

Marital Status And Household Density In Government-Built Apartments In Lagos

Anthony K. Adebayo, Anthony C. O. Iweka

Abstract: In Nigeria, the responsiveness of government-built apartments to marital arrangements is yet to be adequately examined. This study evaluates household density among seven marital status categories in multifamily apartments developed by Lagos State Development and Property Corporation (LSDPC). Occupants' marital statuses were collected using a sample of 582 (7.5%) from 7,764 population. The result reveals that "married", "just-single", "widow(er)" and "divorced" categories were dominant. Furthermore, a chi-square test shows that at 95% confidence level, marital status has no significant effect on dwelling density among all the apartments investigated. Therefore LSDPC should be interested in the policy implications of these outcomes.

Index Terms: crowding, density, government-built apartment, multifamily apartments, public housing.

1 INTRODUCTION

The literature explains that demographic characteristics are the most frequently used features to discuss housing behaviour of households. In general, changes in household circumstance can trigger changes in space needs. The literature also asserts that changes in marital status of urban dwellers are a factor that is increasingly becoming important in determining future living arrangements in urban housing. Marital status refers to a person's conjugal status in relation to marriage laws in a particular country or locality. Henn (2005), for example, claims that marital status is an important variable in family functioning. Similarly, Russell (2007) claims that demographic characteristics and social trends are major factors that influence the living arrangement in residential apartments. According to him, marital status is one demographic characteristic that influences crowding experiences within the household environment. Demographic trends in marriage, cohabitation and divorce have also been shown to affect the distribution of household composition (Fields 2003).

1.1 Aim and Objectives of the Study

The aim of this study was to evaluate the variability in household density among different marital status categories in LSDPC's multifamily apartments in Lagos, Nigeria. The specific objectives are: (a) to establish the rated capacity of the various apartments; (b) to establish the level of occupancy in apartments with different marital arrangements during habitation; (c) to examine the effect of marital status on dwelling density and crowding in LSDPC's multifamily apartments.

1.2 Variations in Classifications of Marital Groups

Marital experience is a universal phenomenon. However, the classifications of marital groups and the associated norms vary across nations and across ethnic divides. Thus the interpretation given to a particular marital category is dependent upon time, location and context. It is therefore necessary to understand some of these perspectives, and the way they align (or do not align) with the present study. In the United States, the term "married" refers to a legal union between one man and one woman as husband and wife. In Canada, this category includes persons whose opposite sex or same sex spouse is living. In several other countries, including Nigeria, the term "married" also refers to individuals who are unmarried, but living together under common law arrangement. In this study, the term "married" does not distinguish whether the person is in a polygamy or bigamy. It does not also indicate whether the person had married more than once. Within the past two and half decades, researchers have witnessed the rise and spread of single parent families (Becker, 1991; Ellwood and Jenchs, 2004; Wilson, 1987). According to Ellwood and Jenchs (2004), 33% of babies delivered in 1990 were born to unmarried persons. The single parent can be a single mother or single father. In these two aspects, attention is on out-of-wedlock births and fatherless families. Ellwood and Jenchs (2004) points out the need to be more precise in understanding single-parent families. They contend that the definition of single-parent households should not be confused with single-households created by divorce, separation, death or imprisonment. They claim that single mothers should be classified as those who never cohabited or married, and those who do not live with another adult who supports her and her children. The above definitions are rather ambiguous and difficult to apply, particularly in Nigerian setting due to social stigma associated with these groups and dearth of data from government agencies. Therefore, this study takes respondents by which group they personally choose to belong irrespective of the causative factor. Obviously, this will have a limiting influence on the outcome of the present research and the reliability of the results.

