FRAMEWORK OF THE EXISTING PATTERNS OF RESIDENTIAL SEGREGATION AND HOUSING QUALITY IN NIGERIA

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DEDICATION

I dedicate this thesis to my parents for their unwavering moral and financial support, advice, encouragement and prayers which guided me throughout my academic pursuits. I dedicate this thesis especially to my beloved children Iman, Shaheed and Ameen for their love and endurance through the difficult time while I was gone for the period of my PhD studies. This thesis is also dedicated to my siblings for their prayers and moral support. And finally, I dedicate it to my husband for his support and encouragement, and also for giving me the chance to pursue my PhD here in Malaysia. I love you all.

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ABSTRACT

Residential segregation, the spatial separation of population sub-groups within a given geographical area, is a phenomenon which is prevalent in both developed and developing countries like Nigeria. This research examined the existing patterns of residential segregation and housing quality in Bauchi Metropolis of Northern Nigeria; its objectives are to explore the main patterns of residential segregation and evaluate the factors responsible for residential segregation in the study area, to analyse the quality of houses in the study area and determine the relationship between residential segregation and housing quality in the study area, and to develop a framework for the existing patterns of residential segregation and housing quality. Data was collected from 600 households within three density areas in Bauchi metropolis. The research was conducted through questionnaire survey, personal interview and personal observation, and the quantitative data was analysed using regression analysis while the qualitative data was analysed using thematic analysis. The research established that the existing residential segregation patterns are based mainly on religion, ethnicity, age and income; and the factors responsible for residential segregation in the study area are individual and aggregate socioeconomic characteristics, individual preference/taste/choice of neighbourhood political/institutional factors. While the indicators of housing quality in the study area are building design, type of roofing and wall materials, condition and age of buildings, the type of internal facilities and the source of lighting. The findings of this research have contributed to knowledge by establishing that residential segregation patterns are based mainly on religion, ethnicity, age and income; and that political and institutional factors influence residential segregation in the study area.

ABSTRAK

Pengasingan kediaman iaitu pemisahan ruang populasi sub-kumpulan dalam suatu kawasan geografi merupakan fenomena yang tersebar luas di negara membangun mahupun yang sedang membangun seperti Nigeria. Kajian ini ialah bagi mengkaji corak sedia ada pengasingan kediaman dan kualiti perumahan di Bandaraya Bouchi di Utara Nigeria. Objektif kajian ini adalah untuk mengkaji corak utama pengasingan kediaman dan menilai faktor penyebab kepada pengasingan kediaman di kawasan kajian; mengkaji faktor penting yang menentukan kualiti rumah di kawasan kajian dan juga mengkaji hubungan di antara pengasingan kediaman dan kualiti perumahan di kawasan kajian tersebut. Data telah diambil daripada 600 orang penghuni daripada tiga kepadatan kawasan di kawasan kajian tersebut. Kajian ini telah dijalankan melalui borang kaji selidik, temuramah perseorangan dan pemerhatian peribadi. Data kuantitatif telah dianalisis menggunakan analisis regresi manakala data kualitatif dianalisis menggunakan analisis tematik. Hasil dari kajian yang telah dibangunkan mendapati bahawa punca utama corak pengasingan kediaman sedia ada adalah berdasarkan agama, etnik, umur dan pendapatan; dan faktor yang menyumbang kepada pengasingan kediaman di kawasan kajian adalah agregat dan ciri-ciri sosioekonomi individu, kecenderungan/citarasa/pilihan di kalangan individu dalam kawasan kejiranan tersebut dan juga faktor-faktor politik/institusi. Manakala faktorfaktor yang menentukan kualiti perumahan di kawasan kajian adalah rekabentuk bangunan, jenis bumbung dan elemen bahan dinding, keadaan dan usia bangunan, jenis kemudahan ruangan dalaman dan sumber pencahayaan. Penemuan daripada kajian ini terhadap sumbangan kepada institusi ilmu ialah dengan mendapati bahawa corak pengasingan kediaman utamanya adalah berdasarkan agama, etnik, umur dan pendapatan; dan juga faktor politik serta institusi mempengaruhi pengasingan kediaman di kawasan yang dikaji.

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CHAPTER 1

INTRODUCTION

1.1 Background to the Study

Several authors in various disciplines have defined residential segregation. It was reported by Cundiff and Hudson (1999) to involve the spatial concentration of population groups. In a similar definition by Kemper (1998) residential segregation was referred as the spatial separation of population sub-groups within a given geographical area such as a large city. Such sub-groups can be formally defined in terms of age, occupation, income, place of birth, ethnic group or some other measures like race or religion. In line with this, Landrine and Corral (2009) referred to residential segregation as the geographical separation of whites from ethnic minorities in residential areas. However Acevedo-Garcia, Lochner, Osypuk and Subramanian (2003a) reported that available evidence indicates that segregation by race/ethnicity is stronger than segregation by income. Sanni and Akinyemi (2009) also stated that although the tendency of people to segregate based on income has been well documented in literature, it was found not to be very significant in Africa.

