clean, beautiful, economically vital, affordable, efficiently administered, have good functional infrastructure, include interesting cultural activities, contain ample parks, maintain effective public transportation, support broad opportunities for employment and provide a sense of community. On the same theme, Heylen (2006) addressed the four dimensions of livability often observed in Flanders and the Netherlands, were namely quality of the dwelling, quality of the physical environment, quality of the social environment and neighbourhood safety. Based on his study on rural inhabitants in Aspinge, Sweden, (Vergunst, 2003) introduced a livability framework (see Figure 1). The framework portrayed that livability is made up by the interactions between five variables: local inhabitants, community life, service level, local economy and physical location. For the local inhabitants, their number, demographic structure (age and sex) and lifestyle were among the important factors. Service level refers to communication, schools, and homes for the elderly, and shops. The local economy represents the ability of a place to generate income and employment, and lastly, physical location describes the landscape and buildings in the area.

The various studies carried out on livability disclosed several common livability attributes, such as, functional, physical and social environments. Although safety issues did not feature in the earlier studies, findings in later studies revealed the importance of safety issues. The attributes are tabulated in Table 1.

**Table 1: Livability Attributes defined in selected research**

<b>Omuta 1988</b>	<b>Holt-Jensen 2001</b>	<b>Vergunst 2003</b>	<b>Visser et al 2005</b>	<b>Heylen 2006</b>	<b>Jasmin LL and Ahmad HH 2010</b>
Employment	Aesthetics of living environment	Local inhabitants	Housing	Dwelling	Safety
Housing	Personal	Community life	Social environment	Social environment	Physical
Amenity	Social relations	Service level	Physical environment	Physical environment	Functional
Educational	Functional	Local economy	Functional	Safety	Social
Nuisance		Physical place			
Socio-economics					

(Sourced and adapted from Jasmine, 2010)

Therefore livability can be broadly defined as “the wellbeing of a community and represents the characteristics that make a place where people want to live now and in the future”, (VCEC, 2008). Other research have also linked the concept of livability to a range of factors such as quality of life, health, sense of safety, access to services, cost of living, comfortable living standards, mobility and transport, air quality and social participation (Bishop, 1995; Howley, 2009).

In light of the above discussion, several pertinent attributes of livability relevant to this research were identified. Clearly the foremost attribute is the physical aspect of the dwelling. This includes the quality and suitability of the dwelling. Next are the community and neighbourhood factors. This refers to issues of trust and helpfulness of the community and neighbourhood committees. The third attribute relates to public amenities such schools, childcare, transportation, playgrounds, health facilities, libraries, shopping facilities and the like. The fourth indicator relates to the economic situation of the residents, while the fifth indicator relates to the well being of the residents. The final indicator is all about safety and security. The identified livability indicators have been adopted as the mainstay of this research. The identified attributes and sub-attributes are listed Figure 2.

### **3.0 Research Methodology**

The research methodology is quantitative in nature. Quantitative approach studies conversely are to answer the ‘what?’ questions. It is a deductive process to determine the relationship between variables (independent and dependent) using either descriptive or experimental designs (Hopkins, 2008). The main instrument adopted is the questionnaire, which is a written instrument used to obtain information from a study’s subject. According to Zikmund (2003), a well-designed and administered questionnaire could facilitate the researcher to address the research objectives. Zikmund (2003) stated that as a “rule of thumb” in designing a questionnaire, it should be as simple as possible, to collect only the needed information and be valid. In short, the questionnaire design must be able to be generalised and have a degree of freedom for respondents when answering questions.

### **3.1 Instrument**

The questionnaire survey was the instrument adopted in this research. A structured questionnaire approach was used to understand the respondents' point of view rather than make generalised assumptions. This provided sufficient flexibility and the best information about the subject matter under study. In designing the questionnaire, Hague (1993) noted that the primary role of a questionnaire is to draw accurate information from the respondent. Accurate information is obtained by asking the right questions of the right person.

The questionnaire design was based on the literature review analysed in relation to livability of dwelling, communities and neighborhoods. The questionnaire was carefully crafted to assist in conducting the survey and to provide adequate coverage for the purpose of this research. Close-ended responses were employed in designing the questions, which are sometimes called the fixed-alternative questions, to focus on the issues identified as relevant to the investigation (Singleton, 2010).

