Housing Conditions and Quality of Life of the Urban Poor in Malaysia

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Abstract

This study examines the relationship between housing conditions and the quality of life of the urban poor in Malaysia. Housing conditions includes the physical conditions of dwellings, type of dwellings, house tenure, surrounding environment and availability of amenities. Quality of life is measured by 50 items on self-reported health, safety, and social support. The findings showed a small, but significant positive relationships between housing conditions, health, safety, and social support which provide empirical evidence of the relationship between housing conditions and quality of life. This enlightens the issue of considering housing condition as a social economic indicator of urban poverty.

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Keywords: Urban poverty; quality of life; housing condition; socio-economic indicator

1. Introduction

One area of concern which is highly related to economic development is urbanization. The rate of urbanization describes the projected average rate of change of the size of the urban population over a given period of time. The annual rate of urbanization for Malaysia for 2010-2015 time period is expected...
to be at 2.4 percent (National Physical Plan, 2005). With the fast growing economy, the rate of urban population in Malaysia has increased rapidly from 25% in 1960 to 72% in 2010. Urban population is defined as the percentage of the total population living in urban areas. It was forecasted that by year 2030 more than three quarter of the total population in Malaysia will be staying in urban areas (Jamaliah, 2004). Excessive urban growth will lead to increasing diseconomies and escalating social cost (Siwar & Kassim, 1997).

The urbanization factor, migration of low income groups from the rural to urban areas, the influx of foreign workers, and the rising costs of living have contributed to the increase of urban poverty in Malaysia. Malaysia’s poverty had been predominantly rural phenomena as information on urban poverty is lacking and there is need on the characteristics and determinants of urban poverty (Nair, 2009). Statistics have shown that urban poverty has declined in terms of the incidence but the actual number of urban poor and slum dwellers in the cities is still significantly high. In 2009 a total of 69,900 households were reported as being urban poor (KPKWKM, 2011). The Ministry of Women, Family and Community Development defines urban poor as a household in which the main breadwinner earns less than RM1500 per month. However, even if the income is doubled to RM3000 a month, it is barely enough for a household of five members, prompting the Ministry of Federal Territories and Urban Wellbeing to consider increasing the urban poverty line to RM3000 per month. Urban poverty is characterized by a higher degree of commercialization, higher environmental and health risk, social fragmentation and crime, and negative contact with the government (Wattent, 1950). In addition, the urban poor are also more vulnerable compared to the rural poor due to their limited entitlements to command resources. Subsidy adjustments and government policies are said to have a disproportionate impact on the society, especially the urban poor.

The measurement of poverty by a specific income threshold is quantitative and convenient but not necessarily sufficient. Poverty is multidimensional and the issues are more complex. Income and consumption measures do not capture the qualitative dimension of being poor such as the lack of comfort, health, personal safety, and social inclusion. The urban poor are normally associated with low levels of education, lack of employment opportunities, large family size, and poor housing conditions. With an escalating cost of living in urban areas, the urban poor are very vulnerable to uncertainties in income. The urban poor are also more exposed to health hazards due to crowded living conditions and the sick building syndrome. Findings from numerous studies showed a significant positive association between housing conditions and chronic illnesses (Habib et al., 2009; Green et al., 2011; Navarro, Ayala & Labeaga, 2010).

This study attempts to examine the relationship between housing conditions and the quality of life of the urban poor in Klang Valley, Malaysia using the participatory approach. The participatory approach is purposeful in identifying what increases the risk of poverty and why do they remain poor. It enables the different type of poverty to be distinguished by investigating the life experience of the poor. The vulnerability aspect analyses the human capital investment, productive assets, access to community infrastructures and claims on third party in times of need. Dao (2008), Hong and Pandey (2007), and Hossain (2007), explored poverty and vulnerability of poor urban and found that urban poor are vulnerable to their respective human capital investment variables. This study will explore the non monetary aspects of poverty by understanding the poor and involving the “poor” themselves. Quality of life is measured by 50 items on self-reported health status, personal safety, social support, and involvement in social activities, which represent four independent but interrelated qualitative dimensions. If these dimensions are considered in measuring the incidence of urban poverty in addition to income, the extent and magnitude of urban poverty might be amplified and closer to reality.
2. Literature Review

2.1. Poverty and housing condition

The World Health Organization describes the sick building syndrome as a group of non-specific symptoms that can include eye, nose or throat irritation, skin problems, headaches, nausea, and other unspecified hypersensitivity reactions (Workers Health Centre, 2002). The causes of the sick building syndrome include the building and finishing materials used and ventilation. Poor ventilation in a building can be caused by poor design (e.g. low ceiling), lack of windows or air wells, and too close proximity with the other building next to it, all of which are very apparent in most low cost housing in the world.

