

Evaluating Expatriates' Preference and Satisfaction with Building Facilities in Low-Rise Housing Schemes, Victoria Island Lagos

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Abstract

This study evaluates the facilities managements' performance on low-rise Housing Schemes in Victoria Island Lagos, Nigeria based on the preference and satisfaction levels of expatriate occupants. A 5-point likert scale form of questionnaires were administered to expatriates representing each of the 175 housing units which make up the nine existing low-rise housing estates in Victoria Island, Lagos. Primary data obtained by administering questionnaires to the expatriates that occupy the considered houses in the Victoria Island estates as well as some key management staff responsible for the facilities management. The considered respondents were based on purposeful sampling. Data obtained from the respondents was ranked and analysed with the mean item score, found in Statistical Packages for Social Sciences (SPSS) version 17. The findings were that ease of access by public transport, functional quality of lifts, and availability of convenience stores/market nearby are on a very low satisfaction scale. Based on the findings, we recommend that the property developers and the facilities managers should be locating in areas where there is ease of access by public transport; ensuring functional quality of lifts and availability of convenience stores/market nearby.

Keywords: Building, expatriates, facilities, housing, performance, schemes

1.0 Introduction

Buildings have multifarious objectives which include providing users with healthy, spacious, secured outdoor and indoor environment, amongst others. Worthy of note is that occupation is the all-embracing objective for buildings and where occupation is present, different kinds of activities on buildings take place ranging from: work, study, leisure, sleep, family life to social interactions of users, amongst others. Buildings should therefore be planned, constructed and managed by governments, professionals and experts with special considerations to the satisfying requirements that help occupants in the activities on buildings.

However, UN-Habitat, (2006) stated that most urban residents in developing countries live in housing conditions that constitute an affront to human dignity and which comes with appalling social, economic, spatial and unhealthy implications. Accordingly, preliminary survey based on many users' opinions show that the facilities management performances of most buildings in Lagos state of Nigeria are unsatisfactory. Researchers from different parts of the world have adduced a number of reasons why buildings perform poorly in meeting users' needs. The prominent ones amongst them appear to be: the lack of adequate knowledge of users' changing needs (Ha 2008; Danny, 2003); references by architects and other professionals, who design, construct and maintain buildings (Barrett and Baldry 2003; Agbola, 2005); and finance (Okolie and Shakantu, 2009).

Barrett and Baldry (2003) observed that very few organizations ask users whether a building meets their requirements even-though the people that understand a building best are the people that use it every day. In the same accord, Leaman (2004) and Mayaki (2005) observed that most designers and builders tend to be territorial in defending their perceived areas of expertise and often go on to the next job without learning from the one they have just done. Another opinion emphasizing this problem is that design and decision-making is rather concentrated, fragmented and involves only a small group of experts (Danny, 2003). Generally, in most cases, the people concerned and affected by the designs are never involved or considered during design process. Although, interest in Building Performance Evaluations has increased significantly in recent years, anecdotal evidence suggests that it is a more mainstream activity in the United States of America, Australia and some European countries than it is in Africa (Preiser, 1995; Barrett and Baldry, 2003, Oladejo and Umeh et al, 2015).

Obtainable in Lagos state of Nigeria is that most buildings do not integrate the user satisfaction factor in their development and management plans. The management plans of buildings usually ignore evaluation of feedbacks from users which could have served as guide to appropriate feed forwards in future designs of buildings or improvements of existing ones. In the area of expatriate users, the situation has been observed not to be better both in Lagos facilities management practices and gap fillings in academic studies.

Evaluation of expatriate occupiers' satisficing factors in low-rise housing schemes in Victoria Island, Lagos is the kernel of concern in this study as multi-dimensional problems like voids; poor responsiveness to service charge amongst others poses treats in the built environment. Preiser (1995) opined that buildings need to be evaluated periodically to ascertain how developments consistently meet the requirements of the occupants. Evaluation is vital to ascertain how buildings work and how designs have met the specific or group needs of users before implementation (Okolie and Shakantu, 2009). Feedbacks from the evaluation can be used in future designs of buildings or improvements of existing ones. Feedback performance evaluation provides the necessary information for better briefs in future, which in turn contribute to high building performance and overall organizational effectiveness. Shedding more light, when developers initiate new projects, information gained from building performance evaluation will assist in: preventing mistakes previously made, saving developers money, ensuring proper construction of houses; and in improving the quality of life and housing satisfaction levels of users (Darkwa, 2006). Performance evaluation would also assist Lagos State Government and other stakeholders in the construction industry to produce cost effective buildings, with healthy, productive and comfortable outdoor and indoor environments amongst other good benefits.

