



Conceptual Framework of Residential Satisfaction

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Abstract

Residential satisfaction is described as a sense of comfort, with what one needs or wants to achieve in a building. The paper aims to establish a residential satisfaction framework that will consist of essential determinants. Comprehensive analysis of the literature is undertaken to determine criteria which consist of characteristics of housing, neighbourhoods' characteristics, social demographic characteristics, behavioural characteristics. These characteristics become one concept of residential framework serve the purpose of measuring the level of residential satisfaction. With this framework, it will help the researcher specifically define and collect information to obtain specific data.

Keywords: Residential; Satisfaction; Housing

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1.0 Introduction

It is very complicated to measure residential satisfaction because it is subjective matters and depends on the particular place, time, the objective of assessment and involvement of a variety of people (Bardo and Dokmeci, 1992). Several residential satisfaction studies have produced various findings. Residential satisfaction surveys have become a key predictor for various individuals, such as architects, town planners, property managers and developers. At least four different approaches have applied to the definition of residential satisfaction (Galster, 1985). The first approach is that residential satisfaction as a primary indicator of the views of the people about the general quality of life. Secondly, the assessment criteria also used as an ad hoc tool to evaluate the performance of the private and public sector housing projects. The third is that it used as a measure of initial mobility and, subsequently, changes in housing demands and changes in the community. The last approach is to examine the understanding of the inadequacies of residents in their current housing environment. Therefore, to obtain the correct information, it is very important to understand the concept of residential satisfaction. This paper aims to give an overview of housing fulfilment and the residential satisfaction conceptual framework. Two key goals for developing a conceptual structure are discussed in this study. The first goal is discussing the definitions and theories of residential satisfaction. The second goal is to assess the components and determinants involved in the study of residential satisfaction.

2.0 Methodology

The approach for this study is focused on the compilation and review of secondary data and information to achieve the aims and objectives of this paper. A literary examination of the theories and studies in residential satisfaction at the cross-cultural level has been carried out through peer reviews of the articles and conference papers which cover both developing and developed countries. A review

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of the theories and empirical studies on residential satisfaction has been conducted to conclude that further residential satisfaction studies are necessary for accordance with specific situations relating to the country or culture.

3.0 Theories in Residential Satisfaction

The term residential satisfaction is commonly used in the worldwide study. Individuals in the developing industry and researchers use this very important predictor in their studies. The theory of housing needs stated by Rossi (1955), housing deficit theories by Morris and Winter (1975) and psychological construct theory by Galster (1985) are some theories that are related to the satisfaction of residence. The first theory of housing needs presented by Rossi (1995) indicates the rates of life are different and changes at these rates make households uncomfortable. This discomfort has been demonstrated by households moving elsewhere. There are five phases according to Maslow's needs hierarchy. These phases are physiological needs, safety needs, belongingness and love need, esteem needs, and need for self-actualization. It is necessary to satisfy individuals fundamental which need to improve the ability and capacity of a person in a society. In general, the housing deficits are characterized as housing shortages for the population. However, Morris and Winter (1975) stated that the premise of the housing deficit term is that the house itself is not in good condition. People tend to compare with others to determine their own homes. Housing disparities have contributed to housing deficits in their home. As a result, people are willing to make improvements in their home. This theory is more concern with the physical dimension of houses in contrast to the psychological theory. The condition of the residents influences people to compare with others. Thus, they will have a feeling of satisfaction or dissatisfaction (Galster, 1985). Unsatisfaction of residential physical status can result in changes to the building which demonstrate that the research into residential satisfaction needs to examine further as the outcome may differ for each residence.

