

LEVELS AND PATTERNS OF DWELLING PERSONALIZATION IN SELECTED PUBLIC HOUSING ESTATES IN LAGOS, NIGERIA

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ABSTRACT

Although previous studies have been able to connect personalization of dwellings with the need for self-identification and uniqueness, these studies were not all-inclusive in terms of providing insight into how the socio-economic characteristics of the residents influenced the levels and patterns of personalization of their dwellings. This study is necessitated by the need to investigate the levels and patterns of dwellings personalization in public houses using selected Public Housing Estates of the Lagos State Development and Property Corporation (LSDPC) as case study.

KEYWORDS: *Levels and Patterns, Public Housing Estates*

INTRODUCTION

The home has been regarded as one of the most personalized unit of human habitation. It is also believed to encompass different kinds of socio-spatial relationships and serves as a reflection of people's desire, aspirations and mental awareness totally entrenched in the inhabitants (Karunaisinghe, 2004). Over the years, the concept of personalization of dwelling has continue to receive increased attention especially in the developed countries although with much of the empirical literature centered on perception of personal identity at home (Aragonés *et al.*, 2010; Clemons *et al.*, 2004), including the assessment of other concepts such as territoriality in the bedrooms, display of objects and modification in the environment portraying a sense of identity and pride of the occupants (Abu-Ghazze, 2000; Bell *et al.*, 2001; Lily, 2010; Martin, 2006). While personalization may be argued to occur in diverse settings, personalization in relation to public housing dwellings seems to command research interest considering the fact that majority of these public housing often create a kind of designer-user gap as a result of the difficulty in meeting the diverse needs of the occupants by the designers of these houses. In addition, empirical evidence have suggested that users preferences and needs are often not put into consideration when these public buildings are being conceptualize and designed, up till completion and allocation, while emphasis has always been that of targeting the standards proposed by housing developers (Adegbehingbe *et al.*, 2004; Aduwo, 2011; Morakinyo, 2014; Morakinyo & Ilesanmi 2015).

However, it has been shown that personalization constitute an important component and process of creating a home that provides a sense of individuality which in way help define peoples home. Also, the natural need for people to

personalize their dwellings create a kind of need to have a space they can attribute and relate to themselves regardless of whether it is deliberately or intuitively done by a way of manipulating the environment to define and showcase their beliefs and values (Marcus, 1995). As earlier emphasized, it is not surprising that these phenomenon is common especially among occupants of public housing considering the inability of these developers to satisfy the needs and requirement of these heterogeneous set of occupants of these houses. For these reasons, the residents devise a means of appropriating their dwellings to themselves though different modifications made to their houses.

Extending this argument, Anarjani (2013) posit that the monotonous and common nature of most public housing is responsible for why the occupants of these houses resort to personalization of their dwellings so as to create a sense of identity and uniqueness aim at distinguishing their dwellings from others. This is so because to them, their houses serves as a medium of expressing their identity. However, while studies on personalization of dwellings have focused mainly on the general aspect of these houses, not much has been done to examine levels and patterns of transformation in the context of public housing estates. For instance, while conducting a study on differences in housing personalization needs in vertical and horizontal houses, Astuti and colleagues (2015) were able to demonstrate how personalization of dwellings enhanced the identity of the users. Also found was higher needs for personalization in horizontal houses than in vertical house. Notwithstanding that previous studies have been able to connect personalization of dwellings with the need for self-identification and uniqueness, these studies were not all-inclusive in terms of providing insight into how the socio-economic characteristics of the residents influenced the levels and patterns of personalization of their dwellings. It therefore becomes imperative to examine how resident's socioeconomic characteristics influences the extent to which occupants of these public housing personalize their dwellings to express themselves. The problem this research seeks to address is examine the levels and patterns of dwellings personalization in public houses using selected Public Housing Estates of the Lagos State Development and Property Corporation (LSDPC) as case study.

RESEARCH QUESTIONS

- What is the level of personalization of dwellings in the study area?
- What is the pattern of personalization of dwellings in the study area?
- What are the determinants of variation in pattern of personalization of dwellings?

RESEARCH OBJECTIVES

- examine the level of personalization of dwellings in the study area;
- ascertain the pattern of personalization of dwellings in the study area;
- assess the determinants of variation in pattern of personalization of dwellings.