1.3 Density

The issue of sufficient living space is closely tied to the concept of density. Density is an objective measure and refers to the number of people in any given space, e.g. per square metre, per room, per dwelling or per hectare. Most of the literature focussing on household density discuss the term alongside crowding (Churchman, 1999; Kaya and

- Dr. Anthony K. Adebayo is a lecturer in the Department of Architecture University of Lagos, Akoka- Yaba, Lagos, Nigeria. E-mail: akay.adebayo@yahoo.com
- Dr. Anthony C. O. Iweka is a lecturer in the Department of Architecture University of Lagos, Akoka- Yaba, Lagos, Nigeria. E-mail: tonyiweka@yahoo.com

Erkip, 2001; Newman and Hogan, 1981; Pader, 2002; Walden, Nelson and Smith, 1981). However, there appears to be no agreement among researchers that there is a single point of density at which everyone will feel crowded. High density does not always lead to crowding (Jazwinski, 1998). Newman and Hogan restricted their interpretation of density to urban density. They noted that density studies within rooms or buildings are relevant to urban density, and bear linkage to the concepts of territoriality and personal space. They also claimed that the architectural design of the internal spaces of buildings can provide mechanisms that cater for individual human territoriality. According to Churchman, living density signifies density inside the home, and this is clearly different from residential density, which represents density outside the home, whether at the building, street, or city level. The description of density as a neutral term is relevant to this study because a given density level does not include an evaluative component to immediately know whether it is positive or negative. The focus of the current research is on density inside the home which is interpreted to mean dwelling density. It is also expressed as intra-household density.

1.4 The Study Area

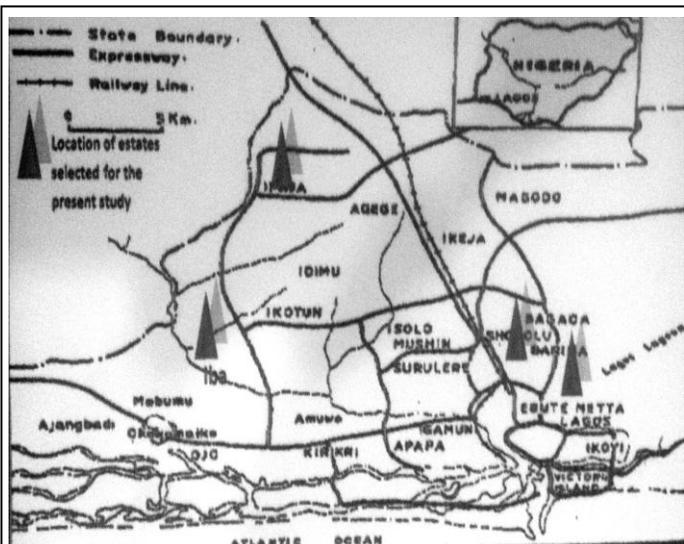


Figure1: Map of Lagos State, Nigeria, showing the study areas.

Lagos Metropolitan area is an African megacity which is located in south-western Nigeria on the West Coast of Africa and situated within latitudes $6^{\circ} 27' 11''$ N and Longitudes $3^{\circ} 23' 45''$ E. Lagos metropolis constitutes the greater parts of the habitable portion of Lagos State. The state is bounded in the north and east by Ogun State, in the west by the Republic of Benin and the south by the Gulf of Guinea. It is 800km southwest of Abuja, the Nigeria's capital and the smallest yet the most populated state in the country with an estimated population of 18.5 million inhabitants (Salau, 2010). Lagos State (2004) remarks that Lagos will be the third largest global city in the world by 2025, with an estimated population of 24.0 million people. Lagos State harbours 65% to 70% of the country's total industrial and commercial activities and also accounts for approximately 50% of the manufacturing concerns. The built-up area of

Lagos metropolis has an average projected population density of about 20,000 people per square kilometre. The high growth rate of Lagos has tremendous consequences, especially in the area of providing adequate housing for teeming urban population. Thus government's attention on housing provision is a prerequisite for Lagos to sustain its leadership in commercial and national development.

