

# Ranking Components of Household's Residential Movement Model Emphasizing on Economic View of Housing (Case Study: Seyyed Khandan Neighborhood-Tehran District 3)

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**Abstract:** One of the aspects of city dynamism is households' movement from one residential neighborhood to other ones inside the city. These movements that affect city structure have various reasons. Assessing the reasons of household's residential movement is very complex task since it is due to the concept of residential satisfaction or dissatisfaction. However, this movement, depending on the type of ownership, can be done based on people's indexes and factors. Therefore, this paper aims to analyze and prioritize importance of residential movement indexes emphasizing on the type of people and households' ownership in Seyyed Khandan neighborhood of Tehran. To determine sample size of the case study, Cochran formula was used and 175 questionnaires were distributed in the neighborhood. However, in order to prioritize residential indexes in two aspects of (owner/tenant), Entropy and qualitative method of SAW were used. This paper indicates that educated landowners have high tendency and jobless landowners have low tendency to move. This may be due to their fear of losing the ownership of their residential units because of fluctuations in the housing market. However, tenants who earn high income tend to have successive movements greatly and those who are unemployed or earn low revenue prefer to stay in their residential environment. Therefore, it is recommended that banking facilities and urban projects to be increased in line with providing houses for households in order to reduce their repetitive movements.

**Keywords:** residential movement, prioritization, type of ownership, Seyyed Khandan neighborhood

**JEL Classification:** N95, R21, R28, R31

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## 1- Introduction

Today, not only research about housing includes physical dimensions, but it also consists of structural, functional, and identity aspects of residential environment (Mohit et al., 2010). Housing issue, because of different and complex aspects and its influential role on people's life, needs much attention (Rahimi et.al., 2013). Thus, it is important to study a residential environment due to its impact on important indicators of planning such as quality of life, residential movement ratio, and forecasting housing demand. Human beings always move in order to maximize profits and reduce losses to improve their life quality (Stokols & Shumaker, 1982). Housing is the most important land use in urban areas composing the largest part of Iranian household's expenses (Mohammadzadeh et.al., 2015). Thus, optimal conditions of life, including welfare facilities of the area, residential satisfaction, quality of life, and social dignity, are bases to determine destination. Accordingly, the attraction and repulsion issues of departure and destination locations are assessed (Brandstetter, 2011). In the extensively conducted studies, mobility models are affected by different factors including duration of residence, employment status, revenue level, age, gender, and family circumstances that individuals and households try to choose the best alternative based on their facilities and conditions (Mohit et.al, 2010). However, household's residential movements have evident outcomes on land market boom and bust, housing and rental, constructing new housing, renovation and repairing

existing houses, change in patterns of housing, and residential density in different areas of the city. In addition, household's movement from one residential neighborhood to other neighborhoods inside the city has a major role on formation or change in social spheres of the city (Forbers & Roberston, 1978). Although movement has formed and changed social and demographic structure of neighborhood units, it is provided based on social-spatial structure of the city. Human's spatial behavior can be considered as values and criteria experienced during time and different places (Van der Vlist, 2001). These values not only are taken from his economic, social, and cultural conditions, but also is the result of conditions that the environment imposes on him and attention to such values determines his willingness to change life style and residence. These tendencies- with any motivation- will be followed by socio-spatial impacts and generally, residential feature of a city or an urban neighborhood is formed by locating behavior or personal or family decisions (Chaline, 1993). Today, the issue of residential mobility in different areas of the city has been considered because of inevitable causal relationship between residential mobility and its socio-spatial structure, particularly in analyzing social geography of cities. In Iran, most urban studies have been emphasized on the analysis of results and consequences of village to city migrations. However, despite influential impact of residential movements on socio-spatial structure of city, less attention has been paid to mobility issue

(Abdi Daneshpoor, 1999). Undoubtedly, it is necessary and important to study the way of residential mobility to access to its rules about Iran's cities, from one hand, they are faced with village to city migration, and on the other hand, socio-economic development and life style have resulted in changes in the physical structure of cities and people's residential pattern (Poorahmad et.al., 2011). The study of formation and change in social domains inside the cities help urban planners to consider social realities of each domain in planning. In this regard, realization of dominant streams of households' movements, features of attraction and repulsiveness of areas, stimulus factors of households for movement, forecasting future models of these movements, and change in social domains inside the cities enable managers and urban planners to adopt appropriate policies to control and guide its socio-spatial consequences (Safayipoor and Sajjadi, 2008).

