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Editorial

This edition of NIU *Journal of Social Sciences* focuses on Development Administration, Social Psychology, Educational Psychology and Human Resource Management.

The first part of the Journal addresses issues in Development Administration such as Fiscal Policy, Institution Building, Security or Intelligence Management, Welfare Services, Rural Development and Good Governanace. It is established in one of the papers that Nigeria's institutions are generally weak and dysfunctional, persistently incapable of delivering on broad national goal of promoting growth and development. If we are to build institutions that will raise the quality of life of Nigerians, there should be policies that would result in institution building, that regulate the conduct of all in respect of institutional change and economic performance. The paper recommends therefore, that there must be political will towards implementing sound governmental policies and strengthening institutions that would make the citizens to have confidence in the leadership for stable political systems that would ensure economic prosperity and national security.

Papers in the second section are on Social Psychology. Using Pregnant Women at the University of Benin Teaching Hospital, Benin City, Nigeria as case studies, one of the papers in these sections argues theoretically and demonstrates empirically that The Knowledge and attitude of the pregnant women towards substance use in pregnancy was poor. Education significantly differentiated pregnant women with positive attitude from those with negative attitude. It is, therefore, recommended that health education should be carried out for pregnant women on the abuse of substance.

In third section on Educational Psychology, one of the papers discusses the impact of untimely semester results on academic performance of students using Economics Department in TCNN College of Education Bukuru of Plateau State, Nigeria, as a case study. According to the paper, some of these negative impacts include: withdrawal, low moral for studies, demonstration or unrest, Paying extra fee and waste of time, energy and resources of the student. The paper suggests the problem could be addressed by timely release of students' results, making academic boards sit on results as expected, doing internal and external moderations of scripts/results within the school (internally), introducing Management Information System and Proper monitoring by the school authority

The last section on Human Resource Management, it is argued in one of the papers that organizational diversity climate reduces the positive correlation between empowerment and intention to leave. It is, therefore, recommended strengthening empowerment practices, fostering a positive diversity climate, and routine evaluation of climate diversity among employees.

On the whole, this issue of *NIU Journal of Social Sciences* features many interesting research papers. Some of these papers are empirical in nature while others have theoretical base. Each of them focuses on one specific social and management problem or the other; trying to proffer solutions to them. Readers are therefore advised to make proper use of the ideas presented by the various authors.

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Part One

Development Administration



The Role of Institution Building in Development Administration In Nigeria

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Abstract. Institution building is a vital necessity for the sustenance of good governance and socio-economic growth and development. This is because institutions serve as viable channels through which the citizens express their expectations or dissatisfactions on any national issue. Moreover, they serve as effective means to establish political accountability; yet within the process of institutional development, there should be balanced development of the intuitions so that no particular institution becomes more powerful over other institutions. However, in recent years, in Nigeria there is a challenge of eroded institutions that has ultimately continued to grapple with emergent socio-economic and political challenges. This paper examines institution building as a strategy for sustainable growth and development in Nigeria, the objective is to explore the meaning of institution building and its role in achieving the desired national development and to identify the challenges militating against institution building in Nigeria. Findings from the study show that Nigeria's institutions are generally weak and dysfunctional; persistently incapable of delivering on broad national goal of promoting growth and development. If we are to build institutions that will raise the quality of life of Nigerians, there should be policies that would result in institution building, that regulate the conduct of all in respect of institutional change and economic performance. The paper recommends that there must be political will towards implementing sound governmental policies and strengthening institutions that would make the citizens to have confidence in the leadership for stable political systems that would ensure economic prosperity and national security.

Keywords: Development Administration, Institution Building, Political Systems, Sustainable Growth, Nigeria.

1. Introduction

Institution building is a vital precondition for any social, economic and political growth and development which are critical and essential to any nation. It is one of the aspects of development administration which as a constituent factor for economic development, contributes to development actions that are often utilized to bring about change. It is primarily intended for developing countries that have decided to be transformed through modernization, whose superseding goals are tilted towards socio-economic progress and nation building. A country is classified as developed when she is able to provide qualitative life for her citizenry. Nigeria since independence has been faced with the problems of development in spite of abundant human, and natural resources she is endowed with. The country has been experiencing difficulty in adapting to social and economic changes arising from new social order associated with, economic, social and political challenges such as population increase, stumpy capital formations, slow ability to acclimatize with modern technology due to inconsistent policies; over-dependence on foreign 'aid' and deficient political and bureaucratic policy-making institutions and other myriads of security challenges (Okwuchukwu, 2011). Government is primarily responsible for setting the stage for achieving development administration through strong governmental institutions for making effective policies for capacity building by acquiring new skills,

attitudes, behaviours that are most often driven by public sector institutions (Olaopa, 2019). Although public sector institutions in Nigeria basically have responsibility for ensuring effective development administration, the symptoms of failure are easily noticeable as the causal factors for poor public sector performance because most public institutions in the country tend to be weak due to lack of capacity for institution building. Against this background, this paper seeks to examine the problems affecting national development as well as strategies for achieving development administration with particular reference to the roles of institution building as a strategy for sustainable growth and development in Nigeria.

2. Literature Review

2.1 Conceptualizations

Huntington (1965) defined institutions as the stable, valued, recurring patterns of behaviour which can be referred to as the mechanisms which govern behaviour of a set of individuals within a given community. Institutions are often identified with social purposes transcending individuals and intentions by mediating the rules that govern the living. Hodgson (2009) stated that institutions are integrated system of rules that structure social interactions. From a disciplinary perspective, institutions are principal object of study in social sciences such as political science, anthropology, economics and sociology. For example, Durkheim (1968) explained that institution is the science of institutions, their genesis and functions and that it is central to law and a formal mechanism for political rule making and enforcements. An institution is a social structure in which people cooperate and influence the behaviour of people and the way they live. The most generally agreed definition of institutions is provided by North (1990) who states that 'Institutions are the rules of the game of a society, institutions structure incentives in human exchange, whether political, social, or economic which may take any form of constraint that human beings devise to shape human interaction.' Institutions are made up of formal rules instituted by people such as statute law, common law, and regulations; informal constraints such as conventions, norms of behaviour and self-imposed codes of conduct; and the enforcement characteristics of both. They are generated from socially transmitted information and imposed by people upon themselves in order to structure their relationships with each other. Finally, there is the enforcement mechanisms which are integral part of the institutional framework

of a society and can function fully, marginally, or not function at all – institutions are ineffective when they are not enforced. According to Yeager (1998), the major role of institutions is to reduce uncertainty by establishing a stable but not necessarily efficient structure to human interaction and points out that both formal and informal institutions are evolving and changing, thereby continually altering the choices available to man

2.2 Institution Building

There are various terms used to describe institution building. One of the many features of development administration is institution building and as an element of economic development, it leads to development actions which brings about change in the society; and describes the concept of institutional building as it relates to development. The phrases often used include: 'civil service reform', 'institutional development', 'capacity building', 'institutional strengthening', etc.' Although these terminologies are widely used, they are yet ambiguous; there is need to ensure common interpretation for better explanation that will bring about broad understanding of the matter under consideration in this essay so it will be worthy to define institution building in a way that will guarantee uniformity in meaning and application.

Institution building is an approach of the developmental process which relies on the notion of 'social engineering' which underlines leadership role of bureaucrats that ensures the success of that process and the approaches available to them. It could also be described as a set of activities that supports organization building or organizational efficiency and other activities meant to change the method through which the society is regulated. However, the weaknesses of political, legal and administrative institutions tend to hamper the process immensely (Okwuchukwu, 2011). The political aspects of institution building entail the creation of a system that focuses on organization-influenced change toward progressive political, economic and social objectives.

Esman & Bruhns (1965) observed that institution building is an approach of the development administration processes which rely heavily on the concept of social engineering which stresses the leadership functions of elite groups within that process and the alternative action/strategies available to them. Institution building implies programmes of sustainable and constructive change in organizations which are designed to make them better at doing

what they already do, and more efficient; or which are designed to change the character of societies by transforming their goals and strategies, cultures, ways of functioning, management styles and so on (Habib, 1980). A level of self-sufficiency which enables organizations to manage their own affairs effectively, equitably and efficiently in the interests of development through the process of institution building to help governments to interpret and define the philosophies behind human development (UNDP, 1993). Institution building must be in harmony with local customs and practices which is built upon to complement what is already known and accepted by the society. It also entails the formulation of policies that strengthen and manage the resources needed for the realization of suitable programmes and projects.

Institution building most often takes account of what could be referred to as the imperatives of effective organization which include: clearly articulated missions, goals, strategies and main function which entails arranging functions into logical groups for the attainment of organizational objectives; methods of coordination and control adapted to the circumstances of the organization; the delegation of sufficient authority to enable managers or groups to exercise direct control over their areas of responsibility and clearly defined roles and relationships; the institutionalization of planning and communication at all levels; strong connections between performance and reward; credible transformational leadership capable of setting directions, motivating and inspiring employees and colleagues, and creating an organization culture which places high value on productivity (Blunt, 1990).

In practice, most development administration practitioners are now more concerned with improving on what exists rather than building from scratch. Institution building and development administration are used interchangeably being that they attempt to improve the functioning of societies by creating, strengthening or changing the way people relate to one another in the context of public action and public activities.

Effective institution building may sometimes involve changing relationships among important actors without apparently changing the formal organizational context of regular informal interaction between different groups of public servants involved in economic policy-making (Schiavo-campo, 1994). The term is used to refer to attempts to improve the functioning of societies by creating, strengthening or changing institutional framework, the main thrust of

institution building is the strengthening of institutional and human resource capacities of governments for the achievement of national development objectives and the internationally agreed development agenda for sustainable development by assisting countries in transforming public administration institutions into effective, efficient, transparent, accountable, innovative and citizen-oriented ones to accomplish missions of the State including delivery of services and sustainable development goals and targets; promoting the development of public sector human resource leadership capacities, professionalism and ethical conduct that fosters commitment to public service among the civil servants (Israel, 1987).

Changes in institutions occur incrementally since it is a consequence of the imbedded nature of informal constraints in societies. While the change in formal rules as a result of political or judicial decisions may occur so fast; "informal constraints embodied in customs, traditions, and codes of conduct are much more impervious to deliberate policies (Blunt & Collins, 1994). These cultural constraints represent the link between the past and the future and provide "the key to explaining the path of historical change." Therefore, it is a representation of the complex interaction between the State as a designer of formal rules and the society as being bounded by its informal constraints where the actors or players –groups of individuals are bound by a common purpose to achieve objectives while institutions are the rules of the game of a society. These players can be "political bodies (political parties, the senate, a city council, a regulatory agency); economic bodies (firms, trade unions, family farms, cooperatives); social bodies (churches, clubs, athletic associations); and educational bodies (schools, universities, vocational training centres) (Blunt & Collins, 1994).

2.3 Development Administration

The concept of development is not new but still it is in an incipient stage. Since civilization it has been growing in scope and substance, and the present nature of development greatly differs from that of the early period. Serious attempts have been made by scholars of different disciplines particularly after the Second World War to define the concept of development (Luke, 1986). The concept of development administration has two major aspects. One aspect of it refers to 'development of administration'. This means to develop administration. It involves strengthening and improving administrative capabilities as a mean for achieving development goals. Administration of

development has a key role in implementing the development programmes, projects and policies. This may involve raising the standards of education, transforming social systems, improving public health, raising national income, stabilizing political system, conserving national resources, improving communication system, constructing dams, power plants and undertaking many other developmental tasks of national importance.

These are two sides of one coin. Riggs (2015) said that administration can be improved by changes on environmental constraints that hamper its effectiveness and with the strengthening of development programmes. Unless the administrative effectiveness of government is increased, the developmental objectives which a developing country may aspire for fulfillment cannot be achieved. The field of development administration covers both aspects first, the development of administration and second is administration of development. Development of administration concerns the nature of administrative capacity for development and methods of improving and increasing it. Administration of development concerns the organization and management of various, development efforts (Braibanti, 1969).

Fainsod (1962) defined development administration as a carrier of innovating values involving the establishment and allocating resources to expand national income. It involves the organization of new planning and development agencies; the reorientation of existing nation-building agencies; and the creation of an administrative cadre to provide leadership in stimulating and supporting developmental programmes which can only be achieved through the mechanism of institution building as a major component of economic development. (Habib, 1980).

Development administration is concerned with increasing and improving the capabilities of the administrative system. If the developmental goals are to be carried out successfully with efficiency and effectiveness; there is need to increase the capacity of those involved in developmental tasks. Development administration has to perform the functions of improving the education of, and imparting training to, the personnel engaged in developmental goals (Sapru, 2002). Although policy making, planning and budgeting are advisory functions of development administrators, yet they constitute a significant part of efforts to enhance administrative capacity for development. Administrative capability also involves the use of modern management techniques and other ways and means to identify individual objectives with developmental goals. Improving and enhancing the

administrative capabilities are directly related to achieving developmental goals. Katz says that to achieve development objectives, administrative capability for development is required which has the capacity to mobilize, allocate and combine the activities. According to Katz "Administrative capability for development involves the ability to mobilize, allocate and combine the actions that are technically needed to achieve development objectives (Swerdlow, 1963).