4.0 Terms of Residential Satisfaction

Throughout the previous studies, the term "residential satisfaction" or "dwelling satisfaction" should separate and defined specifically. Residential is a synthesis of the entire physical and social elements of the housing system. Housing is also a multidimensional phenomenon, including the form of arrangement, tenure, place and political competence (Mohit and Al-KhanbashiRaja, 2014). As far as the word satisfaction is concerned, it is a method of determining what has been achieved or obtained and what has been anticipated. The perceived disparity between goal and accomplishment can also be adequately elaborated. Mohit and Al-KhanbashiRaja (2014) stated that not only the physical feature, but also the ability to form social networks fulfilled, and this is subjective to an objective environment. The multifaceted design of the housing complicates the assessment of the house. However, the single-facet can't provide sufficient details on housing quality in other areas (Weideman and Anderson, 1985). Residential satisfaction means a feeling of accomplishment when one has achieved or has fulfilled what one wants or needs in a house (Mohit and Al-KhanbashiRaja, 2014). Residential satisfaction can also be seen as a symbol of the general quality of life for homeowners, which can contribute to the fulfilment of an individual's housing expectations (Tan, 2016). Amerigo and Aragones (1997) mentioned in their studies, residential satisfaction is the quality of life that represents the definition of the residents of a particular residential environment and tends to cause residential mobility.

5.0 Analysis of Residential Satisfaction

The majority of research centred on the goals and subjective qualities of the residential environment as well as the personal characteristics (Rioux and Werner, 2011). According to Amerigo and Aragones (1997), there are three levels of analysis which comprise of cognitive, affective and behavioural elements. The vital forecast of cognitive, affective or behavioural characteristics of the residents also shown to be the residential satisfaction, including factors including life satisfactory, neighbourhood commitment, mental or human health, and residential mobility (Lu, 1999). Analysis of these levels together with literature review is crucial in solving certain issues regarding residential satisfaction. Cognitive aspect is a study of the relationship of an individual with his or her residential environment. The cognitive or "residential satisfaction" is often evaluated in current literature in a single article stating that overall residential satisfaction or with specific residential environment components is measured (Li and Wu, 2013). In their study, Amerigo and Aragones (1997) stated different gender, in terms of husband and wife, have similar perception toward the residential environment. Housewives with low socio-economic status represent an important aspect in their residential environment which are the basic infrastructure, overcrowding, safety as well as relationships with neighbours.

Regarding the analysis of the affective aspect, it is considered as an interaction between an individual with his or her residential environment. Affective is more likely to focus on the emotional state of an individual where it is very easy to access cognitively (Wang and Wang, 2015). In the case of residential satisfaction, the element of affective is subject to the well-being of an individual in his or her daily life which the duration of stay in the residential area. Amerigo and Aragones (1997) have collected predictors that separate into two dimensions which are the physical versus social and objective versus subjective.

The final level of analysis is the behavioural aspect. Behavioural aspect is essentially the attitude attributes of an individual toward the residential environment, in the perspective of residential satisfaction. An individual that satisfied with his or her residential environment is likely to do nothing towards the improvement of the house. In this case, they are satisfied with what they have. And the residents who impose a favourable attitude such as have a good relationship with the neighbours have higher level satisfaction (Amerigo and Aragones, 1997).

6.0 Empirical Studies of Residential Satisfaction

Specific residential satisfaction study studies have been performed in particular by professionals and experts on user characteristics. There is a range of methods included in the residential satisfaction questionnaire to achieve the aims of the various studies (Amerigo and Aragonés, 1997). The general characteristics are divided into four parts that focus on obtaining perceived environmental quality indices, assessing the satisfaction of the individuals with their residential environment, and the compilation of social demographic and personal characteristics. The last section examines the behavioural and individual issues in their home setting. The study includes factors such as community conditions and infrastructure, physical and mental health, socioeconomic trends, such as economic results and social contact (Fauth et al., 2004). In contrast, the measurement of residential satisfaction through location factors in the surrounding neighbourhood environment, alongside conditions like "Safety and walking," "Access to destinations," "Social network," and "Travel network" (Leslie and Cerin, 2008 and Galster, 1985).

