
Comparative Assessment of Residential Satisfaction between Public and Private Housing Estates in Federal Capital City (FCC) Abuja, Nigeria.

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Abstract

In spite of efforts from both the private and public housing developers, residential satisfaction remains a major challenge in developing countries of which Nigeria is not an exception. The aim of the study is to comparatively assess residential satisfaction between public and private housing estates in Federal Capital City (FCC) Abuja with a view to (i) Examine the resident's satisfaction with housing components (ii) Examine the resident's satisfaction with housing, neighbourhood environment, social, economic and management aspects of housing. The study adopts the quantitative research design approach, thereby, primary data were collected through field survey. The sample frame for the study is 7943 households within the six selected housing estates, while a sample size of 366 households were arrived at using 95% confidence level. The samples were selected using systematic random sampling technique at an interval of 22 houses. The data were collected through questionnaires, and the data were analyzed using descriptive (mean, frequency and percentage) and inferential statistics (ANOVA). The study established the residents from both the private (3.06) and public (2.89) estates are fairly satisfied with the residential area. The study also revealed that among the five components of residential satisfaction examined, the residents are only satisfied with the housing components; private (3.61) and public (3.55). The study shows that there is no statistical significant variation in residential satisfaction between the public and private housing estates; housing characteristics (0.506), environmental (0.266), social (0.851), economic (0.595) and management attributes (0.142), the p-value recorded for all the five dimensions of satisfaction is greater than 0.05 at 95% confidence level acceptable for all social science studies. The study conclude that, more attention should be paid to the neighbourhoods environment, social, economic and management components of residential area to improve the overall residential satisfaction of the residents. The study therefore, recommends among others an overall development of the residential area to cater for the social, economic and environmental desires of the residents.

Keyword: Estate, Neighbourhood, Residential, Satisfaction,

Introduction

The provision of habitable and satisfactory residential housing in terms of standard, quality, users' needs, expectations and aspirations is one of the major goal of both the public and private housing developers. Even with the multiplicity of efforts from both the private and public housing developers, residential satisfaction remains a major challenge in the country (UN Habitat, 2006). It is based on this premise that Fatoye and Odusami (2009) posited that improving housing quality requires the understanding of the user's needs, aspirations,

expectations and the extent to which such needs and aspirations are met. Examining factors that influence residential dissatisfaction or satisfaction is an effective tool in the determination of housing needs (Teck-Hong, 2011).

The term residential satisfaction came into limelight in the early 1960s, then it serves as a basis for optimizing the architectural design of large housing developments, in which feedback as to the residents views on the features of housing was collected and consequently mainstreamed into the design process (Furbey & Goodchild, 1986). The concept of residential satisfaction has therefore metamorphosed over time. In recent time the concept of residential satisfaction takes into consideration the total actualization of the residents' basic housing needs including the structural and physical adequacies as well as the provision of critical amenities, equipment and installations including access to livelihood to make the neighbourhood a safe and comfortable place for human habitation (Jiboyi, 2009; Waziri and Roosil, 2013).

Residential satisfaction is therefore central in the process of evaluating the performance of housing delivery process and the evaluation of residents' perceived judgments of their housing environment as well as tool for assessing housing mobility with intentions to improve the processes of housing delivery (Potter, *et al.*, 2001). Understanding residential satisfaction serve diverse purposes, hence the importance of residential satisfaction can never be over emphasised. Residential satisfaction serves the purpose of assessing the housing condition of residents (Salleh, 2008), the success achieved or otherwise in housing projects (Mohit & Nazyddah, 2011), the quality of life (Caldieron, 2011; Lee & Park, 2010); and project quality (Lara & Bekker, 2012). Studies on residential satisfaction also help in improving our understanding of housing adjustment and mobility behaviours of residents (Fang, 2006).

Thus, it can be inferred that even though those who conduct research on residential satisfaction have different rationales and objectives, studies on residential satisfaction promotes better understanding of the key sources of satisfaction or dissatisfaction among residents, factors that influence their satisfaction levels and how they are most likely to react if they felt dissatisfied with their housing conditions. Information on residential satisfaction is germane to the development of effective housing policy and planning intervention. In Abuja, housing construction have been in progress on a daily basis, yet without consideration to the basic housing needs and requirements of the potential occupants. There is little or no attention given to minimum standards and housing infrastructures which are key components of achieving residential satisfaction. Studies have shown that the housing problem in Nigeria is no longer about building of dwellings alone but has extended to the desire for basic housing amenities and every other necessary arrangement required to make a place decent and fit for human habitation (Jiboyi, 2009).