Development administration concerns the administration of development which is further simplistically referred to as administering development. This is identified with organizational development - government departments, public enterprises, regulatory agencies, public corporations, cooperative institutions, etc. The government machinery is responsible for achieving the broader socio-economic and political goals. Precisely, development administration has two main functions, one relates to realizing development goals and objectives and second is to improving and enhancing capabilities of those involved in development goals and objectives. Based on the foregoing, it is safe to say that development administration is therefore about projects, programmes, policies and ideas which are focused at development of a nation, with emphasis on socio-economic and political development of society in general carried out by talented and skilled bureaucrats (Chandler & Plano, 1982).

3. The Role of Institution Building in Development Administration

Joseph Easten hypothesizes that "resident and entrenched leadership can easily command resources for a new programme and develop strong enabling linkages with other institutions in the society than absentee and changing bad leadership. The institution must have to relate with its environment to ensure survival and appropriate growth. An effective adjustment between organizational needs and environmental norms and values must be made and the leadership must claim and establish the legitimacy of the organization. Because institution-building is essentially a group process, leadership is one of its important elements. The critical role of formulating the doctrines and programmes as well as defining the set of values to which the organization attaches itself rests on leadership. Leadership is the process by which one member of a group influences other members of the group towards the attainment of specific group goals. It is the ability to lead others with the aim of bringing about change in an

organization (Carlson, 1998). Esman (1967) believes that leadership is critical to institution-building because induced-change process requires intensive, skillful and committed management of both the internal and environmental relationships. Besides the conviction that the set goal is achievable, Tang (2005) suggests that there are four important ingredients or set of skills necessary for effective leadership in institution-building which are: optimism - the belief that the ultimate goal is attainable; devotion- willingness to pursue the goal relentlessly; pragmatism - setting time lines and deadlines for achieving and reaching the goals before the deadlines; and skill- possessing the intellectual and technical capacity for understanding every issue relevant to realizing the set goals. Leadership, therefore, is akin to a bow which drives guides and gives direction to an arrow to help it reach its target. In this regard, what Nigeria needs is not only a strong leader, but one with the right mix of vision, intellect, commitment, etc. to initiate, drive and champion the reform process that will position the country to the desired nation building path.

The place of institutions in economic performance and nation building in general is easy to assume that all agree on or understand its primacy of place in quest for human progress. Though scholars and thinkers are moving towards consensus on the importance of institutions for human advancement, there have been several writings that emphasized how important institutions are for progress. They include Daron Acemoglu and James Robinson's *Why Nations Fail*; Neil Ferguson's *Civilization – the West and the Rest*; Raghuram Rajan and Luigi Zingales' *Saving Capitalism from the Capitalists*; Hernando De Soto's *The Mystery of Capital*; and the groundbreaking book by the Nobel Laureate Douglas North - *Institutions, Institutional change and Economic Performance*.

These books generally emphasized the importance of institutions; policy choices, institutions, human capital, entrepreneurship, culture - value system and leadership. We need to bring institutions and culture which is shaped by leadership with focuses on institutions and think less of values as a factor in making economic progress happen.

A development administration explanation for the function of institutions and their linkage to governance suggest that they evolve functionally within societies to address checks and balances and comparative advantage issues. Contemporary attitudes and beliefs about institutions and the role that they play constrain centralization of authority in the sense that national government becomes deterred

just as predictably, informal bodies exert their influence when decentralization provides better approaches to solving societal problems. Governance cannot be said to be in place if the people do not identify with the state, if the system continues to be alien to the cultural norms, corruption in its behaviour fails to guarantee the people's security and does not influence the economic activities of the people in a positive way. The system must recognize the importance of local institutions and realize that institution building cannot take place without taking the super institution of the state into consideration; e.g., high rates of population increases with capital formation remaining correspondingly low, difficulties in adapting advanced technology; problems of launching an agrarian and industrial revolution due to lack of coherent policies; heavy dependence on foreign 'aid' and lack of balance between political policy-making institutions and bureaucratic policy implementing structures have caused tremendous obstacles to development.

Economic development as a determining variable in the process of modernization is largely dependent "on the intellectual and political aspects of the process, the growth in knowledge and the ability of political leaders to mobilize resources in transitional societies however the weakness of political, legal and administrative institutions, government ought to be set up and run if they are to be good government. That is, when the reason for government is aimed for the common good and is wholly supported by all citizens of good will (Thomson, 1968) and the realization that the citizens were very much involved in the management of their government whether at the local, municipal or at the metropolitan levels (Johnston 1998).

In the Nigerian context, the formal structures of government in Nigeria have increasingly become a fiction in governance. According to Olowu & Erero (1997), the services they provide have declined sharply in quality and quantity, which inadvertently has given rise to the development of alternative institutional structures for providing essential services; empirical studies have shown that highly centralized states are expensive to run, cumbersome, inflexible and are subjected to being abused (Esman, 1991). Governance must be rooted in functioning local, participatory self-governance institutions (Wunsch, 2004).

There is in no doubt that governments have not been doing well politically and economically but that emphasis should now be shifted to the growth of civil societies, public ownership of political institutions,

mobilization of talents and resources into constructive patterns and countervailing power vis-à-vis national institutions. This new re-awakening is undoubtedly a reaction to years of frustrating experience with highly centralized national governments; any explanation that can be given for the continuing malaise of governance in our societies is the choice of their policies and the strategies employed in pursuing them. These policies include centralization (Olowu, 1995), central control of resources both fiscal and jurisdictional (Gboyega, 2003); turbulent economic and policy environment which have undermined local institutions (Olowu & Wunsch, 1995, 1996); leadership impunity to the laws of the land as if they are unchangeable and the absence of complimentary reforms in the legal systems (Ayee, 1997). According to Wunsch (2004), governments tried to develop policy and deliver services. States must share their powers of governance with regional and self-governing communities and there should exist a jurisdictional integrity that recognizes the political and legal competence of a unit of government to operate within a spatial and functional capacity where the citizens should be able to give consent and pass judgment on the exercise of authority over that governmental entity. There should be the transfer of responsibilities and resources from the central government to local entities and the development of networks between governments at all levels (Mukoro 2017). One of the many aspects of development administration is institution building as a component of economic development (Mutahaba, 1989). Weak institutions must be combated for the love of the next generation. To fail to build institutions that support growth and stability is to betray the mission of this generation. If institutions are to be involve in nation building, among the critical areas for institutions to be built or invigorated are in education, law and order, financial markets, communication and land reforms (Utomi, 2020).

4. The Importance of Institutions in Development Administration

Empirical analyses provide strong support for the overwhelming importance of institutions in predicting the level of development in countries around the world (Ferrini, 2012). Acemoglu, Johnson & Robinson, (2001) state that protection of property rights, effective law enforcement, and efficient bureaucracies, together with a broad range of norms and civic values are found to be strongly correlated to better economic performance. Institutions support economic development through four broad channels: determining the costs of economic transactions,

determining the degree of appropriateness of return on investment, determining the level for oppression and expropriation, and determining the degree to which the environment is conducive to cooperation and increased social capital. North (1990) opined that institutions are the rules of the game in a society, the humanly devised constraints that shape human interaction. They structure incentives in human exchange, whether political, social or economic. Institutions comprise, for example, contracts and contract enforcement, protection of property rights, the rule of law, government bureaucracies, financial markets. They also, however, include habits and beliefs, norms, social cleavages and traditions in education (Hall & Jones, 1999).

Formal institutions typically tend to be the crystallization of informal institutions (North, 1990). As social norms in the realms of gender, class and caste, for example, determine rules of political participation and representation, methods of economic exchange, and inclusion of different groups in society (Pateman, 1988). Rodrik, Subramanian & Trebbi (2002) assess the relative importance of institutions, geography and integration (trade) in determining the differences in incomes between the world's most developed countries and the poorest ones. They find that institutional determinants surpassed all others. It is not a new intuition that is responsible for the prospering of economic activity but it is institutions that matter. Adam Smith had noted the importance of a justice system, private property rights, and the rule of law in his text called - The Wealth of Nations. Aron (2000) surveys the studies which correlate indices of development to institutional ones and showed a positive correlation with property rights and enforcement, with civil liberties, others with political rights and democracy, with institutions for cooperation (e.g., clubs and associations), and find a negative correlation of development with political instability. On a general note, institutions appear so important to economic development in the following aspects according to empirical studies:

- Institutions conducive to economic development reduce the costs of economic activity. The costs include transaction costs such as search and information costs, bargaining and decision costs, policing and enforcement costs (Coase, 1992, Dahlman, 1979).
- Institutions lower transaction costs by providing common legal frameworks (e.g., contracts and contract enforcement, commercial norms and rules) and encourage

trust by providing policing and justice systems for the adherence to common laws and regulations (Shirley, 2003).

- Institutions increase the security that the risk of incurring in an economic transaction is matched by the full appropriation of its eventual benefits. This includes the presence of individual private property rights. If property is protected, individuals are more willing to invest and to incur sunk costs (Grief 1993). This, according to Pande & Udry (2005) increases output and thus is conducive to economic development (Bates, 2001). Thus, property rights are by no means sufficient to spur economic growth, and must be balanced by institutions which limit the extractive capacity of state power. These typically involve independent parliaments and judiciaries. Democratic institutions of political representation strongly contribute to this process (Rodrik, 2000).
- Institutions determine the extent to which those in power are able to expropriate the economy's resources to their private advantage. Unequal institutions strongly limit development by reducing the capacity of individuals to access resources, expand production and increase their incomes. Institutions which benefit elites and allow their appropriation of resources and products have perpetuated underdevelopment. (World Bank, 2008, & Myrdal, 1992). Greater equality and functional economic institutions are also seen as the cause for the successful development while high inequality has concentrated power in the hands of restricted elite, and governments have failed to adequately invest in infrastructure and public welfare (UNFAO, 2006).
- Similarly, institutional capacity to exploit domestic primary resources is indicated as the key to the success of Botswana and Mauritius in comparison to other developing countries for which primary resources have turned into a curse, i.e., Sierra Leone (diamonds), Angola, Equatorial Guinea and Nigeria (oil) (Birdsall, et al., 2005).
- Institutions have effects which lie deep in the socio-economic fabric of societies. (Banerjee & Duflo, 2011). Institutions which are conducive to development ensure greater self-expression, allow the free flow of information and encourage the formation of associations and clubs. These form

prosperous social relationships, which are conducive to greater economic interaction by increasing levels of trust and wider availability of information (Putnam, 1993) and allow greater sharing of resources through democratic institutions and the use of the state to reduce the risk attached to economic activity (Bardhan, 2006).

- Institutions often pool resources to limit the negative effects of business cycles on incomes and unemployment. Institutions conducive to development pool resources to provide the investments in education, health and infrastructure which lie at the basis of economic interaction and are necessary and complementary to private investment.
- Informal institutions lie at the basis of an economy. They include public agencies, trade unions, community structures and professional associations. They make up the fabric which determines the response to laws and government decisions. Most often they shape these outcomes themselves.
- Institutions matter a great deal in determining the level of economic development of a country. Indicators such as degree of protection of property rights, the rule of law, and civic liberties are strongly correlated to economic performance. Institutions are so important for economic development and it has identified four broad channels through which the correlation can be explained.
- Institutions determine the costs of economic transactions: they spur development in the form of contracts and contract enforcement, common commercial codes, and increased availability of information, all of which reduce the costs of transactions, risk, and uncertainty.
- Institutions determine the degree of appropriability of return to investment: protection of property rights and the rule of law spur investment and thus increase incomes.
- Institutions also determine the scope for oppression and expropriation of resources by elites: unequal institutions which allow the dominance of powerful elites over economic exchange strongly limit development, as can be seen in the case of many ex-colonial countries.
- Institutions strongly affect the economic development of countries and act in society at all levels by determining the frameworks in which economic exchange occurs. They

determine the volume of interactions available, the benefits from economic exchange and the form which they can take.

- Lastly, institutions determine the degree to which the environment is conducive to cooperation and increased social capital; inclusive and participatory institutions increase the flow of information and the extent to which resources can be pooled to reduce risk and ensure sustained levels of wealth. High quality institutions today are rooted in greater equality, political competition and cooperative norms in the distant past.

5. Institution Building and Development Administration in Nigeria

Some of the most critical challenges to development administration in Nigeria include entrenched poverty and unemployment, conflict, hunger, and diseases. If the country must achieve meaningful national development, there is need to build strong institution for service delivery, government efficiency, and strong policy and programme implementation capacity in order to achieve meaningful public sustainability. Our infrastructural development, maintenance and delivery of other state services need viable and functional institutions. All governmental institutions should aim to attract and maintain a talent pool and dedicated workforce that would drive development and should be independence and autonomous of government interference so that they should be able to perform and deliver services without fear or favour (Skelcher, 2005).