In the last studies on residential mobility, this concept is a function of residential satisfaction or dissatisfaction. The subject that is less noted in these studies is the impact of individual indicators of mobility on landlords and tenants i.e. how much these indicators impact on residential movements. Thus, this paper aims to assess and analyze this issue, regardless of individuals and households that are not satisfied with their residential environment, try to move and vice versa, which of mobility indicators impact on household mobility in normal condition based on ownership type. Therefore, this paper, for optimal

and desirable assessment of residential movement, has investigated Seyyed Khandan neighborhood that is one of the relatively old neighborhoods in Tehran Municipality district 3. Given few internal studies about residential movement, mentioned indicators were extracted from foreign references and researches. Because of the importance of the subject, it has been tried to prioritize assessment indicators by using Simple Additive Weighting Method.

## 2- Literature Review

Residential movement has been investigated different aspects including cultural, geographical, racial, economic or from perspective of type of residential unit, facilities of that neighborhood, etc. (Pettit, 2004). About displacement reasons, Rossi had influential studies in 1955 as the first studies in this field. He stated that mobility follows household structure and its changes. In addition, Sabagh et.al. (1969), Spear (1970), Dokmeci and Berköz (2000), addressed the issue of mobility beside issues related to urban economy and household (housing tenure and revenue). Bartel (1979) and Chan(1999, 2002) found that there was a positive relationship between labor and residential mobility in the U.S. Also, Buhm and Tylor (2002) reached to the similar conclusion in England (Lersch, 2013). In this regard, Van Ommeren et.al. (1999) and Van Der Vlist (2001) studied some of the relationships between occupational displacement and residential mobility by using Search Theory in Netherlands. Today, attention to transport costs (regarding distance and

time), and its impact on tendency to change job or movement have become more important. Van Der Vlist in his thesis stated that long distance increases occupational displacement and it has little impact on residential satisfaction (Van der Vlist, 2001). Strassmann modeled the relationship between housing market interventions and residential displacement (Strassmann, 2000). Also, Chan (2001) studied the impacts of negative shocks of housing market on movement. These studies are important since they indicate how the process of search and assessment of opportunities changes in market conditions. In other studies, housing market was defined and analyzed based on household revenue, and the effectiveness of financial restrictions on residential movement was studied (Alkay, 2011). Nevertheless, there is an increasing growth of the related literature about the impact of local housing market conditions on choosing housing and wide changes of these local conditions in housing market stream. Conceptually, the relationship between individuals and households' behavior and changes over time and space in the literature is not yet clear (Dieleman et al., 2000). However, there is a positive relationship between capital and movement possibility. Households with higher incomes are more likely to move from their residential environment. For instance, it is likely for households to move from slums to formal housing market by increasing residents' regular savings (Lall et al., 2006). Parker et.al. (2002) concluded that residents in low-income neighborhoods are more dissatisfied than those who live in rich

neighborhoods. Moreover, dissatisfaction is more in residential neighborhoods with high density (Clark & Ledwith, 2006).

### 3- Theoretical Principles

Residential displacement is residents' movement from one house to another or from one neighborhood or part of a district to other areas (Djebarni & Al-Abed, 2000). This decision is the result of tension caused by imbalance between households' wants and actual status of housing or natural environments (Alkay, 2011). In studies about residential displacement, this concept is a reaction that a household demonstrates toward issues related to residential environment problems and it intensifies when status of residential environment cannot provide people's wants and it gradually leads to dissatisfaction and continuous stimulation of demands, goals, and expectations of a person who moves (Lu, 1998). In this regard, residential displacement can be a solution to obtain better opportunities or more satisfaction, but this is different considering to household's economy. For instance, less-income households do not move to improve their conditions, but this is due to unsustainability in housing. Moreover, some studies address the issue of household's economy, household's movement between landlords and tenants. Researches have indicated that ownership and residential stability become less or more prominent in certain steps of life including marriage or divorce, childbirth or retirement of household headship. There is a relationship between life events and personal features such as age, gender, economic status, etc. They also have great

impact on residential mobility (Lin, 2010). Thus, there are three main rules in line with residential mobility including:

1. There is a significant relationship between rate of movement and people's age (or household headship). In developed societies, young people between 20 and 35 years old move more than other age classes.