2 METHODOLOGY

2.1 Case Study Research Design

This study is essentially a case study research that incorporates aspects of evaluation analysis. The methodological issues attached to the case study are substantially based on survey research design. The survey research component provides an indication of the prevalence of the phenomenon of dwelling density among different marital status classifications within the selected cases. The adoption of case study approach in this study is considered appropriate because the research focus is a contemporary phenomenon within some real-life context (Yin, 2003). In addition, the research is interested mainly in information specific to a particular study context, the LSDPC (Illesanmi, 2005). The single institutional context of LSDPC qualifies it to be classified as a single unit, or single case with identifiable boundaries. According to earlier researchers, LSDPC has 40 residential estates comprising a total of 20,572 housing units (Iweka, 2012; Jiboye, 2009; 2010). Since the present study is restricted to multifamily housing units, the first step was to identify the housing estates with large numbers of multifamily housing units. In this study, a housing estate is considered to have large numbers of multifamily housing units if it contains 100 or more of such units. There are twelve estates in this category, namely: Abesan, Amuwo-Odofin, Anikantomo, Dairy Farm-ljaiye, Iba, Ikponri, Isolo, Ojokoro, Dolphin II, Ebute-Metta, Ijaiye-Agege, and Femi Okunnu. All the twelve estates contain a total of 17,679 apartments, representing the population for this study. Four housing estates for in-depth study were purposively selected from this list. These include three low income estates and one medium income estate. The three low-income estates selected were (1) Abesan (4,272 apartment units), (2) Iba (2,388 apartment units) and (3) Dolphin II (576 apartment units). The medium-income estate chosen was Ebute-Metta (528 apartment units).

2.2 Sampling

The total number of housing units in the four selected estates represents the sample frame. This amounts to 7,764 comprising two-bedroom, three-bedroom and four-bedroom multifamily apartments in the low and medium income category. In all, a 7.5% sample of the housing units was chosen for this study, amounting to 582 units. Stratification and systematic techniques were applied in the identification and selection of housing unit design types available in each estate. These housing types were classified according to Number of Bedrooms. The stratification technique was also used to delineate the housing unit types according to the proportion in each estate and ensured that all population proportions were matched in the sample. The housing units eventually chosen for detailed survey were selected using systematic random sampling technique after the first

apartment was chosen at random. The measure of crowding was constructed from responses to pre-tested questionnaire items pertaining to the number of persons and marital status of household head in each housing unit.

2.3 Procedure for Data Analysis

The Canadian National Occupancy Standard and the Equivalized Crowding Index were used in computing what constitutes an adult-equivalent occupant. In applying these indexes, each individual who is in a marital relationship is rated as one-half. Children under one year are disregarded. Children one year of age or over, but less than eighteen years of age are counted as one-half. Household members aged eighteen years or over are counted as one. The outcome gives an equivalized number of people living in an apartment (Australian Bureau of Statistics year book 2008; Basavarajappa, 1996; Iweka, Adebayo, and Igwe, 2009; Iweka, 2012; Morrison, 1994; Schluter, Carter, and Kokaua, 2007; Seeling et al, 2008).

3 RESULT AND DISCUSSION

The survey offered six choices in the following categories: “married” “separated” “divorced” “widowed” “single mother” “single father” “just single” “others (specify)”. The results from this question are outlined in Table 1. No respondent marked “others”. Table 1 shows that 69.1% (121) households in the study area were headed by married persons. This was the most frequently occurring response. Households headed by individuals who were categorized as “just singles” constituted 16.5% (29). These persons were presumed to be young adults who are yet to be married. The result indicated that the third highest group of household heads were the widow (ers), who constituted 6.9% (12). These three types of households are generally regarded as what urban residents are used to. Table 1, however, further reveals the existence of household types in other forms of marital arrangement though in smaller proportion than the traditionally recognized types. The four marital types identified in this study are “separated” 2.9% (5), “divorced” 1.7% (3), “single mother” 2.3% (4), and “single father” 0.6% (1).