The civil service as an institution should serve as a catalyst that drives national development; not only the execution of government programmes but also policy formulation and implementation and researches aimed at actualizing government vision, mission and objectives. There should be no frequent and constant change in policy. Leaders should avoid policy inconsistency and discontinuing of the policy of their predecessors. Policy inconsistency is one of the major setbacks to achieve any enduring meaningful development. When a person assumes an office the first thing, they do is to rubbish the policy or programme initiated by their predecessor and introduce new and often ill-conceived policies that are not realistic before the end of their tenure.

The dismal underdevelopment the country is experiencing can be attributed to the lopsided and visionless plan of our previous leaders. There is lack of consistency in our programme and public policy

that is why any incoming administration or government tend to discredit their predecessors before even sitting down to plan their own programmes. Governance should be seen as a continuous process so there should be consistency in any ongoing project of statehood by investing substantial part of our nation's wealth in strong institutions and training and retraining of our workforce because every nation's strength is in her workforce.

“What Africa needs are strong institutions not Strong men” – Former US President Barack Obama in Accra on his maiden visit to Africa as President. “There is a monstrous relationship between the government and the citizen whereby the government is more powerful than the citizen...” (Adewale 2012). The absence of institutions, strong men dominate, and the effect of their dominance is weakened rule of law and elevated uncertainty levels (Utomi, 2020).

Institutions have and follow rules, strong men have friends and follow whims that make decision making problematic and often results in either the avoidance of economic engagement or the high cost of hedging against undesired outcomes which often results in poor economic performance and create a class of people who are so left out and feel they have nothing to lose such that with no stake in the social order are inimical to the country. It is therefore imperative to recognize that institutions matter and concentrate on more problematic issue about how societies need strong institutions. Bearing in mind that many public institutions in Nigeria have floundered of which every citizen must be concern is how enduring institutions are able to function. When costs are placed on conduct outside agreed range of behavior and the rule of law ensures that they are followed, it is easier to anticipate transaction engagement. Where boundaries and consequences for conduct outside those boundaries are unclear, for example in the country of the big man might tend to be right rather than the rules. (Utomi 2020)

6. Development Administration Institutions in Nigeria

These institutions are the ministries, departments, agencies and corporations, local authorities, any business or undertakings entrusted by the government and any company registered or deemed to be registered under the companies Act No.7 of 2007 in which the government holds more than fifty percent (50%) of the shares. These institutions perform administrative functions; e.g., the civil service as government institution functions as an administrative machinery to formulate and implement government

policies and programmes while other are political in structure but work in synergy with the other institutions for the purpose of achieving political objectives of government e.g., the political parties, INEC, the executive and the legislature (national and state assemblies) perform political functions. Others yet perform economic functions; e.g., the Central Bank. Some of the institutions in Nigeria are highlighted below:

- Central Bank of Nigeria
- Civil Society Legislative Advocacy Centre
- Code of Conduct Bureau
- Federal Ministry of Finance
- Federal Ministry of Justice
- Independent Corrupt Practice and other related Offences Commission (ICPC).
- Independent National Electoral Commission
- National Agency for food, Drug, Administration and Control NAFDAC.
- National drug Law Enforcement Agency (NDLEA).
- National Pension Commission
- National Planning Commission
- National Population Commission of Nigeria
- Nigeria Customs Service
- Nigerian Communications Commission
- Nigerian Electricity Regulatory Commission
- Nigerian Stock Exchange
- Petroleum Products Pricing Regulatory Agency
- Securities and Exchange Commission
- Standards Organization of Nigeria
- The Independent National Electoral Commission (INEC)
- The Legislature (National Assembly)
- The Nigeria Immigration Service
- The State House, Abuja

7. The Challenges of Institution-Building in Nigeria

There are several challenges to institution-building in Nigeria (Esman, 1967). These factors are inter-related and complementary in their effects; and together act as obstacles to the effective functioning of public institutions on the one hand, and attempts at strengthening them and improving their effectiveness on the other (Tang, 2005). They include:

7.1 Elite Resistance

The Nigerian elite could be described as a rent-seeking group of people that seek to control and influence political and economic institutions for personal gains. Any change in the existing

institutional set up is likely to unfavorably affect the rents earned by the elite (Manjumar & Mukand, 2004). This is why the elites have insistently and clandestinely resisted the existence of strong institutions in Nigeria. Their monopoly is not just on economic institutions; they have also infested the political, judicial and law enforcement institutions in order to consolidate their positions to protect themselves against any possible repercussion. The elites are not only powerful, but everywhere with different nomenclatures such as ‘cabal’ or ‘vested interest groups’ in virtually all critical sectors of the Nigerian polity and economy (Manjumar & Mukand, 2004).

7.2 Conflict of Interests

A major discernible obstacle to institution-building is the existence of actor-goals. This refers to conflicts between the objectives of individual actors involved in an organization and those of the organization as a whole. Often, individuals who run and operate national institutions in Nigeria pursue personal goals that are conflicting with those of the corporate entity. Such contrasting circumstances produce two adverse effects: it prevents optimal performance of the organization; and provokes an internal rivalry towards strengthening the institutions. Opportunities for personal material gains create incentive for institutional actors (leaders and operators) to establish themselves while weakening the institutions. Institutions, therefore, remain compromised from within (Gambari, 2008).

7.3 Lack of Political Will

Institution-building requires for its take-off, continuity and success, the intention and commitment of those who are vested with the statutory authority to control and run the organizations; i.e., those responsible for governance. These include political heads, such as Directors-General (DGs), members of the board, ministers and commissioners, etc. whose tenures are most often short and because, institution-building is a long-term activity, it is unpleasant to them because they are more interested in short-term and more financially rewarding activities such as project conception, design and execution; which offer greater opportunity for personal enrichment than focusing on strengthening the institutions. For example, members of the National and State Assemblies are usually more interested in constituency projects and other similar matters than sponsoring motions or bills that have bearing to improve legislative performance, DGs and other heads of MDAs tend to show greater interest in

contract awards than in designing and implementing training programmes for capacity building of staff (Carlson, 1998).

7.4 Constitutional Rigidities

The Constitution of Nigeria is the supreme law of the country. The enabling laws for all institutions are derived directly or indirectly from the Constitution therefore, an amendment of the enabling laws or the Constitution itself is often required before any changes like restructuring, re-organization etc. can be made to most institutions. However, the process and procedures for amending the constitution is very rigid and difficult. Nigerian lawmakers as a group seem not to be patriotic, they rarely act to promote national objectives. So being an elite group, the lawmakers' allegiance/loyalty is owed to their individual and group interests. An instance of this, is the approval and passage in February 2018 of a bill which purports to changing the order of elections in the time-able approved by the Independent National Electoral Commission (INEC) which attracted wide-spread criticism and condemnation by many Nigerians describing the action as unconstitutional and self-serving. The proposed law, rather than improving the effectiveness of INEC eventually undermines its autonomy and overall effectiveness in the conduct of elections (Mohammed, 2019).

7.5 Institutional Corruption

Official corruption has taken over the zeal to serve well and render oversight functions to the satisfaction of citizens. The ministries, departments and agencies never execute their target allocations nor even return unspent funds. Budget padding and allocation of unwarranted funds as constituency projects have been the bottlenecks of the Nigerian society (Guardian Newspaper Editorial, 2016). This coupled with judicial and administrative weaknesses and injustices; lack of punitive regimes and outright corruption and impunity (Daudu, 2016). The consequences have been poor state of affairs of the social and economic infrastructures and pervasive poverty and dependency on few that work and massive unemployment on an import dependent and massive unemployed youths. The youths serve as instruments for perpetrating violence and conflicts during elections and transitions of governments. Furthermore, uneducated youths and drug addicts and unemployable persons with massive child labour becomes challenges that most of those institutions are faced with (Daudu, 2016)

7.6 Bureaucratic Bottlenecks and Duplication of Duties and Roles

Our institutions are filled with bureaucratic inconsistencies, duplication of duties and roles. The institutions are set up to provide employment and generate revenue rather than provide essential services to the generality of the citizens. There is no distinction between essential services and luxury. Governments have no capacity to provide necessary infrastructural services to their citizens such as power supply, clean pipe borne water, standard gauge roads, educational institutions, health services, agricultural extension services, social security services and adequate economic assurance of their career after retirement. Most of the services have been privatized where in most cases; the highest bidder gets the companies sold to them. After much failure and duplication of duties and heavy employment and outstanding salaries and allowances, with most of the liabilities outstripping the assets, the companies are sold off by government to their cronies that are rich and can afford to operate with high prices and taxes. Those institutions and companies eventually fail to deliver because they were aperture and not true reflections of institutions that really need privatizations on public/private partnership to enhance a developing economy on investments with legal framework that will protect the investor (Olaopa, 2019).

8. Conclusion

From the foregoing discussion, outcomes are more difficult to predict because institutions are not decreed into existence, they evolve. Many of our so-called institutions have been decreed into being without requisite actions and this is the reason for weak institutions. These things are unlikely in our environment except to those with power as their patrons. It then adds up to poverty and failure to realize the imperative to accelerate institution building on the challenge for nation building. Citizens became victims and how altogether the obtuse power asymmetry between citizen and state kills the spirit of enterprise and keeps the economy recursive and underperforming. It is pertinent to make the point about how institutional weaknesses have kept Nigeria in the recursive mode and can be directly linked to the current state of high unemployment in the country, visiting the system with whims that assure we will lose one decade of progress. If we are to build institutions to raise the quality of life of Nigerians; institutional change and economic performance should engage in contestations that will ultimately result in institutions

that set boundaries to the conduct of all. If we continue to roll over and play dead; the authority figures will continue to act in ways that heighten uncertainty and sabotage economic progress; where people feel they are victims of injustice, it is hard to find peace and where there is no peace, progress is improbable. A just society is desirable and made likely by institutions that mete out consequences in a manner blind to who is involved.

Findings from this paper show that Nigeria's institutions are generally weak and dysfunctional; persistently incapable of delivering on broad national goal of promoting growth and development. Any process aimed at their strengthening must first grapple with a number of hindrances and challenges to institution-building. These include: elite resistance, conflict of interests, lack of political will and constitutional rigidities. Leadership is also identified as a critical element in the institution-building process. However, the emphasis should be on informed leadership - with a vision and the commitment to its pursuit - rather than strong leaders.

9. Recommendations

This paper recommends that:

- There must transparency and accountability in institutions.
- There must be proper separation of powers and independence of the judiciary in terms of funding and administration.
- Institutions should stick to their target when delivering their goals.
- Government institutions must be accountable to the people they represent.
- There must be the political good will to implement sound governmental policies and strengthening institutions in Nigeria.

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The Value of Human Life in the Nigerian State

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Abstract. This paper sets out to exam the ontological meaning of life based on the relationship that exists among the Nigerian citizens, government and its law enforcement agents. Down through the ages the scenario created by the Nigerian government and its law enforcement agencies in the careless mishandling of the citizens they swore to protect with their positions is becoming a terrific and an imaginable phenomenon. The insensitive mishandling of the citizens as low breed animals has forced people to ask whether life in Nigeria is a right or a privilege. The government and its law enforcement agencies in Nigeria are now playing God and assuming the position of God when dealing with the citizens. In Nigeria, fundamental human rights exist in shadows and utopic impressions of false hope. The absolute disregard for the fundamental human rights and the rule of law in Nigeria have led to man's in-humanity to man in the country, insecurity, corruption, outright injustice, and mass exodus of the citizens to foreign lands where life is more secured. Using the historical and phenomenological methodologies, this paper examines the precarious nature of human life in the Nigerian State with historical facts, references and without bias, and further made some recommendations on how to navigate out of this uncivilized and barbaric system we presently find ourselves in the 21st century.

Keywords: Life, Right, Bad leadership, Corruption, Nigerian State, Law Enforcement Agencies.

1. Introduction

The meaning of life and human existence is one of the perennial problems of philosophy. Existentialists, liberal democratic theorists, essentialists, etc. have all given their opinion on the meaning of life. There is also "the socio-cultural and communal dimensions of the human person which the African takes into consideration in searching for the meaning of life" (Odia, 2018: 70). From the religious perspective, it is

a general belief round the world especially among the theists that life is a direct gift from God and therefore sacred. This concept has naturally made it clear that no one has the right to tamper or snatch or sniff off another man's life. Such an act in African traditional society is abominable and therefore attracts a severe punishment from the community where the crime is committed. The sacredness of life is held sway with high esteem in most parts of the world because no man can give it. Therefore, it cannot be taken by anyone. In Nigeria today, the sacredness of life or human dignity is theoretical, cosmetic and mere mask because there is little or no regard for life. For ages, the Nigerian government and its law enforcement agencies have dehumanized majority of the citizens, frustrated them beyond recognition, killed/murdered them without conscience, jailed them without a cause, and wiped them out of existence for asking for their legitimate rights. Nigerians now live in their father's land with fear like the ancient Israelites in Babylon during their captivity. Nigeria is a country that claims to practice democracy but afraid of the basic tenets, rudiments and ingredients of democracy, especially the supremacy of the rule of law. It is a situation where the government acts unconstitutionally and punishes the few courageous people who challenge the unconstitutionality of the government.