In Malaysia the high rate of migration to urban center in the last three decades had increased the demand for affordable housing in many cities (Sivar & Kasim, 1997) and caused an acute shortage in affordable housing. The urban poor had to deal with this shortage by setting up slum and squatter settlements (Tan, 2011). The squatter dwellings are made of discarded materials such wooden planks, plastic and asbestos sheeting, and the squatter areas usually have high density (Murad & Raquib, 2007). These squatter dwellers living in crammed living conditions and shelters made from temporary or inflammable material are exposed to accidents in homes (Satterthwaite, 2003). To overcome this problem, provision of low cost houses for the target group with monthly income not exceeding RM750 a month was initiated under the Ministry of Housing and Local Government. The type of low cost houses includes flats, terrace or detached houses. As the public sector alone cannot fulfil the housing need, private licensed developers were engaged. However, developers built low cost houses just because of quota requirement as they are considered not profitable. Consequently, low cost house purchasers often found themselves with problems created by errant private housing developer. The problems range from leaking roofs, defective rectification works and uneven floorings to the more serious problems such as sub-standard quality, no proper connection of water and electricity, and inadequate ventilation, even though the Certificate of Fitness has been issued.

In terms of design, a low-cost house in Malaysia has to have the minimum standard specified a built-up area of 550-660 square feet, two bedrooms, a living-room, a kitchen and a bathroom (Nair 2011). However, a typical Malaysian family or household usually consists of five members: an adult male, an adult female, and three children (Millenium Development Goal). This gives rise to occupation of between two and six people per room / space (Sikod, 2001). For a household of more than four members, this condition creates issues regarding comfort and privacy, which are space related. Overcrowding, defined as more than two persons per room has been identified as the most frequently cited indicator of housing condition among the urban poor (Pevalin, Taylor & Todd, 2008). A study done by Harker (2007) showed that housing condition and overcrowding could have a significant impact on children’s immediate and long-term effects on health, education, safety and behaviour. In another study, Green (2011) found that physical housing conditions such as the presence of roaches, plumbing defects, and heating/cooling problems contribute significantly to mental health dysfunction such as being depressed, feeling worried, feeling sad, feeling helpless, and feeling emotionally upset. Pevalin et al., (2008) in his study cited a number of research to show the link between poor building design to mental health problems, such as stress and alcohol/drug problems, infestation and noise whereas unpopular housing areas and high-rise flats have been linked to depression, anxiety and generic psychological distress.

Another factor related to housing condition is the surrounding environment. Most of squatter areas and low cost houses have limited space and recreation areas such as multipurpose hall, and playground to be used for community and recreation activities. A study by Manum & Adaikalam (2011) on unsatisfied basic needs among low income women in Peninsula Malaysia found that a higher percentage of women in the urban were unsatisfied with the quality of housing compared to their rural counterpart.
2.2. Poverty and quality of life

In 1990, the United Nations has developed indicators of Quality of Life based on the “New Social Indicators” for Asian and Pacific countries. The indicators include subjective and objective data about health, safety and the environment, economic stability, family, work, and educational life, community involvement, and cultural activity (UNDP, 1989). Jongudomkarn and Camfield (2006) identified 26 aspects of quality of life including health and family relation for Thailand. They also cited Pongsapitch (2000) who took a more focused approach to measure the quality of life through the participatory approach and managed to identify eight indicators including security, family and community and health.

Poverty in Malaysia is measured both in terms of absolute and relative terms. Absolute poverty is measured in terms of Poverty Line Income (PLI). On the other hand relative poverty is measured as proportion of household earning income less than half the mean or median income. According to Siwar and Kassim (1997), excessive urban growth and concentration of people and economic activities will lead to uneven distribution of development benefits between urban centers along side the higher cost of living. Therefore a common PLI to measure rural and urban poverty will underestimate urban poverty. If a different PLI is used, for example 20 to 30 percent higher from the rural sector, a much higher incidence of urban poverty will be recorded. Mok, Gan and Sanyal (2007) pointed out that the PLI has two shortcomings in Malaysia. Firstly it is based on consumption expenditure and secondly, the data on household income is less reliable as it is often under-reported and influenced by the timing of data collection.