2. There is a significant relationship between rate of residential displacement and type of residential unit ownership in household. For instance, owners have less mobility than tenants do.

3. There is a significant relationship between household's residential unit and events of life cycle domains such as household formation or dissolution, educational and occupational period (Dieleman et al., 2000).

Weinberg et al. (1981) in the U.S. and Van Emren and Leuvensteijn in the Netherland found experimental evidences based on negative relationship between transaction costs and residential mobility, and they concluded that landlords are less willing to move (Mendoza, 2006). Moreover, Ivandis (1987) studied displacement models and choosing type of ownership in simultaneous decision-making. A few years later, Ivandis and Kaan (1996) considered movement decisions regarding ownership as a sequential process and they stated that movement among tenants is due to instability of residential unit and among landlords is due to rise in expectation level of residential environment. On the other hand, following extensive analyses, this result proved that affordable housing supply for low-income classes of

metropolitan areas can be a reason for displacement of poor classes to areas with cheaper land and housing since in urban society, each classes of society relies on some of facilities that is associated with their class hierarchy. Low class of society desire to become property owner and buy a small and relatively appropriate house. Residential ownership results in more satisfaction to owners from different aspects including power and freedom for decision making and it is also a symbol of their credit and personality (Simpson & Fowler, 1994). This study was compatible with Apgar findings (2004) indicating high satisfaction rate of landlords towards tenants. Although housing ownership results in high satisfaction to owners, not all of them can enjoy appropriate housing. This is true among those who can afford it and the rest of them are in economical residential areas with lower rents (Aluko, 2011).

In other studies, housing market has been defined based on the level of household income (Adriaanse, 2007) and the quality of effectiveness of financial restrictions on residential mobility has been analyzed (Alkay, 2011). Thus, adjustment of households and housing at micro level has been considered at least in three geographical scales including 1. Particularly, (urban) housing market that a household lives in it 2. Nationally demographic and economic conditions that are vibrant and progressive over time 3. Difference in the policies of housing, wealth, and ownership structure that forms the process of residential movement (Dieleman et al., 2000). Börsch and Supan (1993) stated that

financially certain behaviors of rental housing against proprietary housing and structure of granting housing loan may explain difference in the preferences of ownership right in the U.S., Germany, and Japan (Coulter et al., 2012).

Helderman et.al. (2004) and Huang and Deng (2006) concluded that landlords are less willing to move than tenants in Netherland and China. There is a negative relationship between house ownership and movement since landlords are faced with high costs for movement. However, there are many studies on types of residential displacement in terms of ownership of residential units, but relatively a few has been based on choosing neighborhood since behaviors of choosing housing is the result of interaction between household's needs, wants, preferences, and housing features and priority of buying residential stability and people prefer to settle in a neighborhood or a residential unit with less satisfaction but with more stability rather than to move many times (Clark & Ledwith, 2006).

#### 4- Research Methodology

Due to the essence of the matter, descriptive-analytical method was used for data analysis in this research. In this regard, data were collected by library and survey. Investigating the role of residential ownership, as one of the indicators of residents' satisfaction of Seyyed Khandan neighborhood in Tehran, municipality district3, first, the rate of residential ownership of the area was studied. Then, displacement model based on type of ownership was divided into individual indicators including age of household headship, type of household, number of household headships, status of household headship activity, household's educational level, revenue status, gender of household headship, and residence time in order to determine the priority of each of them for displacement (table1). Furthermore, given that there were many resident households in the studied area and investigating their viewpoints and information was a demanding task, Cochran formula was used in order to determine sample size.

$$n = \frac{NT^2 S^2}{d^2(N-1)+T^2 S^2}$$

$$n = \frac{28627(2/58)^2 \cdot (1/85)^2}{(0/05)^2(28627)+(2/58)^2 \cdot (1/85)^2} = 175$$