EMPIRICAL REVIEW

Concept of Housing and Personalization

Personalization as a term has been frequently used in identifying something regular in agreement with the needs and preferences of individuals. The need for personalization arises from different social status, cultural effects, traditions of that society, individual requirements and life style of the current user. Kopec (2006) while describing the concept, defines

personalization as a physical marker used to identify personal identity, mark territories and hence regulates social interaction. Omar and Saruwono (2012) in their own submission argued that personalization of dwellings helps in improving and achieving desired functional and psychological comfort which constitute important elements of human needs thereby supporting the belief that personalization is a means of creating home. It has also been argued that personalization of dwellings helps in distinguishing boundaries and enhancing security (Fernandez, 2007). Similarly, Lily (2010) while assessing personalization of bedrooms by urban adolescents in Botswana with a view to ascertaining the interplay of personalization, identity and place attachment revealed expressed identities and place attachment achieved through personalization were indicators and outcomes for sense of identity, sense of security, social ties, goal achievement, emotional bond, and control over a place. The conclusion drawn by this study was that the adolescent males personalized their bedrooms because they were control of the decoration, while for the girls, the level of parental control was high. As such, decorative and personal items was found to be significant in showcasing identity, exploration and commitment.

Studies on personalization have assess the various approaches and process to personalization of dwellings. For instance, a study in Malaysia revealed activities such as: rearrangement of moveable items, decoration, alteration of family norms and composition and structural modification to buildings were some of the activities performed by residents of urban mass housing to personalize their dwellings (Jusan & Sulaiman, 2005). While giving reasons for personalization of dwellings, Gosling, Craik, Martin, and Pryor (2005) believed personalization of private places by individuals is a reflection of their interest, personalities, abilities, lifestyles and values. Also, Weibel and Weisner (1981) argued that values and ideologies especially where religious differences are important could influence the home environment. Other studies have also shown that social class and wealth of residents are some of the things used to assess their personality. For instance, location, exterior building design and materials used in building were some of the things used to identify the personality of residents (Gifford, 2002). This therefore, implies that the physical environment exhibits a kind of communicative and illustrative meanings which can be associated with social attributes, personality and social status of individuals (Hauge, 2007).

THEORETICAL FRAMEWORK

Space Syntax

Space syntax theory was developed by Hillier and Hanson (1984). According to Jeong and Un Ban (2014), the theory is based on graph theory and has been used to analyze spatial configurations. The position of this theory is that buildings, towns and cities exhibit particular spatial properties which translate to sociological rules and affects the kind of relationship existing among them. Within the context of this framework, the spatial configuration of a dwelling was believed to present a fairly accurate map of socioeconomic, social and ideological relations of its inhabitants. One of the assumptions of this theory was that space was the basic fundamental of socio-economic events. Accordingly, this theory states that spatial and social forms exhibit a very close relationship such that a certain spatial configuration may define a number social patterns including the distribution pattern of land use, mobility, urban crimes and location of immigrants (Hiller, 2007).

METHODOLOGY

The Study Area: Lagos State

This study is conducted in Lagos, Southwest Nigeria between latitude 6° and 7° North of the equator, and longitude 3° and 4° east of the Greenwich Meridian. In terms of size, Lagos state is one of the smallest states in Nigeria (3,577 km²) but

home to largest population in Nigeria with people from different ethnic background living in the state. With a population over 16 million, Lagos is regarded as the seventh fastest growing city in the world, and the second largest city in Africa (Nwagwu & Oni, 2015). People from different ethnic and socio-cultural background resides in this city as a result of rural-urban migration which has significantly aided the rapid population growth. Important districts include: the old city, (now the commercial district) on western Lagos Island, Ikoyi Island, situated just east of Lagos Island, Apapa, (the chief port district) on the mainland, low-lying Victoria Island, industrialized Iddo Island and a group of mainland suburbs, Ebute Metta, Yaba, Surulere, Mushin, and Ikeja, while places like Alimosho, Abule-Egba, Lagbado have further enlarged the residential, commercial and administrative landmass of Lagos State.

Official intervention in housing provision in Nigeria began with the creation of the Lagos Executive Development Board (LEDB) in 1928 to tackle the housing-related bubonic plague and rid Lagos of the filth and unhealthy living and housing conditions that existed. Since then, government's direct involvement in housing development and delivery has increased (Diogun, 1989; Mbali and Okoli, 2002). As part of their efforts to reduce the problem of housing shortage in Lagos, the Federal and Lagos state governments embarked on housing development for different categories of Nigerians residing within the Metropolitan Area. However, the direct impact of the Federal government was not felt in housing provision for the masses in Lagos until 1973 when it established the Federal Housing Authority. This was subsequently followed by the creation of the Federal Ministry of Housing, Urban Development and Environment. Today, quite a good number of public housing schemes developed by both the Federal and State governments exist in virtually every major location within Lagos.