This common structure was necessary to gather a sufficiently large body of comparable data across different respondents in order to make statistical inferences. Furthermore, several categories of close-ended questions were used in designing the questions, as recommended by Zikmund (2003). The choice of closed-ended responses will expose the research to a limited number of answers – requiring only recognition and a choice among the answer options. Close-ended questions have benefits in the form of saving time because the respondents need only to tick or circle the answers (Root, 2003). Major questions were developed in the form of general statements, which were then followed by a sequence of sub-questions that probed with further depth.

The questionnaire was validated by academic experts to ensure that the contents were sufficient to meet the needs of this research. A pilot study was carried out to identify ambiguities, and permit early detection of any necessary reviews, additions or omissions. After which, the questionnaire was ready for distribution.

The questions were formulated using yes/no answers and quantitative scale with which respondents were asked to express the importance of indicators under each of dimension on a ten-point Likert style response scale (1 for “unimportant” and 10 for “very important”) for affordable and livability issues. Apart from this, the questionnaire also contained demographic questions that included the respondent's age, gender, income, household income, education level, employment status, tenure status and length of residency in the neighbourhood.

In this research, the field survey was conducted face-to-face between questioners and respondents. A group of questioners were identified and briefed thoroughly to ensure standardization of approach to respondents, neutralizing respondent queries and explanations to respondents. Throughout the survey, the research team members were available to assist the questioners. Altogether 500 questionnaires were printed and distributed. A cover letter identifying the subject to engage the interest of the respondents was attached to the questionnaire. The letter explained the nature and objectives of the study. The survey for this research was conducted in October and November 2014. The questionnaire was administered to the selected area of investigation.

### **3.2 Data Sampling**

Generally, a sample is a finite part of statistic, to gain information and is defined as the act, process and technique of selecting a suitable sample or representative part of a population, for the purpose of determining parameters or characteristics of the whole population (Cooper, 2006). Random sampling approach within the identified areas was used in this research.

When considering sampling decisions, the basic criterion to take into account in quantitative research is the statistical representativeness of the sample - i.e. the degree to which it resembles the whole population concerning the characteristics being studied, since it should enable researchers to generalise their findings for the entire population (Brito, 2009). The issue of sampling is important because it is rarely the case that one has sufficient time and resources to conduct research on all possible individuals who could potentially be included in the study.

According to Frankfort-Nachmias (1996), generalisation in an empirical survey is usually based on partial information from the entire population. In addition, sampling is also important for gathering consistent, accurate and unbiased estimates of the population's status in terms of whatever was being researched (Sapsford, 2006). As such the sampling was only carried out in Kuala Lumpur and Johor Bahru. Kuala Lumpur is heavily urbanized with many issues in affordable housing while Johor Bahru is in rapidly climbing up the urbanization ladder. In Kuala Lumpur the questionnaire distribution focused on areas like Batu Caves, Selayang and Sentul, whereas in Johor Bahru, Pasir Gudang, Larkin and Skudai were the focus areas. All the areas of focus were identified to be areas of affordable housing. Respondents were selected at random, as long as the respondents lived in the affordable housing within the identified areas.

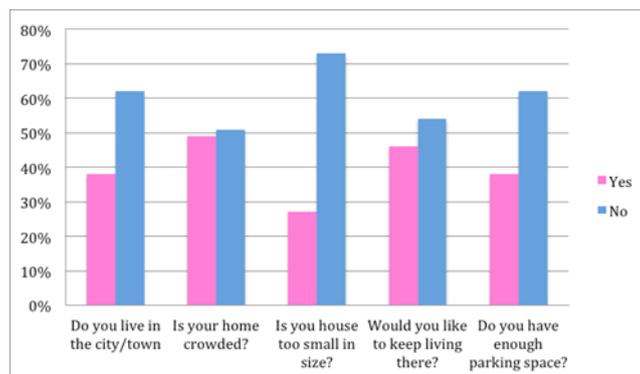
To generate the results, the research adopted computerized data analysis in the form of software package (SPSS) Version 21. An accurate analysis method is needed to arrange the large body of data in a systematic and reliable way so that the objectives of the survey could be achieved.

