Global Journal of Arts Humanity and Social Sciences
ISSN: 2583-2034

GSAR PUBLISHERS
GLOBAL SCIENTIFIC AND ACADEMIC RESEARCH

OPEN ACCESS

Global Journal of Arts Humanity and Social Sciences
ISSN: 2583-2034
Abbreviated key title: Glob.J.Arts.Humanit.Soc.Sci
Frequency: Monthly
Published By GSAR Publishers
Journal Homepage Link: https://gsarpublishers.com/journal-gjahss-home/

Volume - 4 | Issue - 9 | Sept 2024 | Total pages 663-673 | DOI: 10.5281/zenodo.13768480

EVALUATION OF HOUSING QUALITY IN SELECTED SUBURBAN OF IBADAN, NIGERIA

BY

Dr. AMAO Funmilayo Lanrewaju[1], OYADOKUN Joel. Olufemi[2], SOYEBO Olugbenga Olufemi[3]

[1]Department of Architecture, Faculty of Environmental Sciences, LAUTECH, Nigeria. ORCID Number: https://orcid.org/0000-0002-8422-206X

[2,3] Department of Architecture, Faculty of Environmental Sciences, LAUTECH, Nigeria.

Article History
Received: 01- 09- 2024
Accepted: 14- 09- 2024
Published: 17- 09- 2024

Corresponding author
Dr. AMAO Funmilayo Lanrewaju

Abstract

The study examined the socio-economic characteristics of the residents in selected suburban of Ibadan; identified and examined the housing and neighborhood characteristics; evaluated housing quality and analysed the relationship between the housing and neighbourhood characteristics and housing quality. This is with a view to providing information that would enhance the housing quality in suburban of Ibadan. Primary and secondary data were used for the study. A survey of eleven purposively selected communities from Oluyole and Egbeda local government areas was conducted through a questionnaire administration and expert rating by five independent assessors using penalty scoring. The study employed a systematic random sampling method to select a sample size of 480 representing 5% of the sampling frame of 9600 household heads. The data collected were analysed using descriptive and inferential statistics. The ANOVA indicated that the relationship between residents, housing, and neighbourhood characteristics was significant. The study concluded that housing quality in the suburban of Ibadan is poor.

KEYWARDS: Housing; Neighbourhood; Housing Quality; Socio-economic Status; Suburban

1. INTRODUCTION

Housing quality is a matter of great concern, especially in developing countries because inadequate housing affects a large proportion, perhaps more than 50%, of all urban residents in the developing world (World Bank, 2002). The focus of this study is on housing quality in the suburban area. Housing quality in this study generally refers to the grade or level of acceptability by users of dwelling units and their immediate residential neighbourhood environment, including the design and functionality of the housing structures, building materials used, the amount of internal and external space pertaining to the dwelling and housing service facilities (Hall and Meng, 2006). The quality of housing within any suburban neighbourhood should be such that satisfies minimum health and good living standards, but should also be affordable to all categories of households (Okewole and Aribigbola, 2006).

Housing quality is a complex concept, comprising several characteristics (Ibem, 2012). It is expressed according to contexts: urban/rural, formal/informal housing, developing/developed nations. Housing quality is therefore difficult to measure directly because quality can be laden with physical, social, economic, and cultural dimensions which are difficult to capture. Housing quality standard may however be defined as the measurement of users acceptability at a given time and place in a given set of sociocultural, technological, and economic environments (Ibem and Alagbe, 2015).

1.1 STATEMENT OF THE RESEARCH PROBLEM

Many past studies on housing quality have emphasized the qualitative dimension of the housing problem (Hanmer et al, 2000; Olanrewaju and Akinbamijo, 2002; Olanrewaju, 2004; Neilson, 2004; Jiboye, 2009; Olotuah, 2007; Wahab, 2001; Coker et al, 2007; Gilbertson et al., 2008; Owoye and Omole 2012). The main qualitative problem facing urban housing dwellers is quality of the housing units and neighbourhood environment. In an effort to address these concerns, researchers are re-examining the housing quality especially in the urban centres. A vast array of literature investigates the housing quality concept from different contexts: Rural/urban, formal/informal, and developed and developing

countries. The results of these studies have shown varying factors, patterns, contexts, and concepts in the housing quality evaluation. They evaluated quality of the housing in the core area based on the facilities and services provided to the urban dwellers but did not address the physical characteristics of housing such as sizes of spaces, privacy, households' size, house types, and house forms in their various studies. Hanmer et al (2000) concluded that qualitative housing involved the provision of infrastructural services. Nelson (2004) stipulated five basic quality criteria, namely: compliance with bearable standard; free from serious disrepair; energy efficiency; modern facilities and services; safe and secure and healthy. Sengupta and Tipple (2007) suggested the use of four major indicator variables to analyse quality: housing consumption, connection to services, and location characteristics. Nevertheless, physical housing characteristics were excluded in their conceptual framework.

Olotuah (2006) developed a methodological framework for evaluating housing adequacy in a suburban area (Oba-Ile) in which a linear model was developed through multiple regression analysis for the prediction of housing quality. The linear model however did not account for the neighbourhood characteristics such as: quality of open spaces, location, layout, connectivity, and quality of infrastructural facilities and services.

Apart from the variation in the concepts of the housing quality assessment, certain gaps are observed in the existing literature. Most of the studies were conducted on the core areas of the urban cities such as Akure, Oshogbo, Ibadan, and Lagos. These past studies have focused more on the central city slum, while the housing qualities in the suburban have been neglected. Few studies on the sub-urban paid limited attention on the housing quality (Adedibu et al, 1998; Adama, 2006).

Ilesanmi (2012) investigated beyond the scope of housing facilities and services and added neighbourhood quality as indicator for housing quality evaluation. Five neighbourhood quality indicators were developed and used, namely: quality of neighbourhood roads, quality of open spaces, quality of location, quality of environmental layout, and quality of landscaping but did not involve the users of the public housing for the assessment. Instead, an expert assessment of housing quality indicators was adopted. Coker et al (2007), examined housing quality and neighbourhood environment but in the context of urban centre (Core areas) in which the city of Ibadan was divided into three major zones.