Research by Amerigo and Aragonés (1997) mentioned that four sections which include socio-demographic features, housing characteristics, neighbourhood characteristics and behavioural characteristics used to conclude the empirical studies on inter-cultural residential satisfaction (Mohit and Al-KhanbashiRaja, 2014). Other researchers have also defined the relevant social-demographic factors for the study. Another study shows that quality of the building, maintenance culture, social and neighbourhood culture, the management and housing sector and the students in the public hall of residence, using the Technical University of Takoradi as a case-study (Somiah et al., 2017) are considerably predicted. These add another of the variables in their study which relate their importance to residential satisfaction with a culture of maintenance by owners.

6.1 Socio-demographic Characteristic

The effect of education on housing satisfaction appears to be negligible (Lu, 1999). However, other studies have shown that the level of education affects the level of house satisfaction (Vera-Toscano and Ateca-Amestoy, 2008 and Ibe and Aduwo, 2013). This statement supported by the statement in another study (Campbell, 1976) in which the relationship between housing satisfaction and age, income, education and employment has been found positive. In a study, it is proved that education has impacted affective attachment more significantly and places dependency in rural areas than urban areas.

The characteristic of the residents, including age, revenue, length of residence and ownership of a house are also important factors (Lu, 1999). Some researchers as Lu (1999) and Chapman and Lombard (2006) indicated that age has a positive impact on residential satisfaction, with elderly are more satisfied with their house than the younger people. It is also mentioned in a study that the elderly who is a homeowner and have higher income contribute to a higher level of satisfaction as well as marriage and children's presence continue to influence neighbourhood satisfaction as families with children are more likely to live in safe and spacious environments (Lu, 1999).

Previous research has shown higher incomes that allow households to move into an adequate house in an attractive neighbourhood, which can lead to higher satisfaction (Frank and Enkawa, 2009). This statement was supported by the result of another study by Lu (1999), in the general satisfaction of higher-income households with their housing. For residential satisfaction levels, employment industry and household size are important (Ibe and Aduwo, 2013).

This section states that the main features of residents include the age, income, residence life, house ownership, the type of household and the impact of the satisfaction of residents in various ways, in positive or negative ways (Mohit and Al-KhanbashiRaja, 2014). The results were expressed in the study. However, the findings between house satisfaction and the characteristics of residents are not conclusive. An analysis made by another study shows that the social and demographic character of a household, residence duration, tenure type is positively linked with total housing satisfaction (Mohit and Azim, 2012).

6.2 Housing Characteristic

In a study by Lane and Kinsey (1980), housing characteristics are more significant than demographic characteristics. This shows that building features, such as the number of bedrooms, kitchen size, location and housing quality, have a strong relationship with housing satisfaction (Ariffin et al., 2010). In previous research by Parkes et al. (2002), the structural housing indicator is an important factor affecting house satisfaction. This is followed by a further study that summarized that residential satisfaction differently at the cross-cultural level depends on housing characteristics, such as the number of bedrooms and toilets, size and location of the kitchens, dining room or living rooms (Mohit and Al-KhanbashiRaja, 2014).

The indicators included physical characteristics of houses, such as laundry and storage areas, space in the kitchens, size of living and dining areas, number of bedrooms and bathrooms and other houses factors including the quality of dwellings, privacy and housing provided by developers, for example, house protection and ventilation. Mohit and Azim (2012) stated in their study that the housing characteristic effect the satisfaction level of the residents where the number of toilets, size and condition of washing and drying area as well as number of electrical sockets, low level of residential satisfaction was reported.

In measuring higher residential satisfaction, the physical characteristics of houses, such as comfort, building quality, housing design and house measurements, are significant (Türkoğlu, 1997). Ibe and Aduwo (2013) mentioned in their study, the most important predictor in residential satisfaction are adequacy of thermal and visual comfort as well as the security in residence.

6.3 Neighbourhood Characteristic

Mohit and Al-KhanbashiRaja (2014) found that the satisfaction of neighbourhoods is a significant predictor of the satisfaction of residence. The greater percentage of residents' dissatisfaction was the longer distance to schools, housing, shopping and medical services. Neighbourhood components, such as crime prevention and accident protection, are related positively to housing satisfaction. It has concluded that residential satisfaction not only depends on the residential unit but also in the neighbourhood.

