A Study on Residents’ Self-built Improvements as a Predictor of Their Intentions on Residential Mobility at MRB Dwelling Units in Metro Manila

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Abstract

The purpose of this study is to clarify the validity of the residents’ self-built improvements as predictors of their intention on residential mobility while using the HAYASHI II (Qualification Method) as the method for the analysis. These self-built improvements were classified into three categories and these are; a) kinds of improvements, b) usage of improvements, and c) opinions on future improvements as shown in Figure 1. The data show that residents who installed grille balcony at the rear portion of their dwelling units and used them as kitchen and storage as well as residents who constructed mezzanine floors and used them for bedroom and storage have the intention to stay longer. On the other hand, some of the residents who had already made all the improvements and those who did not make any improvements are more likely to move out. The installation of grille balconies satisfies the residents’ needs for kitchen and storage spaces, while the construction of mezzanine floors satisfies their needs for additional bedroom and storage spaces. These developments enhanced their sense of belonging to their dwelling units. Thus, the kinds of self-built extensions and occupation of spaces—which predicted the residents’ intention to move or to stay—are valuable indicators of the residential mobility.

Keywords: self-built improvements; extensions; occupation of common spaces; intentions on residential mobility (move out or stay); MRB (Medium Rise Building); Metro Manila

1. Introduction

In an attempt to provide a permanent solution to the growing problem of socialized housing in the urban cities of Metro Manila, the government has initiated a housing scheme, locally called MRBs (Medium-Rise Buildings). This type of housing project was aimed to provide decent and affordable dwellings for the low income urban dwellers. The units were designed in such a way that they were open-planned with a floor area of 18m² each and it was left for the residents to improve their units in the form of self-built improvements. Even though the units were of narrow floor spaces and are being occupied by large households of low economic status, there are those who stay long and continue to improve their units. Residents improve their dwelling units in varied ways to fit their needs. Some of the improvements take the form of self-built extensions and occupation of common spaces in their present MRB dwelling units. The need for additional space is evidently related to the increase in household size and most likely occurs when the household requires provisions for additional housing needs such as additional sleeping area, storage space, working space, and space for additional income.

In our previous paper the self-built improvements were considered as major factors in understanding the residents’ housing adjustment behaviors. These self-built improvements were examined in relation to the household structural growths, transformations, and changes in the profession of residents. In the analysis it was found that there were eight typical groups of transformation patterns that can be clustered into three
cases using the chronological pattern method. Some of these self-built improvements take the form of extensions and occupation of common spaces (increased space). While the residents continued to make these various kinds of self-built improvements, they have fulfilled not only the lacking housing requirements (insufficient space) but also developed a sense of belonging that contribute to their feeling of having a permanent house to live. Thus, knowing and understanding these residents’ self-built improvements and relating these to their intention on residential mobility can help in understanding their housing adjustment behavior.

The main purpose of this study is to make clear the characteristics and relationships of two variables; 1) the residents’ self-built improvements and 2) the residents’ intention on residential mobility to their present dwelling units. The first variable is classified into three categories; a) kind of improvement, b) usage of improvement, and c) opinions on future improvements. These three categories were used as the predictors of the second variables (Figure 1). Whereas these two variables were related to each other in order to determine the validity of the self-improvements as predictors of residential mobility.

2. Past Studies

Several significant number of studies focused on low-cost housing projects that examined the residential mobility as shown in Table 1.

Burns (1983) examined the residents’ change of attitude towards self-help projects and emphasized that residents’ participation towards the development of their dwelling units increased their tendency to stay longer in their dwelling unit and become satisfied with the housing. Four indicators were used in analyzing the data and these are those: “who prefer to move to a different neighborhood“, ”who are contented with their present situation“, ”who believe they deserve a better situation than at present” and ”who believe they live better than before“. These were used to analyzed the data using a quasi-experimental design method to relate these to residential satisfaction.

Clark and Onaka (1983), Edwards (1983), Gosling et al (1993), and Seek (1983) used the residents’ life cycle stage as a determinant of residential mobility. They evaluated the relationships between the life cycle stages and the residents’ tendency to move out. Clark and Onaka (1983) stressed that there are three major factors for residential mobility and the choice to move were also influenced by the changes in household structures. Three indicators were used in analyzing the data and these are: “the desire for more space“, “for tenure change”, and “for cheap dwellings”. In analyzing the data, a tabulation method was used showing the reasons of the residents in moving out of their present dwelling unit.

Edwards (1983) explained that the patterns of residential mobility are closely related to the changing structure of the local housing industry and concluded that “structural factors” perform an important part in explaining the transformation patterns of residential mobility.