In this regard, socio-economic characteristic of the users is one of the most important factors in the study of housing quality. People of different socio-economic background are likely to have varying responses toward the use of space, facilities, and services. Socio–economic characteristics of the residents has been established to have an influence on subjective assessment of quality (Jiboye, 2009; Omole, 2012). It is expected that residents with higher socio–economic status may apply a higher standard of assessment in the evaluation of their dwelling units and neighbourhood in general. Demographic variables of an individual such as Employment status, income status, educational background, means of acquisition, numbers of people in the household are important factors in determining the quality of the facilities and services in the building and the entire neighbourhood as whole. The study seeks to compliment previous research by extending beyond core areas of urban centres and examining the housing quality of the suburban of Ibadan in terms of a wider range of physical characteristics of the housing and neighbourhood of the study area. Based on the above-established gaps, this research provided answers to the following questions:

1. Who are the residents of the suburban?
2. What are the characteristics of housing that exist in the study area?
3. What kind of neighbourhood do we have in the suburban?
4. What is the quality of housing like in the study area?

1.2 AIM AND OBJECTIVES

The aim of the study was to examine the factors that influence housing quality in the suburban of Ibadan with a view to informing sustainable housing policy. The specific objectives of the study were to:

1. examine the socio-economic characteristics of the residents in selected suburban;
2. identify and examine the housing and neighbourhood characteristics in the study area;
3. evaluate the quality of housing in the study area;
4. analyse the relationship between the housing and neighbourhood characteristics and the housing quality in the study area.

1.3 JUSTIFICATION OF THE STUDY

Study of housing quality in the suburban is important for the purpose of gathering, analysing, and presenting information on the housing and neighbourhood qualities in the study area. It also provides a baseline from which changes in policies and activities may be evaluated. Good Housing Quality Standards has served as dynamic starting points for deeper understanding of housing and neighbourhood characteristics and appropriate responses.

1.4 SCOPE OF THE STUDY

This study focused on housing quality. The study covered selected areas of Oluyole and Egbeda Local Government Areas in the suburban of Ibadan, Oyo State. The study was limited to the housing quality, physical housing, and neighbourhood characteristics, and the socio-economic characteristics of residents in the study area.

1.5 STUDY AREA

The city of Ibadan is chosen because it is a traditional urban centre with phenomenal growth which explains the rapid spread out of the city. The city has experienced significant urbanization and industrialization. Ibadan is one of the largest cities in Africa and this makes it ideal for the research. It is suggested that understanding the housing, neighbourhood characteristics, and housing quality of the study area could help in formulating policies for qualitative housing in the suburban.

2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 HOUSING

Housing has been universally accepted as one of the most essential necessities of human life and a major economic asset in every nation. Adequate housing provides the foundation for stable communities and social inclusion (Oladapo, 2006). Gilbertson et al. (2008) observed that there is a significant relationship between housing conditions, physical and mental health of individuals. Osuide (2004) suggests that one of the most fundamental elements of human dignity is to have a safe place to live and this enhances human development. The World Health Organization (WHO, 2010) also describes housing as residential environment which includes the physical structure used for shelter, all necessary services, facilities, equipment, and devices needed or desired for the physical and mental health and social well-being of the individual and family.

2.2 NEIGHBOURHOOD

Several convergent definitions have been given to the term Neighbourhood. Kallus (2000) defined housing as "a place with physical and symbolic boundaries" while Morris and Hess (1975) labeled it "a place and people with common sense limit as the area one can easily walk over". Golag (1982) sees it as "a physical or geographical entity with specific boundaries". Hallman in his approach, attempted to integrate social and ecological perspectives by defining neighbourhood as "a limited territory within a large urban area, where people inhabit dwellings and interact socially.

2.3 HOUSING QUALITY

Housing quality is a complex concept with broader social and economic meaning than quantitative housing supply. It accounts for both quantitative and qualitative dimensions of housing units, their immediate surroundings, and the needs of the occupants. Moreover, the concept of housing quality is relative as it relates to local standards and conditions. What is considered to be reasonable quality in one context may be considered poor quality in another context. The quantitative dimension of housing quality refers primarily to objective structural, material, social, and economic constituents of housing products or outcomes that can be measured and that result from the performance of the housing sector.

2.4 HOUSING QUALITY STANDARDS

Housing standards vary from one nation to another and also within a particular country; variations in climate, culture, degree of urbanization, and socio-economic progress affect standards. The UNO (1969) stated that standards derive from a people's cultural level of attainment. It has been argued that standards should combine the best features of traditional practice with the economy and rationality of modern techniques. In a study on Benin City, Onokerhoraye (1976) empirically classified housing standards in Nigeria into two categories: first, space standard, which defines housing development in terms of plot sizes, number of buildings per unit area of land, and occupancy sizes. The second relates to performance standard, which describes the quality of the environment.

2.5 CONCEPTS OF HOUSING QUALITY

The need to appreciate the relevance of qualitative housing requires an understanding of the concept of 'quality 'which according to Onion cited in Afon (2000), is a mental or moral attribute of a thing which can be used when describing the nature, condition of that particular thing. Jiboye (2004) noted that getting a definition of quality depends not only on the user and his or her desires but also on the product being considered.

2.6 HOUSING QUALITY EVALUATION: DIMENSIONS, LEVELS AND APPROACHES

Housing quality is difficult to measure directly because quality can be loaded with physical, social, economic, and cultural dimensions which are difficult to capture. They are classified as quantitative and qualitative dimension of housing quality evaluation. The quantitative dimension of evaluation refers primarily to objective structural, material, social, and economic constituents of housing products or outcomes that can be measured while the qualitative dimension is much more subjective and difficult to measure. It represents the perceived meanings and values of factors such as the 'comfort' or 'privacy' that are afforded by different dwelling types, lifestyles, and the preferences and expectations of the inhabitants. As a result of the high local and regional variations in the quantitative and qualitative dimensions of housing quality, it is impossible to define one standardized set of criteria and indicators that apply equally to all areas at all times. Canter (1983) and Kaitilla (1993) described qualitative dimension of evaluation as subjective evaluation.