Specifically, the study context comprises four selected estates in which the study was conducted. A preliminary survey was used to purposively select the four estates from the 20 low and 10 medium-income public housing Estates in Lagos State. The selected four (4) LSDPC public housing estates in Lagos metropolis are: Abesan, Iponri, Isolo, Ijaiye, public housing estates. These estates have been observed to exhibit a preponderance of indicators of personalization in forms of physical, spatial and façade changes, extension and addition of extra units, change of use and function. These were estates also among those that have been inhabited over a long period of time. The selected estates were:

- Abesan Low-Income Housing Estate, Ipaja
- Iponri Low Income Housing Estate
- Isolo Low-Income Housing Estate
- Ijaiye Medium-Income Housing Estate

These brief descriptions of each estate were from the researcher's personal observation and existing records on the estates. This was done in order to provide background information on the physical and other characteristics of the selected housing estates.

Data Source

The data for this study were obtained from both primary and secondary sources. The study utilized a survey research design, in which primary data were collected using structured questionnaire and personal observations. Purposive sampling technique was used to select four public housing estates comprising three low-income and one medium-income housing

estate out of 22 low-income and 10 medium-income estates, being the largest estates. The sampling frame for the four selected estates comprised 9734 housing units in 1361 blocks of flat out of which systematic random sampling was used to select a sample size of 973 housing units. Secondary data were obtained from neighbourhood plans, architectural drawings of housing typologies, and the estate master plans.

Study Population and Sampling Technique

Using Income criterion, two categories of housing, representing two income levels, were identifiable and selected for the study. They consist of low-income and medium-income housing estates. These patterns and categories are peculiar and similar to those available in public housing development in Nigeria, generally. They also provide useful anecdotes or examples to support more generalized statistical findings. These estates were carefully selected through a preliminary field survey method to demonstrate the complexities of the worldwide phenomenon amongst a number of public housing Estates in Lagos. They effectively represent residents' personalization as it occurs in public housing schemes in Nigeria.

DATA ANALYSIS AND DISCUSSION OF FINDINGS

Socio-Demographic Characteristics of Respondents

The distribution of respondents according to sex revealed more males (83.2%) than females (16.8%) across all the selected public housing estates. The distribution of respondents according to age group indicates simple majority 373, representing (40.7%) of respondents across all the selected housing estates were in the age group 41-50 years across, followed by 265 respondents in the age group 31-40 years, accounting for (28.9%) of the total respondents. The result also revealed the predominance of respondents from age group 41-50 years in all the selected housing estates, while respondents in age group 21-30 years were least represented across all the selected housing estates. In general, the results show there are more youthful household heads and the largest being the age group between 41 and 50 years age in both Estates. This pattern of age distribution may have an impact on the vibrancy and kinds of activities that might be taking place within these estates. On the other hand a young age group may imply that more personalization is expected in the future considering the stage in the life cycle.

The presentation of respondents according to marital status revealed more than two thirds of the total respondents from all the selected housing estates were married, followed by respondents who are widower, accounting for (9.6%) and widow (9.4%) of the total respondents. Respondents who are divorced accounted for the least proportion (0.2%). The distribution of respondents according to ethnicity indicates the predominance of the Yoruba ethnic group across all the selected housing estates. The fact that about two third 587, representing (64.0%) of the respondents were from the Yoruba ethnic group no doubt was because this study was conducted in southwest Nigeria, predominantly occupied by people from the Yoruba ethnic group. This was followed by the Igbo ethnic group, accounting for (29.2%), respondents from the Hausa ethnic group accounted for the least proportion (6.8%).

The distribution of respondents according to religious affiliation revealed that (71.0%) of respondents across all the selected housing estates, were Christians, followed by respondents who practiced Islam, accounting for one quarter (25.1%) of the total respondents across all the selected housing estates. Furthermore, educational background and the academic qualification of respondents, affect the choices that residents of a house make on housing. A more educated resident is expected to make more-informed choices. The distribution of respondents according to educational attainment indicates approximately half (49.9%) of the total respondents surveyed across the selected housing estates had vocational

education, followed by 279 respondents who are first degree holders, accounting for (30.4%), while those who possessed postgraduate degree accounted for (17.1%) of the total respondents surveyed. The distribution of respondents according to income category revealed more than half (55.5%) across all the selected housing estates belonged to the middle income group, followed by respondents belonging to the high income group (26.6%), while respondents from the low income group accounted for the least proportion (17.9%) of the total respondents.

Levels of Personalization of Dwellings

The level of personalization was examined using both descriptive and inferential statistics. The descriptive statistics involved the use of mean item score to rank each of the items. In addition, the non-parametric Kruskal Wallis t-test was conducted to ascertain variation in the level of personalization across the selected housing estates. The use of non-parametric statistics was due to the categorical and ordinal nature of the data. Non-parametric test are generally used when data are measured on nominal (categorical) and ordinal scales and also when the data did not meet the stringent conditions of parametric test (Pallant, 2005). The assessment of variation in markers of housing personalization across the selected public housing estates indicates statistically significant variation with respect to architectural detail on building frame, object in space, builder border definer and fixtures, while there was no statistically significant variation with respect to space addition to the building and landscape across the selected housing estates. The result indicates personalization with respect to architectural detail on building frame was more pronounced in Abesan housing estate, with the highest mean rank ($M=523.83$) while Iponri had the lowest mean rank (319.63). The large chi square value suggests substantial variation and was found to be statistically significant ($p<0.05$).