Research previously recorded that the residents evaluate neighbourhood based on primarily residential normative parameters, access to quality education, quality of the streets and roads as well as homogeneity of caste, race and ethics (Morris et al., 1976). Thus, it is stressed that satisfaction in the neighbourhood proved to be an important predictor for housing satisfaction (Lu, 1999). Accessibility to public transportation, community and shopping services and physical environment varying factors of neighbourhood satisfaction have also identified as the predictors for residential satisfaction (Ozo, 1990).

A study by Francescato et al. (1979) concludes that the issue of safety from the accident has been taken into account as a factor in housing satisfaction. This is confirmed by another study, which says that community dissatisfaction will probably cause by a level of criminal activities or lack of facilities, industrial growth or workplace location (Mulligan et al., 2004). Thus, it concluded that residential satisfaction depends not only on the housing units themselves but also on the neighbourhood (Parkes et al., 2002).

6.4 Residents' Behavioural Characteristic

Residents are attempts to overcome disparities in their housing and the dissatisfaction of the lack of the house is characteristic of their behaviour, or 'home adaptation' as conceived by Morris et al., (1976). House changes are a process that can happen if residents have a normative deficit which causes considerable residential satisfaction to be reduced. They also found out in their analysis that residential changes and additions consist of two major circumstances, which include an increase in space or the number of spaces in the housing unit and improvements in housing unit efficiency.

The residents' behavioural characteristics reflect their residence satisfaction and dissatisfaction (Mohit and Al-KhanbashiRaja, 2014). The residents respond differently to the dissatisfaction with their homes. It may be adaptable to the condition of the residential unit or modified in a certain part of the residential unit or lead to migration. It all depends on whether the residents are unhappy or capable of relocation.

A study on a culture of maintenance for owners has incorporated the new attribute. This attribute, together with existing residential attributes, it found to be significant. According to the rank by Somiah et al. (2017), important features in the study are the quality of buildings and cultural maintaining of owners, social characteristics, the neighbourhood, management features and the residential unit. Based on the empirical studies that have discussed, it can be concluded that in assessing the residential satisfaction, there are four (4) characteristic should be considered. The characteristics are socio-demographic characteristics, housing features, neighbourhood characteristics and resident behaviour characteristics (Mohit and Al-KhanbashiRaja, 2014).

Table 1.Components in Residential Satisfactions

Characteristics of Residential Satisfaction	Determinants	Subjective Variables
Socio-demographic characteristic	Demographic of residents Socioeconomic of residents	Age, gender, marital status, income, duration of residence, tenure status, race, religion, education, household size, job status etc.
Housing characteristic	Physical characteristic Support services Management factors Building quality features	The number of rooms and sockets, size of rooms, dining, kitchen, and living, dry area, quality of the house, toilet/bathroom, ventilation, parking, corridor, staircase etc.
Neighbourhood characteristic	Neighbourhood facilities Social environment Public facilities	Accessibility, safety and security, infrastructure, privacy, urban activity and noise, neighbours' relationship etc.
Behavioural characteristic	Residents behavioural towards residential	Mobility, modification, adjustment, adaptation, maintenance culture

(Literature Review)

7.0 Conceptual Framework of Residential Satisfaction

The residential satisfaction indicator system has a wide variety of facets (Mohit and Al-KhanbashiRaja, 2014). This multi-faceted includes six (6) characteristics which are socio-demographic characteristic, the physical features of the house, housing support services, public facilities, neighbourhood facilities, and the social environment. The framework is community-based and offers the basis for the identification and evaluation of critical community concerns.

Residential satisfaction determinants and variables are discussed previously which including three levels of analysis which are cognitive, affective and behavioural. By using a single-faceted framework, the data collected might be insufficient to explore more on specific elements in the objectives of any research. This research introduces a conceptual framework for residential satisfaction focused on the analysis of residential satisfaction studies establishment. This framework is a combination of multi-faceted framework and components related which represented the determinants needed in residential satisfaction studies.