On the other hand, in the objective dimension to evaluation, people see important attributes of their physical environment and evaluate them based on certain standard of comparison with standards defined by what people believe they may reasonably aspire to. This implies that individual's evaluation of housing quality involves a multiplicity of both subjective and objective variables which depend on the manner in which attributes of the environment are perceived by an individual and the standard reference to which such attributes are compared with.

Bonnefoy (2007) proposed four levels of residential environment. These are individual buildings, neighbourhood, neighbours, and community levels. In each of these levels, physical, social, and socio-physical characteristics of housing environment can be evaluated. However, at the physical level, the characteristics of individual housing units, immediate surrounding environment as well as neighbourhood facilities are examined. The natures of interactions or social relationships among residents of housing units are assessed at the social level. Issues related to social activities, communal activities, and social interactions as well as social cohesion are studied. The socio-physical level of evaluation primarily focuses on users' reaction to both the physical and social environment.

Olotuah (2004 and 2005b), Omole (2001), Konade et al, (1994), Lux (2005), Jiboye (2004 and 2010), and Morris et al (1976) indicate that socio-economic characteristics of residents, physical characteristics of housing units, neighbourhood characteristics,

housing management structure, physical and environment amenities are key factors influencing housing quality evaluation. This suggests that assessment of physical characteristics of housing units is an important aspect of evaluative measure used in judging the success of housing quality evaluation

At community level, evaluation of housing quality has particularly been on community attitude and perception on quality. Vast literature from studies (Okoko, 2000; Adesina, 2007; Dupont, 2005; Andersen, 2003; Olotuah, 2006b; Owoeye, 2012) view housing in the urban fringes as one of the root causes of geographically, socially, and racially patterned disadvantages such as crime, poverty, low neighbourhood property value and other negative externalities in the developing countries. Elsewhere, other research studies (Bryant et al., 1982; Apparicio and Seguin, 2006) have shown how housing in the peripheries provided low-income people access to land for housing, reduced high incidence of poverty among beneficiaries, and addressed the challenge of inadequate housing as well as the relative inequality in accessibility to urban services among residents.

Therefore, one can conclude from the foregoing that within the context of various levels and dimensions to evaluation of housing quality, a wide range of issues can be examined. These include physical characteristics of housing units and immediate environment, response of residents to housing environment, accessibility to neighbourhood facilities, and community attitude.

2.7 RELEVANT INDICATORS FOR HOUSING QUALITY EVALUATION

In assessing the quality of housing, qualitative studies have identified some others criteria as relevant indicators for quality evaluation in residential development. Among such is the one by Ebong,1983 who acknowledged aesthetics, ornamentation, sanitation, drainage, age of building, access to basic housing facilities, burglary, spatial adequacy, noise level within neighbourhood, sewage disposal, and ease of movement among others, as relevant quality determinants in housing.

However, Hanmer et al., 2000, concludes that qualitative housing involves the provision of infrastructural services which could bring about sustainable growth and development through improved environmental conditions and improved livelihood. In determining the quality of residential development, Neilson (2004) stipulates five basic criteria which provide that housing must be in compliance with bearable standard, free from serious disrepair, energy efficient, provided with modern facilities and services, and that it must be healthy, safe and secure.

These indicators consist of variables such as; access to basic housing and community facilities, the quality of infrastructural amenities, spatial adequacy and quality of design, fixtures and fittings, building layout and landscaping, noise and pollution control as well as security. There are however indications from these various studies that a single variable may not be sufficient to assess the qualitative nature of residential development. Therefore, qualitative assessment should also take into account type of constructions, materials used, services, spatial arrangement and facilities within dwellings, function, and aesthetics, among others (Jiboye, 2004). Other previous studies have indicated that a more appropriate method of evaluating the quality of the built environment is through the affective responses based on the user's assessment (Ilesanmi, 2005; Owoeye and Omole, 2012).

2.8 THE CONCEPTUAL FRAMEWORK

In this study, conceptual framework refers to the three significant key concepts which are: housing quality, housing, and neighbourhood characteristics. One of the major objectives of this study is to analyse the relationship between the socio-economic characteristics of the users, the housing and neighbourhood characteristics, and the housing quality. Therefore, the conceptual framework of this study called for the understanding of these relationships. From the literature, it was discovered that the housing and neighbourhood characteristics influence the concept of the housing quality depending on the characteristics of the users.

2.8.1HOUSING CHARACTERISTICS

Housing characteristics in this study entails all physical aspects of the housing units and are measured by functional, technical, and aesthetic qualities. The functional qualities are fittings and fixtures, the spatial organization of the building, house type, sizes of space, privacy, and housing facilities provided. Technical qualities include: Soundness of building components such as roof, wall and floor, finishes and fittings, materials of building construction, types of construction, structural stability, and safety. Aesthetic qualities: perception of building design, form, and styles. These characteristics were measured on a Likert-type Scale.

2.8.2NEIGHBOURHOOD CHARACTERISTICS

The Neighbourhood Characteristics in this study refer to the immediate neighbourhood qualities. They are quality of: Infrastructures and communal services, landscaping, open spaces, layout, and connectivity and location; Quality of neighbourhood infrastructures and communal services; Quality of landscaping; Quality of open spaces; Quality of layout and connectivity; Quality of the location; physical isolation; security and safety of the housing unit and the entire neighbourhood.

Fig. 2.1: Conceptual Framework for Studying Housing Quality Evaluation

The diagram above explains how the concept of housing quality, housing, and neighborhood characteristics are defined in this study.