The need for adequate provision of neighbourhood requirements such as roads, schools, access to livelihood, and connectivity to higher order activities as well as neighbourhood management cannot be over stressed. These are central to the concept of housing/residential satisfaction. It has been argued that the failure of adequate housing delivery is largely due to negligence of the basic components that are key to satisfying users' comfort and aspirations by the housing providing stakeholders (Waziri, and Roosil, 2013). This phenomenon is a common place in Abuja with many of the housing estate lacking some of the required facilities and services. These views no doubt underscore the need for studies on residential satisfaction in the quest to provide housing that meets the daily needs, expectations and preferences of the occupants. This study therefore comparatively assessed the level of residents' satisfaction with their residential housing in public and private housing estates in Abuja, Nigeria.

1.7 The Study Area

The Federal Capital Territory is located in the geographical centre of Nigeria. It has a land area of 8,000 square kilometres. It is bounded on the north by Kaduna State, the west by Niger State, the east and southeast by Nasarawa State and the southwest by Kogi State. It falls within latitudes 7° 20' North of the Equator and longitudes 7° 45' and 8° 39'. The FCT's natural endowments such as; its rolling hills, isolated highlands and other endearing features make it a delight. The savannah grassland of the North and the Middle Belt, the richness of the tropical rain forests of the south and an equable climate all combined to make the FCT a soil-rich agricultural haven (Figure 1).

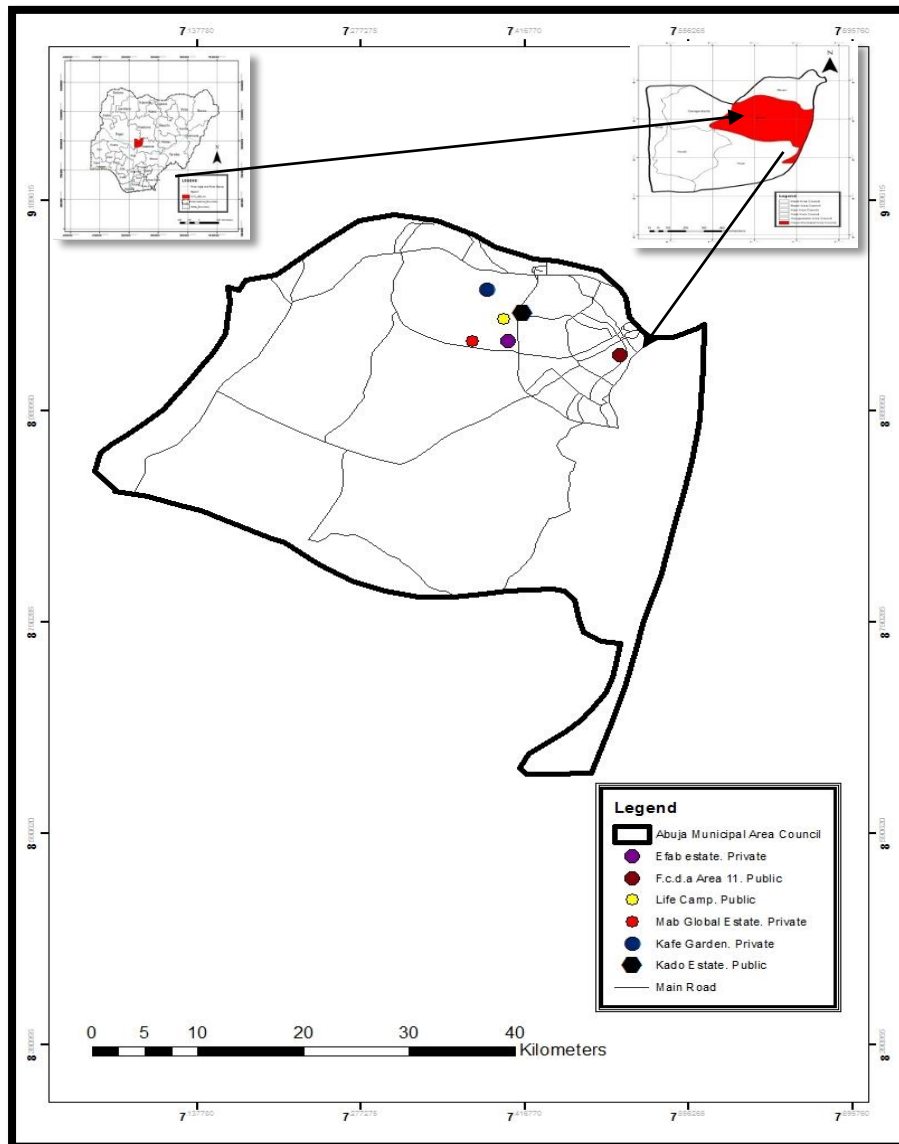


Figure 1.0: Location Map of FCC Showing the Study Area
Source: Digitized from ESRI Database, (2018)