Williams and Collins (2001) referred to it as the physical separation of the races in residential contexts. Segregation was imposed by legislation, supported by major economic institutions, enshrined in the housing policies of the federal government, enforced by the judicial system, and legitimized by the ideology of

white supremacy that was advocated by churches and other cultural institutions. The segregation of African Americans is distinctive. Although most immigrant groups have experienced some residential segregation in the United States, no immigrant group has ever lived under higher levels of segregation that currently exist in the African American population. In the early 20th century, immigrant enclaves have been never homogeneous to one immigrant group. In most immigrant ghettos, the ethnic immigrant group after which the enclave was named did not constitute a majority of the population of that area, and most members of European ethnic groups did not live in immigrant enclaves.

In Africa, the segregation of the natives from the Europeans came about through colonisation. Segregation was said to be suggested in 1897 (as a general health measure) when mosquitoes were discovered to cause malaria (Gale, 1980). However, it was not adopted until 1908 due to the outbreak of the plague in Accra (Ghana). A disease reported to have claimed the lives of six million people in India between 1898 and 1907. The Colonial Office thus saw the introduction of the disease as a threat; hence, in 1910 it gave them more grounds to enforce segregation. Gale (1980) however opined that there were other important factors that made segregation popular in Northern Nigeria (the people in that region had no prior contact with the Europeans thus there were no merchants or professionals who could speak English. Social contact was so difficult thus leading to a more formal and distant type of relationship between the two groups).

The European administration led to the creation of new settlements in Northern Nigeria called the "Sabon Gari" (that is new town in Hausa Language). These settlements were established to house servants and labourers of the Europeans, and non-natives of the North. Edewor (2011) reported that prior to colonial rule there was a heterogeneous form of settlement (there were people of various tribes and nationality living together) in the Northern Nigeria (for example in Kano) where citizenship was based on residence and occupation. However, the British resolved to put an end to this residential pattern. Spatial, legal and psychological boundaries between social, ethnic, or racial categories were imposed to enforce a clear division between so-called races and ethnic groups to make these categories visible, in everyday life.

The Sabon Gari settlements are now found not only in the northern Nigerian cities but also in the southern Nigerian cities and their peculiarity derives from their unique demographic composition, social orientation and religious characteristics. The Sabon Gari settlements in the Hausa-Fulani dominated northern Nigerian cities are inhabited by southern Nigerian migrants while those in the Yoruba dominated south-western Nigeria are domiciled by the Hausa-Fulani settlers (Albert, 1996). Its abridged version, Sabo, became popular in south-western Nigeria and they are found in such Yoruba cities as Ibadan, Ijebu-Ode and Sagamu. In Igbo dominated eastern Nigeria, the Hausa-Fulani settle in the 'Abakpa Quarters'. These are, however, stranger settlements established by the strangers themselves through their continuous aggregation in given locations within the urban system. They are, however, patterned after the "Sabon Gari" settlements, which were established during the colonial era.

1.2 Statement of the Research Problem

Most of the studies on residential segregation have been found to delve more on racial/ethnic and income segregation, its patterns, causes and consequences, and its effects on health, and so on. Majority of these are based on researches from developed countries, especially the USA. Such studies undertaken are those of McClinton & Zuberi (2006); Williams & Collins (2001), Anderson et al. (2003), Edwards (1970), K'Akumu & Olima (2007), French (2008) and Farley (2010) to mention a few. However, very few researches have been conducted on residential segregation in the Nigerian context as compared to South Africa, UK and the U.S.

Nigeria is a multi-ethnic country (Asiyanbola, 2012), where ethnic differentiation has remained a critical problem in most of its cities (Dung-Gwom & Rikko, 2009, and Asiyanbola, 2012), this along with religious differences have led to violent crisis across the country. These crisis according to Dung-Gwom & Rikko (2009) have entrenched a divide in the cities which have led to the creation of residential neighbourhoods along ethnic, religious and cultural lines; particularly in the northern part of the country. One of such cities is Bauchi, a city which has

witnessed several ethno-religious crisis for almost two decades. According to Osaghae & Suberu (2005) and Uchendu (2010) Bauchi witnessed ethno-religious crisis between the Hausa/Fulani and Sayawa in 1991, 1995, 2001, 2005 and 2011; the Bauchi religious crisis of Yelwa Kagadama in 1991, 2006 and 2007, and the *Boko Haram* insurgency in the neighbouring north-eastern states of Borno, Yobe and Adamawa and parts of Gombe and Bauchi, have also contributed to the emergence of religious and ethnically segregated neighbourhoods this being as a result of the fear and insecurity faced by people in these areas. According to Gambo & Omirin (2012) violent ethno-religious fracas has ushered in a new phenomenon in neighbourhood/settlement arrangement in most northern towns and cities.