TABLE 1
MARITAL STATUS OF HOUSEHOLD HEAD

Marital situation category	No of Respondents	Percentage (%)
Married	121	69.1
Separated	5	2.9
Divorced	3	1.7
Widow(er)	12	6.9
Single Mother	4	2.3
Single Father	1	0.6
Just Single	29	16.5
Total	175	100

Note: one respondent did not answer the question marital status.

Although these household types may have existed historically, it is likely that cultural instincts have over the years discouraged people from willingly accepting to be identified with them. The social unacceptability of “single fatherhood” and ‘divorced” households was evident from the data. The least figure of 0.6% (1) of respondents belongs to single fatherhood. This is closely followed by respondents from households headed by divorced persons 1.7% (3).

3.1 Design Density

Figure 2 provides a logical and reasonable description of how LSDPC’s multifamily apartments were supposed to be occupied. This is the rated capacity (also called design density, or predicted occupancy). It is distinct and distinguishable from the way the multifamily apartments were actually occupied during usage. This was achieved by derivation, deduction and by inference from the spatial provisions in specific multifamily apartments, using established occupancy norms. This represents the implicit assumptions about how the apartments were to be occupied (that is, the intended occupancy goal).

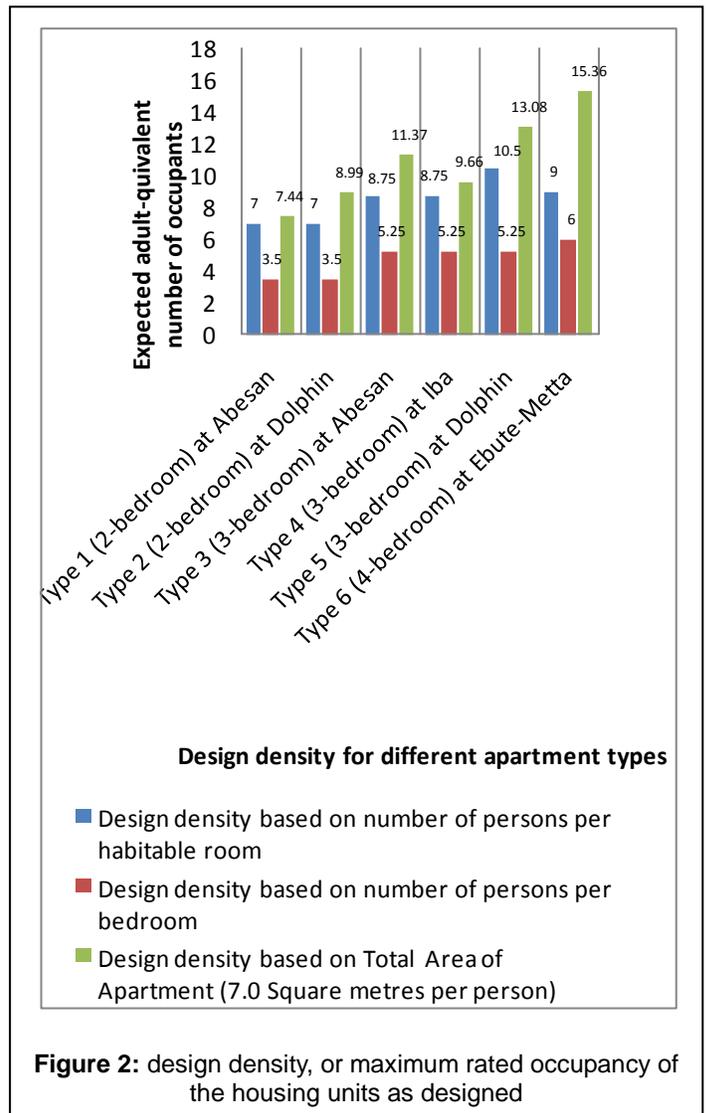


Figure 2: design density, or maximum rated occupancy of the housing units as designed

Design density was operationalized as the maximum rated occupancy of the housing units as designed. The rated capacity for each existing LSDPC's multifamily apartment type was computed in this research for adult-equivalent occupants, to represent the benchmark at which dwelling space optimal occupancy occurred. Over-occupancy (or, over-crowding) occurs when the size of a household is larger than the capacity of the dwelling to provide adequate accommodation. This can be obtained from the architectural drawings of the housing units found in each selected case study, which reflects the original interior design of housing provided. The architectural drawings purchased from LSDPC were used to extract the initial interior design of the six apartment prototypes covered in this research. Details of design density scores for each apartment are shown in Figure 2. These scores refer to the number of people expected to occupy them.