Furthermore, the result of the analysis indicates Abesan housing estate had the highest mean rank with respect to object in space ($M=521.15$), while Iponri estate had the least mean rank ($M=380.18$). Also, the high chi square value implies statistically significant variation across the selected housing estates ($p<0.05$). The mean rank of levels of personalization with respect to building border definer was highest in Iponri estate ($M=500.82$) and lowest in Abesan estate ($M=433.51$). The variation in the level of personalization across the selected housing estates was substantial going by the high chi square value obtained and the result was statistically significant ($p<0.05$). Finally, Abesan had the highest mean rank with respect to addition of fixtures ($M=516.67$), while Iponri estate had the lowest mean ranking ($M=403.31$). The variation in level of personalization was statistically significant across all the selected housing estates given the large chi square value and the associated p-value fell below the 0.05% alpha threshold value (table 5.8)

On the other hand, in order to assess the overall level of housing personalization in all the selected housing estates, the group mean was computed (table 1). Based on the group mean value, any value below 1.5 is regarded as low, value that lies within 1.5-2.5 is regarded as moderate, while value above 2.5 is regarded as high. The defined range was arrived at based on the fact that the maximum score possible that each of the marker can have from a respondent is 4.0 based on the four-point likert scale used. Therefore, the assessment of level of personalization based on the group mean indicates level of personalization of dwellings was high with regards to architectural details on building frame ($GM=3.07$), building border definer ($GM=2.82$) and fixtures ($GM=2.62$), while a moderate level of housing personalization was found with respect to landscape ($GM=2.27$), space addition to the building form ($GM=1.87$) and object in space ($GM=1.82$). The group mean for markers was highest ($M=3.07$) with respect to architectural details on the building frame. The closeness in

the standard deviation values associated with all the selected housing estates suggest similar pattern in terms of the response of the residents, implying there is no much variation across the different housing estates.

Table 1: Kruskal Wallis Test Showing Variation in Levels of Personalization of Dwellings across Selected Housing Estates

Levels of Dwelling Personalization	Selected Housing Estates	N	Mean Rank	Test Statistics
Space addition to the building form	Abesan LIH	415	453.26	$\chi^2=2.70$ $p>0.05$
	Iponri LIH	93	473.65	
	Isolo LIH	330	470.79	
	Ijaiye MIH	79	422.65	
Architectural detail on building frame	Abesan LIH	415	523.83	$\chi^2=58.67$ $p<0.05$
	Iponri LIH	93	319.63	
	Isolo LIH	330	424.02	
	Ijaiye MIH	79	428.61	
Landscape (soft and hard)	Abesan LIH	415	480.48	$\chi^2=5.63$ $p>0.05$
	Iponri LIH	93	440.70	
	Isolo LIH	330	442.12	
	Ijaiye MIH	79	438.21	
Object in space	Abesan LIH	415	521.15	$\chi^2=43.73$ $p<0.05$
	Iponri LIH	93	380.18	
	Isolo LIH	330	409.81	
	Ijaiye MIH	79	430.82	
Building border definer	Abesan LIH	415	433.51	$\chi^2=8.34$ $p<0.05$
	Iponri LIH	93	500.82	
	Isolo LIH	330	471.03	
	Ijaiye MIH	79	493.39	
Fixtures	Abesan LIH	415	516.67	$\chi^2=37.51$ $p<0.05$
	Iponri LIH	93	403.31	
	Isolo LIH	330	413.86	
	Ijaiye MIH	79	410.17	
	Total	917		

Source: Author's Field Survey, 2017

Table 2: Overall Level of Dwelling Personalization across the Selected Housing Estates

Overall level of Personalization of Dwellings		N	Mean	SD	Group Mean	Level
Space addition to the building form	Abesan LIH	415	1.874	0.508	1.87	Moderate
	Iponri LIH	93	1.893	0.471		
	Isolo LIH	330	1.905	0.496		
	Ijaiye MIH	79	1.819	0.413		
	Total	917	1.882	0.492		
Architectural details on the building frame	Abesan LIH	415	3.169	0.243	3.07	High
	Iponri LIH	93	2.981	0.232		
	Isolo LIH	330	3.066	0.330		
	Ijaiye MIH	79	3.067	0.233		
	Total	917	3.104	0.283		
Landscape (soft and hard)	Abesan LIH	415	2.312	0.211	2.27	Moderate
	Iponri LIH	93	2.251	0.299		
	Isolo LIH	330	2.262	0.255		
	Ijaiye MIH	79	2.262	0.251		
	Total	917	2.284	0.242		
Object in space	Abesan LIH	415	1.977	0.480		
	Iponri LIH	93	1.730	0.544		
	Isolo LIH	330	1.770	0.561		