Apart from the ethno-religious factor, the planning policies and laws in Nigeria have contributed to segregation. According to Nwaka (2005a),

"The policies and institutions for urban development, where such policies existed at all, were very restrictive and myopic, especially in the critical areas of land use control, planning and the provision of infrastructure and services. Planning and housing were used as instruments of segregation and social policy - to ensure that the small community of Europeans was protected in segregated high quality residential reservations".

Also, the sub-division of residential areas into low, medium and high density for urban planning and development purposes (although it is a normal practice as reported by K'Akumu & Olima, 2007) has also fostered residential segregation in Nigeria. The land sub-division and development activities in Nigeria have been reported to have excessively high standards and contribute to the exclusion of the low-income groups from the formal process of land development (Garba & Salisu, n.d.). Evidence from literature has also shown that residential segregation affects housing quality (as reported by Williams & Collins, 2001), as usually the segregated group or minorities are poor and discriminatory practices tend to hinder their access to quality and affordable housing. Housing quality in the medium and high density residential areas of the study area have over time been observed to be lower than that of the low density areas based on structural design and neighbourhood infrastructure.

A review of studies on residential segregation revealed that few scholars have studied the origin, patterns and consequences of residential segregation in Nigeria. Such studies as those of Albert (1996), Edewor (2011) and Muhammad, Kasim & Martin (2015b) have mainly focused on the role of the colonial authorities in enforcing segregation policies which have led to the establishment of stranger settlements (Sabon Gari) in Northern Nigeria. These colonial policies also led to residential segregation based on religion, ethnic group and race, and the cause of the ethno-religious crisis in some parts of the country. Gambo & Omirin (2012) through an empirical study attributed the creation of ethnic and religious settlements in some northern Nigerian cities to the ethno-religious crisis which often occur in those cities. While Obafemi & Omiunu (2014) conducted a survey on residential preference of immigrants determines ethnic segregation in Yenagoa metropolis in Nigeria. Using Chi-Square test and multiple regression analysis they discovered that immigrants in the study area preferred to live in the same neighbourhood as their kith and kin. Also their study revealed that segregated neighbourhoods in the study area were ethnically motivated, and the peculiarities in these neighbourhoods were largely derived from the demographic composition, social orientation and religious characteristics.

Aliyu, et al. (2012) on the other hand, studied the influence of intangible location factors (such as cultural identity, safety, socioeconomic background, security, frequency of violence, religious inclination, ethnic background, indigeneship) on residential segregation in Jos, Plateau state. The survey uncovered that residential segregation in Jos was greatly influenced by these factors, and this has led to change in the residential pattern of the town. The variations and trends in the sales and rental value of residential properties were said to be greatly affected by persistent residential segregation. A survey by Muhammad, Kasim & Martin (2015a) studied the factors that influence residential segregation in Bauchi metropolis in Nigeria. Using descriptive statistics and multiple regression analysis the study revealed that the patterns of residential segregation in the study area are based mainly on income, religion and ethnicity; and the factors influencing residential segregation were identified as mainly individual and aggregate socioeconomic characteristics, and individual preference/taste/choice of neighbourhood.

Although few researchers such as those cited above have studied residential segregation and settlement patterns in some parts of Nigeria, no study has been found that evaluates the patterns of residential segregation and housing quality in Nigeria.

Evidence from existing literature has shown that residential segregation leads to large differences in housing quality, and consequently health outcomes. In Bauchi residential areas differ in quality and neighbourhood infrastructure (such as access roads, water, electricity etc) with some areas being highly deprived of basic amenities. It is against this background that this study seeks to contribute to existing knowledge by evaluating the existing patterns of residential segregation and housing quality in the study area. There is also the need to evaluate the factors responsible for residential segregation and the extent to which they determine residential patterns in the study area. It is the goal of this research to evaluate the housing quality in the study area, and also explore the relationship between residential segregation patterns and housing quality in the study area. At the end a framework for residential segregation and housing quality will be developed. There is a dearth in literature on residential segregation in the Nigerian context this research also hopes to contribute on the existing literature on residential segregation in Nigeria.

1.3 Research Questions

The research questions formulated to guide this study are:

- i. What are the main patterns of residential segregation in the study area?
- ii. What are the factors responsible for residential segregation patterns in the study area?
- iii. What is the quality of houses in the segregated areas under study?
- iv. How significant is the relationship between the housing quality and residential segregation patterns in the study area?
- v. Is there a framework for residential segregation and housing quality in the study area?

1.4 Research Aim

The study is aimed at examining the existing patterns of residential segregation and its effect on housing quality in the study area, with a view to developing a framework that will guide future research on the phenomenon.

