Dimensions of Housing Participation in Akure, Nigeria

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Abstract

The importance of housing participation to the wellbeing of households cannot be overemphasized. This because when people participate in a process, they are usually satisfied with the outcome. However, the dimension of housing participation is yet to receive require attention in literature. This study examines these dimensions in Akure, Nigeria through structured questionnaire survey. The data obtained were subjected to Single-Factor Descriptive Analysis and Principal Component Analysis. The findings show that much of the variance (73.943%) in the level of housing participation in the study area were explained by the factors of level of participation in housing development, red level of participation in housing development, stages and importance of participation in housing development. The level of participation in housing development component contributed the most in explaining this variance. It concludes that for residents to be satisfied with their housing, there is a need for them to be involved in the process of developing it. And since they are willing to be involved in the process, emphasis should be placed on the different dimensions. It recommends that developers, architects and government authorities should develop strategies for involving users in housing development based on the different dimensions.

Keywords: housing participation, housing preferences, residents, dimensions, factors, users, design

Introduction

Residents' participation has become a topical discourse in housing settlement studies, due to its ability to enhance the level of users' satisfaction (Liu *et al*., 2015; Nuttavuthisit, Pavitra and

Prasarnphanic, 2015). This approach to housing is steadily gaining ground as a productive strategy and developmental concept for sustainable housing provision (Bredenoord, 2016; Johar, 2016). However, King and Hickey (2016) argued that in much of sub-Saharan Africa, the advancement of democratization in developments remain significantly repressed by the persistent neo-patrimonial political systems in spite of the widespread adoption of democracy and increased economic growth. This shows that participation, being a democratic process of development could also be hampered by the political system (, 2018). As a result, governments all over the world are embracing the concept of resident's participation in housing development to handle several housing problems and to provide acceptable and affordable housing to its citizens (.,2020). The study observed that the successes recorded by using this approach to housing development is an indication that it has become necessary for the Nigerian housing sector where it is yet to gain ground.

Ovworomoh, et al. (2023) defined participation as being involved in decision making, to choose the project to be involved in, plan it, implement it, then monitor and control it. Furthermore, Johar (2017) defined residents' participation as an active process where beneficiaries have an impact on the direction and implementation of their housing projects with a view to enhance their wellbeing. Housing participation in this study is defined as the involvement of users in the design and construction of the houses of their abode. Residents usually know what they desire about their living environments; hence, their input in the housing process should be an integral part of the process (, 2020). Residents' participation affords people an opportunity to be involved in the process that produces the residential environment, which affects their day-to-day lives.

Resident's participation is a major tool for understanding the housing needs of users. Thus, it is considered as a way for users to influence developments by contributing to housing development and holding public institutions accountable for the outcomes its management (Roosli, et al, 2018). In essence, participation of residents is vital to improve their wellbeing as it enhances self-development and contribution (Ovworomoh, et al., 2023). Users' participation in housing has the potential for the realization of the Sustainable Development Goals numbered eleven (Sustainable Cities and Communities), through inclusive development of the human settlement making it safe, resilient and environmentally sustainable (Mossin, *et al.,* 2018). Furthermore, Aule, et al. (2020) emphasized that resident's participation is the most reliable approach to achieve this goal. Farmer, Currie, Kenny and Munoz (2015), Liu *et al*., (2015) and Nuttavuthisit, Pavitra and Prasarnphanic

(2015) opined that the importance of residents' participation cannot be overemphasized and that the key issue for researchers and practitioners is to discover the most suitable ways of making it effective within given contexts. This is the reason that Kabirifar and Mojtahidi (2019) and Maeri, *et al.,* (2020) recommended that the target beneficiaries of projects should be sought out and included in the planning and development processes early in the projects to enhance their satisfaction and the realization of their benefits as an additional measure of the project performance.

Aule et al. (2020) explored the outcomes of community participation by reviewing selected studies on the subject. Most of the studies revealed positive outcome of participation especially in housing which includes empowerment of the beneficiaries, residential satisfaction, and mitigation of conflicts between the users and resource persons. It recommended that resource authorities and organizations should seek partnerships with local communities with a sincere motive for empowering the beneficiaries for effective social production of their residential environments. Furthermore, , *et al.* (2017) examined the relationship between residents' participation in housing and residential satisfaction in Akure, Nigeria. The study established a relationship between several aspects of housing design in terms of how the level of residents' participation predicts how satisfied they were with their housing. It also considered other aspects like the stages and preferences for participation in housing thus emphasizing how important it is for residents to participate in the development of their residences. The study utilized single-factor descriptive analysis, mean scoring and Categorical Regression Analysis. Findings revealed that there was a significant and positive relationship between participation and satisfaction in that context, with *p*-value of 0.000.