This work will focus on the Nigerian State, law enforcement agencies and the citizens. It will mostly dwell on how the citizens are treated, and the reactions of the citizens towards the government. It will not fail to address too how people emerge as leaders and occupy the high and sensitive positions in Nigeria as an acclaimed democratic nation. Are the leaders truly the people's choices, or self-imposed or manipulated (hence they are insensitive to the people's plights)? It is saddened that in this 21st century a country like Nigeria that is 62 years old as an independent nation is still graciously and proudly wallowing at the periphery of democracy, and yet

parades itself around as the giant of Africa. This is the problem this work sets out to tackle.

2. The Ontological Concept of Life

There are many accounts of the origin of life. We have the stories of the origin of the universe from different cultures of the world. We also have the origin of the world or the self from the Upanishads, the origin and fate of the universe by Stephen Hawking, the origin of species by Charles Darwin, and the creation and the fall from the Bible (Hallman, 2003: iv). However, ontologically, life is conceived as a priceless gift from the creator (God) to man. It cannot be given by any other being within or outside the universe except God. It is for this singular reason that life is considered as the most sacred thing bequeathed to all living beings especially rational persons. According to Ejim (2006: 46-47) each individual's life is a gift from God to the community and to the family. That is why when a child is born, there is celebration in the family and in the community. The most important thing that makes humans equal is 'life', because no life of a human person is superior to the other as far as all persons are created of the image and likeness of God. Life is therefore an unquantifiable thing given to humans by the creator (God) in a very special way and manner. The human person is the only being molded from the earth with God's own hand and has the breath of life from God that makes him or her active and alive as a being that can think, react, interact, love, appreciate and that moves towards an omega point as his or her final destiny.

Human beings are conscious of themselves because of their unique relationship with God. As an image of God, the human being is a special being that distinguishes himself or herself from other creatures. For this singular reason, Ejim (2006: 38-39) points out that all that exists in this world: man, animals, and other objects, simply share their existence from the reality of the Supreme Being. However, the degree at which human beings as thinking beings share in the reality of the Supreme Being differ from the degree at which other things share in the same reality. The breath (life) of God in human beings is eternal. Thus, death is not an end but a transformation or a sojourn to an eternal life because the human soul as the breath of God is immortal just as God is immortal. It is through death that the human being achieves immortality and reconnects to God. In the odyssey of life, the human being constantly reflects on what becomes of him or her after his or her earthly existence. This singular fact makes the human being to occasionally examine and reexamines himself or

herself in order to reform and refine himself or herself when the need arises as a result of his or her shortcomings since he or she has some imperfection.

With advancement in science and technology thus far, no scientist has created a human being from dust. Attempts may have been made through biotechnology and other means, but the fact remains that our understanding of the functioning of the human anatomy and physiological make up are not enough to create from the dust a human being or other living things. We should bear in mind at this point that cloning is different from creating a human being or other living things from the dust. For now, the secret of creating life or giving life to human beings or other living things remains with God alone as the very author of life.

In African indigenous society, life does not belong to an individual alone. This echoes the saying of Aristotle that the human being is a social being. Humans cannot exist without sociability both at conception and beyond. For the African indigenous society therefore, the deliberate taking away of another man's life is not only an abominable act, but a grievous offense against mother earth, the deities, ancestors, the entire community where the crime is committed and especially the Supreme Being the giver of life. The sacredness and the inestimable value of life in African indigenous society have made it an abomination to terminate the life of an unborn child, maltreat a pregnant woman/nursing mother, commit suicide, euthanasia, and the killing of the weak in the society. Those who are culprits of such abominable acts that terminate other people's life are not spared or allowed to live with other members of the community. The least punishment that could be given to such culprits is banishment, and that is when it is discovered that the offense was committed in error. While those who deliberately committed such act (murder) at the time of peace (not in a war situation) are condemned to death by the community, because the entire morality of the people is anchored on the value of the human life and justice.

In most parts of the world, what makes the society to be considered great is the ability to protect life and property of its citizens. A society is considered to be barbaric, timid, uncivilized and crude when the hope of living a free and secured life is thrown to the dogs. An organized society must therefore show concern for all the inhabitants and their welfare irrespective of the tribes that form the society. Nations have gone into wars because of the protection and welfare of their citizens, because they felt it was their duty to do so. The acclaimed incessant wars in Sub-Sahara

Africa even before the arrival of the white man in Africa were basically fought for the interest of the people; they were fought either for territorial boundaries, or liberation and protection of the people from the domination and oppression of other tribes, or for injustice done to them by another tribe that was not well addressed.

A society therefore is only qualified to answer the name 'society', 'nation', 'State', 'community', and 'country', when it has what it takes to protect the lives and properties of those who live and dwell within the specify territory not minding the tribes that constitute it. So, tribalism which is the "discrimination against a citizen because of his place of birth" (Achebe, 1983: 7) has the capacity to prevent a society, nation, state, community and a country from function as such. A country (in a true sense of the word) is always on a look out for external aggressors who may attack its territories either for the purpose of game or otherwise. It is an aberration when a certified society turned against itself by destroying what makes it bear the name "society".

3. The Nigeria State: Its Security Apparatus and the Citizens

Most Nigerian citizens are fully aware that their physical earthly survival is in the hands of God and not that of the government with its law enforcement agencies. The citizens are also much aware that the security agents are paid to protect the rich, the politicians, the technocrats, and those occupying high positions in the society. The ordinary man and woman on the street have come to believe that he or she can only survive through 'worshiping' those that are at the hem of affairs in the society. The poor can be slaughtered by the security agents to please the few selected opportunists and their cronies without protest. Protest in Nigeria is a crime and best put as treasonable felony. Asking for your right is considered as an attempt to unseat the government of the day. Ehusani (1995: 99) asserts that Nigerians have no freedom, even to complain about their condition, as their best Newspapers have been proscribed for venturing to write the truth, labour unions have lost their autonomy to the extent that oppressive government now dictates what happens in many unions thus making them unable to adequately negotiate better conditions of service for the distressed workers. He states further that when workers attempt to stage peaceful demonstration against their oppressors, they are confronted with deadly harassment by a brutal police force.

The Nigerian citizens were better off during the colonial era when it comes to respect for the fundamental human rights of the citizen. The British were able to manage the colony of Nigeria and respect the fundamental rights of Nigerians because the administrators of Nigeria were experts. As observed by Achebe (2012: 43)

The British governed their colony of Nigeria with considerable care. There was a very high level of knowledge of how to run a country. This was not something that the British achieved only in Nigeria; they were able to manage this on a bigger scale in India and Australia. The British had the experience of governing and doing it competently. I am not justifying colonialism. But it is important to face the fact that British colonies, more or less, were expertly run.

Nigeria gained its independent from the British in a platter of gold without going to war, but there were several protests especially in the southern part of the country demanding for freedom for self-governance without been slaughtered, murdered, or killed by the colonial masters. The citizens were allowed to air their views on issues that directly affected them to guide the colonialists to develop a more cordial relationship with the natives. The Nigerian politicians carved out a special society for themselves after drinking from political elixir to create a lacuna between themselves and the commoners who collectively elected them (directly or indirectly) to occupy the positions that turned them into superhuman beings.

The seemingly frustrated and agonizing relationship between the ruling class and the citizens has made the citizens foreigners in their own fathers' land. The citizens cannot seek for justice or demand for their rights from the ruling class. According to Ehusani (1995: 99), today thousands of people who are mere suspects languish in jail under sub-human conditions, some for upward of five to ten years. Many of them have never been formally charged to court for any offense. A number of these detainees die in prison due to abuse and neglect, and hardly any account is taken of them. The extent of police brutality and extra-judicial killings in our land is alarming. The ruling class has gradually turned the Nigeria State into a totalitarian State where despotic rulers act without regard for the constitution of the country. They indiscriminately increase their salaries and allowances whenever they deem it fit while the public servants and civil servants are paid peanut that is not enough to send their children to good schools. The religious bodies are not excluded, because the

missionary schools, which used to be the school for all and sundry, are currently out of the reach of the poor. Only few religious leaders have openly criticized the government on the pulpits and at the public fora for gross inefficiency. Some of the religious leaders have romances with most of the politicians up to the extent of even knighting or 'turbaning' them in their Churches and Mosques just for material gains. Close to 90% of the politicians in Nigeria are either Christians or Muslims who worship in the same Churches and Mosques with other fellow Nigerians. If our religious leaders are like the biblical Amos (a social critic) they would have used the pulpits like Archbishop Oscar Romero of El-Salvador in Latin America to correct the ills and challenged the criminally corrupted politicians in their Churches and Mosques. Everyone claims that Nigeria is a religious nation; the question now is, of what benefit is religion to the Nigerian populace since some of our religious leaders collaborate with the politicians to perpetuate evils in the land?

The law enforcement agents have their own share of making life unbearable and, to a large extent, meaningless in the Nigerian State. They occasionally unleashed terror on the people even though they are also suffering from the consequences of the negative and bad actions of political leaders. Most of them that have retired barely get their retirement benefits or live a standard life that befits those who made great sacrifices for their country. Most public and civil servants that have retired in this country are treated like ex-convicts freed from the maximum Kirikiri prison after serving their jail terms. Some of them who retired with terminal ailment or injuries from their duty post while in service are left alone to cater for themselves with the meager monthly allowances that is not even forthcoming as at when due. Some of them dropped dead during pensioners' occasional verification exercise, because of poverty. It is this terrific and horrific situation of the Nigerian masses that prompted Ehusani (1995: 98) to comment that, the mass of Nigerians have been stripped naked by a corrupt and callous elite. The mass of Nigerians have suffered in the hands of a succession of despotic, decadent, vision-less, and reckless leaders. They have been humiliated, pauperized and reduced to a state of destitution by combined forces of military dictatorship, political subterfuge and economic profligacy. Most Nigerians have lost their individual and collective pride to the excesses of autonomous conquerors who recognize no order except that established by mammon. Every day, thousands of our country men and women are dying of starvation and otherwise curable diseases. Gaiya (1992: 2) asserts that on several occasions, government has set up

administrative judicial and special military tribunals to victimize and witch-hunt selected persons instead of finding lasting solutions.

The social media that ought to be one of the medium for the citizens to express their feelings and opinions about the nefarious activities of the political class in relation to looting of public funds, borrowing from foreign nations, unexecuted paid projects, incompetence of the government, police and army brutality, poor standard of living, insecurity, raping, kidnapping and banditry in Nigeria, has been made redundant by the government who considers any written or spoken statement against the government as hate speech or treason; therefore a bill has to be raised by the National House of Assembly for the censorship of people's posts on social media that are anti-government. The dictatorial nature of a supposedly democratic system in the Nigerian State is a paradox in the oasis of mental abstraction that is not comprehensible to human understanding, and therefore remains an enigma to the international world where true democracy is practiced. Duniya (1995: 37) points out that from the colonial days to the present, the army or the traditional rulers have always ruled the masses of this nation with an iron hand, arresting and sentencing thousands of suspects on political charges. Although there were countless human rights abuses during the military regime in Nigeria, but people were allowed to protest against bad governance without loss of lives and brutalization of citizens during protests, people could sleep with their eyes closed, and the security of their lives and properties were guaranteed compared to what we have now.

4. Criminal Seeds Watered by Hopelessness

In every human being, there are both good and evil tendencies due to virtues or vices acquired over time in the family, school, society, religion and other social institutions. No one is born perfect and act perfectly all the time. The environment an individual grows up contributes to shaping and modeling his/her life style and his/her relationship with other humans. Even in the Bible, Jesus says a good tree cannot produce bad fruits and a bad tree cannot produce good fruits; that would be an aberration. Philosophically speaking, ideas govern the world to the extent that the prevailing ideology (good or bad) influences persons to act the way they do. Thus, the kind of persons in government and the kind of ideologies they promote and sustain go a long way in making the citizenry politically active or docile. Nigerians as persons created by God are good persons who are hospitable, unassuming, calm,

peace-loving, sociable, entertaining, industrious, self-contented, and anti-racists. However, the kind of leaders they have had over the years and the ideologies these leaders propagated have formed or nurtured Nigerians into what they have currently become.