	Ijaye MIH	79	1.801	0.509	1.82	Moderate
	Total	917	1.862	0.529		
Building border definer	Abesan LIH	415	2.704	0.636	2.82	High
	Iponri LIH	93	2.890	0.863		
	Isolo LIH	330	2.822	0.935		
	Ijaye MIH	79	2.863	0.704		
	Total	917	2.779	0.787		
Fixtures	Abesan LIH	415	2.703	0.422	2.62	High
	Iponri LIH	93	2.587	0.502		
	Isolo LIH	330	2.627	0.507		
	Ijaye MIH	79	2.549	0.510		
	Total	917	2.651	0.472		

Source: Author's Field Survey, 2017

Determinants of Variation in Pattern of Personalization of Dwellings

The socio-demographic determinants of variation in pattern of personalization of dwellings was examined using the Mann Whitney U Test where the independent variable had three levels in place of the independent test, while Kruskal Wallis test was used where the independent variable had more than two levels in place of the analysis of variance (ANOVA) test. The result of the analysis generally revealed personalization with respect to space addition (M=537.47), architectural details (M=536.31), landscaping (M=706.47), object in space (M=610.47), building border definer (M=520.86) and fixtures (M=465.53) was higher among the female headed households than the male headed households ($p < 0.05$). With respect to age group, space addition was more pronounced among household heads who are between age 51-60 years (M=521.09) and age group 60-70 years (M=516.20). Personalization with respect to architectural details was more distinct among household heads in the older age group 61-70 years (M=660.55), landscaping and object in space was however more prevalent among household heads in the age group 41-50 years (M=612.42) and (M=535.50), personalization using building border definer was common among household heads in the age group 51-60 years (M=750.46), while personalization with respect to fixtures was more prevalent among household heads in the older age group 61-70 years (M=621.68).

Religion was also found to significantly describe the pattern of personalization in the study area. The result revealed personalization was more prevalent among residents who practice Christianity with respect to object in space (M=457.21) and building border definer (M=458.25), while personalization with respect to space addition (M=465.85), architectural details (M=680.71), landscaping (M=553.50) and fixtures (M=627.07) among residents who are atheist. The variation was found to be statistically significant across all the housing estates. However, the result show different patterns across the selected housing estates. Duration of stay was another significant determinant of variation in pattern of personalization of dwellings. Space addition (M=687.93), object in space (M=564.92), building border definer (M=592.48) and fixtures (M=510.38) was common among residents who had stayed in their current dwellings for a minimum of six years, architectural details (M=675.84) was more pronounced among residents who had spent between 4-6 years in their dwellings, while landscaping was more prevalent among residents who had lived in their dwellings for less than a year (M=480.32). The pattern was also found to be similar across all the selected housing estates.

Marital status was another significant determinants of variation in pattern of personalization as shown by the outcome of this study. Generally, regardless of the selected housing estate, space addition (M=475.44), was more prevalent among married household heads, while architectural details (M=558.50), Object in space (M=685.75) and building border

definer (M=706.65) was widespread among households who are separated from their spouse. However, personalization with respect to landscaping (M=628.00), was more common among household heads who are divorced, while personalization with regards to fixtures (M=573.66) was most prevalent among households who are widower. Also, income level was statistically significant in determining variation in pattern of personalization across all the selected housing estates. Generally, personalization with regards to space addition (M=600.45), object in space (M=503.14) and fixtures (M=584.83) was most prevalent among residents in the lower income group, personalization with respect to architectural details (M=474.72) and building border definer (M=603.48) was more pronounced among residents in the high income group, while personalization with respect to landscaping was distinct among residents in the middle income group (M=500.58). The variation in pattern was statistically significant in all the markers except for architectural details ($p>0.05$).