3.0 METHODOLOGY

3.1 METHODOLOGICAL APPROACH

The survey research method was adopted for the purpose of this research. Two Local Government Areas amongst six Local Government Areas in the suburban of Ibadan were purposely selected due to their location, population, and development. Evaluation through expert complemented the data from questionnaire. Such a combined approach was thought to minimize limitations that could originate from research techniques.

3.2 STUDY POPULATION, SAMPLING FRAME AND SAMPLE SIZE

This study concentrates on the fringe areas of Ibadan city. Two local government areas (Oluyole and Egbeda) with highest population were purposely selected out of six local government areas. Population of study for this research consists of all the household heads in the two selected local government areas namely Oluyole and Egbeda local government area in the suburban. The study population for the Oluyole local government area is 6,432 household heads and Egbeda local government area is 3,168 household heads which make a total of 9,600 household heads.

Stratified Sampling Method was also used to select the wards based on the location, population, and developments. The wards that border the metropolis or located within urban areas were purposively selected for the study. These areas have constant developments and are the wards that received most of the excess population and activities from the city. Four wards were selected within Oluyole Local Government area, namely: Ward 1, Ward 2, Ward 5, and Ward 10. At Egbeda Local Government area, four wards were also selected, namely: Ward 5, Ward 7, Ward 9, and Ward 10. The communities that have ongoing developments in the two local government areas were selected for the study. The selection was done in such a way that wards with just one community were picked and where there was more than one community in the selected wards, Random Sampling Technique was used to select sampled communities as shown in Table 3.1. At Oluyole local government area, seven (7) communities were selected. They are: Ayegun, Odo – Ona Elewe, Podo, Odo Ona Nla, CRIN, Odo-ona kekere, Arapaja. At Egbeda local government area, four (4) communities were also selected. The communities selected are: Olodo, Wakajaiye, Egbeda, and Olode. The existing buildings within the eleven (11) communities in the two local government areas constitute the sampling frame for the study.

A sample size of 480 household heads (four hundred and eighty) was chosen systematically through random sampling to adequately provide a picture of the quality of housing predominant in the total population. Sample size of 5% of 9600 buildings was taken and considered reasonable for the study. Using random sampling approach to select respondents in the first house and subsequently every 20th houses in the streets involved were selected for questionnaire administration. At Oluyole local government, a total number of three hundred and twenty-two (322) questionnaires were distributed while at Egbeda local government; a total number of one hundred and fifty-eight (158) questionnaires were also distributed to the head of the household.

Table 3.1: Selected Wards, Communities, Sampling Frame, and Sample Size in the Study Areas

Local government	Wards selected	Communities with Developments	Selected Communities	Sampling Frame	Sample Size
Oluyole	Ward 1	Ayegun	Ayegun	439	22
	Ward 2	Odo-Ona Elewe, Idi-Iroko, Podo	Odo – Ona Elewe Podo	1,356 871	68 44
	Ward 5	Idi-Ayure, Odo-Ona Nla, CRIN, Toll gate, Odo-ona kekere	Odo Ona Nla CRIN Odo-ona kekere	1,601 1,475 439	80 74 22
	Ward 10	Arapaja	Arapaja	251	12
Sub Total				**6,432**	**322**
Egbeda	Ward 5	Olodo,	Olodo	689	34
	Ward 7	Wakajaiye	Wakajaiye	1026	51
	Ward 9	Egbeda	Egbeda	1,121	56
	Ward 10	Alakia, Olode	Olode	332	17
Sub Total				**3,168**	**158**
Total				**9,600**	**480**

+

Table 3.2: Summary of Sampling Frame and Sample Size in the Study Areas

Local government Areas	Sample Frame	Sample Size
Oluyole	6432	322
Egbeda	3168	158
Total	**9600**	**480**

3.3 SOURCES OF DATA

Data were obtained through two major sources namely: Primary and Secondary sources. The Primary data were sourced through the use of structured questionnaire as instruments. The secondary data used were sourced from secondary sources including the land use maps of Ibadan from previous publications, housing demographic, population, published materials from journals, textbooks, government publications, and gazettes.

3.4 QUESTIONNAIRE ADMINISTRATION AND DATA COLLECTION

The primary items being sampled were the buildings, the neighbourhood, and their households represented by the household heads in relation to the buildings where necessary while the sampling strategy was the random sampling design. The Questionnaires were administered to the respondents. A random sampling technique was employed in selecting respondents in the study area. Every other house in the study area will be selected for questionnaire administration, starting from the first dwelling units in each of the streets or neighbourhoods involved. In each sampled house selected, one household was selected for the survey. Questionnaire was administered on either the head of household or the landlord. Where these categories of people were not available, an eldest member of such household was selected for the survey.

Descriptive and analytical statistical tools were used to analyse the data thus obtained.

3.5 DATA ANALYSIS

Data collected were analysed quantitatively using univariate, bivariate, and multivariate statistical analysis. The following were the data used, source of data, instrument used, and mode of data analysis according to research objective.

Objective 1: Examine the socio-economic characteristics of the residents in selected suburban

Data used: The information on the socio-economic characteristic of the residents was obtained by studying the demographic pattern of residents; gender, age, religion, ethnic group, marital status, level of education, level of income, occupation, tenure status and length of stay, and household size.

Source of data: These data were obtained from household heads who as expected had detailed information of the house and the household members.

Data instrument: Structured questionnaires were adopted. Scheduled visits to the study areas were made twice in a week to either distribute or collect the questionnaire from residents. Relevant questions encouraged respondents to supply necessary information.

Data treatment: The Data obtained was subjected to thorough analysis through descriptive statistics (univariate analysis), like means, frequencies, and percentages presented in different formats like tables and charts. A comparison between the relevant information drawn from the two local government areas was carried out. This analysis was however done through cross tabulation and chi-square tests.

Objective 2: Identify and examine the housing and neighbourhood characteristics in the study area

Data used: to achieve this objective, data such as spatial organization of buildings, spaces provided such as living room, dinning, fittings and fixtures, housing facilities such as toilet, bathrooms, and house services including sanitation, water supply sewage disposal among others were collected.