It is on the above platforms that it was deemed necessary to carry out a study on the performance of buildings under the Victoria Island Housing Schemes by evaluating the extent of satisfaction derived from buildings and its environment by expatriates. In order to achieve the aim of this study, the following research questions were designed: What are the facilities management functions of facilities managers in the considered real estate development? How has the existing facilities provided in Victoria Island residential housing Schemes satisfied expatriates? Based on the satisfaction level of the expatriate users, what is the performance of the facilities managers in the facilities management services (functions) of buildings under the Victoria Island Housing Schemes? The null hypothesis tested in this study is that Victoria Island Housing Schemes have not significantly satisfied expatriate users. The study did not consider the extent to which the buildings met the building specifications.

2.0 Review of Related Literature

2.1 Concept of Performance Evaluation

Performance evaluation of built facilities can be based on how well facilities conform to design specifications. Mohsini (1989) as well as Torbica and Stroh (1999) mentioned that this approach is meaningful though not without limitation, because the main concern of the occupants is how building facilities meet their needs or expectations. The later argument suggests that performance evaluation of built facilities should depend more on the extent of satisfaction derived by the users from the facilities, and not just how well the physical structure conforms to design specifications. It is an assessment of how well the building satisfies the users; and how it can fit the purpose for which it was built. According to Preiser and Vischer (2005), Building Performance Evaluation is defined as the act of determining in a systematic and rigorous manner the degree to which buildings meet users' needs after completion and being occupied for some time. Watson (2003) added that the systematic approach is based on opinions of the users about buildings. Building Performance Evaluation is an innovative approach to planning, design, construction and occupancy of buildings. It covers the useful life of a building from move-in to adaptive reuse or recycling (Preiser and Vischer, 2005).

2.2 Users' Satisfaction

According to Djebuarni and Al-Abed (2000) and Mohit, Ibrahim, and Rasheed (2010), users' satisfaction is defined as the feeling of contentment which one has or achieves when one's needs or desires in a house have been met. Planners, architects, developers, and policymakers use it in a number of ways namely: a key predictor of an individual's perceptions of general 'quality of life'; an indicator of incipient residential mobility; an ad hoc evaluative measure for judging the success of developments constructed by private and public sectors; and an assessment tool of users' perceptions of inadequacies in their current housing environment in order to improve the status quo. This is important because once their dissatisfaction with the current residence surpasses a certain level (the threshold level), they are likely to consider some form of housing adjustment (Hui and Yu, 2009).

3.0 Research Data and Method

The secondary data were obtained from multiple sources such as published and unpublished materials which include: text books, journals articles, conference papers, seminar papers, working papers, housing program brochures, government official documents and statistics, as well as reports on activities of private housing estates in Lagos State and in Nigeria.

The study population of the case study area is not too large but manageable. Consequently, there was no need for adopting sampling techniques in collecting the primary data since all the members of the population were considered in the study and provides good representativeness and generalization. The sample frame consist of 175 accessible housing units completed by property developers but occupied by expatriates in nine private housing estates developed between 2000 and 2010.

The categories of the existing houses in the private residential housing estate were: one-bedroom, two-bedroom, three-bedroom and four-bedroom. The subgroups within the housing population were all appropriately represented in the study. These considered houses in the Victoria Island estates were enumerated and primary data obtained by administrating questionnaires to the expatriates that occupy them as well as some key management staff responsible for facilities management. Preferences were determined using a 5-point likert scale that indicates the importance of the considered variables. NI represents very Not Important, LI Less Important FI Fairly Important, I Important, and VI Very Important. In addition, questionnaires were designed to elicit information on expatriates' satisfaction level in the housing estates developed by the private developer on a 5-point likert scale, where NS represents very Not Satisfied, LS Less Satisfied, SS Slightly Satisfied, S Satisfied, and VS Very Satisfied. The tool used in weighing residential satisfaction was the Mean Item Score (MIS).

4.0 Data Presentation and Analysis

4.1 IMPORTANCE OF FACILITIES MANAGEMENT INDICATORS TO EXPATRIATE USERS

In Table 4.0, acoustic quality, privacy from neighbours, adequacy of car parking space, ease of access by public transport and cleanliness of public areas ranked high in terms of importance. The study shows that not less than 50% were in agreement that these facilities management services are so important. On the other hand, postage services, size of building, special requirements for disabled, entrance/lobby design, colour of the building, building height, building form and structural integrity fall on the less important. To the users these were fairly important compared to others that are previously mentioned.