Table 3: Socio-Demographic Determinants of Variation in Pattern of Personalization

Markers	Sex	SELECTED HOUSING ESTATE					
		Man Whitney U Test					
		Mean Rank Abesan LIH	Mean Rank Iponri LIH	Mean Rank Isolo LIH	Mean Rank Ijaiye MIH	All Estates	P-value all estates
Space addition	Male	202.95	44.08	158.98	38.90	443.16	(0.001)
	Female	230.89	61.03**	199.58**	47.60	537.47	
Architecture details	Male	204.43	42.16	163.25	36.15	443.40	(0.001)
	Female	224.19	70.28**	177.24	66.55**	536.31	
Landscaping	Male	188.58	39.55	145.83	36.99	409.05	(0.001)
	Female	296.05**	82.88**	268.31**	60.75**	706.47	
Object in space	Male	197.19	40.61	156.46	37.01	428.43	(0.001)
	Female	257.00**	77.75**	212.75**	60.60**	610.47	
Building border definer	Male	198.33	46.29	164.59	38.33	446.51	(0.001)
	Female	251.85**	50.41	170.26	51.55	520.86	
Fixtures	Male	212.78	44.45	165.08	38.22	457.68	(0.001)
	Female	186.33	59.28**	167.68	52.25	465.53	
Markers	Age	Kruskall Wallis Test					
Space addition	21-30	89.00			78.50	420.50	$\chi^2=23.417$ (0.001)
	31-40	198.34	33.75	142.07	38.39	415.48	
	41-50	201.70	43.50	161.21	41.00	445.28	
	51-60	223.21	62.46	198.17	39.68	521.09	
	61-70	255.72**	32.00**	183.30**	35.78	516.20	
Architecture details	21-30	58.25			77.00	397.83	$\chi^2=51.783$ (0.001)
	31-40	209.17	46.25	143.14	32.14	437.63	
	41-50	191.37	54.10	167.97	42.78	455.39	
	51-60	228.09	32.46	143.88	31.66	418.38	
	61-70	255.59**	82.00**	259.34**	62.00**	660.55	
Landscaping	21-30	220.00			24.50	417.00	$\chi^2=328.819$ (0.001)
	31-40	192.20	48.88	165.43	43.54	447.14	
	41-50	260.15**	61.72**	237.38**	54.90**	612.42	
	51-60	179.59	18.27	91.60	28.74	302.71	
	61-70	50.55	28.00	66.50	17.83	160.34	
Object in space	21-30	168.50			77.50	585.67	$\chi^2=73.761$ (0.001)
	31-40	169.52	30.16	136.50	23.11	369.02	
	41-50	219.24	63.36	203.40	48.47	535.50	
	51-60	242.48**	25.75**	122.13**	37.40**	410.46	
	61-70	225.78	51.00	201.36	41.11	520.03	
Building border definer	21-30	76.00			27.00	227.00	$\chi^2=408.539$
	31-40	124.17	26.00	97.51	22.61	269.34	
	41-50	201.02	36.44	152.80	32.30	418.54	

	51-60	342.73**	79.92**	271.33**	57.92**	750.46	(0.001)
	61-70	271.09	55.00	197.45	44.39	561.02	
Fixtures	21-30	238.25			69.00	636.17	$\chi^2=65.575$ (0.001)
	31-40	221.68	50.69	159.04	44.89	486.23	
	41-50	177.79	45.44	136.63	29.58	387.53	
	51-60	231.13	46.88	183.27	43.86	491.74	
	61-70	257.52**	69.00	245.36**	53.17**	621.68	

**=Statistically significant at 0.05% significance level

Table 4: Socio-Demographic Determinants of Variation in Pattern of Personalization

Markers	Marital status	Selected Housing Estate					
		Kruskall Wallis Test					
		Mean Rank Abesan LIH	Mean Rank Iponri LIH	Mean Rank Isolo LIH	Mean Rank Ijaiye MIH	All Estates	P-value all estates
		Kruskall Wallis Test					
Space addition	Single	202.57		152.50		440.06	$\chi^2=14.56$ (0.012)
	Married	219.71**	45.22	171.83	39.92	475.44	
	Widow	176.21	63.17	160.00	39.50	420.80	
	Widower	173.39	49.25	112.54	41.21	376.67	
	Divorced	-	70.50	62.00		437.00	
	Separated	180.00		133.00		375.00	
Architecture details	Single	172.00		72.00		425.91	$\chi^2=57.99$ (0.001)
	Married	222.29	47.40	171.14	38.98	471.16	
	Widow	222.82**	74.00**	182.52**	63.17**	546.78	
	Widower	112.61	22.31	90.10	29.71	275.34	
	Divorced	-	51.00	52.50		208.00	
	Separated	265.50		192.25		558.50	
Landscaping	Single	191.13	46.26	248.75		472.12	$\chi^2=27.57$ (0.001)
	Married	216.61	58.33	161.21	39.61	459.56	
	Widow	223.62**	42.44	229.35**	52.50	549.15	
	Widower	144.08		137.88	33.00	355.48	
	Divorced	-	73.50	69.00		628.00	
	Separated	220.00**	6	251.33**		498.50	
Object in space	Single	221.13		145.25		520.47	$\chi^2=26.13$ (0.001)
	Married	215.16	44.53	165.18	37.79	454.96	
	Widow	217.65	74.83	190.02	55.83	541.94	
	Widower	143.40	47.75	128.88	47.29	375.59	
	Divorced	-	67.00	69.00		349.50	
	Separated	298.00**		251.33		685.75	
Building definer border	Single	221.57		128.25		449.65	$\chi^2=15.37$ (0.009)
	Married	201.21	47.17	167.64	37.65	454.33	
	Widow	238.32	61.00	167.69	52.50	514.49	
	Widower	200.53	35.13	129.08	51.43	418.34	
	Divorced	-	44.50	77.50		368.75	
	Separated	374.00		232.33		706.65	
Fixtures	Single	203.70		110.00	37.61	482.53	$\chi^2=22.53$ (0.001)
	Married	201.29	43.62	165.65	52.58	441.68	
	Widow	184.32	75.33	173.63	51.79	484.08	
	Widower	272.82**	59.13**	165.63		573.66	
	Divorced	-	44.00	70.00		255.25	
	Separated	224.50		159.92		472.00	