The urban poor seemed to have the highest health risk in both developed and developing countries. Lower income and poor living conditions are usually related to poor health status. Urban dwellers are said to be living in ‘life and health-threatening homes and neighborhoods’ because of the very poor housing, living conditions and inadequate provision of health care. In many studies, housing condition emerged as a significant predictor of general and mental health status (Navarro et al., 2010, Adarkwa & Oppong, 2007). Specifically, overcrowded housing are found to have significant effects on poor respiratory health in children (ODPM 2004), poor psychological health (Chaudhuri, 2004), and increase in infectious diseases thereby putting them at higher risk of life-threatening diseases (Baker et al., 2000). Pevalin, Taylor, and Todd (2008) examined the relationship between housing and health over time using longitudinal data from seven years. The study found that overcrowding in earlier life can be linked to respiratory problems, stomach cancer, infection diseases, poorer educational attainment and emotional problems.

2.3. Poverty and social support

For many poor urban, household resources acquired through social relations or social support are significant. Yazicioglu (2006) defines social support as the existence of people who care about an individual and on whom he can depend on when need arises. A study done in Afghanistan found that when people are pessimist of the government’s aid, extended family and community safety net become the only reliable security mechanism for the poor. They adopt a “spatial livelihood strategy” where relatives staying in the same vicinity or same compound are important and informally organize social support, such as offering child care and reciprocal collective work. They invest time and energy in developing and protecting this social asset: visiting relatives and attending festival in confident knowledge that they will be assisted likewise (Schütte, 2009). Good family relationship is important in the sense of following the appropriate norms and conduct (Jongudomkarn & Camfield, 2006).

Van Woerden, Poortimiga, Bronstering, Garrib, and Hegazi (2011) studied the effects of social support from family and friends, social support at work, social support from neighbours and community networks
in relation to health. It is found that the social support variables above are associated with lower likelihood of poor self-rated health. Surprisingly, social support from neighbours is associated with a higher likelihood of reporting poor health.

3. Methodology

3.1. Research design

A total of 400 poor households from four pre-determined areas in Klang Valley were interviewed using a structured questionnaire. The areas were identified to have high population of the urban poor and are located in the cities of Kuala Lumpur, Petaling Jaya, Shah Alam, and Klang. The survey was conducted in four weeks time involving 10 enumerators. The questions were designed according to the participatory approach to capture the qualitative dimensions of poverty such as comfort, security, identity, and social inclusion. Out of 400 completed questionnaires, 349 were usable for analysis.

The questionnaire consists of three parts. Part A consists of 7 questions on respondents’ personal profile, which include gender, age, ethnicity, marital status, highest education level, household size, and household income. Part B consists of 5 questions on housing condition. The variables are the type of house, house tenure, physical condition of the house, condition of the surrounding environment, and availability of public amenities and its externalities. Examples of public amenities are schools and public transport facilities, which will contribute positive and negative externalities. To have a school near one’s house would definitely provide convenience to the person and his/her school-going children but it could also contribute to negative externalities such as road congestion and the noise factor. Part C consists of 6 questions on the quality of life, which are represented by four dimensions namely, health status, safety, social support, and social activities. Health status includes the physical and emotional aspects of wellbeing. Safety consists of threats to life and assets when one is within the housing area. Social support means the amount of help received from family members and neighbors in difficult situations such as babysitting. Lastly, social activities include a person’s level of involvement in societies and organizations such as the Parents and Teachers Association and political parties.

Method of analysis includes descriptive statistics on the housing conditions and quality of life variables. Factor analysis was conducted to explore the interrelationships among the set of identified variables and dimension components were established. Reliability test was done to check the internal consistency of the measurement items. Further assessment using Pearson correlation and Chi-square tests were conducted to look at the relationship between housing condition and each dimension of the quality of life.