#### **4.0 Findings**

The respondents' age ranged from under 30 to 65 years. Slightly more than 70% of the respondents had a monthly personal income between RM3000 and below. About 40% of respondents who earned up to RM3000 were aged 30 and below.

#### **4.1 Housing Issues**

On the whole, slightly more than 50% of the respondents were quite satisfied with their physical dwelling. Issues of concern were insufficient parking bays, quality of house and non-suitability of house for disabled residents. Interestingly, despite being partially satisfied, more than 50% of the residents would not like to keep staying there. Figures 3 and 4 illustrate the graphical explanation.



**Figure 3: Housing Issues 1**

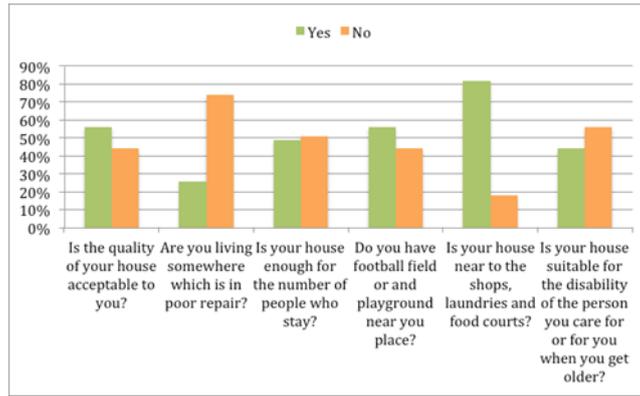


Figure 4: Housing Issues 2

## 4.2 Safety and Security

As illustrated in Figure 5, only slightly more than half of the respondents felt safe walking at night in their area. Correspondingly slightly more than 50% felt where they were staying was safe. Concerns regarding crime were concentrated mainly on activities of petty crimes, bag snatching, and house break-ins. Crimes of less concern was drug abuse and kidnapping. However more than 50% of the respondents reported that there was no police patrol in their housing area.

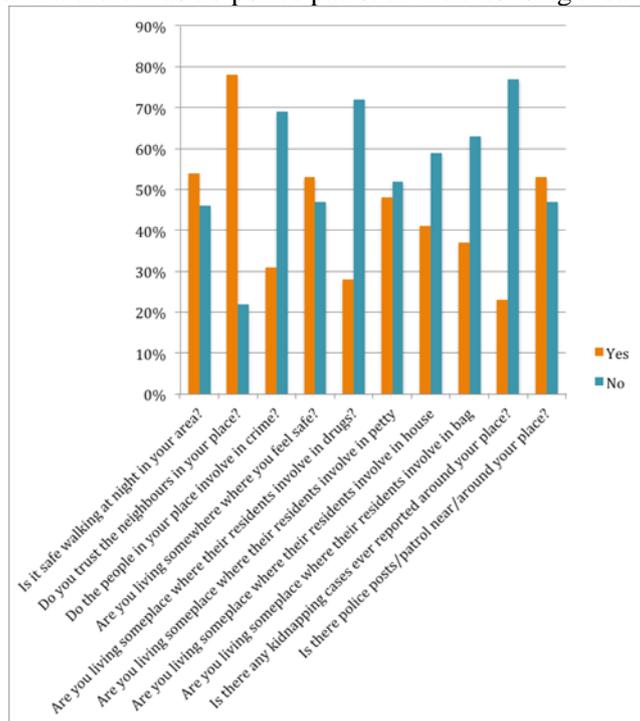


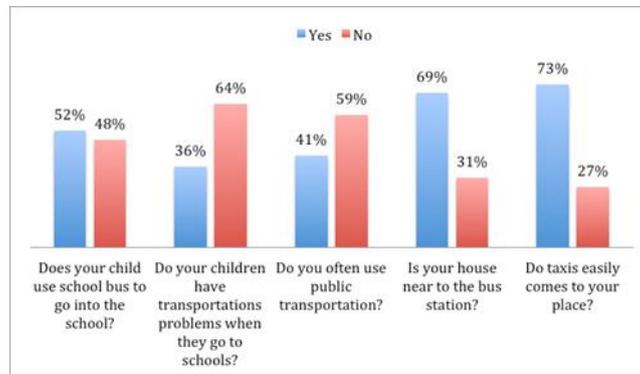
Figure 5: Safety and Security

## 4.3 Education

When asked about education facilities, about two thirds of the respondents answered that there were schools, pre schools and tuition centers close to where they lived. In essence education facilities were adequate.