**=Statistically significant at 0.05% significance level

Table 5: Socio-economic Determinants of Variation in Pattern of Personalization

Markers	Religion	selected housing estate					
		Kruskall Wallis Test					
		Mean Rank Abesan LIH	Mean Rank Iponri LIH	Mean Rank Isolo LIH	Mean Rank Ijaiye MIH	All Estates	P-value all estates
Space addition	Christian	218.14	41.41	164.95	42.26	465.85	$\chi^2=19.87$ (0.001)
	Islam	177.93	46.43	134.57	19.84	381.34	
	Atheist	254.17**			48.50**	533.71	
Architecture details	Christian	189.13	41.03	156.01	36.59	422.65	$\chi^2=21.60$ (0.001)
	Islam	253.16	47.24	162.09	40.47	499.17	
	Atheist	320.42**			42.00	680.71	
Landscaping	Christian	206.65	45.13	166.10**	36.00	452.84	$\chi^2=4.99$ (0.082)
	Islam	208.80	38.43	131.02	42.53	417.57	
	Atheist	260.67			42.50	553.50	
Object in space	Christian	226.28**	47.37**	173.63**	41.75**	485.47	$\chi^2=64.48$ (0.001)
	Islam	158.46	33.61	107.86	23.34	328.16	
	Atheist	205.50			21.50	457.21	
Building definer	Christian	219.58**	39.63	158.83	42.29**	458.25	$\chi^2=7.19$ (0.027)
	Islam	176.29	50.24	153.40	21.28	406.34	
	Atheist	212.33			24.00	419.07	
Fixtures	Christian	216.63	45.40	171.51**	41.65	474.43	$\chi^2=42.65$ (0.001)
	Islam	182.19	37.85	114.37	20.91	354.23	
	Atheist	251.25**			66.50**	627.07	

**=Statistically significant at 0.05% significance level

Table 6: Socio-Economic Determinants of Variation in Pattern of Personalization (Cont'd)

Markers		Selected Housing Estate					
		Kruskall Wallis Test					
		Mean Rank Abesan LIH	Mean Rank Iponri LIH	Mean Rank Isolo LIH	Mean Rank Ijaiye MIH	All Estates	P-value all estates
		Duration of stay					
Space addition	< 1 years	253.00		172.86		533.16	$\chi^2=378.90$ (0.001)
	1-3 years	169.88	41.70	127.18	36.76	374.34	
	4-6 years	112.76	22.19	40.50	13.77	203.83	
	6+ years	317.41**	75.25**	240.61**	58.89**	687.93	
Architecture details	< 1 years	269.89		267.64		675.84	$\chi^2=252.16$ (0.001)
	1-3 years	158.19	40.42	104.29	30.08	333.19	
	4-6 years	304.99**	65.06**	213.42**	51.27**	635.14	
	6+ years	249.14	49.48	233.71	54.02	590.38	
Landscaping	< 1 years	208.03		185.00		480.32	$\chi^2=30.93$ (0.001)
	1-3 years	209.45	44.66	174.94	35.68	461.41	
	4-6 years	252.95**	64.28**	198.27**	48.59	570.17	
	6+ years	184.65	40.65	145.45	44.35	413.11	
Object in space	< 1 years	216.33		197.50		521.28	$\chi^2=74.69$ (0.001)
	1-3 years	189.83	46.96	131.74	34.87	400.10	
	4-6 years	170.46	57.66	164.23	31.73	427.27	
	6+ years	258.55**	39.98	209.70**	54.00**	564.92	
Building definer	< 1 years	32.53		22.79		71.36	$\chi^2=169.43$ (0.001)
	1-3 years	205.20	43.44	142.94	41.08	431.29	
	4-6 years	159.42	31.34	99.25	19.59	310.74	
	6+ years	262.34**	65.29**	216.43**	47.65**	592.48	
Fixtures	< 1 years	249.61		175.29		565.86	$\chi^2=110.06$ (0.001)
	1-3 years	226.18**	50.81	151.62**	43.52**	475.00	
	4-6 years	100.87	33.13	48.25	16.64	215.25	
	6+ years	216.01	47.83	205.92	44.28	510.38	