3.2. Study limitation

Although the study areas were pre-determined, respondents were conveniently sampled depending on the availability of the heads of the households or their spouses and their willingness to be interviewed. Thus, the distribution of the sample by ethnic group might not be reflecting the actual proportion of the urban poor in Malaysia.
4. Findings and Discussion

4.1. Reliability Test

Table 1 shows the Cronbach’s alpha of relevant ordinal variables (items with scales) used in the study. The values were above 0.7, showing an acceptable level of internal consistency. After performing the factor analysis, several items were deleted and finally, a total of 28 items with scales were selected for quality of life and 10 items for housing condition. These items were later used together with the dichotomous variables in all analysis.

Table 1. Reliability analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Housing Condition:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrounding Environment</td>
<td>.803</td>
<td>5</td>
</tr>
<tr>
<td>Public Amenities</td>
<td>.773</td>
<td>5</td>
</tr>
<tr>
<td><strong>Quality of life:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health status</td>
<td>.730</td>
<td>15</td>
</tr>
<tr>
<td>Social support</td>
<td>.883</td>
<td>5</td>
</tr>
<tr>
<td>Safety</td>
<td>.769</td>
<td>8</td>
</tr>
</tbody>
</table>

4.2. Demographic Profile

Table 2 summarizes the demographic profile of the respondents. Slightly more than half of the respondents were between the age of 40 to 60 years, 85.2 percent were Malays / Bumiputera, 12.6 percent were Indians and 7 percent were Chinese. Marital status showed that almost 70 percent were married while 8.8 percent were either divorced or separated. In terms of academic qualification, 48.4 percent had completed secondary education, 21.5 percent had only primary education while 6 percent claimed had no formal education. As for household income, 35 percent earning less than RM1000 per month, while 54 percent earning less than RM3000 per month. Almost 30 percent of the respondents had a household size of 7 or more and majority (91.4%) did not own a house; 38.7 percent were in public housing and 52.7 percent renting from private individuals.

Table 2. Demographic profile

<table>
<thead>
<tr>
<th>Items</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>97</td>
<td>27.8</td>
</tr>
<tr>
<td>Female</td>
<td>252</td>
<td>72.2</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 40</td>
<td>132</td>
<td>36.4</td>
</tr>
<tr>
<td>40 - 60</td>
<td>185</td>
<td>53.0</td>
</tr>
<tr>
<td>60</td>
<td>30</td>
<td>5.6</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Malay/Bumiputera | 297 | 85.2  
Chinese        | 7   | 2.0   
Indians        | 44  | 12.6  
Others         | 1   | 0.3   

Marital Status
Married        | 244 | 69.9  
Widow          | 39  | 11.2  
Divorced       | 26  | 7.4   
Married but separated | 5  | 1.4   
Not married but living together | 2  | 0.6   
Single         | 33  | 9.5   

Education level
None            | 21  | 6     
UPSR            | 75  | 21.5  
LCE/PMR         | 53  | 15.2  
MCE/SPM/O-Level | 169 | 48.4  
STPM/GCE/A-Level| 15  | 4.3   
Certificate/Diploma | 10 | 2.9   
Degree          | 6   | 1.7   

Household size
1 – 3           | 59  | 16.9  
4 – 6           | 189 | 54.2  
7 – 9           | 83  | 23.8  
> 10            | 18  | 5.2   

Household Income (RM)
< 1000          | 122 | 35.0  
1000 – 2000     | 151 | 43.3  
2001 – 3000     | 41  | 11.7  
3001 – 4000     | 18  | 5.2   
>4000           | 17  | 4.9   

House Tenure
Inherited       | 3   | 0.9   
Own property    | 21  | 6.0   
Renting (public housing) | 135 | 38.7  
Renting (from individuals) | 184 | 52.7  
Others          | 6   | 1.7   

4.3. Housing condition

Housing conditions were measured using 16 items concerning the physical condition and the surrounding environment of the current house. With regards to the type of house, 79 respondents were staying in flats, 33 in terrace houses, 24 in detached type house, 16 in semi-detached type house, 5 were renting rooms, and 4 in shophouses. All respondents reported to have the following problems regarding the physical condition of their houses: not enough space, insufficient natural light, leaking roof, windows and floor in bad condition, mould on walls and no private lawn. On the surrounding environment, the most problematic situations faced by them are air pollution caused by traffic or industry, followed by road congestions and noise from heavy traffic, and lack of public parks for recreational and family activities. When asked about issues on the surrounding environment of their houses that they always had to face, 48.7 percent of respondents reported of lack of proper maintenance by the local authorities, 39.8 percent reported their concerns on teenagers loitering on the streets, and 37.8 percent highlighted the vandalism activities on public properties. On the same issue, situations that they sometimes had to face include noisy environment (67.6%), beggars roaming around the housing areas (39.8%), and unpleasant graffiti and damages on the building walls (39%).