2.0 Literature Review

Concept of Satisfaction

Many researchers have defined “satisfaction” as the range of meeting individuals’ needs while others explain it as some sort of emotional feelings, standards of behaviours or mental efforts towards a goal or belief. Since levels of satisfaction are usually measured as arbitrary scales,

they are usually used for comparing those levels in different portions of a sample and also for investigating the variables that are related with higher satisfaction rates (Campbell et al., 1976; Francescato 2002; Francescato *et al.*, 1987; Lovejoy *et al.*, 2010).

Satisfaction is a process of evaluation between what was received and what was expected (Parker and Mathews, 2001). Satisfaction can be precisely defined as the perceived discrepancy between aspiration and achievement, ranging from the perception of fulfilment to that of deprivation (Campbell *et al.*, 1976). Williamson (1981) found that satisfaction was not only conditioned by physical aspects but also by the ability to form social networks. Finally, Satisfaction is a subjective response to an objective environment (Potter and Cantarero, 2006).

Concept of Residential Satisfaction

Residential satisfaction has been considered as a complex construct as its precise meaning depends on the place, time and purpose of assessment and on the value system of the assessor, involving an extensive range of people - architects, planners, sociologists, psychologists and urban geographers (Bardo and Dokmeci, 1992). Galster (1985) pointed out that the concept of residential satisfaction has been utilized in at least four different ways: First, it has been used as a key predictor of individual perception of general quality of life. Second, it has been used as an ad hoc evaluative measure for judging the success of housing developments constructed by then private sector and the public sector.

Third; it has been used as an indicator of incipient residential mobility and, hence, altered housing demands and neighbourhood change. Fourth, it has been used to assess resident's perception of inadequacies in their current housing environment so as to direct forthcoming private or public efforts to improve the status quo. Therefore, it is essential to understand the concept of residential satisfaction within the milieu of its theoretical and empirical perspective. Residential satisfaction (RS) is described by Hui and Yu (2009) as a reflection of the degree to which the inhabitants feel that, their housing is helping them achieve their goals. Generally, theories have stated that RS is a measure of the difference between occupant's actual and desired housing as well as neighbourhood. In this study, the expectancy value and the discrepancy model are explored. The concept of housing satisfaction relates to how a consumer of housing product reacts to the overall components of such a product as predicated by their taste as a ratio to his expectations. The degree to which (the inhabitants) feel (that their housing) is helping them to achieve their goals (Jiboye, 2012). It also refers to individual's evaluation of their housing environment, subjects to their needs, expectations and achievements (Hui and Yu, 2009).

The concept of residential satisfaction was developed based on the premise that the gap in between the actual desired housing by occupants and the exact neighbourhood conditions is determined (Galster and Hesser, 1981; Mohit *et al.*, 2010). Residential decisions by the house hold are being made based on their needs and aspirations. Absence of complains suggest residential satisfaction at equilibrium point of needs and aspirations, and would likely feel dissatisfied if their housing and neighbourhood do not meet their needs and aspiration (Salleh, 2008). Morris and Winter (1978) in their theory of housing adjustment as cited in Ukoha and Beamish (1997) offers predictors of housing satisfaction. It occurs when the housing situation is in alliance with the cultural, family and community housing norms. Any short fall upon the housing situation, the house hold tends to make some adjustment or adaptations to make the housing consistent with their norms.

An incongruity between the actual housing situation and housing norms results in housing deficits which give rise to residential dissatisfaction. Once their dissatisfaction with the current housing surpasses a certain level, they are likely to consider some form of housing adjustment (Salleh, 2008; Hui and Yu, 2009). This is particularly true when housing is acquired with the expectations that it meets the household specific and diverse needs (Ibem and Amole, 2012). However, the concept of residential satisfaction is generally linked with the quality of life as indicated in various satisfaction researches (Galster and Hesser, 1981; Galster, 1987; Park, 2006; Lee and Park, 2010; Caldeieron, 2011; Ibem and Amole, 2012).