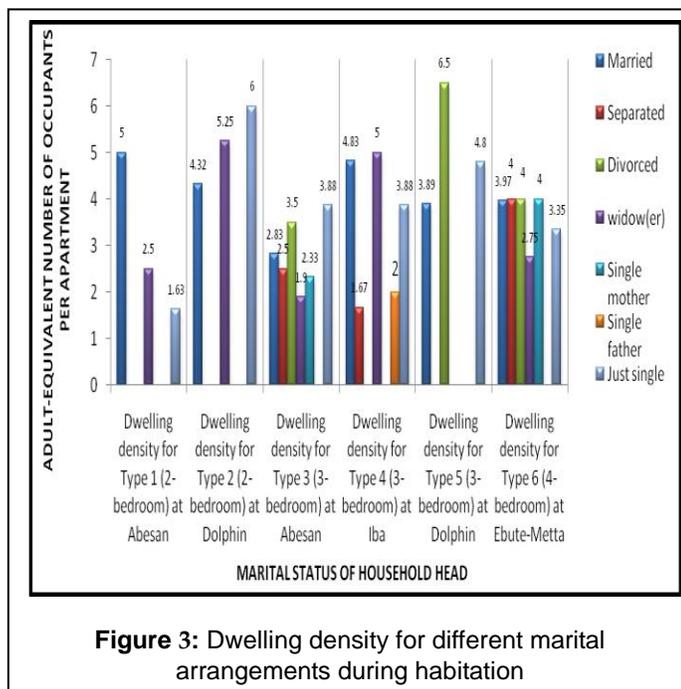


Figure 3: Dwelling density for different marital arrangements during habitation

The dwelling densities for different marital arrangements during habitation in various apartment types are shown in Figure 4. Data from this study reveals that only two marital groups were dominant in all the six apartments. These are households headed by persons who are married, and persons who are "just single". The third most available marital household type was the widow(er) and it was found in five apartment types. The fourth dominant household type was headed by divorced persons. This means that the dwelling density in these four household types should be of interest to LSDPC. For the two most dominant household types, dwelling density in households headed by married persons was considered less than in households headed by just singles in three apartment types. These apartments are Type 2 (two-bedroom) at Dolphin II, Type 3 (three-bedroom) at Abesan, and Type 5 (three-bedroom) at Dolphin II. The results in these three apartment types were inconsistent with generally held belief that being married and presence of children leads to greater occupancy. On the other hand, among the other three apartment types dwelling density in

households headed by married persons was higher than in households headed by just singles. The apartments are Type 1 (two-bedroom) at Abesan, Type 4 (three-bedroom) at Iba, and Type 6 (four-bedroom) at Ebute-Metta. This was consistent with previous research indications. The observations from figures 1 and 2 for each marital arrangement are discussed below:

3.1.1 Dwelling density incidence in apartments where household heads are married: The figure reveals that all the apartments were under-occupied, when assessment methods of Number of Habitable Rooms and Total Area of Apartments were used. The use of Number of Bedrooms indicator shows that all the two bedrooms investigated were over-occupied while the three-bedroom and four-bedroom units were under-occupied.