4.4. Quality of life

The quality of life was measured by four dimensions: health status, personal safety, existing social support and involvement in social activities. A high number of respondents (52%) claimed of having chronic illness but only 13% were seeking hospital treatments for their illnesses. This could either be due to their financial constraints or lack of knowledge on the cost of the treatment. Respondents also reported of feeling vulnerable and stressful. The top three factors contributing to stress were constant cash insufficiency, death of close relative or friend, and being unemployed. With regards to social support, most assistance received was on advice on marital problems while the least assistance were to look for caretakers for their house, children or family members if they had to be away for work purposes. On a poverty scale of 1 to 10 where 1 stands for ‘very poor’ and 10 stands for ‘not poor’, almost 60 percent ranked themselves as below 3. However, 50 percent also reported of an increase in their living standards for the past two years.

4.5. Cross-tabulation analysis between housing condition and the quality of life

The type of house was found to have significant relationship with physical health status. Results of the chi-square tests were shown in Table 3. About 30 percent of respondents who were staying in flats, shop houses and renting rooms seek hospital treatments for more than 6 times in a year as compared to those who stayed in detached, semi-detached and terrace houses with only 5 percent. Size of the household was also found to have significant association with physical health status. Seven percent of households with less than 6 members seek hospital treatment for more than 6 times in a year as compared with household of more than 6 members with 14 percent. Cross tabulation of overall house condition with physical health condition shows that only 1 percent of respondents who were satisfied with their housing condition seek hospital treatment for more than 6 times as compared to 9 percent who were not satisfied with the housing condition. The surrounding environment issues highlighted earlier, i.e. noisy environment, teenagers hanging around the street and lack of proper maintenance by the authority were also found to have significant relationship with respondents’ physical health status. However, all items under the externalities and public amenities variable had no significant relationship with physical health condition.
Table 3. Chi-square test between housing condition and physical health

<table>
<thead>
<tr>
<th>Housing Condition</th>
<th>Physical health</th>
<th>χ²</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of house</td>
<td></td>
<td>159.535</td>
<td>.000</td>
</tr>
<tr>
<td>Number of Household</td>
<td></td>
<td>31.406</td>
<td>.008</td>
</tr>
<tr>
<td>Overall House Condition</td>
<td></td>
<td>28.652</td>
<td>.001</td>
</tr>
<tr>
<td>Surrounding Environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noisy environment</td>
<td></td>
<td>18.691</td>
<td>.044</td>
</tr>
<tr>
<td>Teenagers hanging around the street</td>
<td></td>
<td>26.796</td>
<td>.003</td>
</tr>
<tr>
<td>Area around the house is not well taken care of</td>
<td></td>
<td>22.185</td>
<td>.014</td>
</tr>
<tr>
<td>Externalities and Public Amenities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In terms of emotional well-being, 96 percent of respondents staying in detached houses reported to feel depressed most of the time followed by 80 percent staying in flats and 73 percent in terrace houses. Depression could be caused by the feeling of insecure or vulnerable to life uncertainties and most admitted to be very stressful for not having enough money (χ² = 38.08, p = 0.00). The type of housing was found to be significantly related to the stress level due to problems in relationship with parents (χ² = 34.1, p = 0.001) but not statistically significant to problems in relationship with own children (χ² = 16.48, p = 0.17). Respondents who were renting expressed their fear of losing shelter the most, with 81 percent of those renting from private individuals and 75.5 percent of public housing tenants, compared to those who were staying in own houses (χ² = 9.67, p = 0.046).

Social support in this study were defined as assistance from neighbors for the following situations: help around the house when a person was down with minor illnesses, help when moving out or in, advice in making major decisions in life, advice on marital problems, help to babysit children or elderly or disabled family member while away for work purposes, and help to watch over house or possessions while away for work or leisure purposes. Social support was found to be significantly related with the household size (χ²= 19.56, p= 0.003). Respondents claimed to receive generous assistance from the neighborhood but the percentage declines as the household size increases. This could be due to society’s perception that the family would be more self-contained or self-supported with more family members.