In the expectancy value model, the evaluation process is mostly dependent on people's expectation and beliefs as paired against the ability or the inability of the evaluated object to hinder the attainment of their goals. A paradigm associated with the discrepancy model, on the other hand, was identified by Oliver (1981). This paradigm states that if performance exceeds expectations, customers will be positively disconfirmed (satisfied); the reverse is true. Churchill and Suprenant (1982), however, did draw a critical attention to the fact that, neither disconfirmation nor expectation has any effect on consumer satisfaction with durable products. To them, satisfaction is determined solely by the performance of the product; in a scenario were at the house epitomizes the durable product; the satisfaction of the occupants boldly rests on the designer and his choice to ensure high performance and thus, attain high residential satisfaction.

Residential satisfaction is a concept that can be influenced by both objective and subjective measures of housing attributes which includes physical, social/psychological and management attributes and the demographic characteristics of the residents (Amole, 2009). Onibokun (1974) assert that, social, cultural and behavioural elements within the entire societal environment influenced the habitability of a house. Other factors include age, (Varady *et al.*, 2001), marital status (Tan and Hamza (1979) cited in Jiboye (2012), number of children and family size (Theodory, 2001), income, education, employment, and welfare (Varady, et al., 2001), social participation and interaction (Varady and preiser, 1998) past living condition as well as residential mobility and future intention to move (Jiboye, 2012; Morshid *et al.*,1999; Yeh, 1972).

Methodology

The study adopts the quantitative research design approach, hence, primary data were collected through field survey. The sample frame for the study is 7943 households within the six selected housing estates, while a sample size of 366 households were arrived at using 95% confidence level and a confidence interval of 5. A total of 116 households were sampled in the private estate, while 250 households were sampled in the public estates. The samples were selected using systematic random sampling technique at an interval of 22 houses. The data were collected through questionnaires, and the data were analyzed using descriptive (mean, frequency and percentage) and inferential statistics (ANOVA).

Results and Discussion

Residential Satisfaction with Physical Housing Characteristic

Table 4.1 shows residents satisfaction with housing components in both the public and private housing estates. The result shows that the residents of both the public and private housing estates are satisfied with the number of toilet, size of room, number of rooms, and size of living room, while they are indifferent about the sizes of toilet. However, Table 1, also show that the residents of the public estate are neither satisfied nor dissatisfied with the sizes of kitchen, while their counterpart in the private estates are satisfied with the size of kitchen (3.52) in the

estates. The shows that the pattern of residential satisfaction in both the private and public estates is almost the same.

Table 1: Satisfaction with Housing Component

Housing Characteristics	Public	Remark	Private	Remark
Size of Room	3.52	Satisfied	3.71	Satisfied
Size of Kitchen	3.44	Indifferent	3.52	Satisfied
Size of the living room	3.60	Satisfied	3.67	Satisfied
Number of Toilet	3.80	Satisfied	3.64	Satisfied
Size of Toilet	3.32	Indifferent	3.39	Indifferent
Number of rooms	3.66	Satisfied	3.73	Satisfied

Key: 0.00-1.49 = highly dissatisfied; 1.50-2.49=Dissatisfied; 2.50-3.49=Indifferent; 3.5-4.49=Satisfied; 4.50-5.00=Highly Satisfied

Source: Author's Fieldwork (2018)

Residential Satisfaction with Environmental Characteristic

Table 2, shows the average satisfaction of residents with environmental factors in both the public and private housing estates. The result shows that the residents of the private housing estates on the average express indifference with cleanliness (2.55) and noise (2.80) in the estate, while they are dissatisfied with the landscape form (2.43) and green areas/open space (1.92). On the contrary, the residents of the public housing estates are dissatisfied with the landscape form (1.73), Green area/open space (1.89), cleanliness (2.35), and noise (2.47). It can also be observed that the residents of the housing estate (private and public) are dissatisfied with the environmental components of the estates.