Data on neighbourhood characteristics were also obtained. Neighbourhood infrastructures, communal facilities, and services, pedestrian and vehicular circulation, layout and connectivity, designed landscape, open spaces between housing units, street quality, pollution (noise level), site location (physical isolation and safety).

Source of data: These data were obtained from respondents and through expert rating by five independent assessors (Qualified Architects). Physical observation of the buildings and the entire neighbourhood, photographs taken, and Google earth search machine.

Data instrument: Questionnaire was also used to elicit information on housing and neighbourhood characteristics of the study area.

Data treatment: The quantitative data were analysed using descriptive statistics and the results presented in tables. The relationship between gender and arrangement of spaces, privacy, and provision of spaces were analysed through cross tabulation, chi-square test, and other relevant statistical tests.

Objective 3: Evaluate the Housing Quality in the Study Area

Data used: Data such as adequacies of basic infrastructures like water supply, electricity, waste disposal, drainage and road, adequacy of layout and connectivity, open spaces, and location were obtained. Others included; suitability of building design, the spatial organization of the building, soundness of building components, materials of building construction, physical integrity and structural quality of buildings, and conditions of building elements and fixtures.

Data relating to the following were also collected through expert rating. They are:

External Visual quality: defects include peeling/fading external finishes such as renderings and painting; weathered exterior wall finishes; paint decay, and removing surface materials.

Material quality: defects in building elements in need of major or minor maintenance, such as dilapidated roof, wall, and floor elements, including ceiling collapse and broken tiles.

Structural quality of buildings: defects include evidence of failing structures such as partial settlement in foundations or sagging beams; use of non-durable materials; and overall lack of long-term integrity in terms of structure, fabrics, and materials.

Detailing quality of buildings: defects relate to the performance of the operational elements, such as doors, windows, ceilings, roofing members, and fascia boards: broken doors and windows fixtures; leaking roofs; and deteriorating timbers.

Quality of housing services: defects include dilapidated appliances and amenities such as broken and leaking sanitary, plumbing, water supply, and sewage disposal pipes or fixtures.

Quality of neighbourhood infrastructures and communal services: defects include poor road surface conditions, pot-holes, inadequate drainage, broken kerbs, in efficiency of vehicular circulation, inadequate street light, poor structure or dilapidated communal services such as school, post office, civic centre, and so on.

Quality of landscaping: defects include lack of designed landscape or poor condition.

Quality of open spaces: the condition, layout, and efficiency of open spaces between housing units.

Quality of layout and connectivity: defects include spatial disorder or general inefficiency of layout, poor pedestrian circulation and street quality.

Quality of the location: defects may include physical isolation, security, and safety of the housing unit and the entire neighbourhood.

Source of data: These data were obtained through expert rating by five independent assessors, using penalty scoring within similar time-frames. Data on the housing quality were also sourced from respondents through the questionnaire.

Data instrument: Direct questions in the questionnaire and penalty scoring from expert rating were the most relevant instruments.

Data treatment: Data obtained were subjected to statistical analysis like analysis of variance, regression analysis, cross tabulation, and chi square. Multiple regression analysis of the data was carried out to analyse the housing quality of the study area.

Objective 4: Analyse the relationship between the socio-economic characteristics of the residents, housing and neighbourhood characteristics, and the housing quality in the study area

Data used: The data were extracted from the results obtained from objective 1, 2 and 3

Source of data: These data were obtained from respondents and expert

Data instrument: Direct questions in the questionnaire were the most relevant instrument

Data treatment: Data obtained were subjected to statistical analysis like analysis of variance, regression analysis, cross-tabulation, and chi square. Correlation of these processes with the results in objective 1, 2, and 3 was done; multiple regression analysis of the data were carried out to find the relationship between the socio-economic characteristics of the respondents and housing quality of the study area. Factor analysis will also be used to reveal which factor contributes most to the housing quality problems encountered in the study area.

4.0 RESULT, ANALYSIS AND INTERPRETATION

4.1 RESIDENTS, HOUSING AND NEIGHBOURHOOD CHARACTERISTICS OF THE STUDY AREA

This study aimed at examining the socio-economic characteristics of the residents in the selected suburban of Ibadan, Nigeria. This was achieved through the use of descriptive statistics at the univariate level, using frequency distribution, percentages, and charts. The socio-economic variables examined include; gender, age, marital status, religious background, ethnicity, employment status, occupation, monthly income, educational background etc. Information on the housing characteristics such as type of building, duration of stay in the current building, reasons for staying, and number of persons living in the household were also examined.

The aim was also to examine the housing and neighbourhood characteristics of the study area. In order to achieve this objective, parameters relating to spatial organization of buildings, spaces provided for such as living room, dinning, fittings and fixtures, housing facilities such as toilets, bathrooms, and house services including sanitation, water supply sewage disposal among others were examined. The neighbourhood characteristics such as provision of infrastructural facilities like roads, drainages, electricity, social institutions like schools, health services, civic centres, layout and connectivity, open spaces, physical isolation, safety were also identified and examined.

4.2 THE SOCIO-ECONOMIC CHARACTERISTICS OF THE RESIDENTS

Statistical Package for Social Scientists (SPPS) were used to analyse variables. A brief description of the socio-economic composition of respondents in the study area reveals that 67% of the respondents were male while 33% were female in the Oluyole local government area. This represents the gender ratio of the representatives of the different households to which questionnaires were administered and eventually retrieved. It suggests that the men were more accessible and willingly to contribute to the course of this study. It also explained the extent to which men traditionally dominate most households in Nigeria. It was observed that the men within the communities selected were generally more calm and accommodating, unlike the women who were always in a hurry to dismiss the researcher. The age range indicates that 63% of the respondents were either 40 years old or less than 40 years old, respectively. Thus, suggesting the predominance of middle-aged tenants over older adults' tenants occupying most informal housing in the studied area. From the survey, 65% were married, while 35% were single. The socio-economic status revealed that 45% of the respondents are low-income, 30% are low- medium income, 20% are upper-medium income while only 5% are high-income. This suggests that only few people are comfortable with their income, showing that the majority of the habitants are poor.