Gosling et al (1993) examined the residents’ housing extensions using two criteria. These are “housing market adjustment” and “as an individual household choice” and they emphasized extensions as a possible option rather than moving out.

Seek (1983) investigated the housing improvement activities of the residents and related these to their mobility. It was observed that many residents choose to improve rather than to move out as an alternative way of their housing adjustment. It was noted that the residents’ inclination to stay longer in their present dwelling is due to the emotional and high economic cost of moving out.

Foo (1997) examined the physical, ownership and management features of low-cost condominiums in Bangkok and found that the reason for the decision of the residents to move out is that the units are being sold to other buyers rather than to them, who are the original owner-occupants. But Foo later suggested that low-cost condominiums represent a viable alternative for housing the urban poor.

Based on previous studies, this paper examined the relationships between the kinds of residents’ self-built improvements and residential mobility. These self-built improvements were used to predict the residential mobility. Two indicators were used to analyze the data and these are “the self-built improvements and its usage” and “the residents’ opinions on room for future improvements”. These were based on the questions asked to the residents and were divided into two categories: “What they think about the status of their present dwelling units and can it accommodate more improvements? (Yes or No)” and the reason why they

| Authors         | Year | Indicators Used                                | Mobility   | Method Used in the Analysis     |
|-----------------|------|-----------------------------------------------|------------|---------------------------------|
| Burns (1)       | 1983 | who prefer to move to a different neighborhood | stay longer | Quasi-Experimental Design       |
|                 |      | who are contented with their present situation |             |                                 |
|                 |      | who believe they deserve a better situation   |             |                                 |
|                 |      | than at present                                |             |                                 |
|                 |      | who believe they live better than before      |             |                                 |
| Clark and Onaka (2) | 1983 | the desire for more space, for tenure change,  | moving out  | Tabulation Method               |
| Edwards (3)     | 1983 | for cheap dwelling in the life cycle           |             |                                 |
| Foo (4)         | 1997 | changing structure of local housing industry  | moving out  | Tabulation Method               |
| Gosling et al (5) | 1993 | “structural factors”                           |             |                                 |
| Seek (6)        | 1983 | physical and socio-economic, physical,         |             |                                 |
|                 |      | ownership, and management                     |             |                                 |
|                 |      | housing market adjustment and as an individual|             |                                 |
|                 |      | household choice in the life cycle            |             |                                 |
|                 |      | housing improvement activities in the life     |             |                                 |
|                 |      | cycle                                          |             |                                 |

Table 1. Comparison of Related Literatures
answered “Yes or No”.

Some of the previous studies focused on the housing improvements activities (Seek, 1983), the desire for more space (Clark and Onaka, 1983), and housing extensions (Gosling et al, 1993) and these studies were based on the changes in the life cycle stages of the residents. They stressed on the cost of improvements, the duration of occupancy, and the pattern of housing expenditures which could be considered broader in scope. In contrast with these studies, this study focused on the kinds of self-built improvements and residents’ opinions on room for future improvements which are used as significant indicators of residential mobility. It more clearly explained and directly showed how residents filled up the lacking requirements they need for more domestic spaces that were correlated with their residential mobility. The residents who installed grille balconies and used these as kitchen and storage areas, as well as those who constructed mezzanine floors and used them for bedroom and storage areas intend to stay longer. In other words, we assumed that the choice of staying longer is due to the existence of the opportunity for improvements.

3. Methods

We conducted the investigation from July to August 2001 on three government built MRB (Vitas, Domus Mariae, and National Government Center) housing projects in Metro Manila. It involved a total of 120 household sample respondents who participated in the survey. The details of the investigation was reflected on our previous paper (Manalang et al, 2002)².

3.1 Residents’ Self-built Improvements (Increase of Space)

As a result of inadequate dwelling space of the MRB units and its failure to respond to the users needs, residents have decided to adjust their dwelling units in the form of self-built improvements. There are two kinds of self-built improvements (increase of space) initiated by the residents into their dwelling units. These are the extensions and the occupation of common spaces as shown in Figure 2.

Extensions are composed of two types: the installation grille balconies and the construction of mezzanine floors. The installation of grille balconies are common types of cantilever extensions protruding outside the residents’ dwelling units, usually installed in front (GBF) and rear (GBR) portions of residents’ dwelling units. The usage of GBF are for kitchen, storage, and kitchen + storage as shown in Table 2 and Figure 3 (a), while GBR are for kitchen, storage, laundry, and kitchen + storage as shown in Table 2 and Figure 3 (b). The Construction of Mezzanine Floors (CMF) are form of extensions used for bedroom, storage, and bedroom + storage even though the residents know that the headroom is insufficient as shown in Table 2 and Figure 3 (c).