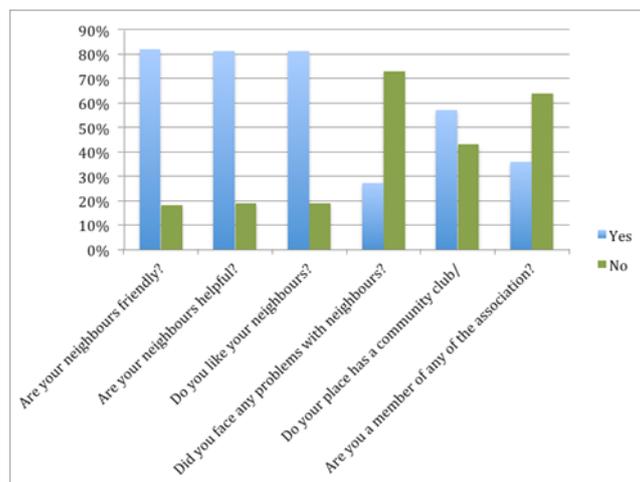
## 4.4 Transport

There seems little issue on transportation. A majority of the respondents were satisfied with their transportation facilities. Of note is that despite the availability of public transport, more than 50% respondents chose not to use public transportation. This does indicate there is some slack and lack of trust in public transportation. Please see Figure 6 below.



**Figure 6:** Transportation

#### 4.5 Community



**Figure 7:** Community

A majority of the respondents had no problems with their neighbours and basically had good and helpful neighbours. It was noted that although most of the residents had a community or resident association in place many of the respondents were not members of such associations. This suggests disinterest in community actives.

#### 4.6 Work Place Issues

As illuminated in Figure 8 a majority of the respondents do not live near their work place. Although many would like to work nearer to their work place, they reported that they could not afford to do so. Generally many respondents agreed that they could afford to stay at their present dwelling. This signifies that housing becomes more affordable further from their work place and tallies with the view of (Pivo, 2013) that to reduce house price, location would have to be compromised.

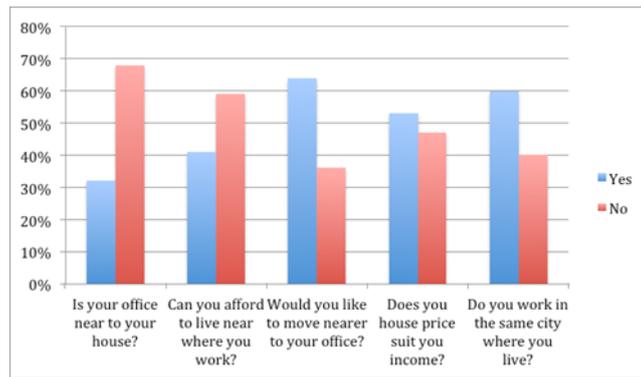


Figure 8: Work place issues

#### 4.7 Public Amenities

As a whole the respondents were satisfied with the amenities available and accessibility to wet markets, groceries, playground and internet coverage. Shopping complexes and sports facilities were less available and accessible. However many mentioned that there were no library facilities nearby. Hence although education facilities were adequate, the residents were not accessible to library facilities.