Ravisree and Brar (2022) examined the roles that community participation plays in the process of affordable housing projects for the poor in India. It sought to identify the extent to which community participation is effective in planning affordable housing programs through a redevelopment housing project in a town in Kerala, India. The data were collected through field survey and personal interviews with the household heads or adults in the selected households. The data were analyzed through eight themes of livability. The result of the study shows that when members of a community are empowered with accurate and adequate skills and information, they are more likely to make informed decisions and choices. The study promotes positive social improvements in the community by strengthening the women members of the community. These

studies have been able to provide certain information on residents' participation; however, there is still a need to provide information on the different dimensions of the concept which is still scarce in literature.

Essentially, the detailed participatory mechanisms that may operate within certain contexts (especially in developing countries) remain under-researched (Nuttavuthisit, Jindahra and Prasarnphanich, 2015). Thus, much attention has not been paid to examining the dimensions of housing participation especially as it relates to developing countries like Nigeria. It is an intention of this study to fill this gap in knowledge. For the purpose of this study, emphasis was placed on identifying the dimensions of residents' participation in housing because these dimensions will help to better appreciate how housing participation could be applied and improved within varying contexts. Examining the dimensions of housing participation would provide a more detailed understanding of the concept and this should enhance the ability to more practically address the issues of non-participation and get more users involved in the housing development process.

Therefore, the aim of this study is to examine housing participation in Akure, Nigeria with a view to identifying its dimensions for satisfactory housing environment. It examined the levels of participation in different aspects of house design and construction, preferred level of participation, importance of residents' participation in housing and identified designer of the houses. The findings of this study would provide information that could be used more practically to argue for the adoption of residents' participation in housing by developers, city planning officials, architects and policy makers in Nigerian cities where necessary.

Materials and Methods

This research relies on primary data collected mainly through questionnaire survey. The variables were as shown on Table 1, and the respondents were asked to select the correct options from the ones provided. The participation variables that focused on different aspects of house design were defined by adapting the findings of Choguill (1996) to this study. The levels in ascending order were self-management (1: the lowest level), conspiracy (2), informing (3), diplomacy/dissimulation (4), conciliation (5), partnership (6), and empowerment (7: the highest level); and they were converted to options in the questionnaire. In order to ensure that the respondents understood the questions and the options, there was a need to simplify the levels for their easy understanding. Therefore, the options were stated as ' I made the major decisions while

the architect made only minor ones' (empowerment); ‘I discussed my needs with the architect and made joint/ equal decisions about it’ (partnership); and ‘I chose it from alternatives that were developed by the architect’ (conciliation). Others were stated as 'The architect had too much control over decision making about it than I did’ (dissimulation); 'I was only informed about decisions made about it (Informing); ' I did not have any form of contact with the designer about it’ (conspiracy); and 'I did it by myself without restrictions from any architect’ (self-management). Other participation variables were defined as shown on Table 1.

Copies of the questionnaire were administered on the transitional and peripheral concentric zones of Akure (See Figure 1). Using data from the National Population Commission and ground-tooling, the population of housing units in the transitional zone was 1,571 buildings, while it was 3878 buildings for the peripheral zone, totaling 5,449 buildings. The sample size for the research was three hundred and fifty-nine (359), which was generated using Sample Size Calculator (an online application). The questionnaire was administered proportionately according to the contribution of each zone to the population size. Sampling was carried out using simple random sampling techniques and the heads of households (male or female) in each house were the basic focus of the questionnaire administration. The percentage return for the structured questionnaire was 84.7%, which was deemed as sufficient for the study. Descriptive Analysis, Principal Component (Factor) Analysis and Standard Deviation were used in the analysis for this study.