Table 4.0: Ranked Levels of Importance of Building Facilities Indicators by Expatriate Users

	NI	LI	FI	I	VI	MIS
View from window	5(3.4)	16(10.9)	35(23.8)	40(27.2)	51(34.7)	3.7891
Water tightness from rain	6(4.1)	11(7.5)	34(23.1)	54(36.7)	42(28.6)	3.7823
Space utilization of flat layout	5(3.4)	16(11)	37(25.5)	48(33.1)	39(26.9)	3.6897
Orientation of flats	2(1.4)	16(10.9)	35(23.8)	69(46.9)	25(17.0)	3.6735
Sanitary fittings	6(4.1)	23(15.6)	23(15.6)	57(38.8)	38(25.9)	3.6667
Fire service system	2(1.4)	21(14.2)	35(23.6)	59(39.9)	31(20.9)	3.6486
Adequacy of landscaping areas	6(4.2)	20(14.0)	34(23.8)	45(31.5)	38(26.6)	3.6224
Adequacy of natural ventilation in flat	7(4.7)	17(11.5)	41(27.7)	45(30.4)	38(25.7)	3.6081
Acoustic quality	4(2.7)	19(13)	36(24.7)	63(43.2)	24(16.4)	3.5753
Privacy from neighbours	6(4.2)	12(8.3)	51(35.4)	44(30.6)	31(21.5)	3.5694
Adequacy of car parking space	6(4.1)	24(16.4)	33(22.6)	48(32.9)	35(24.0)	3.5616
Ease of access by public transport	7(4.8)	21(14.4)	32(21.9)	56(38.4)	30(20.5)	3.5548
Cleanliness of public areas	5(3.4)	13(8.8)	51(34.5)	53(35.8)	26(17.6)	3.5541

Electric fittings	8(5.4)	17(11.6)	41(27.9)	49(33.3)	32(21.8)	3.5442
Proportion of window to walls	9(6.2)	21(14.5)	35(24.1)	46(31.7)	34(23.4)	3.5172
Size of your flat	4(2.8)	26(17.9)	34(23.4)	55(37.9)	26(17.9)	3.5034
Social and recreation centres	7(4.8)	15(10.2)	48(32.7)	51(34.7)	26(17.7)	3.5034
Water quality	5(3.4)	23(15.5)	42(28.4)	49(33.1)	29(19.6)	3.5000
Adequacy of daylight distribution in flat	6(4.1)	22(14.9)	38(25.7)	56(37.8)	26(17.6)	3.5000
Adequacy of refuse disposal facilities	5(3.4)	24(16.4)	44(30.1)	42(28.8)	31(21.2)	3.4795
Overall satisfaction of the building	3(2)	32(21.6)	30(20.3)	58(39.2)	25(16.9)	3.4730
Windows	9(6.1)	26(17.7)	35(23.8)	42(28.6)	35(23.8)	3.4626
Uninterrupted water supply	8(5.4)	26(17.7)	36(24.5)	46(31.3)	31(21.1)	3.4490
Adequacy of escape routes in case of fire	3(2)	22(14.9)	59(39.9)	35(23.6)	29(19.6)	3.4392
Floor to ceiling clear height	7(4.8)	21(14.3)	52(35.4)	39(26.5)	28(19.0)	3.4082
Uninterrupted power supply	6(4.1)	26(17.8)	43(29.5)	45(30.8)	26(17.8)	3.4041
Maintenance of residential block	5(3.4)	21(14.2)	49(33.1)	56(37.8)	17(11.5)	3.3986
Security measures of the building to control trespasser	11(7.5)	20(13.6)	48(32.7)	37(25.2)	31(21.1)	3.3878
Security provisions of flats	7(4.7)	23(15.5)	50(33.8)	44(29.7)	24(16.2)	3.3716
Lighting level of public areas	7(4.8)	24(16.3)	41(27.9)	60(40.8)	15(10.2)	3.3537
Horizontal circulation within building	9(6.2)	20(13.7)	52(35.6)	41(28.1)	24(16.4)	3.3493
Functional quality of lifts	6(4.1)	23(15.8)	54(37.0)	40(27.4)	23(15.8)	3.3493
Appropriateness of site for erection of residential building	6(4.1)	22(15.0)	57(38.8)	40(27.2)	22(15.0)	3.3401
Durability of external building finishes	2(1.4)	29(19.7)	55(37.4)	39(26.5)	22(15.0)	3.3401
Maintenance of public areas	5(3.4)	18(12.2)	68(45.9)	42(28.4)	15(10.1)	3.2973
Anticrime measures	8(5.4)	29(19.6)	42(28.4)	49(33.1)	20(13.5)	3.2973
Vertical circulation within building	6(4.1)	28(19)	56(38.1)	32(21.8)	25(17)	3.2857
Availability of convenience stores/market nearby	6(4.1)	28(18.9)	50(33.8)	47(31.8)	17(11.5)	3.2770
Leisure facilities	4(2.7)	22(15.1)	66(45.2)	38(26.0)	16(11.0)	3.2740
External appearance	7(4.8)	21(14.4)	58(39.7)	45(30.8)	15(10.3)	3.2740
Startimes transmission	10(6.8)	33(22.6)	44(30.1)	26(17.8)	33(22.6)	3.2671
Postage services	11(7.6)	30(20.8)	39(27.1)	45(31.2)	19(13.2)	3.2153
Size of building	8(5.6)	23(16.1)	59(41.3)	37(25.9)	16(11.2)	3.2098
Special requirements for disabled	7(4.7)	28(18.9)	58(39.2)	37(25.0)	18(12.2)	3.2095