**=Statistically significant at 0.05% significance level

Table 7: Socio-Economic Determinants of Variation in Pattern of Personalization (Cont'd)

Markers	Income category	Selected Housing Estate					
		Kruskall Wallis Test					
		Mean Rank Abesan LIH	Mean Rank Iponri LIH	Mean Rank Isolo LIH	Mean Rank Ijaiye MIH	All Estates	P-value all estates
Space addition	Low	278.30**	54.04**	213.54**	57.52**	600.45	$\chi^2=61.12$ (0.001)
	Middle	191.59	38.85	150.18	36.91	417.79	
	High	210.84	51.90	162.13	27.48	449.89	
Architecture details	Low	205.63	41.54	162.47	28.14	417.86	$\chi^2=5.16$ (0.076)
	Middle	200.01	48.64	168.33	46.58	464.72	
	High	228.37	49.50	161.99	39.95**	474.72	
Landscaping	Low	161.54	38.90	132.57	33.14	361.61	$\chi^2=40.86$ (0.001)
	Middle	219.23**	57.85**	183.12**	41.54	500.58	
	High	205.19	39.40	153.58	44.28	437.73	
Object in space	Low	270.75**	51.76	175.39**	36.93	503.14	$\chi^2=5.95$ (0.05)
	Middle	187.23	49.97	172.89	42.17	453.36	
	High	225.22	38.90	143.72	39.10	441.09	
Building border definer	Low	275.67	66.04	191.50	55.50	597.89	$\chi^2=216.36$ (0.027)
	Middle	154.24	26.05	135.22	31.93	344.99	
	High	301.71**	58.76**	207.65**	39.05**	603.48	
Fixtures	Low	327.05**	62.32**	200.61**	38.81	584.83	$\chi^2=46.90$ (0.001)
	Middle	183.31	43.28	158.42	43.26	431.29	
	High	205.40	38.79	154.81	35.05	432.23	

**=Statistically significant at 0.05% significance level

DISCUSSION OF FINDINGS

The assessment of level of personalization based on the Group Mean (GM) indicates level of personalization of dwellings was high with regards to architectural details on building frame (GM=3.07), building border definer (GM=2.82) and fixtures (GM=2.62), while a moderate level of housing personalization was found with respect to landscape (GM=2.27), space addition to the building form (GM=1.87) and object in space (GM=1.82). The group mean for markers was highest (M=3.07) with respect to architectural details on the building frame. The closeness in the standard deviation values associated with all the selected housing estates suggest similar pattern in terms of the response of the respondents, implying there is no much variation across the different housing estates. Furthermore, the result of the analysis indicates Abesan housing estate had the highest mean rank with respect to object in space (M=521.15), while Iponri estate had the least mean rank (M=380.18). Also, the high chi square value implies statistically significant variation across the selected housing estates ($p < 0.05$). The mean rank of levels of personalization with respect to building border definer was highest in Iponri estate (M=500.82) and lowest in Abesan estate (M=433.51). Finally, Abesan had the highest mean rank with respect to addition of fixtures (M=516.67), while Iponri estate had the lowest mean ranking (M=403.31). The variation in level of personalization was statistically significant across all the selected housing estates given the large chi square value and the associated p-value fell below the 0.05% alpha threshold value

The socio-economic determinants of pattern of personalization of dwellings showed sex, age group, marital status, religion, length of stay in apartment and income level were all statistically significant in determining the pattern of personalization of dwellings in the study area. Overall, personalization was more prevalent among household heads in the older age group (61-70 years), among the female headed households, married couples, residents and practice atheism. This findings was in tandem with the work of Weibel and Weisner (1981) who argued that values and ideologies could vary

well influence home environments, particularly where religious differences or other strong ideological convictions are important. However, the pattern of personalization of dwellings with respect to income level varied significantly.

CONCLUSIONS

This study investigate the levels and patterns of dwellings personalization in public houses using selected Public Housing Estates of the Lagos State Development and Property Corporation (LSDPC) as case study. Findings from this study revealed variation in pattern of personalization of dwellings across the selected public housing estates. This study also identified socio-demographic factors such as age, sex and marital status as important determining factors in personalization of dwellings. Socio-economic factors that were significant in determining personalization of dwellings in the study area include: duration of stay in the apartment, religion and income level.

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