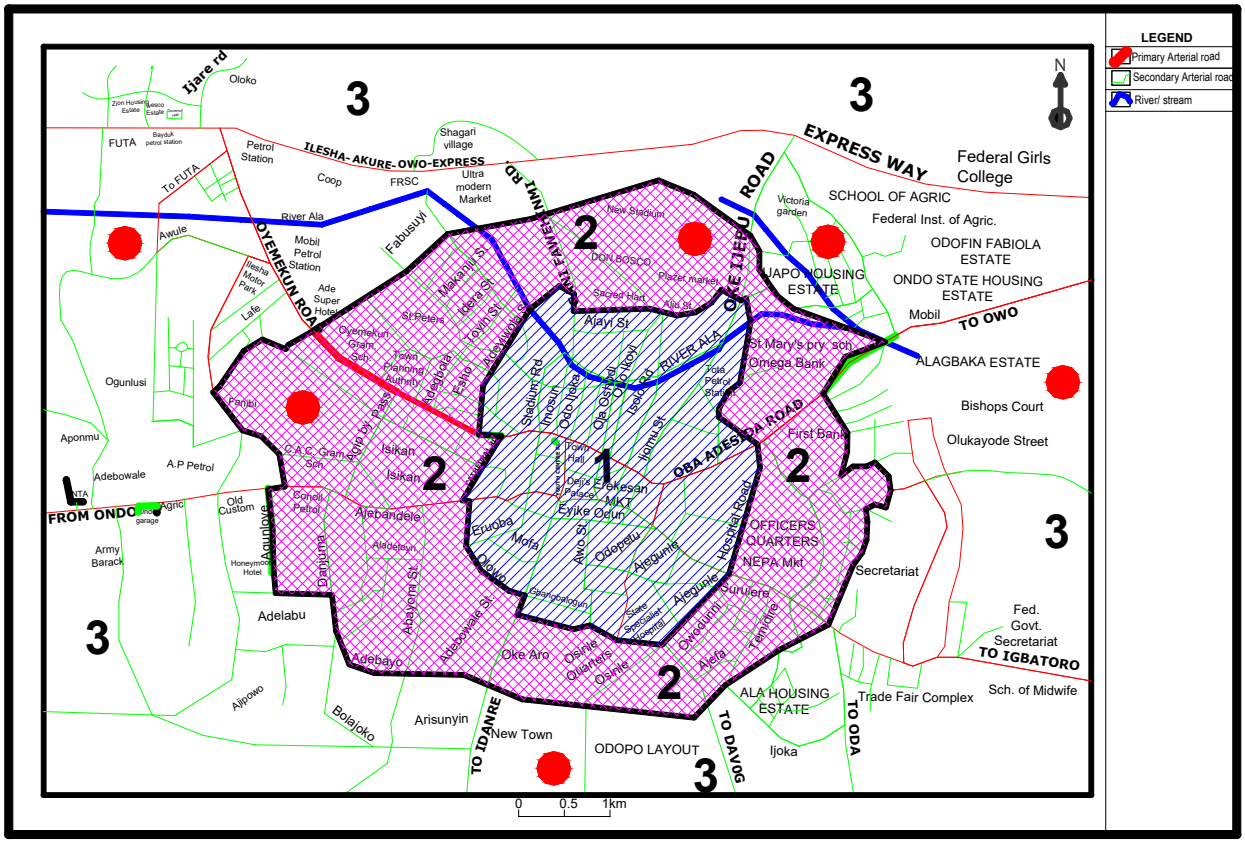

Figure 1: Road Map of Akure with overlay of the concentric zones showing the study areas
Source: Ministry of Housing and Urban Development, Akure; Owoeye and Omole (2012)

Results and Discussions

Variables in the study

Table 1 shows the descriptive statistics for the variables investigated in the study. The Table shows that almost half (46.7%) of the respondents did not have any form of contact with the house designer, almost half of them were not involved in the development of the design brief of their residences, and the same 47.4% of them were not involved in the arrangement of the interior spaces of their abodes. Furthermore, 48% of the respondents were not involved in deciding the numbers of bedrooms in the house, the same proportion were not involved in deciding the sizes of the spaces, and in selecting the building materials for the house. In addition, 47% of them were not involved in selecting the finishing materials, 42.4% of them preferred to discuss their housing needs with the architect and make joint/ equal decisions about design of the house, while 18.1%

of them preferred to make the major decisions while the architect makes only minor ones. This reveals a generally low level of housing participation in the study area and this is contrary to their preferences.

A proportion of 48% of the respondents had no idea who designed their residences, while 68.8% of them considered participation in the design of the houses of their residence as very important. Almost half of the respondents (47.4%) did not participate at in the design of their residences, while over a third (37.5%) of them participate from the inception stage. Over a third (34.2%) of the respondents strongly disagreed that they were involved in selecting the house constructor, while almost a third (33.2%) of them strongly disagreed that they were involved in the construction of the houses.