**Table1. Effective individual indicators on household residential movement**

|   | Index  | Weighting Range   | Explanation  |
|---|--|---|--|
| <b>Indicators of residential movement</b> | <b>Age of household headship</b>             | 18- 34<br>35- 44<br>45- 64<br>65 / +                        | Age of household headship has been divided based on type of ownership into four categories.  |
|   | <b>Type of household</b>                     | Single<br>With parents<br>Without children<br>With children | In the index of type of household, with the birth of each child, household faces a concept naming stress room. In fact, it is the ratio of number of household individuals on the space of residential unit that is an important factor in residential dissatisfaction and consequently movement.  |
|   | <b>Number of household headships</b>         | 0<br>1<br>+2  | In the last studies, by rise in the number of household headship, revenue increases and people's wants and demands change (Chavez, 2002).  |
|   | <b>Status of household headship activity</b> | Unemployed<br>Employed<br>Retired                           | In terms of type of activity, jobless people and retired headships are less willing to move.   |
|   | <b>Headship's educational level</b>          | Under<br>Diploma<br>Diploma- B.A.<br>B.A- Ph.D.             | Residents with lower educational level are less willing to move and vice versa i.e. residents with higher education have higher demands. In addition, naturally, people's revenue will be increased gradually considering their level of education and it is more likely to move (Ukoha & Beamish, 1997).  |
|   | <b>Revenue status</b>                        | Low<br>Average<br>High                                      | Low-income households move repeatedly because of inappropriately economic or social status. This can be changed based on type of ownership i.e. tenants low-income household move not because of improvement of conditions but because of instability in housing, but it is not the same in owners (Dawkins & Nelson, 2002). According to Iran's Statistical Center, people's revenue status has been divided in this article into low (6 million Rials to 15 million Rials), average (15 million Rials to 25 million Rials), and high (25 million Rials to more). |
|   | <b>Gender of household headship</b>          | Male<br>Female  | Female-headed households are less willing to move than male headships.   |
|   | <b>Time of residence</b>                     | Less than 5 years<br>5 to 10 years<br>More than 10 years    | According to the researches, as residence time increases in residential environment, sense of belonging increases and residential movement is less likely to occur.  |

**Reference: (Researchers' findings)**

In order to analyze and determine the role of ownership in residential movement, zero and one scale was used and it was ranked based on SAW

technique. Stages of this technique are as below.

In this method, the weight of each indicator is determined by using Entropy

technique. In order to use this technique in weighting, first, amount of E symbol is calculated by using equation1.

$$E \approx S\{p_1, p_2, \dots, p_n\} = -k \sum_{i=1}^n [p_i \cdot \ln p_i] \quad (1)$$

In a way that one is positive constant. Afterwards, specific value of P is calculated for each of I and J by using equation2. For  $E_j$ ,  $P_{ij}$  set can be seen according to equation3.

$$E_j = -k \sum_{i=1}^m [p_{ij} \cdot \ln P_{ij}] \cdot \forall j \quad (2)$$

$$P_{ij} = \frac{r_{ij}}{\sum_{i=1}^m r_{ij}}, \forall i, j \quad (3)$$

Then, deviation degree of created information is calculated by  $D_j$  for j-th indicator of equation4 and to calculate  $w_j$  weights, existing indicators of equation 5 is used.

$$d_j = 1 - E_j \quad (4)$$

$$W_i = \frac{d_i}{\sum_{j=1}^n d_i}, \forall j \quad (5)$$

Given that vector W that is for indexes' weights, appropriate option of  $\tilde{A}$  is chosen by using equation6 and  $\sum_j w_j - 1$  is seen in equation7.

$$\tilde{A} = \left\{ A_i \mid \max_i \frac{\sum_j W_j \cdot r_{ij}}{\sum_j W_j} \right\} \quad (6)$$

$$A^* = \{ A_i \mid \max_i \sum_j W_j \cdot r_{ij} \} \quad (7)$$

Considering research method, based on what is in the range of zero and one, one is the value for household residential lack of movement. This means that in this situation, household headship is satisfied enough considering type of ownership and rent and they will not be willing to move (assuming no special event in life). Each of studied indicators in this research

has a certain range in the studied area that extracted based on questionnaire data.