The result reveals that respondents from household with 4 to 6 persons accounted for the simple majority (42.1%) of the total respondents, followed by respondents living in an household of 3 to 4 persons, accounting for (24.4%) of the total population. Furthermore, the result also reveals that respondents living in a household of 9 persons and above accounted for the least proportion of (9.0%). This is an indication that most of the houses in the study area were not overcrowded as in case of central city.

4.3 HOUSING CHARACTERISTICS OF THE STUDY AREA

The result indicates that adequate spaces were provided for all the housing units examined. Significant proportion from the two study area supported that adequate spaces were provided or the various housing unit examined. For example (88.8%) respondents from the two study area agreed that adequate provision was made for living room, (73.5%) agreed on adequate spaces provided for dining room, (89.6%) for kitchen, and (89.8%) for bedroom.

However, the result reveals that provision for housing services and facilities such as water closet were not adequately provided in the study area. Also, condition of the building components and materials were analysed and revealed not to be in good condition.

4.4 NEIGHBOURHOOD CHARACTERISTICS OF THE STUDY AREA

The result revealed the absence of adequate landscape, open space, street layout, efficiency of open space between units. However, the result shown that the study areas were generally not overcrowded. Majority (58.8%) of the respondents agreed to the safety of the entire neighbourhood. The study indicated that significant proportion (68.8%) did not agreed with the safety of the noise level within the neighbourhood especially in Oluyole study area. Finally, majority (53.8%) of the respondents did not agree with the safety of the environmental related problems, with Oluyole study area accounting for a higher proportion of (31.7%).

4.5 HOUSING QUALITY IN THE STUDY AREA

An evaluation of the housing quality in selected urban fringes of Ibadan, Nigeria was carried out based on variables considered as relevant indicators of quality in housing evaluation. These include; adequacies of basic infrastructures like water supply, electricity, waste disposal, drainage and road, adequacy of layout and connectivity, open spaces, and location. Others include; suitability of building design, the spatial organization of the building, soundness of building components, materials of building construction, physical integrity and structural quality of buildings and conditions of building elements and fixtures.

The Relative Importance Index (RII) was used to evaluate housing quality in the study area. RII is computed using the following formula:

Relative Importance Index (RII) = $$\frac{\sum w}{AN} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{5N}$$

Where *W* is the weighting given to each factor by the respondent, ranging from 1 to 5, (n1 = number of respondents for very inadequate, *n2* = number of respondents for inadequate, *n3* = number of respondents for fairly adequate, *n4* = number of respondents for adequate, *n5* = number of respondents for very adequate. *A* is the highest weight (i.e. 5 in this study) and *N* is the total number of samples. The relative importance index ranges from zero to one.

The result revealed that respondents were not satisfied with the quality of spaces like kitchen, toilet, and bedroom. With regards to quality of spaces provided, the living room with an RII value of 0.65 ranked first, followed by bedroom raking second with an RII value of (0.61). Finally, the result revealed that toilet and outdoor spaces, each with a corresponding RII value of (0.55) ranked least in terms of quality of spaces provided in the house.

4.6 HOUSING QUALITY EVALUATION BY EXPERT RATING (PENALTY SCORING)

The study revealed a wide range of defects in which interventions, improvements, and repairs were required: External visual quality, material, structural, detailing, and service defects. Defects related to the quality of the neighbourhood environment were also observed. Degrees of defects however differed significantly between the Oluyole and Egbeda local government areas. The Egbeda (Olodo, Wakajaiye, Egbeda, Olode neighborhood) recorded a higher rating than the Oluyole (Ayegun, Odo – Ona Elewe, Podo, Odo Ona Nla, CRIN, Odo-ona kekere, Arapaja neighbourhood) both for housing quality and neighbourhood infrastructure.

4.7 RELATIONSHIP BETWEEN HOUSING QUALITY AND CHARACTERISTICS OF THE RESIDENTS, HOUSING, AND NEIGHBOURHOOD IN THE STUDY AREA

The result revealed that there is a significant relationship between income level of the respondents and housing facilities used in the house. The table 4.1 also presents the correlation analysis on the relationship between income level of respondents in the study area and housing facilities (toilet type). The result yielded a correlation coefficient of (0.40) indicating a positive relationship between income level and housing facilities (toilet type). However, the significant p-value of (0.0138< 0.05) i.e. less than the 5% alpha threshold value indicates that the result was significant.

Table 4.1: Relationship between Income Level and Housing Facilities

Correlations			
		Income Level	**Housing facilities**
Income Level	Pearson Correlation	1	.480
	Sig. (2-tailed)		.0138
	N	480	480
Housing facilities	Pearson Correlation	.480	1
	Sig. (2-tailed)	.0138	
	N	480	480

The result yielded a Chi square value of (139.447) and a significant p-value of (0.003 < 0.05) i.e. less than the 5% alpha threshold value.

Table 4.2: Relationship between Gender and Spatial Organization of Bedroom

Gender	Spatial organization of Bedroom						Total
	No response	Very Inadequate	Inadequate	Fairly Adequate	Adequate	Very Adequate	
Male	0	58	6	70	113	47	294
Female	3	7	75	44	39	18	186
Total	3	65	81	114	152	65	480

Pearson Chi Square (139.447) df(5) p = 0.001

The result from the table above indicated that female and male have different perception toward the adequacy of spaces such as bedroom, kitchen, and toilet in terms of; privacy and arrangement. The result indicates that is significant relationship between gender and the spatial organization of bedroom.