1.5 Objectives

- i. To explore the main patterns of residential segregation in the study area
- ii. To evaluate the factors responsible for residential segregation and how they impact on residential segregation in the study area
- iii. To analyse the quality of houses in the segregated areas under study
- iv. To determine the relationship between residential segregation patterns and housing quality in the study area
- v. To develop a framework for residential segregation and housing quality in the study area

1.6 Research Hypotheses

The research hypothesis for achieving the study on the patterns of residential segregation and housing quality in the study area are:

Hypothesis 1:

Ha There is a significant relationship between the factors responsible residential segregation and the patterns of residential segregation in the study area

Ho There is no significant relationship between the factors responsible residential segregation and the patterns of residential segregation in the study area

Hypothesis 2:

Ha Residential segregation has a significant effect on housing quality in the study area

Ho Residential segregation has no significant effect on housing quality in the study area

1.7 Scope of the Study

Nigeria is the largest and potentially the richest country in Africa, being the sixth largest oil producing country in the world. It has a land area of close to one million square kilometres, and a population of well over 125 million. Estimates at the turn of the century suggest that 43.5 percent of the population live in urban areas, and this percentage is projected to reach 50 percent by the year 2010, and 65 percent by 2020. The rate of urban growth is about 5.5 percent, roughly twice the national population growth rate of 2.9 percent. More than seven cities have populations that exceed one million, and over 5,000 towns and cities of various sizes have populations of between twenty and five hundred thousand (Nwaka, 2005a). Also, Nigeria is classified as low-middle income country with a gross national income (GNI) of US\$175.6 billion, GDP growth rate of 3.0 %, per capital income of US\$1,160 and about 84% of the population earning below US\$2 a day (Oyebanji, Akintoye & Liyanage, 2011).

Bauchi State is one of the 36 states of Nigeria located in the north-eastern zone (shown in Plate 1.1 below). Bauchi Metropolis (the study area) is the capital of Bauchi State Nigeria with a population of 493,730 (National Bureau of Statistics, 2010), and it is ranked the 7th most populous state in Nigeria. The state covers a total land area of 49,259.01 square kilometres which represents about 5.3% of Nigeria's total land mass, making it one of the largest states in the country (Bauchi State GIS -

BAGIS, 2012), while the metropolis covers a total land area of 3,687 square kilometres (Ogwuche, 2013).



Plate 1.1: Map of Nigeria showing Bauchi State (adopted from Bauchi State/ Safer Nigeria Resources, 2012)

The city lies on the Port Harcourt – Maiduguri railway line. Bauchi metropolis (Plate 1.2 below) consists of eight administrative wards (units). These are Hardo Ward, Dan'iya Ward, Makama Sarkin Baki 1 Ward, Makama Sarkin Baki 2 Ward, Majidadi A Ward, Majidadi B Ward, Dawaki Ward, and Dankade Ward respectively (Bello, Danjuma & Adamu, 2007). The state is an area of in-migration of persons from Kano, Katsina and Sokoto states involved in rural-rural movement in the country. In addition, many lgbos, Yorubas and other southern ethnic groups also migrate into the state, especially to the urban centres (OnlineNigeria, 2003).

Bauchi was chosen as the study area in this research because it is one of the states of northern Nigeria that has witnessed ethno-religious crisis from 1991 to 2011, and frequent attacks by boko Haram; a situation which has strained the peaceful coexistence in the area and caused the emergence of

settlements/neighbourhoods based on religion and ethnic identity in the region as reported by various scholars (such as Dung-Gwom & Rikko, 2009; Aliyu et al, 2012; Gambo & Omirin, 2012 etc). New settlements have over the years sprung up around the town which have taken religious/ethnic identities and also the influx of refugees from neighbouring states experiencing insecurity such as Yobe, Borno and Adamawa has further contributed to this development. Reports have shown that in the year 2014 over two million refugees were settled in Bauchi by the state government (Wakili, 2014) by providing them with land and houses. Observations have shown that immigrants in the town tend to live around people of the same religion and dominant ethnic group. Some of these residential neighbourhoods in Bauchi have been observed to have lower housing quality and poor infrastructure compared to other areas of the town especially the low density area (GRA). The emergence of these segregated neighbourhoods and the nature of housing in these areas forms the basis of choosing Bauchi metropolis as the study area.

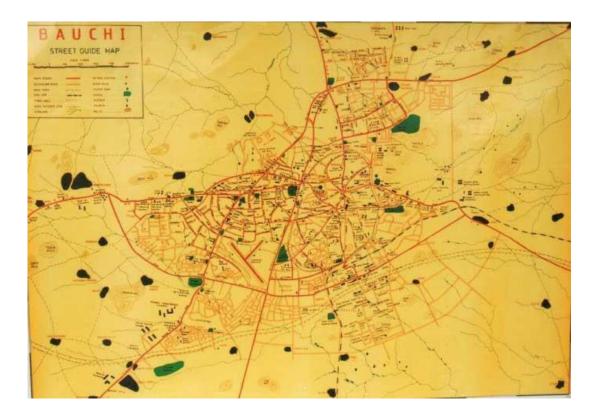


Plate 1.2: Bauchi Metropolis Street Guide Map (adopted from Bauchi State GIS - BAGIS, 2012)