**Introducing the Studied Area**

Seyyed Khandan neighborhood is located in Tehran Municipality district 3 in the northeast of the city. This neighborhood connects to Hemmat Expressway from north, to Resalat Exp. From south, to Haghani Exp. From west, and to Shariati Avenue from east. It has 304 hectares area with 28627 people. Before constructing highways in the area, it had a homogeneous context, and people who lived there were originally born and grown up in this neighborhood, but currently, with the development of highways, number of immigrants has increased significantly in the neighborhood and it has affected neighborhood context.

According to the obtained data, more than 48 percent of neighborhood population is men and 51.4 percent is women with an average age of between 35 to 45 years old. In addition, 94.3 percent of people live in one-household residential units and 5.7 percent of them live in multi-household residential units. Of 175 people of statistical population, 96.44 percent was male-headed households and only 3.56 percent of them was female-headed households due to death of spouse or divorce. 87.7 percent of household headship was married and 12.3 percent was single. Totally, revenue status of statistical population earned between 7 million Rials and 35 million Rials. Also, among the residents, 5.1 of them had diploma or under diploma degrees, 63.7 percent had diploma to B.A. degree, and 31.2 percent had B.A. to Ph.D. (table2).



**Table2. General information of the research**

| Variable                               | Type                     | n=175  |
|--|--------------------------|--------|
| Gender (percentage)                    | Male                     | 48.6   |
|  | Female                   | 51.4   |
| Age (average age)                      | -                        | 35 -45 |
| Household status (percentage)          | One-household            | 94.3   |
|  | Multi-household          | 5.7    |
| Household gender (percent)             | Male                     | 96.44  |
|  | Female                   | 3.56   |
| Marital status (percent)               | Single                   | 12.3   |
|  | Married                  | 87.7   |
| Revenue status (average-million Rials) | -                        | 7-35   |
| Educational status (percent)           | Diploma or under diploma | 5.1    |
|  | Diploma to B.A.          | 63.7   |
|  | B.A. to Ph.D.            | 31.2   |

Reference: (Researchers' findings)



**Map1. Studied area**

Reference: (<http://region3.tehran.ir>)

**5- Research Findings**

According to table3, the weight of each type of tenure (landlord/tenant) has

been defined, and it was specified in a range of zero and one. In order to determine hierarchy of displacement

indicators based on type of housing tenure, first, the weight of each indicators and their importance degree were determined by Entropy method. In

studying the weight of each indicator by using Entropy method, proposed stages were presented in tables 4, 5, and 6.

**Table3. The weight of each indicators based on type of ownership**

|  |                    | Owner    | Tenant   |
|--|--------------------|----------|----------|
| <b>Duration of residence</b>                     | More than 10 years | 0.85112  | 0.657441 |
|  | 5 to 10 years      | 0.675411 | 0.523326 |
|  | Less than 5 years  | 0.612375 | 0.289966 |
| <b>Household gender</b>                          | Male               | 0.541    | 0.3258   |
|  | Female             | 0.7632   | 0.479    |
| <b>Revenue status</b>                            | High               | 0.1273   | 0.367    |
|  | Average            | 0.5244   | 0.5411   |
|  | Low                | 0.9230   | 0.730    |
| <b>Educational level of household</b>            | B.A.- Ph.D.        | 0.269    | 0.311    |
|  | Diploma-B.A.       | 0.555    | 0.545    |
|  | Under diploma      | 0.830    | 0.752    |
| <b>Occupational status of household headship</b> | Retired            | 0.9520   | 0.593    |
|  | Employed           | 0.5141   | 0.573    |
|  | Unemployed         | 0.8992   | 0.4873   |
| <b>Number of household headship</b>              | 2                  | 0.6988   | 0.4239   |
|  | 1                  | 0.8555   | 0.5623   |
|  | 0                  | 0.9652   | 0.4987   |
| <b>Type of household</b>                         | With children      | 0.5823   | 0.3972   |
|  | Without children   | 0.750    | 0.4221   |
|  | With parents       | 0.741    | 0.5982   |
|  | Single             | 0.4170   | 0.2234   |
| <b>Age of household headship</b>                 | +65                | 0.836    | 0.620    |
|  | 45 -65             | 0.746    | 0.481    |
|  | 35 -45             | 0.5703   | 0.410    |
|  | 18 -34             | 0.4551   | 0.2889   |