Table 2: Aggregate Satisfaction with Environmental Components in Public Estates

Environmental Characteristics	Private Estate		Public Estate	
	S. Index	Remark	S. Index	Remark
Landscape	2.43	Dissatisfied	1.73	Dissatisfied
Green area/open space	1.92	Dissatisfied	1.89	Dissatisfied
Cleanliness of estate	2.55	Indifferent	2.35	Dissatisfied
Noise	2.80	Indifferent	2.47	Dissatisfied
Average	2.43	Dissatisfied	2.11	Dissatisfied

Key: 0.00-1.49= Highly dissatisfied; 1.50-2.49=Dissatisfied; 2.50-3.49=Indifferent; 3.5-4.49=Satisfied; 4.50-5.00=Highly Satisfied

Source: Author's Fieldwork (2018)

Residential Satisfaction with Social Characteristic

The average satisfaction of residents with the social attributes of both the public and private estates is depicted in Table 3. The result shows that residents in both the private (2.91) and public (2.82) estates express indifference with the level of interaction. The residents are satisfied with the level of trust in the public (3.60) estates, while they are neither satisfied nor dissatisfied in the private estate (3.47). The result also shows that safety/security in private estates is satisfactory (3.75), while in the public estates they are dissatisfied (2.66). They are neither satisfied nor dissatisfied with social mix in both estates. For aesthetics, the residents of the public estates are dissatisfied (2.38), while the private estates express indifference with the aesthetics of the estates. The high level of trust in the public estate could be attributed to the

high population of residents working in the same place of work, which is not common in the private estates.

Table 3: Satisfaction with Social Characteristics in the Estates

Neighbourhood	Private		Public	
	S. Index	Remark	S. Index	Remark
Interaction with neighbours	2.91	Indifferent	2.82	Indifferent
Trust neighbours	3.47	Indifferent	3.60	Satisfied
Social Mix	2.77	Indifferent	3.28	Indifferent
Safety/Security	3.75	Satisfied	2.66	Indifferent
Aesthetics	3.08	Indifferent	2.38	Dissatisfied
Average	3.19	Indifferent	3.14	Indifferent

Key: 0.00-1.49= Highly dissatisfied; 1.50-2.49=Dissatisfied; 2.50-3.49=Indifferent; 3.5-4.49=Satisfied; 4.50-5.00=Highly Satisfied

Source: Author's Fieldwork (2018)

Residential Satisfaction with Economic Characteristic

Table 4, shows the aggregate satisfaction of residents with the economic attributes in the estates. The result shows that the residents from both the public and private estates are neither satisfied nor dissatisfied with the general economic attributes of the estates, this is depicted in the SI of 2.85 and 2.70 recorded in the estates respectively. This can also be observed in the average satisfaction index recorded for each of the economic attributes, except for the level of business opportunity.

Table 4: Aggregate Satisfaction with Economic Attributes in the Estates

Neighbourhood	Private		Public	
	S. Index	Remark	S. Index	Remark
Cost of housing	2.70	Indifferent	3.49	Indifferent
Distance to market	2.61	Indifferent	2.81	Indifferent
Business opportunity	2.48	Dissatisfied	2.30	Dissatisfied
Prices of goods & services	2.99	Indifferent	2.78	Indifferent
Average	2.70	Indifferent	2.85	Indifferent

Key: 0.00-1.49 = Highly dissatisfied; 1.50-2.49=Dissatisfied; 2.50-3.49=Indifferent; 3.5-4.49=Satisfied; 4.50-5.00=Highly Satisfied

Source: Author's Fieldwork (2018)

Residential Satisfaction with Management Practices

Table 5, shows the average satisfaction of residents with the management and maintenance of both the private and the public estates. The result shows that in the private estates, the residents are satisfied with the cleanliness/sanitation (3.56), while they are neither satisfied nor dissatisfied with response to complaints (3.27), facility management (2.81), and waste management (3.84). However, in the public estates the residents express dissatisfaction with response to complaints (2.30) and facility management (2.42). The residents also express indifference with cleanliness/sanitation (3.27) and waste management (3.21).

Table 4.20: Aggregate Satisfaction with Management Practices in the Estates

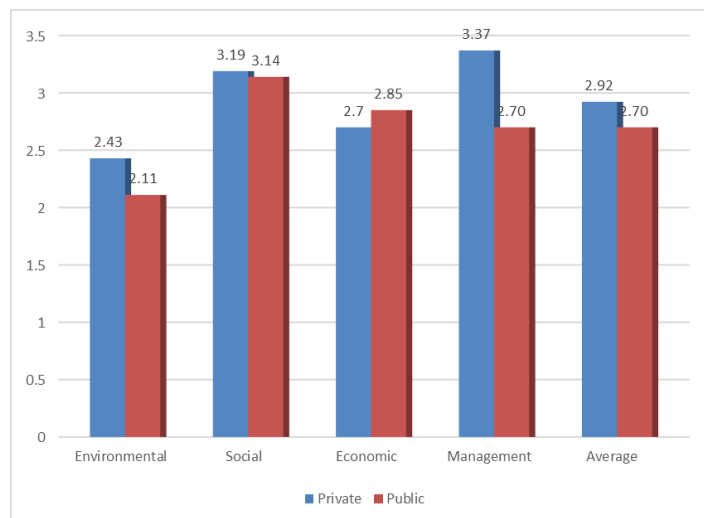
Neighbourhood	Private		Public	
	S. Index	Remark	S. Index	Remark
Cleanliness/Sanitation	3.56	Satisfied	3.27	Indifferent
Response to complaint	3.27	Indifferent	2.30	Dissatisfied
Facility Management	2.81	Indifferent	2.42	Dissatisfied
Waste Management	3.84	Indifferent	3.21	Indifferent
Average	3.37	Indifferent	2.80	Indifferent