3.1.2 Dwelling density incidence in apartments where household heads are separated: Among the respondents, household heads whose marital status fell under the category "separated" were not found in three apartment types. These are the Type 1 (two-bedroom) units at Abesan Estate, the Type 2 (two-bedroom) units at Dolphin II Estate and a Type 5 (three-bedroom) at Dolphin II. The data shows that persons who are separated from their spouses were more likely to be found either in three-bedroom units or four-bedroom units. None of the respondents in Dolphin Estate belong to this marital classification, both in the Type 2 (two-bedroom), and Type 5 (3-bedroom) apartments. The situation was slightly different at Abesan Estate. In Abesan Estate, Type 1 (two-bedroom) did not harbour separated household heads among the respondents. This household type could only be found in type 3, (3-bedroom) apartments. Except at one instance, the dwelling density in the three types of apartments where separated household heads were found showed a common trend. All the apartments were under-occupied. Generally, apartments where the household heads are separated were less likely to be found in two-bedroom units than three-bedroom and four-bedroom units. Also, persons in this marital category were more likely to be found in four-bedroom units than three-bedroom types.

3.1.3 Dwelling density incidence in apartments where household heads are divorced: Data from the research show that household heads that are divorced were not found among residents of three apartment types. These are: Type 1, (two-bedroom) at Abesan, Type 2, (two-bedroom) at Dolphin II, and Type 4, (three-bedroom) at Iba Estate. The close link between "Separated" and "Divorced" was revealed in this research, as both household types were not found among respondents living in two-bedroom apartments. This shows that divorced households are more likely to occupy three-bedroom and four-bedroom housing units. Figures 1 and 2 also show that Type 6 (four-bedroom) at Ebute-Metta was under-occupied, notwithstanding the measurement criteria used. Similarly, Type 5 (three-bedroom) at Dolphin II showed under-occupancy in all indicators except when Number of Bedrooms indicator was applied.

3.1.4 Dwelling density incidence in apartments where household heads are widowed: As shown in Figure 3, respondents who are widows(ers) were not found among the residents of Type 5 (three-bedroom) apartments in Dolphin II Estate. All the other five building types investigated in this study harbour widows(ers). Of the three indicators used to assess dwelling density in this study, two clearly revealed that all the apartments were under-occupied. The two indicators are Number of Habitable Rooms and Total Area of Each Apartment. The situation was not too different when the Number of Bedroom indicator was applied. In this circumstance, all the four apartment types were under-occupied, while only one was over-occupied. The over-occupied apartment, based on Number of Bedrooms was found in Type 2 (two-bedroom) units at Dolphin II. The apartments have exceeded their optimum design density by 1.75 adult equivalents.

3.1.5 Dwelling density incidence in apartments where household heads are single mothers: The cultural reluctance in accepting the reality of this emerging type of "single mother" household was reflected in the paucity of respondents in this category. Only respondents in two dwelling unit types indicated that they belong to "Single Mother" classification. The apartments are Type 3 (three-bedroom) at Abesan and Type 6, (four-bedroom) at Ebute-Metta. The single mother group was not found among the respondents in four apartments types. These are: (1) Type 1 (two-bedroom) at Abesan, (2) Type 2 (two-bedroom) at Dolphin II, (3) Type 4 (three-bedroom) at Iba, (4) Type 5 (three-bedroom) at Dolphin II. This tends to imply that single mother heads of household are rarely found among residents of two bedroom apartments. This is contrary to expectation, given the largely held view that this household type is characterized by fewer numbers of occupants. One possible explanation is that the population density in neighbourhoods where two-bedroom apartments are located is usually high. Moreover, the two bedroom units tend to provide accommodation to higher number of persons belonging to the lower social ladder in an urban setting. Single mothers probably avoid clustering among these people to avoid stigmatization. Figure 2 and 3 tend to further suggest that single mother households were largely under-occupied, using the three measurement indicators adopted in this study.