Involvement in social and political activities include among others, giving opinions to the local councils, writing letters to newspapers, involved in political election campaigns, being active in Parents and Teachers Association, Housing Residents Association, and voting during political elections. Most respondents were found to be not actively involved in the society; the involvement rate was less than 10 percent for all activities listed. However, out of those who claimed to be actively involved, most stayed in flats. Social and peer-pressure due to close proximity of housing could be the underlying motivational factor for this matter.

Low and Yusof (1991) reported that the City Hall of Kuala Lumpur had been facing serious social problems among the squatters including high incidence of communicable diseases, teenage pregnancies and psychological and family stress. This led the government to introduce the Sang Kancil Program, a program that was developed to reduce squatter problems by resettling them in low-cost housing and also by improving the housing conditions of the squatter sites. The program also includes a number of social and community development projects to provide the poor with health, family planning, youth guidance, employment and consumers education.
4.6. Correlation analysis between Housing Condition and Quality of Life

A Pearson product-moment correlation coefficient was computed to assess the relationship between the four dimensions of quality of life and the surrounding environment element of the house condition. The results were shown in Table 4. As expected, the surrounding environment was found to have significant positive correlations with health status and the overall quality of life at 99% significant level. A good surrounding environment provides sanitation and comfort with quiet environment, no vandalism on building walls and public facilities, regular rubbish collection, clean and well maintained landscape around the house, and no teenagers or beggars loitering around the area. However, the findings also showed that the surrounding environment was negatively correlated with safety and social support, implying that a better surrounding environment was associated with lower sense of safety and less assistance from neighbors in times of needs. From observations of community lifestyle in different types of housing areas in Malaysia, one could see that in a less crowded neighborhood and better surrounding environment, people tend to increase their “personal space” as shield to protect their privacy. Everybody was independent in fulfilling own needs and safeguarding own safety, thus expectation to offer or receive assistance from neighbors was minimal.

Availability of public amenities and its externalities was found to be positively correlated with social support and quality of life at 99% significant level. Accessibility to public transport increases not only a person’s mobility but also allowing him/her to be more reachable by friends, family members, and other people in the neighborhood. However, public amenities and its externalities was negatively correlated with health status, which could be due to the direct effects of air pollution and the indirect effects of road congestion that could lead to higher stress level.

Table 4. Correlation between quality of life and housing condition

<table>
<thead>
<tr>
<th>Housing Condition</th>
<th>Surrounding environment</th>
<th>Externalities/Public amenities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of life</td>
<td>.216**</td>
<td>.282**</td>
</tr>
<tr>
<td>Health</td>
<td>.191**</td>
<td>-.272**</td>
</tr>
<tr>
<td>Social activities</td>
<td>.008</td>
<td>-.002</td>
</tr>
<tr>
<td>Social support</td>
<td>-.136*</td>
<td>.149**</td>
</tr>
<tr>
<td>Safety</td>
<td>-.130*</td>
<td>-.088</td>
</tr>
</tbody>
</table>

Notes: * p < .05,  ** p < .01

5. Conclusion

The findings provide empirical evidence of the relationship between poverty, housing conditions, and quality of life. Housing is not only a physical shelter but also plays a significant role in a person’s physical, mental, and emotional health conditions with regards to the qualitative dimensions provided by the housing condition and the surrounding environment of the housing area. Unfortunately, the housing conditions of the urban poor in Malaysia are lacking all these aspects and failed to provide these important dimensions. Due to the strong significant relationship with the quality of life, we highly suggest
that housing condition to be seriously considered as a socio-economic indicator in the assessment or measurement of urban poverty. A study should also be done on finding the optimal housing conditions of the urban poor in Malaysia in terms of the physical aspect of the house (design, size, materials used) and the surrounding areas (location, landscape, availability of public amenities and services). Failures to address the housing issues of the urban poor might cause the group to be continuously marginalized in the society and deprived of a quality life.

References


Pongsapitch, A. (2000). *Wellbeing measurement tool development of Thai people (Research report).* Social Research Institute, Chulalongkorn University, Chulalongkorn, Thailand.