Key: 0.00-1.49 = Highly dissatisfied; 1.50-2.49=Dissatisfied; 2.50-3.49=Indifferent; 3.5-4.49=Satisfied; 4.50-5.00=Highly Satisfied

Source: Author's Fieldwork (2018)

Composite Satisfaction with Neighbourhood Environment and Management of Estate

Figure 1, shows the composite satisfaction of residents with neighbourhood environment and management aspect of the both the public and private housing estate. The result shows that the residents of both the private (2.43) and public (2.11) estates are not satisfied with the environmental attributes of the estates. On the other hand, the residents from express fair satisfaction with the social, economic, and management attributes of the private and public estates (Figure 1). In general, the residents are fairly satisfied within the general residential characteristics with S.I of 2.90 and 2.70 for the private and public estates respectively. It is important to also note that, the S.I value recorded by the private estate is higher than that of the public estate in all the dimensions of satisfaction assessed except the economic dimension. This shows that there is satisfaction recorded in the private estate is better than that recorded in the public estate, although may not be statistically significant.



Key: 0.00-1.49 = Highly dissatisfied; 1.50-2.49=Dissatisfied; 2.50-3.49=Fairly Satisfied; 3.5-4.49=Satisfied; 4.50-5.00=Highly Satisfied

Figure 1: Composite Satisfaction with Neighbourhood and Management of Estate

Source: Author's Fieldwork (2018)

Variation in Residential Satisfaction with Housing Characteristics

The variation in residential satisfaction between the private and public housing estates is presented in Table 6. The result shows that there is no statistical significant variation in

residential satisfaction between the private and public housing estates. The p-value recorded for each of the five dimensions of residential satisfaction examined as depicted in Table 4.21 is greater than 0.05 at 95% confidence level. The implication of this result is that, there is no statistical significant variation in the residential satisfaction of residents of both the private and public housing estates with regard to the following components of residential satisfaction; housing (0.506), environmental (0.266), social (0.851), economic (0.595) and management attributes (0.142). This shows that residential satisfaction in the housing estates is not a function of the strategy employed in the development of the housing estate.

Table 4.6 Variation in Residential Satisfaction between Private and Public Estate

Cases	Sum of Squares	df	Mean Square	F	p-value
Housing	0.010	11	0.010	0.476	0.506
Environmental	0.198	7	0.198	1.505	0.266
Social	0.008	9	0.008	0.038	0.851
Economic	0.045	7	0.045	0.314	0.595
Management	0.650	7	0.650	2.858	0.142

Source: Author's Fieldwork (2018)

Conclusion and Recommendations

The study concludes that there is variation in the level of residential satisfaction derived from five dimensions (housing, environmental, social, economic, and management) of residential satisfaction considered for this study. The residents are satisfied with the housing characteristics, dissatisfied with the environmental characteristics, and neither satisfied nor dissatisfied with the social, economic and management attributes of the estates irrespective of the development strategy (public or private). It is also evident from the findings of the study that both the private and public housing estate developers must pay attention to the size of toilet, business opportunities, landscape pattern, green areas/open space Landscape, green area/open space. While in the public housing estate noise level, cleanliness/sanitation, response to complaint and facility management remains a challenge.

Base on the findings of the study carried out on comparative assessment of residential satisfaction between public and private housing estate in Federal Capital City, the following recommendations were made. The government and private housing developers should pay attention to salient housing characteristics that meets the desire and aspirations of the people when designing mass houses for the people. The size of toilet, kitchen and living rooms should be designed in accordance with the needs and aspiration of the people. The environmental attribute of the housing estate should not be taken for granted, adequate attention must be paid to the landscape pattern, provision of green areas and open space, pollution (noise) and cleanliness and sanitation.

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