Reference: (Researchers' findings)

**Table4. Calculating E<sub>j</sub> value**

| $E_j = -k \sum_{i=1}^m [p_{ij} \cdot \ln p_{ij}] \cdot v_j$ |                    | E <sub>j</sub> owner | E <sub>j</sub> tenant |
|---|--------------------|----------------------|-----------------------|
| <b>Duration of residence</b>                                | More than 10 years | 0.963568             | 0.9925863             |
|   | 5 to 10 years      | 0.9814756            | 0.8745236             |
|   | Less than 5 years  | 0.9863567            | 0.983698              |
| <b>Household gender</b>                                     | Male               | 0.99223              | 0.9951112             |
|   | Female             | 0.936788             | 0.9963569             |
| <b>Revenue status</b>                                       | High               | 0.974530             | 0.9856785             |
|   | Average            | 0.8912458            | 0.9745693             |
|   | Low                | 0.967852             | 0.8562348             |
| <b>Educational level of household</b>                       | B.A.- Ph.D.        | 0.993692             | 0.9745689             |
|   | Diploma-B.A.       | 0.984120             | 0.9856256             |
|   | Under diploma      | 0.99689720           | 0.9859696             |
| <b>Occupational status of household headship</b>            | Retired            | 0.963589             | 0.9945668             |
|   | Employed           | 0.974589             | 0.9896952             |
|   | Unemployed         | 0.8789635            | 0.9896321             |
| <b>Number of household headship</b>                         | 2                  | 0.9123689            | 0.9891236             |
|   | 1                  | 0.9578963            | 0.9957741             |
|   | 0                  | 0.9963897            | 0.8956589             |
| <b>Type of household</b>                                    | With children      | 0.9689752            | 0.985622              |
|   | Without children   | 0.9865896            | 0.9689588             |
|   | With parents       | 0.99214785           | 0.922214              |
|   | Single             | 0.965898956          | 0.9987457             |
| <b>Age of household headship</b>                            | +65                | 0.8963598            | 0.985633              |
|   | 45 -65             | 0.992369             | 0.996989              |
|   | 35 -45             | 0.975633689          | 0.958792              |
|   | 18 -34             | 0.9652348            | 0.986635              |

Reference: (Researchers' findings)

**Table5. Calculating Di value**

| $d_j = 1 - E_j, \forall j$                       |                    | Owner      | Tenant     |
|--|--------------------|------------|------------|
| <b>Duration of residence</b>                     | More than 10 years | 0.03643    | 0.007413   |
|  | 5 to 10 years      | 0.018525   | 0.125476   |
|  | Less than 5 years  | 0.0136433  | 0.0163202  |
| <b>Household gender</b>                          | Male               | 0.004888   | 0.00777    |
|  | Female             | 0.0036431  | 0.063212   |
| <b>Revenue status</b>                            | High               | 0.025472   | 0.02547    |
|  | Average            | 0.025430   | 0.1087542  |
|  | Low                | 0.1437652  | 0.032148   |
| <b>Educational level of household</b>            | B.A. – Ph.D.       | 0.025430   | 0.006308   |
|  | Diploma- B.A.      | 0.01588    | 0.01588    |
|  | Under Diploma      | 0.014030   | 0.0031028  |
| <b>Occupational status of household headship</b> | Retired            | 0.005433   | 0.036411   |
|  | Employed           | 0.010437   | 0.025411   |
|  | Unemployed         | 0.0103679  | 0.1210365  |
| <b>Number of household headship</b>              | 2                  | 0.0876311  | 0.0876311  |
|  | 1                  | 0.004225   | 0.0421037  |
|  | 0                  | 0.0036103  | 0.0036103  |
| <b>Type of household</b>                         | With children      | 0.031024   | 0.0310248  |
|  | Without children   | 0.031041   | 0.0134104  |
|  | With parents       | 0.77786    | 0.00785215 |
|  | Single             | 0.001254   | 0.03410105 |
| <b>Age of household headship</b>                 | +65                | 0.0143667  | 0.10364302 |
|  | 45 -65             | 0.003011/0 | 0.007631   |
|  | 35 – 45            | 0.041208   | 0.02436632 |
|  | 18 -34             | 0.013365   | 0.0347582  |