Table 1: Descriptive Statistics

Items	**Frequency (N=304)**	**Percentages (100%)**	**Standard Deviation**
Level of participation in house design			1.821
I did it by myself without restrictions from any architect	19	6.3	
I did not have any form of contact with the designer about it	142	46.7	
I was only informed about decisions made about it	15	4.9	
The architect had too much control over decision making about it than I did	45	14.8	
I chose it from alternatives that were developed by the architect	22	7.2	
I discussed my needs with the architect and made joint/ equal decisions about it	40	13.2	
I made the major decisions while the architect made only minor ones	21	6.9	
Level of participation in the development of brief			1.907
I did it by myself without restrictions from any architect	26	8.6	
I did not have any form of contact with the designer about it	144	47.4	
I was only informed about decisions made about it	12	3.9	
The architect had too much control over decision making about it than I did	41	13.5	
I chose it from alternatives that were developed by the architect	13	4.3	
I discussed my needs with the architect and made joint/ equal decisions about it	42	13.8	
I made the major decisions while the architect made only minor ones	26	8.6	
Level of participation in the arrangement of interior space			1.911
I did it by myself without restrictions from any architect	32	10.5	

I did not have any form of contact with the designer about it	144	47.4	
I was only informed about decisions made about it	10	3.3	
The architect had too much control over decision making about it than I did	32	10.5	
I chose it from alternatives that were developed by the architect	22	7.2	
I discussed my needs with the architect and made joint/ equal decisions about it	41	13.5	
I made the major decisions while the architect made only minor ones	23	7.6	
Level of participation in deciding the number of bedrooms			1.987
I did it by myself without restrictions from any architect	30	9.9	
I did not have any form of contact with the designer about it	146	48.0	
I was only informed about decisions made about it	16	5.3	
The architect had too much control over decision making about it than I did	22	7.2	
I chose it from alternatives that were developed by the architect	20	6.6	
I discussed my needs with the architect and made joint/ equal decisions about it	37	12.2	
I made the major decisions while the architect made only minor ones	33	10.9	
Level of participation in deciding the sizes of the spaces			1.896
I did it by myself without restrictions from any architect	24	7.9	
I did not have any form of contact with the designer about it	146	48.0	
I was only informed about decisions made about it	13	4.3	
The architect had too much control over decision making about it than I did	32	10.5	
I chose it from alternatives that were developed by the architect	16	5.3	
I discussed my needs with the architect and made joint/ equal decisions about it	54	17.8	
I made the major decisions while the architect made only minor ones	19	6.3	
Level of participation in choosing the building materials			1.909
I did it by myself without restrictions from any architect	36	11.8	
I did not have any form of contact with the designer about it	146	48.0	
I was only informed about decisions made about it	14	4.6	
The architect had too much control over decision making about it than I did	36	11.8	
I chose it from alternatives that were developed by the architect	13	4.3	
I discussed my needs with the architect and made joint/ equal decisions about it	30	9.9	
I made the major decisions while the architect made only minor ones	29	9.5	

Level of participation in choosing the finishing materials			1.950
I did it by myself without restrictions from any architect	43	14.1	
I did not have any form of contact with the designer about it	143	47.0	
I was only informed about decisions made about it	13	4.3	
The architect had too much control over decision making about it than I did	35	11.5	
I chose it from alternatives that were developed by the architect	8	2.6	
I discussed my needs with the architect and made joint/ equal decisions about it	31	10.2	
I made the major decisions while the architect made only minor ones	31	10.2	
Preferred level of participation in the design of the house			1.630
I prefer to do it by myself without restrictions from any architect	24	7.9	
I prefer to not have any form of contact with the designer about it	3	1.0	
I prefer to only be informed about decisions made about it	7	2.3	
I prefer that the architect has too much control over decision making about it than I do	36	11.8	
I prefer to choose from alternatives that were developed by the architect	49	16.1	
I prefer to discuss my needs with the architect and make joint/ equal decisions about it	128	42.4	
I prefer to make the major decisions while the architect makes only minor ones	55	18.1	
Designer of the house			1.337
By self	16	5.3	
Artisan	7	2.3	
Draughtsman	31	10.2	
I used the plan of an existing house	9	3.0	
Architect	114	37.5	
No idea	127	41.8	
Importance of participation in house design			1.120
Very not important	13	4.3	
Not important	20	6.6	
Fairly important	16	5.3	
Important	45	14.8	
Very important	209	68.8	
Stages of participation in development of house			1.885
Inception stage	114	37.5	
House design stage	7	2.3	
Town Planning Approval stage	7	2.3	
Construction stage	11	3.6	
External works stage	4	1.3	
Finishing stage	8	2.6	
Modification stage	8	2.6	
All the stages	1	0.3	