The figure below is the residential satisfaction conceptual framework. In this context, the indicator system established by the previous study by Mohit and Al-KhanbashiRaja (2014) has been adapted. The analysis consists of six (6) components. Nevertheless, in this study, the components that relate to previous research have been reduced to quatre (4) characteristics and ten important determinants used as indicators in determining the residential satisfaction level.

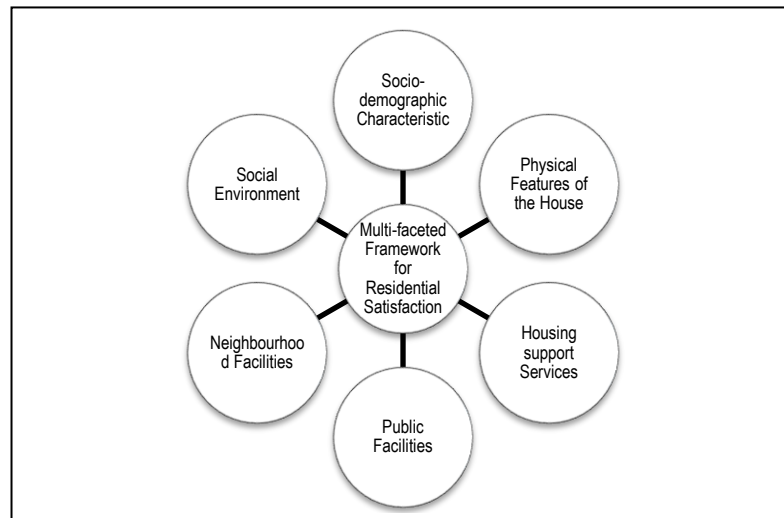


Fig. 1: Multi-faceted Framework for Residential Satisfaction (Mohit and Al-KhanbashiRaja, 2014)