The occupation or use of common space (Occupation of Corridor) in front of the residents dwelling unit is another common form of solution to getting additional space for their personal use as shown in Table 2 and Figure 3 (d). The Occupation of Corridor (OCC) is for living, kitchen + laundry, kitchen + storage, and for commercial purposes (small shops and convenience stores).

Most of these self-built improvements are not fully finished due to financial constraints. But from time to time, residents have managed to improve their dwelling units gradually at their own pace.

Although, self-built improvements have been introduced to the MRB housing projects in order to make
it affordable to the users. There are no specific rules or guidelines set by the government in these kinds of activities. These activities can be labeled as “informal activities” because there are certain rules in the building code that have been violated especially, in the method of constructions and the materials they have used.

29 out of 41 sample respondents have the intention to move out while the remaining 12 sample respondents have the intention to stay. The method used in analyzing the data was the HAYASHI II (Qualification Method). In the analysis, the data were classified into kinds of self-built improvements, usage, and residents’ opinions on room for future improvements. Self-built improvements are composed of two types: a) occupation of common spaces and b) the extensions as shown in Table 3a. Occupation of common spaces has only one category, Occupation of Corridors (OCC), while extensions has three categories; Grille Balcony-Front (GBF), Grille Balcony-Rear (GBR), and the Construction of Mezzanine Floor (CMF). The residents’ opinions on room for future improvements (IMPVMNT) are classified into “YES and No answers” with corresponding reasons, were both further categorized into three classifications: Yes (a,b,c) and No (d,e,f) as shown in Table 3b.

3.2 Classifications and Groupings

Seventy nine out of 120 sample respondents were qualified to be used in the analysis. The remaining 41 sample respondents were deleted because they did not have any of the four kinds of self-built improvements.

4. Results of the Analysis

4.1 Analysis of the Data Using HAYASHI II

Table 4 shows the result of the data analysis using the HAYASHI II. Based on the classifications and groupings of the data, 79 out of 120 household respondents were used as valid samples for this analysis. This means that these 79 sample respondents have qualified based on
This data results came from the 22 sets of tests performed the HAYASHI II in classifying the three categories: the kinds of self-built improvements, the usages of self-built improvements, and the residents' opinions on room for future improvements. These categories were relate to the residents' intentions on residential mobility. The result for the canonical correlation was 0.37 which represents an acceptable result compared to the other tests performed. The distinction boundary value is 0.06 (Table 4 and Figure 4) and the rate of a distinction correct answer value is 75.80% which shows a higher value. This can be interpreted to mean that the items and categories used in Table 4 represent clear classifications for a valid predictor and correlated with residential mobility. The result for the canonical correlation was 0.37 which represents an acceptable result compared to the other tests performed. The distinction boundary value is 0.06 (Table 4 and Figure 4) and the rate of a distinction correct answer value is 75.80% which shows a higher value.

| Items                        | Categories                                                                 | Sample No. | Category Score | Range | Partial Correlation |
|------------------------------|-----------------------------------------------------------------------------|------------|----------------|-------|---------------------|
| Occupation of Corridor (OCC) | Living (OCC/LV)                                                             | 8          | 0.34           | 1.45  | 0.26                |
|                              | Convenience Store, Shop (OCC/CS, OCC/SH)                                   | 6          | 0.78           |       |                     |
|                              | Kitchen+Storage, Kitchen, Kitchen+laundry (OCC/K+ST, OCC/K, OCC/K+LD)      | 17         | -0.67          |       |                     |
|                              | No Usage                                                                    | 48         | 0.08           |       |                     |
| Grille Balcony Froot (GBF)   | Kitchen+Storage (GBF/K+ST)                                                | 12         | 0.16           | 0.67  | 0.12                |
|                              | Kitchen (GBF/K)                                                            | 9          | -0.51          |       |                     |
|                              | Storage (GBF/ST)                                                           | 7          | 0.01           |       |                     |
|                              | No Usage                                                                    | 51         | 0.05           |       |                     |
| Grille Balcony Rear (GBR)    | Kitchen+Storage (GBR/K+ST)                                                | 6          | -1.35          | 2.04  | 0.29                |
|                              | Storage (GBR/ST)                                                           | 6          | -0.53          | (2)   | (3)                 |
|                              | Kitchen (GBR/K)                                                            | 7          | -0.19          |       |                     |
|                              | Laundry (GBR/LD)                                                           | 5          | 0.69           |       |                     |
|                              | No Usage                                                                    | 55         | 0.17           |       |                     |
| Construction of Mezzanine Floor (CMF) | Bedroom+Storage (CMF/B+ST)                                               | 18         | -1.35          | 2.01  | 0.50                |
|                              | Bedroom, Storage (CMF/B, CMF/ST)                                          | 11         | -0.77          | (3)   | (1)                 |
|                              | No Usage                                                                    | 50         | 0.66           |       |                     |
| Residents’ Opinions on Room for Future Improvements (IMPVMNT) | (YES) Provide extensions and mezzanine floor | 27         | -0.70          | 2.18  | 0.48                |
|                              | Provide more shelves, reduced the sizes of partitions/divisions, and use small scale furniture | 16         | -0.03          | (1)   | (2)                 |
|                              | Improvement of : utility systems, interior aesthetics                      | 16         | -0.27          |       |                     |
|                              | (NO) The space is very small                                               | 5          | 0.61           |       |                     |
|                              | No more space for future improvements                                       | 7          | 1.48           |       |                     |
|                              | (all improvements already done)                                           | 8          | 1.28           |       |                     |
| Total Sample                 |                                                                             | 79         |                |       |                     |