Generally, the result indicated the inadequate quality of spaces, housing services, housing facilities, building material, integrity of building components, layout and connectivity, open spaces, location, neighbourhood infrastructures, and communal services in the study area. The inadequacy infrastructural facilities in the area of study have its numerous associated problems on the general environment, socio-economic lifestyle, and housing quality.

The study also assessed the quality of housing and neighbourhood environment through expert (qualify Architects) by penalty scoring rather than positive scoring. The main reason for using users and expert based methods was to see whether there is significant difference in the results. The findings from the study revealed that there was no significant difference in the results obtained from both users based and expert rating. The results from the findings indicated that there is poor housing quality in the suburban of Ibadan.

5.0 CONCLUSION

This study examined the housing and neighbourhood quality of selected suburban in Ibadan, Nigeria, through a survey of eleven purposely selected communities within the local government areas. It reported findings from both users and expert assessment of housing quality in the selected areas. It used a set of quality indicators identified and derived from the literature. Using descriptive statistics, the paper presented a summary of the socio-economic characteristics, housing and neighbourhood characteristics and housing quality.

This study has shown that the majority of residents of the suburban in Ibadan are public/civil servant and self- employed. The finding on the assessment of housing quality indicates some inequalities among the residents; with middle and high income apparently demonstrating a higher level of housing quality compared to low income. This is expressed in terms of the quality and adequacies of infrastructural facilities, building designs, elements, fittings and fixtures rated in the study.

However, these variations were caused by factors such as; poverty, level of education, use of professionals in building construction, building components, materials of building construction, structural

quality of building, quality of layout and connectivity, quality of open spaces, quality of housing and neighbourhood services and absence of adequate physical planning in the study area. Despite noticeable disparities in housing quality amongst the studied areas, socio-economic factors had significant influence on the overall housing quality. The finding confirms that the quality of housing in the residential neighbourhoods is influenced and determined by the socio-economic factors among other related factors. The study concluded that housing quality in the suburban of Ibadan is poor and the socio-economic status of the residents had significantly influenced the housing quality.

REFERENCES

1. Adama, A. E. (2006): Housing Finance Mechanisms in Offa Urban Fringe, Kwara State. Msc Thesis. Department of Urban and Regional Planning, Ladoke Akintola University of Technology, Ogbomoso, Pp. 1 – 32
2. Adedibu, A. A., Opeloyeru, G. O. and Ibrahim, M.A. (1998): Monitoring urban growth in developing cities: A case study of Ilorin, *Journal of the Nigerian Institute of Town Planners,* Vol. 11, Pp. 70-84
3. Adeniji, G. and Ogundiji, B. (2009): Climate Adaptation in Nigerian Cities: Regularizing Informal and Illegal Settlements in Ibadan*: Fifth Urban Research Symposium 2009*
4. Adesina, A. (2007): Socio-spatial transformations and the urban fringe landscape in developing countries. Paper presented at United Nation University Institute for Environment and Human Security (UNU-UHS) Summer Academy on Social Vulnerability and ResilienceBuilding in Mega city. Munich, Germany. July 22-28.
5. Afon, A. (2000): Use of Residents Environment Quality Indicator (EQI) Data in a residential Housing improvement, *In Effective Housing in the 21st century, Nigeria. The Environmental Forum,* F.U.T.A Pp.115-122
6. Amerigo, M. and Aragones, J. (1990): Residential Satisfaction in council housing. *Journal of Environmental Psychology,* Vol.10, Pp. 313- 325
7. Andersen, H. S. (2003): *Urban Sores—On the interaction between segregation, urban decay and deprived neighbourhoods*. Aldershot, England: Ashgate
8. Apparicio, P. and Seguin, A. (2006): Measuring the Accessibility of Services and Facilities for Residents of Public Housing in Montreal. *Urban Studies,* Vol. 43, No.1, Pp. 187- 211
9. Bonnefoy, X. (2007): Inadequate Housing and Health: and Overview. *International Journal Environment and Pollution*, Vol. 30, No.3/4, Pp. 411-429
10. Canter, D. (1983): The purposive evaluation of places: A facet approach. *Environment and Behavior, Vol.*15, No. 6, Pp. 659-699.
11. Coker, A. O., Awokola, O.S., Olomolaiye, P. O., and Booth, C. A. (2007): Challenges of urban housing quality and its associations with neighborhood environments: insights and experiences of Ibadan City, Nigeria. Journal of Chartered Institute of Environmental Health, Vol.7, No. 1
12. Dupont, V. (2005): Peri-Urban Dynamics-Population, Habitat and Environment on the Peripheries of Large Indian Metropolises; Occasional Paper, French Research Institutes in Indian. New Delhi.
13. Filfil, M. (1999): The Housing Environment and Women's Health: The Case Study of Ramallah al Tahta, Birzei, and Palestine. Institute of Community and Public Health/ Environmental health Unit Birziet University
14. Galster, G.C. (1987): Identifying the correlates of dwelling satisfaction: An empirical critique. *Environment and Behavior, Vol.*19, No. 5, Pp. 537-568
15. Gilbertson, J., Green G., Ormandy, D. and Thomson, H. (2008): Good housing and good health: A review and recommendations for housing and health practitioners. A Sector Study Housing Corporation, UK
16. Hall, G. B. and Meng, G. (2006): The identification and spatial extent of hyper-segregation in Metropolitan Lima: *Environment and Planning*
17. Hanmer, L., Booth, D. and Lovell, E. (2000): Poverty and Transport, A Report prepared for the World Bank in collaboration with DFID, Overseas Development Institute.
18. Ibem, E. O. (2012): Residents' perception of the quality of public housing in urban areas in Ogun State, Nigeria, *International Journal of Quality & Reliability Management*, Vol. 29, No. 9, Pp. 1000-1018
19. Ibem, E. O. and Alagbe, O. A. (2015): Investigating dimensions of housing adequacy evaluation by residents in public housing: factor analysis approach, *Facilities,* Vol. 33, No. 78, Pp.1-23
20. Ilesanmi A. O. (2005): An Evaluation of Selected Public Housing Schemes of Lagos State Development and Property Corporation, An unpublished Ph.D. Thesis, Department of Architecture, O.A.U. Ile-Ife, Nigeria
21. Ilesanmi, A. O (2012): Housing, Neighbourhood Quality and Quality of Life in Public Housing in Lagos, Nigeria; *Proceedings of the XXXVIII IAHS World Congress* Istanbul, Turkey, April 16-19.
22. Jiboye, A. (2004): An Assessment of the influence of Socio-cultural factors on Housing quality in Osogbo, Nigeria, Unpublished M.Sc. Thesis, Department of Urban and Regional Planning, Obafemi Awolowo University, Ile-Ife, Nigeria
23. Jiboye, A. (2009): The Significance of Households Characteristics on Housing Quality in Nigeria*, Journal of Geography and Planning Sciences,* No. 2, Pp. 1-10.
24. Kaitilla, S. (1993): Satisfaction with Public Housing in Papua New Guinea: The Case of West Taraka Housing Scheme. *Environment and Behavior,* Vol. 25, No. 4, Pp.514-545