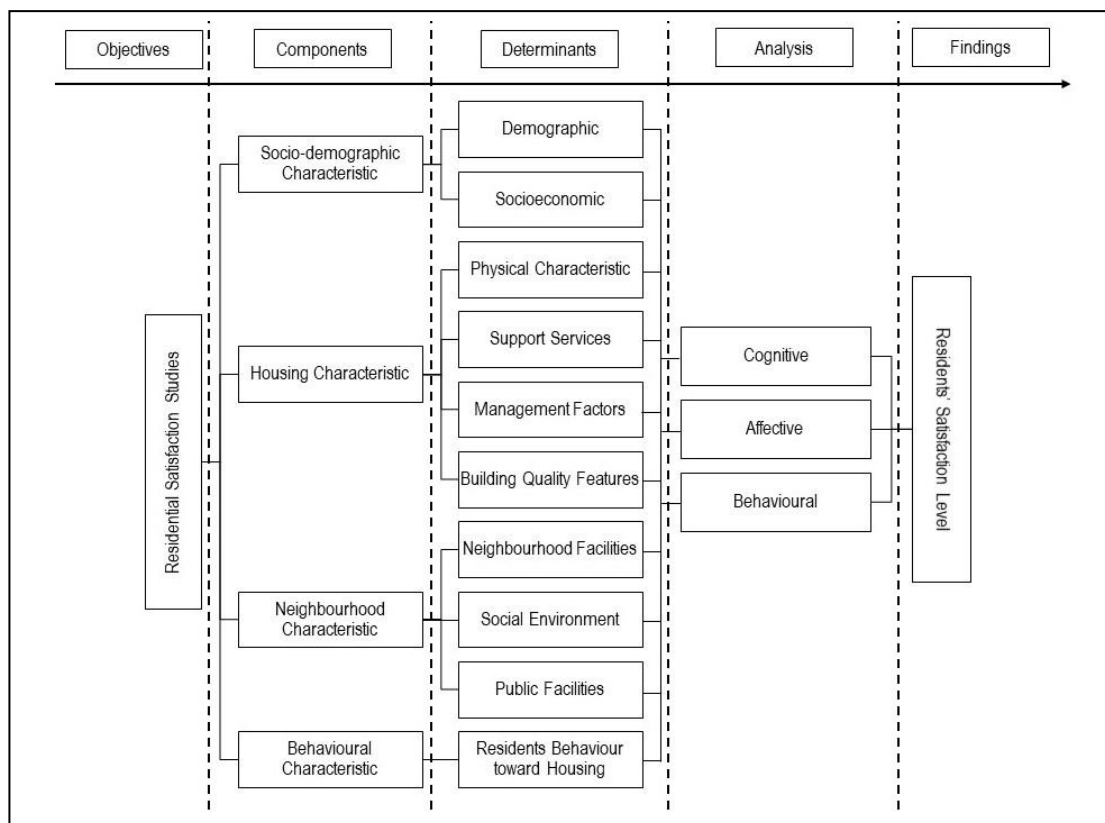


Fig. 2: Conceptual Framework (Authors, 2020)

8.0 Conclusion

Residential satisfaction is a comprehensive analysis in which different situations can be adapted. Residential satisfaction studies can differ in locations, people, community, and the housing characteristic itself is the most important thing. This entire analysis would result in different satisfaction rates in line with the research objective. This research indicates that more residential satisfaction studies can be carried out in the context of housing policies on a case-specific basis. Nonetheless, for three reasons, the building of residential satisfaction is extremely complicated (Rossi, 1955). Firstly, it has two residential and satisfying terms. Secondly, it includes three (3) separate cognitive, affective and behavioural processes. The last reason is that such three (3) methods are used to assess residence satisfaction. It is suggested that, further research in residential satisfaction which embrace the quality of life should be focused on all the

components; socio-demographic, housing neighbourhood and behavioural characteristic as its help the housing policy as well as the housing developments in order to provide more satisfy residence. Thus, the crucial in measuring residential satisfaction is the determination of the relevant variables involved that will reflect the study itself.