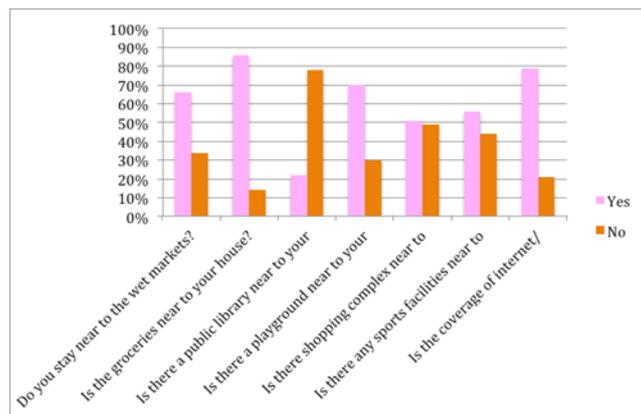


Figure 9: Public Amenities

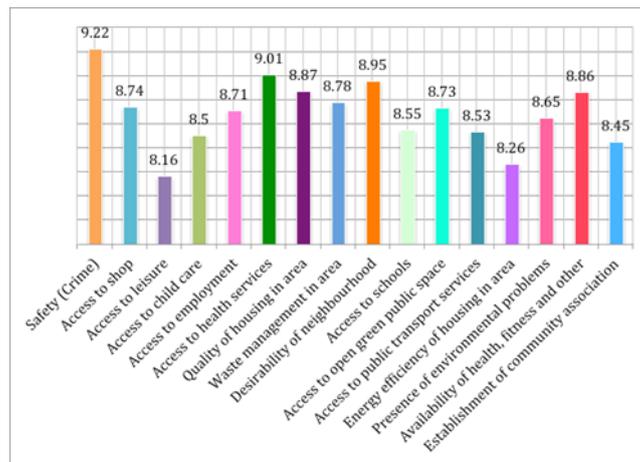
#### 4.8 Health Issues

At a glance, a majority of the respondents had little issues on health. On the whole many were quite satisfied with rubbish collection, level of cleanliness and quality of drinking water. There were concerns with regards to mosquitos and flies though. Further concerns were related to noise and air pollution linked to vehicles and industry.

#### 4.9 Important Criteria for Livability from Respondent's Point of View

Based on the mean of the likert scale (Figure 10), the findings revealed that the most important criteria to livability were safety, followed by access to health facilities, and desirability of neighbourhood. The least three important criteria were access to leisure, energy efficiency of housing area and establishment of community association. These findings echo the findings of (Jasmine, 2010), (Heylen, 2006) where safety issues have begun to play an important role in housing livability.

Interestingly access to health facilities, which was not significant in earlier researches, has now become an important criterion in housing livability.



**Figure 10:** Livability Criteria from Respondent's point of View

## 5.0 Discussion

The findings suggest that there exist livability issues with affordable housing. In terms of dwelling, major concerns sit with the unsuitability of the dwellings to disabled people and insufficient parking space. It appears that many respondents place importance with owning their own vehicle despite the availability of public transport. This reflects a lack of trust in the existing public transportation available.

Literature indicates that livability includes satisfaction to continue staying in the existing place (VCEC, 2008). On the contrary the findings of this research suggests that many respondents make do with the existing physical conditions of their dwellings, because if given the opportunity many would move out to better dwellings. This suggests that the residents are not wholly satisfied with the livability aspect of their homes but have to compromise their needs until they are able to afford better housing facilities.

Safety and security remain the biggest concern, although many (slightly more than 50%) respondents generally feel safe where they stay. However concerns with petty crimes and bag snatching need to be addressed by the enforcement personnel. The respondents have placed safety and security as the most important criteria.

Health issues too play a discerning role with the respondents. Although generally the respondents felt their neighbourhoods were sufficiently clean, there were concerns with mosquitos and flies. Another worry was linked to pollution, both air and noise pollution. Yet again this tallies with previous researches that revealed 'air quality' as an important criteria in livability issues (Bishop, 1995), (Howley, 2009). Local authorities and community associations need to address such issues.

Of note was educational facilities, while adequate, did not provide for localized or neighbourhood libraries. This is a matter that requires further attention by the local authorities.

## 6.0 Conclusion

The findings of this research have established that generally there are attempts to address livability issues within the affordable housing schemes. This suggests that relevant authorities have been conscious of the fact that it is not adequate to just provide the physical affordable homes,

livability aspects need to be incorporated. Nevertheless there is room for improvement especially in terms of disabled friendly dwellings. Health and safety concerns need to be addressed to ensure better well-being of the residents. Authorities should not rest on their laurels but should constantly review their affordable housing master plans and policies to allow for the changing requirements and needs of the public at large.

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