25. Lux, M. (2005): On Housing Satisfaction among Czech Citizens. *Sociologicky Casopis-Czech Sociological Review Vol.* 41, No. 2, Pp. 227-252
26. Mabogunje, A. L. (1980): *The Development Process: A Spatial Perspective* 2nd Ed; London: Unwind Harman Ltd, Pp.189-193, 217-218.
27. Morris, D. J., & Hess, K. (1975). *Neighbourhood power: The new localism*. Boston: Beacon Press.
28. Morris, E. W., Crull, S. R. and Winter, M. (1976): Housing Norms, Housing Satisfaction and the Propensity to Move. Journal of Marriage and the Family Vol. 38, No. 2, Pp. 309-320
29. Neilson, M. (2004): Scottish housing quality Standard (SHQS), Scottish Executive Development Department.
30. Okewole, I. A. and Aribigbola, A. (2006): Innovations and sustainability; in Housing Policy Conception and Implementation in Nigeria, In Okewole I. A. (eds.) *The Built Environment: Innovation Policy and Sustainable Development.* Covenant University Ota, Ogun State, Nigeria 414 – 420.
31. Okoko, E. (2001): Residential Crowding and Privacy in High-Density Neighbourhoods in Akure, Nigeria. *Ife Social Sci. Rev.*, Vol. 19, No. 1, Pp.133-144
32. Oladapo, A. A. (2006): A Study of Tenant Maintenance Awareness, Responsibility and Satisfaction in Institutional Housing in Nigeria. *Int. J. Strategic Prop. Manage.* Vilnius Gediminas Technology, University Vol. 10, Pp. 217-231.
33. Olanrewaju, D. O. (2004): Town Planning: A Veritable Means for Poverty Reduction; 38th Inaugural Lecture, Federal University of Technology, Akure (FUTA): October 26th.
34. Olanrewaju, D. O. and Akinbamijo, O. B. (2002): Environmental Health and Target Audience: A programmatic panacea for poverty alleviation in Nigerian cities: *African Journal of Environmental Studies; Development Africa consortium;* Vol. 3, No. 2, Pp. 82-89.
35. Olotuah, A. O. (2005a): Housing Poverty in Three Inner-City Neighbourhoods, Akure, Nigeria *Journal of Applied Sciences*, Vol. 8, No.3, Pp. 4955 - 4967
36. Olotuah, A. O. (2005b): Neighbourhood Quality In Residential Estates: An Analytical Appraisal of Two Estates in Akure, Nigeria *International Journal of Environmental Sciences,* Vol. 2, No.1 & 2, Pp. 99 - 10
37. Olotuah, A. O. (2006): Housing Quality in Suburban Areas (An Empirical Study of Oba- Ile, Nigeria) *Dimensi Teknik Arsitektur* Dec., Vol. 34, No. 2, Pp. 133-137
38. Olotuah, A. O. and Aiyetan, A. O (2007): An Appraisal of Housing and Environmental Quality in Akure, Nigeria. In*: Proceedings of XXXV IAHS (International Association of Housing Science) World Congress on Housing Science,* Melbourne, Australia, 4-7, September
39. Omole K. F. (2010*):* An Assessment of Housing Condition and Socio-Economic Life Styles of Slum Dwellers in Akure, Nigeria. In: *Contemporary Management Research,* December 2010*,* Vol. 6, No. 4, Pp. 273-290
40. Osuide, S. O., (2004): Strategies for Affordable Housing Stock Delivery in Nigeria. 18th Inaugural Lecture of Ambrose Alli University, Ekpoma, Benin City:
41. Owoeye, J. O. and Omole, F. K., (2012): Analysis of Housing Condition and Neighbourhood Quality of Residential Core of Akure, Nigeria
42. Sengupta, U. and Tipple, A. G. (2007): The performance of public-sector housing in Kolkata, India, in the post-reform milieu, in Urban Studies, Vol. 44,No.10, Pp. 2009-2027
43. So, A. T. P. and Leung, A. Y. T. (2004): Survey of attitudes towards buildings in three Chinese cities: Hong Kong, Shanghai and Taipei. Facilities*,* Vol. 22, No.3/4, Pp. 100-108
44. UN-Habitat, (2003): *The Challenge of Slums* - Global Report on Human Settlements
45. Wahab, B. (2001): Grassroots Participation in Sustainable Urban Development of Slum and Squatter Settlement. *Paper presented at the 32nd Annual Conference of the Nigerian Institute of Town Planners, Uyo, Akwa Ibom State.*
46. Weidemann, S. and Anderson, J. R. (1985): A Conceptual Framework for Residential Satisfaction". *In Altman, I. and Werner, C. (Eds.) Home Environment, Human Behaviour and Environmental Advances in Theory and Research, Vol. 8 Plenum Press*
47. World Bank (2002): Universal(ly bad) services: providing infrastructure services to rural and poor urban consumers. World Bank, Washington