Reference: (Researchers’ findings)

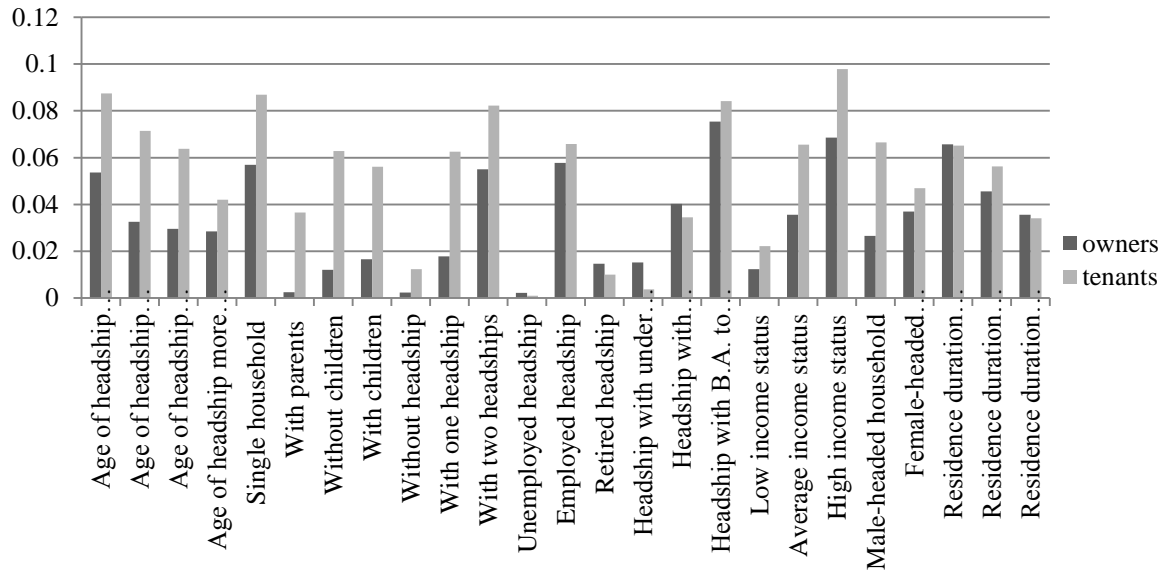
**Table6. The weight of studied indicators**

| $W_i = \frac{d_i}{\sum_{j=1}^n d_j}, \forall j$  |                    | <i>W</i> owner | <i>W</i> tenant |
|--|--------------------|----------------|-----------------|
| <b>Duration of residence</b>                     | More than 10 years | 0.035662       | 0.03412         |
|  | 5 to 10 years      | 0.045623       | 0.05629         |
|  | Less than 5 years  | 0.06574        | 0.06510         |
| <b>Household gender</b>                          | Male               | 0.02658        | 0.06658         |
|  | Female             | 0.036985       | 0.046985        |
| <b>Revenue status</b>                            | High               | 0.0685249      | 0.097881        |
|  | Average            | 0.035689       | 0.065689        |
|  | Low                | 0.01223        | 0.02213         |
| <b>Educational level of household</b>            | B.A. –Ph.D.        | 0.0754766      | 0.084106        |
|  | Diploma- B.A.      | 0.0402390      | 0.034530        |
|  | Under Diploma      | 0.015242       | 0.003742        |
| <b>Occupational status of household headship</b> | Retired            | 0.014763       | 0.010           |
|  | Employed           | 0.057830       | 0.065830        |
|  | Unemployed         | 0.0022369      | 0.0010          |
| <b>Number of household headship</b>              | 2                  | 0.0555677      | 0.082301        |
|  | 1                  | 0.01788562     | 0.062668562     |
|  | 0                  | 0.0023628      | 0.0123628       |
| <b>Type of household</b>                         | With children      | 0.0166325      | 0.0561325       |
|  | Without children   | 0.012220       | 0.062820        |
|  | With parents       | 0.002589       | 0.03660         |
|  | Single             | 0.0569550      | 0.0869550       |
| <b>Age of household headship</b>                 | +65                | 0.028523       | 0.042023        |
|  | 45 -65             | 0.0296356      | 0.0636879       |
|  | 35 -45             | 0.0325896      | 0.07144         |
|  | 18 -34             | 0.053674       | 0.087589        |