The world all over is aware that Nigeria is a land flowing with milk and honey like the biblical land of Canaan in the Ancient Near East. Nigeria is blessed with both human and material resources, and it's among the few countries in the world with such abundant opportunities. Otuibe (2003: 67) argued that God has endowed Nigeria with enormous potentials and opportunities that could make this nation really great and offer every Nigerian a comfortable living. Like the biblical description of the land of Israel, Nigeria could equally be said to be a land that flows with 'milk and honey.' According to Pope John Paul II (1998):

God in fact has blessed this land with human and natural wealth, and it is everyone's duty to ensure that these resources are used for the good of the whole people. All Nigerians must work to rid society of everything that offends the dignity of the human person or violates human rights. This means reconciling differences, overcoming ethnic rivalries, and injecting honesty, efficiency and competence into the art of governing.

Nigeria is an envy of many nations of the world due to its natural resources and with one of the best climatic conditions throughout the year. There are no much natural disasters in Nigeria as experiences in other part of the world like some countries in Asia, Europe and America. The question is, is Nigeria with its natural resources better than those countries that are less endowed?

There are complains within and outside Nigeria today about the chaos, poverty, insecurity, human rituals, cymal crimes, unemployment, gangsterism, religious charlatan, ostentatious style of life among the political class, short life span because of poor health system, increasing rate of illiteracy, school drop outs, robbery, kidnapping, banditry, raping, and cultism in Nigeria presently. Is there hope for the Nigeria nation and the people? Hope can be found in a system of education that produces adequate knowledge for Nigerian graduates "based on a philosophy of education that involves the active participation (consisting of talents, gifts and potentials) of those being educated with an approach open to pluralism" (Odia, 2016: 150). Such a philosophy of education can produce citizens that can

challenge the existing corrupt political structure in Nigeria. However, the current negligence of the educational sector by successive government in Nigeria has made adequate knowledge elusive. There are secessionist movements all over Nigeria clamouring for separation to give room for fast development. Nevertheless, some unbiased and non-tribal-ethnic political agnostics opined that separation is not the answer to the economic, social and political quagmire we are presently navigating in, because the visionless, insensitive and corrupt politicians are evenly distributed in the six (6) geopolitical zones. Therefore, secession will not change and heal the mental state of hysteria of the Herodias political elites who are deeply immersed in corrupt practices, because of their kleptomaniac nature. Stopping a Nigeria politician from stealing from the public treasury is like preventing a village goat from eating yam, which we know is an unthinkable impossibility. According to Okonjo-Iweala (2012: 81) Nigeria had become virtually synonymous with the word "corruption." The corrupt practices are exacerbated by both the Military Generals and politicians (retired and still in service) who had thrown their conscience to the street dogs.

The Nigerian political elites have failed to provide an enabling environment for the citizens to excel in their various fields of endeavors. Eboh (2016: 109) points out that rare Nigerians leave the shore of Nigeria to seek refuge in countries willing to recognize what they are. As a result of the distance between the leaders and the people the leaders do not understand the plights of the people, and they do not know how to address the problems of the common man/woman on the street. The leaders are only concerned about the progress of their families and at times their village supporters. It is a verifiable fact that most of our people who summoned up courage with all the odds in the Nigerian society to go to school/tertiary institutions aimed at getting white collar jobs. After graduation, when the white-collar jobs are not available, they redirect their knowledge and skills acquired from the courses they studied to crimes of various degrees out of frustration. The Nigerian government is not innovative enough to create jobs for its vibrant youths who because of their youthful exuberance are prone to all kinds of crimes. Nevertheless, the same government is good in fixing the privilege ones (their children, brothers, sisters, and ethnic men/women) in juicy positions, while the children of the commoners who struggled to graduate from tertiary institutions are left on the street to seek for teaching jobs from private schools where they are poorly paid just to survive. Some of the poor ones who graduated from tertiary institutions turned to

pastoral ministries by gathering other poor people like themselves seeking for miracle to start fellowships and later graduate to big ministries or Churches.

The Nigerian youths who are always ready to work as a means of survival are not given the opportunity by the government to showcase their talents. It is possible that, if there are basic amenities in Nigeria like other developed or developing nations of the world, the Nigerian youths would have been spending their time on self-development or growing businesses. The government had spent billions of naira on electricity, but very little to show for it. There is no stable electricity and water supply to carry out small scale businesses in the country. Those planning to open small scale businesses have to make provision for power supply because of the epileptic nature of our electricity. The government feels unconcern for the welfare of its citizens. In the process of struggling to survive some of the youths result to cymbal crimes, prostitution, rituals, robbery, and gangsterism. The Nigerian State helps in bringing out the evil tendencies in its citizens through its anti-people's policies. For instance, civil servants, public servants, military and paramilitary who play pivotal roles for the corporate existence of the Nigerian State are poorly remunerated. They spend good 35 years serving their nation, yet at retirement they live in penury and hardly able to care for themselves without depending on their children and relatives. The poor salaries during their service years are not enough for their families up keep, it is therefore practically impossible for them to save for the rainy days (retirement). Some of them rely on loan for the training of children, building of houses and buying cars just to meet up in the society. The Nigerian State has created a miserable situation for them and therefore pushed them to some corrupt practices. For them to survive, they engage on unholy activities such as collecting bribes from their fellow citizens who need their services, working in other places during office hours to get double salaries to increase their incomes, and what have you. The few committed ones remain perpetually poor and become laughing stocks in the society, because there is nothing to show for the 35 years of service to the nation. Some of them die miserably during yearly screening exercise before they get their monthly poor remunerations to keep them alive.

The government emphasizes on fighting corruption, but provide avenue for corrupt practices. The youths are unemployed, those employed are not better off because of poor remuneration, and the pensioners are looking like frustrated strayed ghosts seeking for

places to inhabit. The parents spend virtually everything they have in training their children and, at the end of their training, they are left unemployed with no conducive atmosphere or environment to practice their trade. Since they could not continue to depend on their old parents, they device a means to survive and to assist their parents or younger ones. Some of them taken into robbery, cymbal crimes, human rituals, cultism and other similar crimes. The government of the day seems not to bother about the poor leadership style, while the political class is made up of the egocentric individuals who manipulate the majority to achieve their goals. The rest population is made to live like slaves whose masters are only concerned about the services they render and not their welfare.

5. Leaders Wondering in a Desert Of An Endless Odyssey

It is becoming clearer by the day that the majority of the crops of leaders found in Nigeria can be described as leaders who are wondering in the desert of an endless odyssey. The suffering Nigerians are experiencing today are as a result of leadership malnourishment because leaders in government have remained unfocused, visionless, timid, lacking in administrative acumen, voracious, callous, insensitive to the people's plight, consumed by a selfish political ideology, bereaved of leadership qualities and a bunch of looters. It is also obvious that these same corrupt leaders have inoculated the public and upcoming politicians with corruption virus because of their leadership styles. Their incompetency has thrown the entire nation into a reckless journey with unavoidable jeopardy, and Nigerians are ashamed to be counted among the civilized nations of the world, hence there is a constant mass exodus of young people to neighbouring and far distance countries to find succor and means of surviving. The leaders' thirst for materialism has turned almost all of them to brood of vampires who have little or no human feelings towards the ordinary citizens. Eboh (2016: 123) described 53 years of post-independent Nigeria as a cyclic movement in a mighty ocean without navigational system, no orientation, and no defined destination.

The major reason why Nigeria is underdeveloped today is traceable to the leaders who found themselves in the position of power without knowing what to do positively with the power at their disposal. The reason why politicians fight for positions in Nigeria is simply to amass wealth to oppress the poor and the down trodden individuals. Almost all of them lack developmental principles and completely

knowledge of how to formulate policies that will bring about growth and development in the country. Although, they are good tax collectors like Zacchaeus (before his encounter with Jesus), the people they are leading (followers) are more knowledgeable than them in terms of leadership skills and what it takes to be a good leader. Unfortunately, the followers have allowed themselves to be marginalized and made poor by the ruling class to the extent that they can be bought by peanuts. In the civilized world, people are referred to as elder- statesmen because after retirement from politics or executive positions, the country can still tap from their wealth of experiences and they also give good counsel to those who took over from them. Most of the so-called elder-statesmen in Nigeria that had occupied high positions are self-centered and are still seeking for avenues to milk the country dry. Some even seek for ministerial positions for their children so that they can remain relevant in the corridor of power. Most ministers in Nigeria are children or relatives of retired and dead politicians and heads of state who feel the Federal Government is their family inheritance. Most retired Generals and their children rotate the seat of power like African traditional rulers in total neglect of the fact that the Nigerian State is a democratic State that should pursue the values of democracy. Nigeria is tied down with old bloods that have expired in the political theatre even before they were elected into offices, while the new bloods are disallowed to infuse contemporary political ideologies into the system and style of governance. It therefore looks moronic that a country that is blessed with enough human resources and parades itself as the giant of Africa has the worst system of leadership in the world, and shamefully deceive the world that it practices democracy with leaders who are tyrannical despotic demagogues who loot the nation's treasury without conscience, and jail, incarcerate, murder, banish, cage, threaten, kidnap, and frustrate political opponents who go against their Machiavellian philosophy of leadership that 'the end justifies the means'. Electioneering campaign period that ought to be a period when the various candidates representing different political parties are expected to convince the electorates why they are qualified for the positions they are vying for, has become a period for thuggery, arson, civil unrest, killings of opponents, blackmailing, cheap lies peddling against opponents, and the distribution of government stolen money meant for developmental projects. The general populace has developed a strong belief that their votes do not count because of the open rigging with destructive weapons to scare off the electorates. Some registered voters out of fear of untimely death at the pooling boots where votes are cast stay at home with their voters' cards on

Election Day to avoid molestation from the law enforcement agents and political thugs. Even during ordinary primaries within the parties to select their representative for the main election are occasions where most party leaders fraudulently impose the candidates of their choices on party members through rigging. They still use thugs against themselves to elect party representatives. Therefore, most of the leaders are not the people's choice, but the choice of selfish party leaders. Also, it should be noted that most of these leaders that are rigged into offices by party leaders are character wise not qualified to occupy any public office in a civilized society because of their criminal records and notoriety. In this type of scenario, what are your expectations from such crops of leaders, if not looting to satisfy the demands of those who imposed them on the citizenry, lies and deceit to remain in office, the lack of any genuine developmental philosophy and the greed for materialism?

6. Conclusion

From the foregoing discussion it is pictorially clear that the Nigerian citizens are grooving and glooming in a deep sea of an endless misery, hopelessness, melancholic depression, a bottomless Erebus of political subjugation, a pitiable condition and begging to live and survive in their fathers' land, because of the criminalities of most politicians and law enforcement agencies in the contemporary Nigerian society. Life has lost its sacredness and awe. Most political leaders have a very strong belief that they have the right to take away the life of a citizen who poses as a problem to them at any time; hence, whenever there is a protest against bad governance the politicians and the law enforcement agencies use the slogan 'shoot at sight,' meaning kill any protester that is seen on the street. Nobody questions the government on some of the protesters who were victims of army or police straight bullets, because these law enforcement agencies are carrying out their legitimate duty and government orders. Human life in Nigeria could be equated with the life of lower animals without fear of contradiction. For instance, in Nigeria the herdsmen would murder hundreds of farmers because their cattle were prevented from destroying farmers' crops and the Federal Government would apologize to the herdsmen and even pay them compensation, while the deceased are blamed for interrupting the movement of the cattle. It is also in Nigeria that terrorists are captured, rehabilitated, trained and given amnesty, while protesters without arms are jailed or even killed.

7. Recommendations

The following are recommended to improve leadership quality in Nigeria, and to build a healthy relationship between the leaders and the citizens:

- Leadership philosophy as a course should be introduced in our school curriculum from primary to tertiary institutions to groom our future leaders.
- Rights of citizens should be taught in schools from primary to the tertiary levels.
- The Nigerian judiciary should be truly autonomous as the third arm of government to help foster the supremacy of law.
- Every government should be a single term of five (5) years and no more.
- All laws granting pension or allowances to all past political office holders should be repelled. The salaries and allowances of political leaders are already over-bloated.

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Determinants of Hotel Patronage and Challenges in Oyo State, Nigeria

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Abstract. The significant role of the hotel industry vis-a-vis the provision of job opportunities, foreign exchange earnings and beautification of the environment cannot be over emphasized. However, there is a dearth of information of hotel patronage and the challenges confronting the industry. It is therefore against this backdrop that this study was carried out in Ibadan Oyo State, Nigeria. Multistage sampling technique was adopted in the study to select both the staff and customers patronizing the hotels. A well-structured questionnaire and scheduled interview were used to elicit information collected. The study revealed that more males (56.82%) than females work in hotels and the ages of most (70.45%) members of hotel staff as well the ages of most (51.14%) of the customers ranged between 26 and 40 years. Among others, accommodation ($\bar{X} = 3.76$) is the highest factors influencing hotels patronage by customers while others are Security" ($\bar{X} = 3.75$), "Power supply" ($\bar{X} = 3.70$), "Water supply" ($\bar{X} = 3.69$), "Staff quality" ($\bar{X} = 3.53$), "Location" ($\bar{X} = 3.45$) and "Catering services" ($\bar{X} = 3.26$). It is therefore suggested that high level standard of the aforementioned factors be promoted and maintained by the hoteliers in order to maximize the benefits not just for the staff and owners but also for revenue generation for the state and to also project good image of the industry to the outside world.