The study is thus restricted to only Bauchi metropolis. The study focused on the examining the existing patterns of residential segregation and housing quality in the study area. The study area was stratified into three areas, that is, high density, medium density and low density for the purpose of this research. The high density areas are those areas occupied by the low income group, usually unplanned and unmaintained, and have a plot size of about 225-450m². The medium density areas are occupied by people from the various income groups, moderately maintained and usually plot sizes in this area are 450-900m². While the low density areas are occupied by the high income group, the areas are well planned and have a plot size of 900-1200m². In the high density areas samples were taken from around the traditional walled city, for the medium density areas neighbourhoods within the urban periphery were sampled and while for the low density areas samples were taken from within areas designated as government approved layout such as those within and around government reserved areas (GRA).

The target population for the study are heads of households in the study areas, staff of the Ministry of Lands and Housing Bauchi and its Town Planning Department, Bauchi State Urban Development Board, and the ward heads of areas that fall within the study area.

1.8 Significance of the Study

Residential segregation is a phenomenon that has plagued many societies in the world for decades. It has been a tool, which has shaped the nature and pattern of settlements in the US, Europe, South Africa, Kenya, and many countries across the world. The study of residential segregation in the U.S. has been extensively researched on the causes, patterns and consequences. A range of factors such as private discrimination, preferences, historical and current government policies and income differentials have been reported to be the cause of residential segregation (Leeuw et al., 2007). Studies have disclosed that housing patterns in segregated neighbourhoods does not only separate the whites from the minority groups but it

creates great disparities in employment, education, income, and wealth. Greenstein, Sabatini & Smolka (2000) opined that the combination of residential segregation by class and by racial or ethnic groups and the systematically uneven spatial distribution of quality schools results in poor inner-city enclaves where children attend substandard schools, which in turn limits their life chances. Other services, such as access to transportation and health care, also vary spatially, as do such measurable factors as air quality and neighbourhood infrastructure.

More specifically, residential segregation distances minority job seekers (particularly blacks) from areas of employment growth and opportunity (Turner & Fortuny, 2009). While in other studies, residential segregation has been shown to impact on the health of minority ethnic population especially for African Americans. It was revealed that a relationship existed between residential segregation and mortality rate among blacks, and disparities in health care provision based on socioeconomic status have also been reported (William & Collins, 2001; Ademuluyi & Aluko-Arowolo, 2009; Acevedo-Garcia et al., 2003; Landrine & Corral, 2009).

The study of residential segregation is pertinent because it informs on how residential segregation affects the lives of minority groups. Studies have also disclosed that racial segregation affects the ability or access of minority groups to adequate and affordable housing (Sugrue, 2008; Turner & Fortuny, 2009), public housing is highly segregated for the African Americans and Hispanics, and such developments are usually large densely populated high-rise buildings located in areas of concentrated poverty (Leeuw et al., 2007). Private acts of discrimination also contribute to residential segregation; in the U.S. realtors have been reported to use the act of "steering" by directing people to areas where a particular race is predominant and through restrictive covenants (Sugrue, 2008; Leeuw et al., 2007; Greenstein, Sabatini & Smolka, 2000; Friedman, Tsao & Chen, 2013). Such discrimination has in most cases led to the minorities especially blacks to live in the poorest and worst housing available.

In Nigeria residential segregation has been the cause of the divide along ethnic and religious lines which has also led to the incessant ethno-religious violence that occur across the country (Aliyu et al., 2011; Gambo & Omirin, 2012; Uchendu, 2010; Dung-Gwom & Rikko, 2009, etc). The segregation of people into different

neighbourhoods has been the cause of intolerance and lack of integration in most cases. Although residential segregation has been to some extent studied in Nigeria, little has been said about its causes and how it affects the housing quality of the people in such areas. It is hoped that this research will uncover the existing patterns of residential segregation and housing quality in the study area. It is also hoped that findings of the study provide a basis of understanding the effect of residential segregation in these areas, and enable the relevant authorities to adequately design and implement appropriate policies that will address the numerous and complex problems therein.

1.9 The Study Area

Bauchi Metropolis, the headquarters of Bauchi State, is located between latitudes 9" 00' and 9" 30' North of the Equator and longitudes 10" 25 and 11" 20' East of the Greenwich Meridian (Gani, Chiroma & Gana, 2012). It covers a total land area of 3,687 square kilometres (Ogwuche, 2013), and a population of 493,810, according to the 2006 population census (Federal Republic of Nigeria Official Gazette, May 2007, National Bureau of Statistics, 2010 and Ogwuche, 2013).