**Reference: (Researchers' findings)**

However, after calculating the weight of each indicator (table6), their importance degree has been drawn in diagram1. As it can be seen in the diagram, those owners who have headships with higher educational degree and those tenants who earn high

income are more willing to move. On the other hand, unemployed headships whether owners or tenants are not willing to move. Table7 represents the ranking of research variables.



**Diagram1. Importance degree of each of research indicator**

Reference: (Researchers’ findings)

**Table7. Ranking of research variables**

| Variables                                  | Owner | Tenant |
|--|-------|--------|
| Age of headship between 18-34              | 6     | 2      |
| Age of headship between 35-45              | 13    | 6      |
| Age of headship between 45-65              | 14    | 11     |
| Age of headship more than 65 years old     | 15    | 17     |
| Single household                           | 5     | 3      |
| With parents                               | 23    | 18     |
| Without children                           | 22    | 12     |
| With children                              | 21    | 15     |
| Without headship                           | 24    | 22     |
| With one headship                          | 19    | 13     |
| With two headships                         | 7     | 5      |
| Unemployed headship                        | 25    | 25     |
| Employed headship                          | 4     | 8      |
| Retired headship                           | 20    | 23     |
| Headship with under diploma degree         | 17    | 24     |
| Headship with diploma or B.A. degree       | 9     | 19     |
| Headship with B.A. to Ph.D. degree         | 1     | 4      |
| Low income status                          | 18    | 21     |
| Average income status                      | 11    | 9      |
| High income status                         | 2     | 1      |
| Male-headed household                      | 16    | 7      |
| Female-headed household                    | 10    | 16     |
| Residence duration less than 5 years       | 3     | 10     |
| Residence duration between 5 and 10 years  | 8     | 14     |
| Residence duration with more than 10 years | 12    | 20     |

Reference: (Researchers’ findings)

**6- Conclusion**

This research studied residential movement based on type of ownership in

Seyyed Khandan neighborhood in Tehran, municipality district 3, aiming to prioritize on household’s residential

movement. Given that Seyyed Khandan is one of the oldest neighborhoods in Tehran, it has lost many of its residents during last years because of expansion of highways and traffic. The findings indicated that type of ownership affects household displacement; property owner households move under certain conditions, but tenant households face with lack of residential stability because of their ownership type. In this research, each of influential components on residential mobility was assessed based on type of ownership of households in the studied area.

The results indicated that factors including revenue status, household's educational level, type and gender of household affect residential displacement among landlords and tenants in order that households with high income and education and single households or in an age range of 18 to 34 are more willing to move their residential unit regardless of type of ownership, but its rate is less than tenants. Those households living with their parents or having unemployed household are less willing to move, but tenants and unemployed or under diploma households prefer to stay in their residence. Totally, it can be said that except residential satisfaction in Seyyed Khandan neighborhood that affects highly displacement individual conditions including revenue, education, number of households, age of household, and other cases affect residential movements.

According to research findings, it is recommended that to determine and change residential density in different areas of the city, stimulus flows of inter-

city movements, socio-economic features, motivations and needs of households willing to move to be considered. Thus, it is recommended to increase the density of low and average income areas that they have the highest rate of residential movements with observing other criteria and urbanization regulations in order to meet applicants' needs who want to live in these areas. Moreover, implementation of housing projects and banking facilities can avoid extremely unplanned expansion of city on inappropriate lands near the margins of cities and meet part of housing demand, particularly low-income classes resulting in reduction of repeated urban movements consequently.

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