Keywords: Determinant factors, hotels, patronage, challenges, Oyo State, Nigeria

1. Introduction

The hospitality industry comprises hotels, motels, guesthouses, restaurant and bars, hospitals (Singh and Mulla, 2011). The service of hotels embraces the organized system of apparatus, appliances and employees for supplying accommodation and activities required by the public. The industry is an important aspect of the tourism sector which offers customer services by means of a well-organized system. Hotels provide food, drinks and accommodation to guests who are willing to pay for them and who are in a state to be received (Ajakaye, 2015). Their significant role in the industrial sector in terms of the provision of jobs and foreign exchange earnings (Wouters, 2011) cannot be over emphasized.

Hospitality and tourism establishments are graded and classified based on the minimum operating standards of the facilities and the services provided, managed and maintained in each grade or class of such establishment. The term 'hotel rating sometimes referred to as "hotel grading" or "hotel classification" is often used to classify hotels according to different attributes (World Tourism Organization, 2014). It denotes a system, duly published, in which similar accommodation establishments. (hotels, motels, inns etc.) have been conventionally broken down into classes, categories or grades (WTO, 2014). This is in accordance with their common physical and service characteristics. According to the WTO "hotel rating systems were developed primarily for protecting consumers." Currently, competitive marketing pushes local and international hotels to seeking standardization and tools to improve service quality (Tefera and Krishna, 2015).

A general appraisal and classification of grades of hotels show that one-star hotels have some modest, limited range of facilities and furnishing, with at least ten suite bedrooms. They are generally small and independently owned. Two-star hotels offer a higher standard of accommodation, with at least 20 better-equipped suite bedrooms than a one-star hotel. Each guest room must have a telephone and a colour television. A two-star hotel must also have a parking area for at least 10 guests' cars. In this class, guests can expect comfortable and, well equipped accommodation usually with an en-suite bath or shower. Reception and other staff will aim for a more professional presentation than at the one-star level and will offer a wider range of straight forward services, including serving food and beverages. Three-star hotels offer more spacious, nicer, better-equipped furnished en-suite rooms when compared to one star and two-star hotels. A three-star hotel also has high-class decorations, a colour television in each en suite room, showers, central air-conditioning, valet and room service, one or more bars and lounges an, on-site restaurant, and a small fitness centre with a standard swimming pool usually located in a high-brow, a three-star hotel must also have a minimum of 30 en-suite rooms. Each bedroom will have an en-suite bath and shower and will offer a good standard of comfort and equipment such as a direct dial telephone and toiletries in the bathroom. Besides room service therefore some provisions for business travelers.

A four-star hotel comes with exceptionally well furnished en-suite rooms, central air-conditioning, room and valet service, an excellent restaurant and cuisine, concierge, porter age and luggage handling services, laundry, a standard swimming pool and other recreational facilities. The hotel location and environment should be suitable for a hotel of international standards. A four-star hotel also offers, at least, 50 en-suite rooms, 20% of which must be suites and 25% single rooms. It should have at least, one serviced elevator for guests, and another service elevator for staff. Other important facilities include: fire detection facilities, closed- circuit television set a dining room, an internationally trained manager, car park for at least 50 cars, a reception/information counter, and conference and banquets halls. At least 70% of its employees must be professionally trained.

Five-star hotels are internationally branded hotels offering the highest standard of services and luxuries, with some of the finest architecture, ambience, accommodation and amenities. There is provision for a gym, a bigger-sized swimming pool, cuisines, more than one restaurant, a casino, on-site shopping

facilities and other in-premises recreational facilities. These hotels also offer at least one serviced lift/elevator for its guests and another lift for its employees and goods. It must have at least 100 bedrooms; 25% of which must be suites and 20%, single rooms. it must also have gardens, a lawn or roof garden, a reception and information centre, a 24hour concierge and porter service, a central air-conditioning system, a wake-up call service, conference and banquet halls, at least two restaurants, dining rooms, 24hours coffee shop, a well-equipped bar and a car park for at least 50 guest cars. Its manager must be internationally trained and should speak, where possible, more than one internationally recognized language. At least 80% of its other personnel must be trained in providing the highest quality of hospitality services.

The criteria for grading hotels therefore are, type of accommodation, restaurant, styles of cuisine, fitness areas, standard swimming pool, laundry services, number of suites, closed circuit television, international trained manager, central air-conditioning system, conference and banquet halls, car park, wake-up call service, roof garden, reception, information centre etc. Apart from categorizing hotels into different grades, diverse marketing strategies are adopted to attract various customers which eventually influence the type and the level of patronage. It is against this backdrop that this study is being undertaken.

2. Research Methodology

2.1 Study Area

The study was carried out in Ibadan Oyo State with coordinates: Latitude 7° 51'N, 9° 25'N and Longitude 3° 55'E, 52° 50'E. It has an estimated total population of 7,840,864 as at 2016 (NBS, 2017).

2.2 Data Collection and Analysis

A Multi-stage sampling technique was adopted for this study. Firstly, two local government areas namely; Ibadan North and Ibadan South-West were purposely selected because of the preponderance of hotels in the study area. The second stage was the random selection of six (6) junior members of staff, two (2) senior members of staff and (2) two members of the management staff from each of the hotels making a total of 100 respondent. However, (88%) of the total questionnaires were retrieved and used for this study. Among the hotel customers, ten (10) respondents were randomly selected from each of the hotels out of which 88% of the total questionnaire

was utilized in the analysis. About 57% of the respondents were males while 43.18% were females. Most of the hotel customers had tertiary education. The age range indicated that most (70.45%) of the hotel staffs as well as most of the customers (51.14%) were between 26 and 40years.

3. Results and Discussion

Table 1 shows that 50(56.82%) of the respondents were males and 38(43.18%) were females. This shows that more males than females work in hotels. This result corresponds with the submission of Ekong and Imikan, (2016) that more males work in hotels than females. Also more males (62.5%) patronized hotels than females.

The ages of most members of staff of the hotel (70.45%) as well as those of the most of the customers (51.14%) ranged between 26 and 40years. Most (54.55%) staff of the hotel were educated while a few (2.27%) had no formal education. The largest proportion (68.18%) of the customers obtained tertiary education while some (28.41%) had

secondary education; a few (2.27%) had no formal education while others (1.14%) had primary education. Most (60.23%) of the hotel staff were singles, some (36.36%) were married, others were separated (2.27%) while some were widowed (1.14%). The majority (63.64%) of the hotel customers were married about 28% were single while others were either separated (5.69%) or widowed (2.27%). In respect of the household size of the customers majority (65.91%) had a household size of between 1 and 4 persons while 59.09% had a work experience of less than or equal to 2 years, 29.64% had 3 – 5years experience while 11.36% had more than 5years work experience. Their monthly income revealed that 39.77% and 32.95% received between 10,000.00 – 20,000.00 and 21,000.00 – 30,000.00 respectively while 12.5%, 7.95% and 3.41% received 31,000.00 – 40,000.00, 41,000.00 – 50,000.00 and 51,000.00 – 60,000.00 hence only 24 % of the total hotel staff enumerated received an amount that is above the set national minimum wage. Furthermore, the majority (64.77%) were junior members of staff while 22.73% and 12.5% were senior and management members of staff respectively.

Table 1: Socio-economic characteristics of the respondents

Variables	Hotel Staff		Hotel Customers	
Gender	Frequency	(%)	Frequency	(%)
Male	50	56.82	55	62.50
Female	38	43.18	33	37.50
Age				
18– 25	16	18.18	12	13.64
26 – 40	62	70.45	45	51.14
≥41	10	11.36	31	35.22
Educational Qualification				
No formal education	22	27	2	2.27
Primary	33	41	1	1.14
Secondary	48	54.55	25	28.41
Tertiary	35	39.77	60	68.18
Marital status				
Single	53	60.23	25	28.41
Married	32	36.36	56	63.64
Widowed	11	14	2	2.27
Separated	22	27	5	5.69
Household size				
1 – 4	58	65.91		
>4	30	34.09		
Work experience				
≤ 2	52	59.09		
3 – 5	26	29.64		
>5	10	11.36		
Monthly Income (‘000)				
10 – 20				
21 – 30	35	39.77		
31 – 40	29	32.95		
41 – 50	11	12.5		
51 – 60	77	95		
>60	33	41		
Staff category				
Junior	33	41		
Senior	57	64.77		
Management	20	22.73		
	11	12.50		

Source: Field Survey, 2019.

Among the factors determining the different grades of hotels in the study area (Table 2), accommodation ranked highest with a mean score of ($\bar{X}$ =3.76) It was also the main factor determining hotel patronage by customers and was followed in succession by “Security” ($\bar{X}$ =3.75), “Power supply” ($\bar{X}$ =3.70), “Water supply” ($\bar{X}$ =3.69), “Staff quality” ($\bar{X}$ =3.53), “Location” ($\bar{X}$ =3.45), “Catering services” ($\bar{X}$ =3.26), “Entertainment” ($\bar{X}$ =3.10), “availability of internet services” ($\bar{X}$ =2.82), “Physical and health enhancement facilities (e.g. gyms, swimming pool)” ($\bar{X}$ =2.69), and “Others”(e.g. green landscape, ornamental plants and trees) ($\bar{X}$ =1.23) was the least.

Table 2: Determinants of hotel patronage in Ibadan

S/N	Variable	1	2	3	4	5	$\bar{X}$	S.D
1	Accommodation	0 0%	6 6.82%	20 22.73%	44 50.00%	18 20.45%	3.76	0.87
2	Security	4 4.55%	1 1.14%	26 29.55%	32 36.36%	25 28.41%	3.75	1.05
3	Power supply	1 1.14%	5 5.68%	28 31.82%	26 29.55%	28 31.82%	3.70	1.01
4	Water supply	1 1.14%	4 4.55%	36 40.91%	26 29.55%	21 23.86%	3.69	0.99
5	Staff quality	1 1.14%	7 7.95%	41 46.59%	27 30.68%	12 13.64%	3.53	0.95
6	Location	0 0%	9 10.34%	39 44.83%	29 33.33%	10 11.49%	3.45	0.96
7	Catering services	3 3.41%	11 12.50%	36 40.91%	30 34.09%	8 9.09%	3.26	0.98
8	Entertainment	3 3.45%	14 16.09%	45 51.72%	19 21.84%	6 6.90%	3.10	0.96
9	Internet services	6 6.90%	24 27.59%	33 37.93%	16 18.39%	8 9.20%	2.82	1.13
10	Physical and health enhancement facilities (e.g. gyms, swimming pool)	26 29.55%	9 10.23%	34 38.64%	11 12.50%	8 9.09%	2.69	1.33
11	Others (e.g. green landscape, ornamental plants and trees)	-	1 16.67%	5 83.33%	-	-	1.23	0.62
Weighted Mean = 3.18								

Source: Field Survey, 2019.

Key: 1 = Strongly disagree, 2= Disagree, 3= Undecided, 4= agree, 5= Strongly disagree

Table 3 shows the problems encountered by the hotels in carrying out their corporate social responsibility. “Poor patronage” ($\bar{X}$ =2.53) ranked highest followed by “non-availability of land” ($\bar{X}$ =2.43), “inadequate Staff development” ($\bar{X}$ =2.42), “inability to cope with guest’s sophistication” ($\bar{X}$ =2.27), “Inadequate power supply” ($\bar{X}$ =2.27), “marketing issues” ($\bar{X}$ =2.24), “increased competition from other hotels” ($\bar{X}$ =2.14), “Lack of Technological Application: (CCTV,CRS)” ($\bar{X}$ =2.08), “Non-awareness of needs of the community due to poor hotel-community relationship” ($\bar{X}$ =2.05), “cooperation from the host community” ($\bar{X}$ =1.91), and “Lack of funds” ($\bar{X}$ =1.87) ranked the least.