Bauchi derived from the Hausa word for slavery 'bauwanci', was founded initially as a Hausa slave collecting centre situated in the middle of the pagan community. Alternatively, oral tradition still associates the name Bauchi with the first settler, a hunter who was called 'Baushe'. The town was later more firmly established by Yakubu who was sent from the Gerawa by his father- a Muslim convert called Dadito Shehu Usman Danfodio at Sokoto for Quranic studies. After becoming one of the twelve leaders to receive a Jihad flag from the Shehu during the 1804-1808 campaigns, he returned to establish his headquarters for the spread of Islam at Bauchi. He became the first Emir of Bauchi and from him descends a long line of emirs including the present Emir (Salihu, 2008).

Bauchi metropolis (shown in Plate 1.2) consists of eight administrative wards (units). These are Hardo Ward, Dan'iya Ward, Makama Sarkin Baki 1 Ward,

Makama Sarkin Baki 2 Ward, Majidadi A Ward, Majidadi B Ward, Dawaki Ward, and Dankade Ward respectively (Bello, Danjuma & Adamu, 2007). The state is an area of in-migration of persons from Kano, Katsina and Sokoto states involved in rural-rural movement in the country. In addition, many lgbos, Yorubas and other southern ethnic groups also migrate into the state, especially to the urban centres (OnlineNigeria, 2003). There are a total of 55 ethnic groups in the state which include Hausa, Fulani, Gerawa, Sayawa, Jarawa, Bulewa, Kare-Kare, Kanuri, Warjawa, Zulawa and Badawa. They have varied customs, festivals, historical backgrounds, occupational patterns and beliefs (Bauchi State Government, 2014).

The settlement pattern of the town consists of the walled city and the extension areas outside the city wall. Within the city walls are the Emir's palace, the central mosque, the central market, area courts, primary schools and the central prison. Bauchi town, unlike other northern towns whereby only indigenes live within the city walls, houses both indigenes and strangers. Almost all this expansion area is associated with buildings and functions' deriving from the town's long held position as a government administrative and higher education centre. The extension areas comprises of the G.R.A, Low Cost Housing, Army Barracks, Police Barracks, the Hospital, secondary schools, and other tertiary institutions such as the Abubakar Tafawa Balewa University. Also within this area are government institutions, industrial areas, and markets (Max Lock Group, 1976).

1.10 Research Plan

This section shows the thesis plan from the beginning to the final stage. Figure 1.1 shows the research stages.

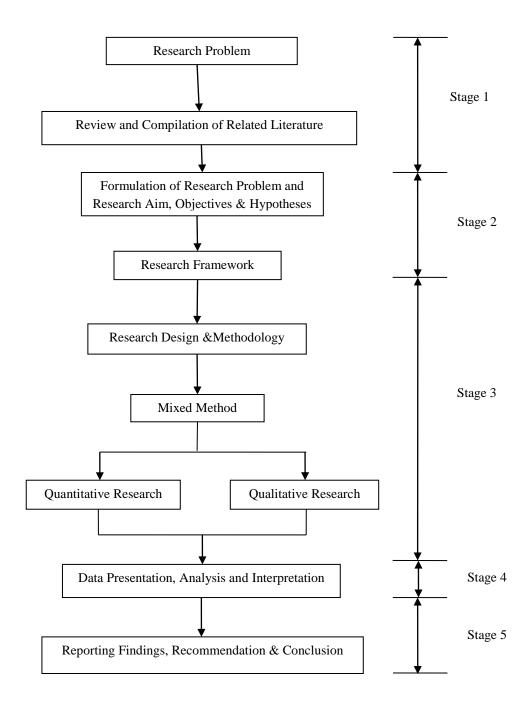


Figure 1.1: Phases of the Research Plan

1.10.1 Stage 1

The first stage of the research involved extensive search and reading of literature related to the problem under study (residential segregation). It involved reading

through relevant researches by other authors to identify gaps which this study hoped to fill. Such writings will be drawn from across the globe and from authors in various disciplines.

1.10.2 Stage 2

This stage involved the statement of the research problem and the formulation of research questions from the problem under study. The aim of the study and the objectives of the study were formulated at this stage. The research framework was also being designed at this stage.

1.10.3 Stage 3

This stage of the research involves the development of the research framework chosen for examining the existing patterns of residential segregation and housing quality in the study area. The theoretical framework consists of a conceptual scheme that brings together strands of research from various authors on residential segregation to form the theory upon which this research is based. The framework adopted for the research was the theoretical framework which was developed based on existing literature.

1.10.4 Stage 4

The research design was decided at this stage and the methodology adopted for the study. The study to be undertaken is going to be a descriptive kind of research as it entails conducting surveys. At this stage, the mixed research method was adopted

and both quantitative and qualitative data are going to be collected from the area under study using the sequential explanatory mixed methods design. Such data as the socioeconomic status, income, education level, religion and ethnic group of respondents in the study will also be collected through the administration of questionnaires. Similarly, semi-structured interviews were conducted and observations were made on the physical condition of the houses and environment in the study area, that is, Bauchi Metropolis.