No participation	144	47.4	
Participation in selecting house constructor			1.589
Strongly disagree	104	34.2	
Disagree	36	11.8	
Neutral	17	5.6	
Agree	90	29.6	
Strongly agree	57	18.8	
Participation in house construction			1.558
Strongly disagree	101	33.2	
Disagree	49	16.1	
Neutral	20	6.6	
Agree	80	26.3	
Strongly agree	54	17.8	

Factor analysis

The result of the factor analysis as displayed in Table 2 reveals participatory as well as preference dimensions of housing design and construction. The correlation matrix revealed the presence of many coefficients of 0.3 and above. The result also showed Bartlett's Test of Sphericity Significance value of 0.000, and Kaiser-Meyer-Olkin measure of sampling adequacy of 0.840, which is higher than the recommended index of 0.60. These values indicate the suitability of using Factor Analysis for this study.

As shown in Table 2, the first factor was the level of participation in housing development, which contributed over 51% of the variance in housing participation, and this factor was loaded on eight variables. This is in consonance with the findings of (2017), which emphasized the importance of the levels of residents' participation in housing. The second was preferred level of participation in housing development, contributing over 14% of the variance in housing participation and is loaded on three items. Johar (2017) emphasized the importance of considering the preferences of residents during participation processes and that is in consonance with this finding. The third was stages and importance of participation in housing development, which contributed over 8% of the variance in housing participation, and is loaded on two items as shown in Table 2. It was not surprising that the analysis identified stages and importance of participation as a vital dimension of housing participation. This is so because, the desire of residents to be involved in the process of housing participation is important to them because they usually consider it as an opportunity for self-development and a sense of achievement. This is in addition to the fact that participation usually occurs in stages, which is usually from the inception to commissioning. Thus, the result indicates

that level of participation in housing development contributed the most to the variance of housing participation, followed by preferred level of participation in housing development, and stages and importance of participation in housing development respectively. In essence, the Table shows that all of the variables investigated were loaded on three components mentioned above, with each contributing differently as indicated in the factor loadings.

Table 2: Factor analysis of responses to satisfaction with infrastructure

	Factor loadings	Eigen value	% of variance	Cum %
Factor 1: Level of participation in housing development		6.651	51.161	51.161
Level of participation in the arrangement of interior spaces	0.914			
Level of participation in development of brief	0.910			
Level of participation in design of the house	0.906			
Level of participation in deciding sizes of spaces	0.901			
Level of participation in deciding the number of bedrooms	0.895			
Level of participation in choosing building materials	0.864			
Level of participation in choosing finishing materials	0.845			
Level of participation in selecting the house constructor	0.648			
Factor 2: Preferred level of participation in housing development		1.864	14.339	65.500
Preferred level of participation in house design	0.806			
Participation in the house construction	0.619			
Designer of the house	0.608			
Factor 3: Stages and importance of participation in housing development		1.098	8.444	73.943
Stages of participation in house development	0.805			
Importance of participation in house design	0.623			

Total variance explained = 73.943%

Conclusions and Implications of the Findings

This study examined the dimensions of housing participation in Akure, Nigeria. It found that every variable investigated was loaded under three components in the analysis. Eight variables, which includes level of participation in the arrangement of interior spaces, level of participation in developing the brief, level of participation the design of the house, and level of participation in selecting the house constructor were grouped under the first component and had the highest Eigen

value of 6.651. The second factor was preferred level of participation in housing development with Eigen value of 1.864 and was loaded under three variables. While, the third factor was stages and importance of participation in housing development with Eigen value of 1.098 and was loaded under two variables. The descriptive statistics showed that there was low level of residents' participation in housing in the study area. Conversely, the residents consider participation in the development of their housing environments to be very important which showed their willingness to participate if the opportunity were to be given. This was also manifested in the preferences by the residents to discuss their needs with the architect while making joint decisions about the house designs. The implication of the findings of this study is that there is a need developers, architects and government authorities to develop strategies to enhance the ability of users to participate in the design and construction of their houses because this will likely have a positive effect on their level of housing satisfaction. Emphasis should be placed on their preferences for participation, the stages that they prefer to be involved in, and level of their participation in the different aspects of housing development. Perhaps, the findings could be different in another context. How would the levels and dimensions identified in this study differ in another context? Would the level of willingness to participate in housing development be similar in another setting? Answering these questions would provide more information to improve the current practice for future housing and enhance the expected results. Therefore, there is a need for further research to determine the intricacies of participation and planning in this endeavour.

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