Table 3: Challenges encountered by the hotels

S/N	Challenges	SD	D	A	SA	$\bar{X}$	S.D
1	Poor patronage	6 6.82%	46 52.27%	22 25.00%	14 15.91%	2.53	0.82
2	Non Availability of Land	8 9.09%	44 50.00%	24 27.27%	12 13.64%	2.43	0.84
3	Inadequate Staff	6 6.82%	48 54.55%	27 30.68%	7 7.95%	2.42	0.83
4	Inability to cope with Guest’s Sophistication	10 11.36%	51 57.95%	20 22.73%	7 7.95%	2.27	0.87
5	Inadequate power supply	6 6.90%	46 52.87%	31 35.63%	4 4.60%	2.27	0.72
6	Marketing Issues	9 10.34%	46 52.87%	29 33.33%	3 3.45%	2.24	0.76
7	Increased Competition from other hotels	10 11.36%	55 62.50%	18 20.45%	5 5.68%	2.14	0.68
8	Lack of Technological Appliances (CCTV,CRS)	10	57	15	5	2.08	0.67

		11.49%	65.52%	17.24%	5.75%		
9	Non awareness of the needs of the community due to poor hotel-community relationship	20 22.73%	49 55.68%	14 15.91%	5 5.68%	2.05	0.84
10	Cooperation from the host community	22 25.00%	48 54.55%	18 20.45%	-	1.91	0.62
11	Lack of funds	28 31.82%	43 48.86%	14 15.91%	3 3.41%	1.87	0.72
Weighted Mean =2.20							

Source: Field Survey, 2019.

4. Conclusion and Recommendation

The staff and the customers of the sampled hotels in this study were well-educated and mostly males. Factors such as accommodation, provision of adequate security, constant electricity power supply and water supply, staff quality, catering services and location of the hotel affected the level of patronage of the hotels. Improvements in the quality of these factors were imperative, if these factors attract high-quality patronage.

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Effects of Erratic Electricity Supply on Socio-Economic Activities of Nigeria: A Study of Kaduna South, Kaduna State, Nigeria (2015-2019)

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Abstract. The relatively regular electricity supply that sustains the manufacturing sector, small and medium scale businesses, individuals and the society in the 70s and 80s is now in a state of comatose despite the privatisation, weak electricity infrastructure, lack of maintenance culture, corruption, lack of capacity to distribute the megawatts generated, lack of innovations and total dependence on foreign electricity equipment, inadequate qualified personnel, poor implementation of power sector reform and customer classifications are the causes of the erratic power supply in Nigeria. These problems pose serious threat to the growth and stability of Nigerian power sector. This study investigates the effects of erratic electricity supply on socio-economic activities in Kaduna South Local Government Area of Kaduna State between 2015 and 2019. The study was anchored on Structural Functional Theory. The study relied heavily on primary type of data and also utilised data collected from secondary sources on electricity supply. Frequency table and percentages were adopted for analysis of questionnaire for easy understanding. The study found that erratic power supply has affected socio-economic activities in Kaduna South LGA because small, medium and larger industries in it cannot sustain alternative power using generator due to high cost of fuel hence leaving business and the collapsed textiles industry in the study area culminating in increasing unemployment, poverty, security challenges such as armed robbery, frustration, political thuggery, which have negative effects on individuals, families and the society at large. Hence, the study recommends that government should license more electricity distributors in order to encourage competition for effective service delivery, metre all customers, use technology to detect interconnections and prevent vandalism among others which will go a long way in restoring the lost glory of

power supply in Kaduna South Local Government Area in particular, Kaduna State and Nigeria in general.

Keywords: Socio-economic Activities, Electricity Supply, Unemployment, Insecurity, Poverty, Economic Growth

1. Introduction

Electricity sub-sector is one of the sectors that is capable of stimulating the economy and ensure economic growth in Nigeria hence the development. For several decades, Nigeria has been experiencing epileptic electricity supply and successive governments have tried to stabilise the sector so as to drive the socio-economic growth and development of the country. However, the country is still grappling with unreliable and erratic power supply. It has affected the performance of the industrial sector which is the engine of growth and socio-economic development in Nigeria. This social issue affects all aspects of human endeavours in commerce, industry and households. Therefore, steady power supply in the state should be prioritised and encourage state's march towards economic self-reliance and development. When there is no electricity supply, everything crumbles as everything revolves around it.

Available records have shown that electricity was first generated in 1896 with two megawatts (2 megawatts) of electricity that only supply Lagos in Nigeria. The first electricity company was known as Nigeria Electricity Supply Company (NESC) established in 1929 to distribute electricity, by the year 2000, Federal government came up with a monopoly called the National Electric Power Authority (NEPA) with the sole aim of generating, transmitting and distributing it to the generality of the

Nigerian people. Efforts to reform the electricity sub-sector led to the 2005 power Reform Act and that of 2013 ensures the Power Holding Company of Nigeria (PHCN) and the 18 distribution companies of which Kaduna Electricity Distribution Company is one of them (Ibirogba, 2018).

According to the United States Agency for International Development (USAID) revealed that the power supply currently stands at 5000 megawatts is below the demands of Nigerian socio-economic activities and households which should be at least 12,522 megawatts. It would be recalled that in 2017, Nigeria spent a huge sum of \$5 billion dollars in fueling generating set and this far below the rate of fuel that goes into the independent power supply from companies and households to get things done without public supply because it is not readily available most especially in the afternoon when it is mostly needed across the country. The developed nations utilised various sources of power supply and based on priority in every city or state hence, epileptic electricity supply is alien to them (Cited in Ibirogba, 2018; Yehia, 2018; Nyatumba, 2019).

Kaduna Electricity Distribution Company is one of the 18 companies that bought over the distribution sub-sector when the bid was set to sell the Power Holding Company of Nigeria and also one of the 11 downstream operators in the electricity market in Nigeria. The area covered by it comprises Kaduna, Kebbi, Sokoto and Zamfara States. It has 8 Area Offices and 147 Customer Service Centres across these States with a population of about 490,000 and on average, it receives between 100 and 250 megawatts (16% and 35% respectively) daily as opposed to 600 and 700 megawatts (Muhammad, 2015; Kadunaelectricitypulse, 2018).

The collapse of textiles industry and exit of the numerous viable industries such as Michelin, Dunlop and others from Nigeria has brought about an escalation of the rate of unemployment and in varying degrees affects policies and programmes of the government. It led to high incidence of mass retrenchment of staff, turning thousands of Nigerian workers back to the labour market. This also increased the dependency ratio and the ever increasing population further led to the escalation of crime rate and insecurity coming into play as the saying that an idle mind can easily be taken over by the devil with negative tendencies detrimental to the Nigerian economy. Another corollary effect was increased level of poverty since most of those retrenched were the bread winners in their respective homes. So, poverty immediately set in just as standard of living deteriorated significantly. These

negative impacts of unemployment cuts across economic, social and political life of the nation thus slowing the pace of development of the country (Egwu and Chinwe, 2016; Aremu, 2019).

The insurgency in the country as at 2017, over twenty thousand lives were lost, over two million people were displaced and it also destroyed billions of dollars-worth of individual and government property hence Nigeria was ranked the world's third most terrorised nation after Iraq and Afghanistan (as second and first positions respectively) despite the resources dedicated to fighting insecurity in the country (Hassan, 2017; Zenn, 2017).

From the foregoing, the journal examined the effects of the erratic electricity supply on socio-economic activities in Kaduna South Local Government Area of Kaduna State between 2015 and 2019.

2. Literature Review

2.1 Electricity Supply and Socio-Economic Activities at Global Level

The total net electricity generation in the EU was 2775 Terawatt hours (TWh) in 2019, an increase of 4% compared with the year before (2018). The sources of electricity production vary among the member states. In 2019, in Denmark over half electricity production (57%) came from wind energy, while more than 60% of electricity production in Austria came from hydro power plants. Around 90% of electricity production came from fossil fuels in Malta and Cyprus, while over two thirds (67%) of electricity production came from nuclear power plants in France, followed by 53% in Slovakia. According to Brookings Institute Report (2016) United States of America is able to maintain constant electricity supply with the agreement and construction of pipeline from the Saudi Arabia's main oil fields in Dhahran towards the Mediterranean, allowing the flow of Saudi oil to United States and Europe. It concluded that power play an important role in American industries and defence (Brooking Institute Report, 2016; Europa, 2020). Evidences abound that power cut or erratic power supply is alien in the developed world of Europe and America.

Brazil was able to tackle rural electricity problem with the introduction of electricity for all programme which increased the grid connection from 3 million to 10 million from 2003 to 2008 and with the help of the locals, identifying the areas without power and the Ministry of Mines and Energy, with adequate funds from government (Bezerra, Callegari, Ribas, Lucena,

Pereile, Kaberle, Szklo and Schaeffer, 2017). Africa is plagued with power cut or load shedding which means reducing the number of hours of power supply daily has affected their economies particularly South Africa, hence, the introduction of Azuri's pay-as-you go Solar Technology System, helping Africa to move away from fossil fuel resources. The technology has already been initiated in Tanzania, Kenya, and South Africa among others. Therefore, the renewable energy is fundamental in shaping the future energy landscape of Africa, enhancing residents' quality of life; promoting political stability by offering opportunities for employment and preventing damage to the economy due to power cuts (Adewuyi and Emmanuel, 2018; Yehia, 2018; Nyatumba, 2019, Daily Trust, 2011; Olajide, 2008).

Africa in particular is characterised with erratic power supply because they failed to explore various sources of power supply such as wind, nuclear, solar among others hence the need for the political will to do it in order to create jobs through Small and Medium Scale Enterprises, smooth socio-economic activities generally and reduce the rate of crime in the country.

3. Electricity Supply and Socio-Economic Activities in Nigeria

The National Bureau of Statistics (NBS) stated that in 2015, 20,337.40 Gigawatt hours (GWh) were supplied across Nigeria. This fell by 6.36 per cent in 2016, when 19,044.30 GWh were supplied. Also, it rose in 2017 by 2.04 per cent with 19,432.39 GWh and further rose in 2018 by 10.55 per cent with 21,483.25 GWh. Thus, Benin Electricity Distribution Company (BEDC) recorded the highest number in 2015, while Ibadan Electricity Distribution Company (IBEDC) stood top between 2016 and 2019 (NBS, 2019; NBS, 2020).

This study purposively employed an in-depth interview to determine the effect of electricity supply on Magogo and Lagos economy. It revealed that both high and low income families tend towards the use of generators, make use of lamps, kerosene stove and solar energy while always preparing ahead of eventualities of power outages. They concluded that the way out is to fully implement the power sector reforms to urgently diversify the sources of generating electricity in Nigeria and mitigate the problem of corruption in the sector (Olurode, Ishola and Adebisi, 2018)

This dissertation on privatisation and commercialisation sought to know whether

privatisation of power sector bring sustainable electricity supply among other objectives. The result shows that 75 per cent of the respondents were dissatisfied as they earlier supported privatisation. The reason for the acceptance of privatisation by the respondents according to the author was on the assumptions that it will bring positive impact on the national economic growth and development. In other words, privatisation and commercialisation shall eradicate the bureaucratic monopoly that is embedded in it which strongly is opposition to fasting success but has failed; it concluded (Gasana, 2015). Today, the situation is worse than it is when the research was conducted hence there is a need for the citizens to embrace solar to augment the public power supply.

The power sector reforms between 1999 (2001) and 2019 did not yield meaningful results due to some challenges and adoption of the neo-liberal agenda in total without taking into consideration the nature of indigenous companies and also not carrying along all the stakeholders. The challenges include: foreign exchange rate, issues of currency fluctuation, corruption, transmission from one administration to another and risk of uncertainty in policy direction of successive administration, population explosion, vandalism, costing that did not reflect tariff regime, infrastructure building for generation, transmission and distribution among others. The study further revealed that despite these challenges, the reform yielded positive result particularly the commercialisation of the sector which eases the burden of total subsidy regime in the sector. It concluded that if policy-makers in the country failed to come up with the Nigerian model of neo-liberal policy philosophy, electricity sector policies will continue to fail but a systematic development of same with a law that such policies should not be abandoned by successive government will reduce the consequences of failure of policy hence, they recommended that the dilapidated infrastructure be overhauled and maintained, attract private investment and government should engage policy analysts as consultants to take a critical look at inputs made by international partners in respect of generation, design, implementation and evaluation of policies among other recommendations (Hamza, Esew and Sani, 2020).

4. Electricity Supply and Socio-economic Activities in Kaduna State

Households, most especially rural areas opt for biomass fuels such as wood fuel for their energy consumption due to lack of electricity and poverty.

Wood fuel in Kaduna state is the most highly consumed fuel, together accounting about 1,722,904 t/year consumed per person in the state. The study concluded that the use of biomass, especially wood, for energy generation in this country and Kaduna state in particular is an issue that may not be wished away owing to the vagaries associated with demographic and socio-economic conditions. Therefore, electricity supply should be made constant to save the trees (Zaku, Kabir, Tukur and Jimeto, 2013)

Oil is a major source of energy in Nigeria and the world in general. Being the mainstay of the Nigerian economy, it plays a vital role in shaping the economy, social and political destiny of the country. The study further revealed that Kaduna Refining and Petrochemical Company (KRPC) impacted negatively on the socio-economic parameters such as employment, health, housing, education and land value, thus making the inhabitants of the area blame the refinery for the rising wave in crime within the study area. The positive impact of the refinery on the study area is the increase in businesses and commercial activities hence contributed to better livelihood for many of the inhabitants of the study area. They concluded that the income of inhabitants from the respondents has a significant influence on the socio-economic life of the people in the study area, those earning low income have low educational attainment that could better their lives and contribute to the quality of their living standard hence the need for government to provide jobs and infrastructural facilities to enhance the socio-economic and political activities of the area. This can be achieved if there is a special provision backed by law from both federal government and representatives from that area among other recommendations (Ezra, Blamah and Ezemokwe, 2016).