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References

- Amerigo, M. and Aragonés, J. (1997). A Theoretical and Methodological Approach to the Study of Residential Satisfaction. *Journal of Environ. Psychol.* Vol.17, pp.47-57
- Ariffin R., N., et al. (2010). Residential satisfaction in private low – cost housing in the urban area: A case study of the Klang Valley, Malaysia. *International Housing Research Conference*. Istanbul, Turkey, 4-7 July 2010.
- Bardo J.W and Dokmeci V. (1992), 'Modernization, traditionalization and the changing structure of community satisfaction in two-sub-communities in Istanbul, Turkey: A Procrustean', *Genetic, Social and General Psychology Monographs*, 118(3)
- Campbell, A., Converse, P.E., Rodgers, W.L., (1976). *The Quality of American Life: Perceptions, Evaluation and Satisfaction*. Russell Sage foundation. U.S.A.
- Chapman, D., & Lombard, D. (2006). Determinants of neighborhood satisfaction in fee based gated and non-gated communities. *Urban Affairs Review*, 41(6), 769-799
- Fauth, R. C., Leventhal, T., & Brooks-Gunn, J. (2004). Short-term effects of moving from public housing in poor to middle-class neighborhoods on low-income, minority adults' outcomes. *Soc Sci Med*, 59(11), 2271-2284.
- Franciscato, G., Weidemann, S., Anderson, J. R., and Chenoweth, R. (1979) *Residents' satisfaction in HUD-assisted housing: Design and management factors*. Washington, D. C.: U.S. Department of Housing and Urban Development.
- Frank B. and Enkawa T., (2009). Economic drivers of dwelling satisfaction: Evidence from Germany. *International Journal of Housing Markets and Analysis*, Vol. 2 Issue: 1, pp.6-20
- Galster, G. C., (1985). Evaluating indicators for housing policy: Residential satisfaction VS marginal improvement priorities. *Social Indicator Research*. Vol.16. pp.415-448.
- Ibem, E. O., & Aduwo, E. B. (2013). Assessment of residential satisfaction in public housing in Ogun State, Nigeria. *Habitat International*, 40, 163–175.
- Lane, S., & Kinsey, J. (1980). Housing tenure and housing satisfaction. *Journal of Consumer Affairs*, 14, 341–365.
- Leslie E. and Cerin E. (2008). Are perceptions of the local environment related to neighbourhood satisfaction and mental health in adults ?, *Preventive Medicine*. Vol 47, Issue 3, pp. 273-278.
- Lu, M. (1999). Determinants of residential satisfaction: ordered logit vs . regression models. *Journal of growth and change* .Vol.30.pp 264- 287.
- Lu, M. (1999). Do people move when they say they will? Inconsistencies in individual migration behavior. *Population Environment*, 20, 467–488.
- Li, Z. & Wu, F. (2013) Residential satisfaction in china's informal settlements: A case study of Beijing, Shanghai, and Guangzhou, *Urban Geography*, 34(7), pp. 923–949
- Mohit, M. A., & Al-Khanbashi Raja, A. M. M. (2014). Residential satisfaction concepts, theories and empirical studies. *Planning Malaysia e Journal of Malaysian Institute of Planners*, 3, 47-66
- Mohit, M. A. & Azim, M. (2012). Assessment of residential satisfaction with public housing in Hulhumale', Maldives. *Procedia - Social and Behavioural Sciences*, 50, 756–770.
- Morris, E. & Winter, M. (1975). A Theory of Family Housing Adjustment. *Journal of Marriage and Family*, 37(1), 79-88.
- Morris, E. W., Crull, S. R., & Winter, M. (1976). Housing Norms, Housing Satisfaction and the Propensity to Move. *Journal of Marriage and Family*, 38(2), 309-320.
- Mulligan, G., Carruthers, J. & Cahill, M. (2004). Urban quality of life and public policy: A survey. In R. Capello & P. Nijkamp (Eds.), *Advances in urban economics* (729–802). Amsterdam: Elsevier Science B.
- Ozo, A. O. 1990 Low cost urban housing strategies in Nigeria. *Habitat International* 14(1), 41-54.
- Parkes, A., Keams, A. and Atkinson, R. (2002). What makes people dissatisfied with their neighbourhoods? *Journal of Urban Studies*. Vol.39. No.(13). pp . 2413- 2438
- Rioux, L. & Wemer, C. (2011) Residential satisfaction among aging people living in place. *Journal of Environment Psychology*, 31, 158–169
- Rossi, P.H. (1955) *Why Families Move: A Study in the Social Psychology of Urban Residential Mobility*. The Free Press, Glencoe.

- Somiah, M.K., Aidoo, I., and Braimah, A. (2017), An Empirical Enquiry into the Attributes of Residential Satisfaction that Predict Students' Satisfaction in Public Halls of Residence in Technical Universities in Ghana. *International Journal of African and Asian Studies*. Vol.39, pp 54-61
- Tan, T. H., (2016),"Residential satisfaction in gated communities", *Property Management*, Vol. 34 Issue 2 pp. 84 - 99
- Türkoğlu, H.D. (1997). Residents' satisfaction of housing environments: the case of İstanbul, Turkey. *Landscape and Urban Planning* (39) 55-67.
- Vera-Toscano, E. & Ateca-Amestoy, V. (2008). The Relevance of Social Interactions on Housing Satisfaction. *Social Indicator Research*, 86, 257-274.8
- Wang D. & Wang F. (2015) Contributions of the Usage and Affective Experience of the Residential Environment to Residential Satisfaction. *Housing Studies*, pp 42-60
- Weideman S. and Anderson J.R. (1985) A conceptual framework for residential satisfaction. In: Altman, I. and Werner, C. (eds) *Human Behavior and Environment*, pp. 153-182 (Plenum Press, New York)