Entrance/lobby design	8(5.5)	30(20.5)	51(34.9)	39(26.7)	18(12.3)	3.1986
Colour of the building	14(9.8)	25(17.5)	47(32.9)	45(31.5)	12(8.4)	3.1119
Building height	9(6.1)	33(22.4)	65(44.2)	28(19)	12(8.2)	3.0068
Building form	24(16.6)	48(33.1)	39(26.9)	18(12.4)	16(11)	2.6828
Structural integrity	31(20.9)	34(23.0)	50(33.8)	17(11.5)	16(10.8)	2.6824

4.2 LEVELS OF SATISFACTION DERIVED FROM THE BUILDING FACILITIES MANAGEMENT SERVICES BY EXPATRIATE USERS

Table 4.1 shows that there was high level of satisfaction derived by the users on a general note. Four factors namely, view from window, water tightness from rain, proportion of window: walls and floor to ceiling clear height are on the very high satisfactory scale. In addition, the analysis reveals over 10% of the users indicated that these services were very satisfactory and over 30% showed that they are satisfactory.

Table 4.1: Ranked Levels of Satisfaction Derived from Building Facilities Indicators by Expatriate Users

	NS	LS	SS	S	VS	MIS
View from window	2(1.4)	13(9.4)	50(36.2)	48(34.8)	25(18.1)	3.5870
Water tightness from rain	3(2.1)	16(11.4)	47(33.6)	46(32.9)	28(20)	3.5714
Proportion of window to walls	-	12(8.8)	58(42.3)	47(34.3)	20(14.6)	3.5474
Floor to ceiling clear height	3(2.1)	15(10.6)	51(36.2)	52(36.9)	20(14.2)	3.5035
Uninterrupted water supply	6(4.3)	17(12.1)	41(29.1)	57(40.4)	20(14.2)	3.4823
Adequacy of natural ventilation in flat	3(2.1)	22(15.2)	55(37.9)	34(23.4)	31(21.4)	3.4690
Orientation of flats	7(5)	17(12.1)	36(25.5)	65(46.1)	16(11.3)	3.4681
Adequacy of daylight distribution in flat	1(0.7)	32(22.1)	42(29.0)	42(29.0)	28(19.3)	3.4414
Startimes transmission	9(6.5)	15(10.9)	38(27.5)	59(42.8)	17(12.3)	3.4348
Electric fittings	1(0.7)	21(14.9)	55(39.0)	44(31.2)	20(14.2)	3.4326
Security measures of the building to control trespasser	-	19(13.2)	55(38.2)	60(41.7)	10(6.9)	3.4236
Adequacy of refuse disposal facilities	-	23(16.3)	44(31.2)	67(47.5)	7(5)	3.4113
Cleanliness of public areas	1(0.7)	27(18.9)	44(30.8)	55(38.5)	16(11.2)	3.4056
Adequacy of escape routes in case of fire	3(2.1)	19(13.1)	60(41.4)	43(29.7)	20(13.8)	3.4000
Space utilization of flat layout	3(2.1)	12(8.6)	64(45.7)	50(35.7)	11(7.9)	3.3857
Size of your flat	2(1.4)	20(14.3)	54(38.6)	51(36.4)	13(9.3)	3.3786
Building height	2(1.4)	26(18.4)	55(39.0)	37(26.2)	21(14.9)	3.3475
Fire service system	3(2.1)	24(16.6)	55(37.9)	46(31.7)	17(11.7)	3.3448
Maintenance of residential block	10(6.9)	19(13.2)	62(43.1)	44(30.6)	9(6.2)	3.3448
Durability of external building finishes	-	30(21.4)	55(39.3)	32(22.9)	23(16.4)	3.3429
Size of building	1(0.7)	19(13.6)	65(46.4)	42(30)	13(9.3)	3.3357
Sanitary fittings	3(2.1)	31(22)	37(26.2)	57(40.4)	13(9.2)	3.3262
Overall satisfaction of the building	4(2.8)	20(13.8)	66(45.5)	37(25.5)	18(12.4)	3.3103
Structural integrity	-	18(12.9)	66(47.1)	51(36.4)	5(3.6)	3.3071
Lighting level of public areas	2(1.4)	24(16.6)	68(46.9)	40(27.6)	11(7.6)	3.2345
Privacy from neighbours	4(2.8)	24(16.7)	58(40.3)	52(36.1)	6(4.2)	3.2222
Uninterrupted power supply	7(5)	25(17.7)	52(36.9)	45(31.9)	12(8.5)	3.2128
Windows	5(3.5)	31(22)	48(34)	44(31.2)	13(9.2)	3.2057
Maintenance of public areas	4(2.8)	17(11.7)	60(41.4)	53(36.6)	11(7.6)	3.1597
Adequacy of car parking space	2(1.4)	30(21.7)	58(42.0)	40(29)	8(5.8)	3.1594
Horizontal circulation within building	1(0.7)	31(22)	66(46.8)	34(24.1)	9(6.4)	3.1348