1.10.5 Stage 5

At this stage data collected for the study was presented, analysed and interpreted. The quantitative data was analysed using the Statistical Package for Social Science (SPSS) and the qualitative data was subjected to qualitative data analysis tools using the SPSS.

1.10.6 Stage 6

This is the final stage of the research. At this point, the findings of the research were reported and conclusions were made. Finally, recommendations were drawn from the findings of the study for policy implementation, and areas for further research into residential segregation in Bauchi Metropolis were suggested.

1.11 Thesis Organisation

The thesis is organised and structured into six chapters. This was done in order to give a clear picture on the content of the thesis at each stage of the work. These chapters are outlined and discussed below.

1.11.1 Chapter 1: Introduction

This chapter contains the introduction to the research undertaken. It presents background information on residential segregation, the statement of the research problem, the aim, research questions and objectives of the study. The scope of the study, which shows the extent covered by the research, is also presented in this chapter, and the significance of the study. The research plan, which provides details of the various stages involved in the research, is also presented in this chapter.

1.11.2 Chapter 2: Literature Review

In this chapter, the literature relevant to the study is reviewed. The concept of residential segregation and the factors responsible for it are reviewed. The patterns of residential segregation such as those based on race/ethnicity, income, religion and occupation are presented. The review of literature on residential segregation in colonial West Africa and particularly that of Nigeria, the consequences of residential segregation and the models/measures of residential segregation are all presented in this chapter. Also reviewed in this chapter are literature on residential segregation and housing discrimination, residential segregation and housing quality and government policies on residential segregation that aim at bringing about integration and desegregation.

1.11.3 Chapter 3: Research Framework

The chapter three presents the research framework for the study. It discusses theoretical and conceptual framework, and the type of framework chosen for the study. It also contains the research approach chosen for this research. A summary of the theories collected from related literature is presented in this chapter and finally the chapter summary.

1.11.4 Chapter 4: Research Methodology

The research methodology is presented in this chapter. It contains the research design, the methods of data collection, types of data required for the study, sampling frame and sampling technique. The method of data analysis and, the summary of the chapter are all presented in this chapter.

1.11.5 Chapter 5: Data Presentation, Analysis and Discussion of Results

This chapter presents the data collected from the study. The data are presented in tables; the analysis and interpretation of both the quantitative and qualitative data are all contained in this chapter. The qualitative data is analysed using tools for qualitative data analysis and the quantitative data is analysed using the Statistical Package for Social Sciences (SPSS).

1.11.6 Chapter 6: Summary of Findings, Recommendation and Conclusion

Chapter six is the last chapter in this research work. It presents the summary of findings of this research, the conclusions drawn and the recommendations made following the findings of the study.

1.12 Summary

This chapter contains the introduction to the research undertaken. It presents background information on residential segregation and the statement of the research problem. The research is aimed examining the existing patterns of residential segregation and housing quality in the study area. The research questions and objectives of the study focus mainly on examining the pattern and factors responsible for residential segregation, determine the significance of these identified factors on residential segregation, to examine the factors that determine the quality of houses in the segregated areas under study and determine whether there is a significant relationship between residential segregation patterns and housing quality in the study area. The scope of the study, which shows the extent to be covered by the research, is also presented in this chapter, and the significance of the study.

In the following chapter two, the review of literature relevant to the study is presented. The concept of residential segregation, the factors responsible for residential segregation, the types and consequences of residential segregation are all presented in this chapter. Literature on residential segregation in colonial West Africa particularly in Nigeria, models and measures of residential segregation, residential segregation and housing discrimination and housing quality, concept of housing quality and housing quality indicators, and policies on residential segregation have also been reviewed in chapter two.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature reviewed for the research. In this chapter, various concepts and theories relevant to the research were reviewed. The definition and concept of residential segregation and the factors responsible for it were discussed. The patterns of residential segregation such as those by race, ethnicity and income are presented within this chapter. The review of literature on residential segregation in colonial West Africa and particularly that of Nigeria, the consequences of residential segregation and the models/measures of residential segregation are all presented in this chapter. Also reviewed in this chapter are literature on residential segregation and housing discrimination, residential segregation and housing quality, and government policies on residential segregation that aim at bringing about integration and desegregation.

2.2 Definition and Concept of Residential Segregation

Residential segregation is a form of segregation that sorts population groups into various neighbourhood contexts and shapes the living environment and social space at the neighbourhood level. The residential neighbourhoods are often classified and segregated based on a variety of peculiarities. These include classification based on race/ethnicity, religion and economic/social status of individuals and groups within the population (Ifesanya & Nwokoro, nd). Kemper (1998) defined residential segregation as the spatial separation of population sub-groups within a given geographical area such as a large city. Such sub-groups can be formally defined in terms of age, occupation, income, birthplace, ethnic origin or other measures; or the sub-groups could be specified as social minorities distinguished from the dominant groups of power differentials. In another definition similar to that of Kemper, residential segregation is said to be the degree to which two or more groups live separately from one to another in different parts of the urban space (Aguilera & Ugalde, 2007). While Aliyu, Kasim, Martin, Diah & Ali (2012) opined that, it is the process where two or more communities that formerly lived together separate because of factors which could be either for religious or ethnic reasons.