The rate of accumulation of each group (%)

**The Rate of a Distinction Correct Answer Value (%)**  Move Out = Stay  75.80

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**Table 4. Analysis of Self-built Improvements/Usage and Residents’ Opinion Using HAYASHI II (Qualification Method)**

**Fig.4. Group Case Score and Percentage Rate of Accumulation for Each Group**
done) has the highest category score with 1.48 followed at second by IMPVMNT’s do not know (we are only renting) with 1.28, and third is OCC/CS and OCC/SH with 0.78 category score that represents the residents’ intention to move out. While GBR/K+ST and CMF/B+ST has the highest category score with -1.35, second is CMF/B and CMF/ST with -0.77, and third is IMPVMNT’s provide extensions and mezzanine floor with -0.70 category score which represent the residents’ intention to stay longer in their present dwelling units.

From all of the self-built areas, the needs for storage is the prominent type and followed by the need for kitchen that can be found in Occupation of Corridor (OCC), Grille Balcony-Front (GBF), and Grille Balcony-Rear (GBR) improved areas. On residents’ opinions on room for future improvements, prominent is the Yes answer “to provide extensions and mezzanine floor”, and the No answer “do not know (we are only renting)” which also showed how the tenure or the status of the residents was found to be related with the residential mobility.

5. Conclusions

The study had shown the process in which the kinds of self-built improvements (Occupation of Corridor, Grille Balcony-Front, Grille Balcony-Rear, and Construction of Mezzanine Floor), the usages of these self-built improvements, and the residents’ opinions on room for future improvements (“Yes” or “No”) are correlated with Residential Mobility and these can be used as valid indicators. Residents who used mezzanine floor as bedroom + storage, Grille Balcony-Rear for kitchen + storage, and residents’ opinions on room for future improvements (Yes answer) “provide extensions and mezzanine floor” has the intention to stay longer in their present dwelling units. While on the other hand, residents who have no usage for Occupation of Corridor, Grille Balcony-Front, Grille Balcony-Rear, and Construction of Mezzanine Floor, used Grille Balcony-Rear as laundry, and residents’ opinions on room for future improvements (No answer) “no more space for future improvements” have the intention to move out of their present dwelling units. This can be simply interpreted that residents has the tendency to move out from their dwelling units when there is no more space for future improvements as evidently shown on this study.

Even though the ratings of the residents who have the intention to move out or to stay have small differences, it is evident that majority of residents who have the opportunity to increase their space have developed a sense of belonging to their dwelling units. They have the intention to stay longer that reflects their contentment with the self-built improvements that they have done to their present dwelling units. Therefore, a residents’ self-built improvements can be a valuable predictor of their intention to move out or to stay longer (residential mobility) in their present dwelling units.

Although these self-built extensions and occupations of common spaces can be valid predictors of residents’ intention to move out or stay, further studies are needed, especially with respect to how these self-built improvements can stimulate the sense of residents’ attachment to their improved space that makes them stay longer in their dwelling units. Hometown furniture, materials used for construction, and the residents’ precious experiences to their improved spaces are the factors that are considered that stimulate the residents’ attachment to the place. Such a study can contribute to a deeper understanding of residential satisfaction and this will be the focus of the next study.

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Notes
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