External appearance	1(0.7)	32(22.7)	63(44.7)	38(27.0)	7(5)	3.1277
Security provisions of flats	6(4.2)	31(21.7)	58(40.6)	40(28.0)	8(5.6)	3.0909
Appropriateness of site for erection of residential building	7(5)	20(14.2)	74(52.5)	35(24.8)	5(3.5)	3.0780
Building form	15(10.7)	28(20)	48(34.3)	34(24.3)	15(10.7)	3.0429
Leisure facilities	15(10.8)	29(20.9)	44(31.7)	38(27.3)	13(9.4)	3.0360
Anticrime measures	5(3.5)	38(26.4)	61(42.4)	33(22.9)	7(4.9)	2.9931
Colour of the building	7(5)	39(28.1)	45(32.4)	44(31.7)	4(2.9)	2.9928
Entrance/lobby design	19(13.9)	24(17.5)	39(28.5)	49(35.8)	6(4.4)	2.9927
Water quality	10(6.9)	33(22.8)	67(46.2)	31(21.4)	4(2.8)	2.9034
Vertical circulation within building	19(13.9)	28(20.4)	49(35.8)	31(22.6)	10(7.3)	2.8905
Adequacy of landscaping areas	32(23.7)	17(12.6)	30(22.2)	48(35.6)	8(5.9)	2.8741
Postage services	32(22.9)	25(17.9)	26(18.6)	43(30.7)	14(10)	2.8714
Special requirements for disabled	23(16)	23(16)	56(38.9)	35(24.3)	7(4.9)	2.8611
Acoustic quality	14(9.7)	36(24.8)	57(39.3)	34(23.4)	4(2.8)	2.8483
Social and recreation centres	17(11.9)	45(31.5)	31(21.7)	46(32.2)	4(2.8)	2.8252
Ease of access by public transport	33(23.4)	30(21.3)	31(22)	40(28.4)	7(5)	2.7021
Functional quality of lifts	29(21.2)	25(18.2)	51(37.2)	24(17.5)	8(5.8)	2.6861
Availability of convenience stores/market nearby	40(27.6)	36(24.8)	44(30.3)	19(13.1)	6(4.1)	2.4138

Availability of convenience stores/market nearby yields least satisfaction (2.41) to the users in comparison with others examined in the study. Twelve indicators (services/facilities) that fall within the second satisfactory scale include: anticrime measures, colour of the building, entrance/lobby design, water quality, vertical circulation within building, adequacy of landscaping areas, postage services, special requirements for disabled, acoustic quality, social and recreation centres, ease of access by public transport, functional quality of lifts. View from window and water tightness from rain considered highly important also yielded high satisfaction to the users.

5.0 Conclusion and Recommendation

In the facilities management of low-rise Housing Schemes in Victoria Island Lagos, occupied by expatriates, view from window and water tightness from rain are of high importance to expatriates and the satisfaction derived from them so far by these expatriates are topping the chart amongst other performance indicators. The satisfaction derived from ease of access by public transport, functional quality of lifts, and availability of convenience stores/market nearby are on a very low scale. In order to ensure that occupants are satisfied, it is recommended that the property developers and the facilities managers should be locating in areas where there is ease of access by public transport; ensuring functional quality of lifts and availability of convenience stores/market nearby.

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