In the United States where the phenomenon is most prevalent, the African Americans are segregated in different neighbourhoods away from the whites. Thus, Cundiff & Hudson (1999) defined residential segregation as the tendency for individuals with different racial backgrounds to inhabit different parts of metropolitan areas in greater concentrations. In the United States, segregation is often associated with the income level of the racial or ethnic group in question (Cundiff & Hudson, 1999). Although many minority groups are segregated, the segregation levels of Blacks are significantly higher than those of other groups. Moreover, Blacks are more likely than other minorities to be hyper-segregated, that is, to reside in mostly Black neighbourhoods that are surrounded by similar neighbourhoods in the centres of cities (Landrine & Corral, 2009).

Residential segregation is a widely researched urban phenomenon in both developed and developing countries. The research exercise has led to a prolific body

of literature including the development of scientific measures of segregation like the Index of Dissimilarities (ID) and *Spatial Exposure/Isolation Index* (P*). In spite of this, it is rare to come across a clear definition of residential segregation. In most cases definitions tend to be normative, historical or contextual rather than conceptual (K'Akumu & Olima, 2007).

The segregation of whites from minorities persists in the US not because the minorities are segregated but because, according to Turner & Fortuny (2009), of the interaction of barriers, fears and preferences. White preferences also play a key role, most whites and minorities would prefer to live in considerably more diverse neighbourhoods than they do (Krysan & Farley 2002). The persistence of residential segregation in the United States is reported to be perpetuated by both private discrimination practices and through government policies. Leeuw et al (2007) stated that policies and practices of the United States government, as well as state and local governments, have helped to create highly segregated residential patterns across the United States. Many of the government programs and policies are said to concentrate poverty in communities of colour. Private housing treaties also discriminate against African Americans and Hispanics in renting or purchase of homes. Real estate agents restrict the entry of minority groups into white neighbourhoods by steering (that is the practice of directing white home buyers to all-white communities and black home buyers to predominantly black or racially transitional neighbourhoods) and restrictive covenants. From the 1930s through the 1960s, the National Association of Real Estate Boards issued ethical guidelines that specified that a Realtor "should never be instrumental in introducing to a neighbourhood a character of property or occupancy, members of any race or nationality, or any individual whose presence will be clearly detrimental to property values in a neighbourhood" (Surge & Goodman, 2007; Sugrue, 2008; Leeuw et al., 2007; and Greenstein, Sabatini & Smolka, 2000).

The African Americans are usually concentrated in inner city enclaves and public housing, and regardless of their socioeconomic status, they are less likely to move into areas that are more affluent. According to Turner & Fenderson (2006), the link between neighbourhood racial and income, composition remains the starkest for African Americans; neighbourhoods where blacks constitute the predominant

minority group are the most likely to have high poverty rates and the least likely to be occupied exclusively by affluent households. However, contrary to what obtains in the United States and other parts of Europe, the situation of minorities in London differs. In the US, minorities are outpaced in suburbanisation by the white population while in London research has revealed that there is continuing suburbanisation of ethnic minorities and rising home ownership, with a decline in White homeownership in suburban London. This is attributed to the growth in the number of ethnic minority households. According to Hamnett & Butler (2009) this growth has partly taken the form of suburban homeownership, particularly among the Indian, African-Caribbean and Black African groups in outer London. This is evidence of upwards mobility in the housing market and it has been accompanied by a fall in the number of White owner-occupied households in outer London. In inner London, by contrast, White owner-occupation grew, which is consistent with continuing White gentrification given the strong growth of professional and managerial social classes over the period from 1991 to 2001. The minorities in London were also shown to be concentrated in social and private rented housing in both inner and outer London (Hamnett & Butler, 2009).

In Malaysia, according to Thong (1978) the colonial administrators isolated themselves from the Asians by residing on the hilly west bank of the river Klang which have presently become the residence of the upper echelons of society. In furtherance of this, the colonial policies have led to residential segregation among the lower income Malays and Chinese on the east bank, thus leading to the perpetuation of Chinatown and Malay settlements. This brings to light residential segregation along ethnic and income lines. In a related report by Ramli & Jamaludin (2012), the British colonial "divide and rule" policy was said to be the reason why, the Malays, the Chinese and the Indians were never integrated as one community. The policy geographically segregated these individual communities into three different areas; the Chinese were concentrated in urban areas, the Malays were mainly in rural areas and the Indians were in rubber plantations.

In Africa, residential segregation cannot be discussed without referring to the colonial period. In West Africa, the British colonialist separated their quarters from those of the natives. Edewor (2011) reported that prior to the colonial era there was

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