3.1.6 Dwelling density incidence in apartments where household heads are single fathers: Figure 3 reveals the reality of socio-cultural inhibitions that tend to discourage residents in the study area from identifying themselves as single fathers. Of the six apartment types covered in this research, respondents who indicated that they are single fathers were found only in Type 4, (three-bedroom) at Iba Estate. In the study area, single fatherhood is regarded as an aberration and attracts stigmatization. It is likely that this reason accounted for the low number of respondents who expressed that they belong to this category. Nevertheless, the data points out that single father household type is an emerging identity in LSDPC's multifamily apartments. An application of the three measurement indicators adopted in this study shows that apartments headed by single father households were under-occupied. The apartments were capable of accommodating more than six adult equivalent

occupants, based on Number of Habitable rooms. Also, an additional number of 3.25 adult-equivalent occupants could be absorbed based on Number of bedrooms; while 7.66 would be needed to attain optimum density, if an indicator of Total Area of Apartment was applied. Dwelling density incidence in apartments where household heads are just singles: Figure 3 shows that persons who belong to the marital status "just single" were spread among the six apartment types investigated in this research. Figure 3 further shows the results of dwelling density computation using three different approaches adopted in this study. Only one of the measurement indicator of Number of Habitable Rooms reveals that all apartment classifications headed by "just single" persons were under-occupied. Specifically, Figure 3 shows that over-occupancy occurred in Type 2 (2-bedroom) apartment at Dolphin II Estate when the number of Bedroom was applied.

3.2 Statistical Validation of Effect of Marital Status on Dwelling Density Outcome

The effect of marital status on dwelling density is shown in Table 2. The chi-square test indicates that marital status had no significant effect on dwelling density at 95% confidence level.

TABLE 2
EFFECT OF MARITAL STATUS ON DWELLING DENSITY

Apartment type	Chi-square Value	P-Value	Remark
Type one (two-bedroom), Abesan	6.234	0.182	Marital Status has no significant effect on dwelling density in all apartment types
Type two (two-bedroom), Dolphin II	4.000	0.406	
Type three (three-bedroom), Abesan;	7.000	0.725	
Type four (three-bedroom), Iba	9.308	0.317	
Type five (three-bedroom), Dolphin	4.960	0.291	
Type six (four-bedroom) Ebute-Metta	4.295	0.933	

4 CONCLUSION

Marital status is a key demographic characteristic that influences crowding experiences within the household environment. In Nigeria, this emerging social demographic experience in household marital arrangement has become evident across urban communities. Today, Lagos has come to be identified according to seven contrasting categories of marital status: married, separated, divorced, widow(er), single mother, single father, and just single. For many years, government-built apartments in Lagos have been shaped to promote the perceived standards of married households. This study evaluated the variability in household density

among different marital status categories in LSDPC's multifamily apartments in Lagos. It also established the rated capacities of various LSDPC's apartments and the effect of marital status on dwelling density and crowding in LSDPC's multifamily apartments. The result reveals four marital groups that are dominant, in LSDPC's estates investigated. These are "married", "just single", "widow(er)" and "divorced", in decreasing order. This suggests that the dwelling density in these four household types should be of interest to LSDPC in its bid to establish a policy direction. However, the statistical validation of the results using chi-square test shows that at 95% confidence level, marital status has no significant effect on dwelling density among the apartments investigated.

REFERENCES

- [1] C.M. Henn, "The Relationship between Certain Family Variables and the Psychological Well-Being of Black Adolescents". PhD dissertation, University of the Free State, Bloemfontein, 2005
- [2] D. Russell, "Household Composition and Psychological Well-Being" PhD dissertation, The Florida State University College of Social Sciences, 2007.
- [3] J. Fields, "America's Families and Living Arrangements: 2003," Current Population Reports: 20-553. U.S. Census Bureau, Washington, DC., 2003.
- [4] G. Becker, A treatise on the family (enlarged edition). Cambridge, MA: Harvard University Press, 1991
- [5] D.T. Ellwood and C. Jencks, "The Spread of Single-Parent Families in the United States since 1960," Faculty Research Working Papers Series, John F. Kennedy School of Government, Harvard University, 2004.
- [6] W.J. Wilson, The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy. Chicago: University of Chicago Press, 1987.
- [7] A. Churchman, "Disentangling the Concept of Density," Journal of Planning Literature, Vol. 13, No. 4, pp.389-411, 1999.
- [8] N. Kaya, and F. Erkip, "Satisfaction in a Dormitory Building: The Effects of Floor Height on the Perception of Room Size and Crowding," Environment and Behavior, Vol. 33, No. 1, pp. 35-53, 2001
- [9] P. Newman, and T. Hogan, "Towards A Resolution of the Conflict between Populace and Planner," Human Ecology, Vol. 9, No. 3, pp. 269-303, 1981.
- [10] E. Pader, "Housing Occupancy Standards: Inscripting Ethnicity and Family Relations on the Land," Journal of Architectural and Planning Research, Vol. 19, No. 4, pp. 300-318, 2002.
- [11] T.A. Walden, P.A. Nelson, and D.E. Smith, "Crowding, Privacy and Coping," Environment and Behavior, Vol.13, No. 2, pp. 205-224, 1981
- [12] C. Jazwinski, "Crowding", available at <http://condor.stcloud.msus.edu/~jaz/psy373/7.crowding.html>. 1998.
- [13] T.I. Salau, "Traffic Impact Analysis as a Tool for Planning Permit Consideration in Lagos State: Guidelines and Procedures," Proceedings of the National Conference on Emerging Global City: The African Challenge, Department of Urban and Regional Planning, University of Lagos, pp. 299 – 307, 2010.
- [14] Lagos State, "Perspectives on Lagos Economy Lagos State," Ministry of Economic Planning and Budget. Ikeja, Lagos, 2004
- [15] R.K. Yin, "Case Study Research Design and Methods," (3rd ed.). Applied Social Research Series, 5. Thousand Oaks, California: Sage Publications, 2003.
- [16] A.O. Illesanmi, "An Evaluation of Selected Public Housing Schemes of Lagos State Development and Property Corporation, Lagos, Nigeria," PhD dissertation, Obafemi Awolowo University, Ile-Ife, 2005.
- [17] A.C.O. Iwaka, A Post-Occupancy Evaluation of Dwelling Density in Multifamily Apartments in Public Housing Estates in Lagos PhD dissertation, University of Lagos, 2012.
- [18] A.D. Jiboye, "The correlates of public housing satisfaction in Lagos, Nigeria". Journal of Geography and Regional Planning, Vol. 3, No. 2, pp. 017 - 028, 2010.
- [19] Australian Bureau of Statistics, "Housing utilization," Year Book Australia, 2008.
- [20] K.G. Basavarajappa, "Living Arrangements and Residential Overcrowding: The Situation of Older Immigrants in Canada 1991," The Analytical Studies Branch Research paper Series No. 115, Statistics Canada, September, 1998.
- [21] A.C.O. Iwaka, A.K. Adebayo, and J.M. Igwe, "Millennium development goals and slum alleviation in developing nations: The challenge of sufficient living area for households," Proceedings of the International Conference on Millennium Development Goals and the Built Environment, Obafemi Awolowo University, Ile-Ife. June 24 – 25, 2009.
- [22] P.S. Morrison, "Housing Occupancy and the Changing Size of Households and Dwellings in New Zealand 1951 – 1991," New Zealand

Population Review, Vol. 20, Nos. 1 & 2, pp. 32-64, 1994.

- [23] P. Schluter, S. Carter, and J. Kokaua, "Indices and Perception of Crowding in Pacific Households Domicile Within Auckland New Zealand: Findings from the Pacific Islands Families Study," The New Zealand Medical Journal, Vol. 120, No. 1248, pp. 1-12, 2007.
- [24] T. Seeling, V. Milligan, P. Phibbs, and A. Thompson, "Reconceptualizing housing need in the context of the 21st century Australian housing policy," Australian Housing and Urban Research Institute Positioning paper (110), http://www.ahuri.edu.au/research_agenda_funding/research_agenda/archived_research_agendas. 2008.