Kaduna State Government Report (2013), (2016) and Oshodi (2019) revealed the low water supply from the twelve water treatment plants to nine urban centres due to erratic power supply. The distribution network to all the nine urban centres was estimated at 2,553.80kmin Kaduna State. The installed capacity of water was 380 million litres per day (mld) of water while the requirement for the urban centres was 540.25 mld. The actual production of water from the twelve water works was 214.8 mld out of the 380 mld installed capacity as at 31st December, 2015 the low production was as a result of erratic power supply and dilapidated equipment.

5. Electricity Supply and Socio-Economic Activities in Kaduna South Local Government Area

The problems hampering small and medium enterprises in Kakuri, Kaduna South is the epileptic electricity supply and other problems which affects the socio-economic activities of the area hence the need for government to provide adequate infrastructural facilities such as reliable power supply and affordable tariff in order to boost industrial activities and create jobs among others (Suleiman, 2017; Adesanmi, 2018).

Nigeria's textile industry collapsed for more than two decades now and over 3 million job losses most especially in Kakuri, Kaduna South as a result of epileptic power supply and other problems. Also, the refusal of government to permit factories to invest in solar energy was another factor, the proposed intervention of 100 billion naira by the Federal Government and partnership with African Development Bank for the revival of it would bring back the once lively socio-economic activities in Kaduna South hence addressing the issue of unemployment, youth restiveness, drug abuse, crime in the area and its environs (Odedokun, 2015).

Power supply in Kaduna South varies from one community to another between 6 to 10 hours, 12 to 24 hours, some experienced voltage fluctuation twice for 2 to 4 hours a day twice in a month and some don't at all hence the majority of the respondents experienced outages. The study concluded that power supply in the area was epileptic and adversely affected every sector of the economy, created an additional strain on the financial burden of the household as they rely on generators as alternative power supply which is more expensive to maintain compared to public electricity supply. Thus, there is a need to inject more funds into the sector; the community should protect power equipments from being vandalised among other recommendations (Aderemi, Folorunsho and Musa, 2017).

6. Theoretical Explanation

The study made use of Functional Structuralism. The Structural Functional Theory or Functionalism emerged on the ideals of the French sociologist Durkheim (1917), he sees structure in terms of solidarity or as a set of relatively stable and patterned relationships of social units, while function is the consequences of social activities which make for adaptation or adjustment of a given structure or its component parts. It emphasised that the society relates through the various social institutions such as

government, law, education, religion, among others, and these working together ensures solidarity and stability. The lives of the people are guided and shaped by social structures which are relatively stable patterns of social behaviour. Each social structure has social functions, or consequences for the operation of society as a whole (Parson, 1951; Merton, 1968; Anosike, 2010).

Another important contributor to the structural functional theory is Parson who argued that for a system to achieve functional imperatives, there should be essential conditions in place for the enduring existence of a system, thus, he developed four-function paradigm to achieve equilibrium hence satisfying the needs of the society. These four functions are adaptation, goal attainment, integration and latency or pattern maintenance and tension management. According to him, the society requires the process of socialisation, the internalisation of social values, and the mechanism of social control so that deviance can be checked (Parson, 1951).

The society is a structure with interrelated parts designed to meet the needs of the people in it and same strive to achieve equilibrium as canvassed by structural functional theorists like Durkheim (1997) and Parson (1951) but not all contributions are inherently good or functional for society, thus, there are acts that have consequences which lesson the adaptation or adjustment of the system. Function here is in terms of the positive contribution of a part to the whole, thus, functions are those contributions or consequences that make for the adaptation or adjustment of a given society. Therefore, for the working of society and its institutions, it is important that all share a set of common values and norms (Merton, 1968).

The structure of the society is different from an organism which can be studied separately from its function. This function involves a structure consisting of a set of relationships among unit entities, the continuity of the structure being maintained by a life-process made up of the activities of the constituent units. Thus, the assumptions states that, there is a necessary condition for survival of a society is a minimal integration of its parts, the concept of function refers to those processes that maintain the necessary integration, and in each society, structural features can be shown to contribute to the maintenance of necessary solidarity. This theory is germane in highlighting the nexus between structural inefficiency, unemployment and security challenges. When a particular structure within the system is inefficient in service delivery, it affects other aspects

of the system hence producing negative consequences (Redcliffe-Brown, 1952; Anosike, 2010).

In sum, Functional Structuralism emphasised on individual's contributions, consensus and order which ensures the stability of the society. The theory tries to enhance one's ability to problem solving and assisting greatly in the performance of complex institutions that make up society hence all structures emerge and exist to perform certain functions. This means that structures can be identified according to certain function and the way it is created plays a crucial role in determining how it functions. Thus, structure consists of certain set or pattern of behaviour and the function of a structure determine its behaviour (Parsons, 1951; Durkheim, 1997; David, 2015).

By application, this structural functional theory explains the nexus between the erratic power supply and the socio-economic challenges that emerged as a result of the former. From the stand point of the arguments of functionalism, it is established that the failure of the Discos (Distribution Companies in Nigeria) to provide constant power supply led to the closure of companies and other businesses went into extinction because they can no longer afford to fuel their generator and government policy disallow them (particularly the textile industry) from using solar power hence the increasing rate of unemployment and security challenges such as armed robbery, political thuggery, frustration among others. This is clearly because, available evidence shows that there is increasing level of unemployment, poverty and insecurity, poor health service delivery among others (Anosike, 2010). The theory has been criticised for being incapable of explaining change and placed much emphasis on closed system and its hierarchy.

7. Methodology

This study has made use of primary and secondary sources of data. Questionnaires were administered in the study area. Similarly, books, Newspapers, journals and instrument materials were used as secondary sources of data. Regular verification and validation of data was done with all inconsistencies checked and resolved with the researcher and research assistants. Frequency tables and percentages were used in analysing the quantitative data obtained through questionnaire.

7.1 Data Presentation and Discussion of Findings

The data gotten from questionnaires administered in the field are presented below using tables. Table 1

consist of the respondents' perception on whether electricity supply in their area in Kaduna South in Kaduna State was erratic in nature, Table 2 constitutes the causes of erratic electricity supply, while Table 3 is on the effects of erratic electricity

supply. The study administered 440 questionnaires with the intent of analysing 400 as the shortfall would fall within the 10 percent (40) added hence 400 questionnaires were analysed.

Table 1: Respondents' Perception on whether electricity supply in their area in Kaduna South in Kaduna State was erratic in nature

Responses	Frequency	Percentage (%)
Yes	375	93.8
No	11	2.8
Indifferent/Not sure	14	3.5
Total	400	100

Source: Field Survey, 2021

Table 1 above shows that 375 (93.8%) of the respondents responded that electricity supply was erratic in the area, 11(2.8%) respondents indicated that electricity was not erratic in the area while 14 (3.5%) of the respondents remain indifferent on the nature of electricity supply in the area. This portrayed that most of the respondents in the study affirmed the erratic electricity supply in the area.

The data in the above table shows that majority of the respondents 375 representing 93.8 who are mostly small, medium, large-scale businesses and households were seriously affected as they cannot maintain the uses of generators as alternative sources of power for their daily consumption. The reviewed literature also supported this as posited by Aderemi, Folorunsho and Musa (2017) who posited that power supply in Kaduna South is epileptic and adversely affected every sector of the economy, creating an additional expenses on the households and business owner while maintaining alternative power supply which is more expensive compared to the public electricity supply.

Table 2: Respondents' Opinions on the causes of erratic power supply in Kaduna South

Responses	Frequency	Percentage
Lack of innovations and total dependence on foreign equipment	26	6.5
Corruption	64	16
Poor implementation of power sector reforms	54	13.5
Lack of capacity to distribute the megawatts generated and poor maintenance culture	65	16.3
All of the above	191	47.8
Total	400	100

Source: Field Survey, 2021

Table 2 above, shows that 26 (6.5%) of the respondents viewed that lack of innovations and total dependence on foreign equipment were the causes of erratic electricity supply in the area, 64 (16%) viewed that corruption was the cause, 54 (13.5%) said that poor implementation of power sector reforms was the cause, 65 (16.3%) responded that lack of capacity to distribute the megawatts generated and poor maintenance culture were the causes of erratic power supply in the area while 191 (47.85%) of the respondents was recorded for lack of innovation and total dependence on foreign electricity equipment, corruption, poor implementation of power reforms and lack of capacity to distribute the megawatts generated and poor maintenance culture all caused the erratic power supply in the area, which represent the majority of the respondents in the study.

The above table revealed that there are several causes of erratic electricity power supply which signifies the all of the above representing 191 (47.85%) and this findings is in line with Anierobi and Ananti (2017) who argued that epileptic power supply are caused by faults, dilapidated infrastructure, lack of qualified personnel to maintain the system. Abdulhadi (2021) a member of Kaduna Electricity Distribution Company Management Staff in charge of Tudun Wada Kaduna South Service Centre, revealed that customers has since 2019 been categorised into bands A,B,C,D and E. customers on tariff A enjoy a minimum of 20 Hours and above of electricity supply while those on Band B,C,D and E enjoy a minimum of 16Hrs,12Hrs,8Hrs and 4Hrs respectively. This is also responsible for the erratic electricity supply in Kaduna South because they are under Band D who are mostly low income earners and their response to payment of electricity bills is lower than A, B and C areas like Danmani,Ungwa Rimi, Kabala Costain respectively among others.

Table 3: Respondents' Opinions on erratic power supply contributed to the unemployment and security challenges in Kaduna South

Rating Scale	Frequency	Percentage (%)
Strongly agree	201	50.1
Agree	123	30.8
Undecided	14	3.5
Disagree	34	8.5
Strongly Disagree	28	7
Total	400	100

Source: Field Survey, 2021

Table 3 above, 201 (50.1%) of the respondents strongly agreed that erratic power supply contributed to the unemployment and security challenges in Kaduna South Local Government Area, 123 (30.8%) agreed, 14 (3.5%) maintained neutral position, 34 (8.5%) disagreed while 28 (7%) strongly disagreed. This depicted that majority of the respondents strongly agreed that erratic power supply contributed to the unemployment and security challenges in Kaduna South Local Government Area.

Going by the above data, it is generally believed that erratic electricity supply was responsible for the increasing unemployment and security challenges in Kaduna South with 201 respondents representing 50.1%. George and Oseni (2012) posits that lack of constant power supply was responsible for the increasing crime rate in the country ranging from armed robbery, political thuggery, kidnappings and banditry. Hassan (2020) also observed that the moribund textile industry in Kakuri, Kaduna South which threw over three million workers into the labour market was largely responsible for the increasing crime rate in the area and it is a result of epileptic electricity supply.

8. Conclusion and Recommendations

It is evident from the findings of this study that erratic power supply affected the socio-economic activities of Kaduna South thereby resulting in the decrease in the Gross Domestic Product (GDP) and increase in unemployment and security challenges such as armed robbery, political thuggery, pick pockets, frustration, and prostitution among others. This study therefore, recommends that more licenses be given to investors to distribute electricity in order to break the monopoly currently enjoyed by the Kaduna Electricity Distribution Company as it would bring competition and efficiency and effectiveness would set in; every electricity users whether household or business premises should be given their metres to stop the estimated billing system mostly used in the study area today; there is a need to embrace technology by the company in detecting faults, interconnections, monitoring their

transformers and prevent sabotage and customers should pay their bills promptly.

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APPENDIX I



TARIFF REVIEW

NERC Approved Service Based Tariff

From **Tuesday, 1st September, 2020**, the new Service Reflective Tariff will take effect.

TARIFF BAND	TARIFF CLASS	HOURS OF SUPPLY	TARIFF COST (Per kWh)
Life-line (R1)			N4.00
BAND A	NON-MD	20 hours & above	N56.31
	MD-1	20 hours & above	N61.54
	MD-2	20 hours & above	N66.42
BAND B	NON-MD	16 hours & above	N54.11
	MD-1	16 hours & above	N58.92
	MD-2	16 hours & above	N61.48
BAND C	NON-MD	12 hours & above	N50.10
	MD-1	12 hours & above	N51.25
	MD-2	12 hours & above	N53.81
BAND D*	NON-MD	8 hours & above	N38.47
	MD-1	8 hours & above	N42.90
	MD-2	8 hours & above	N45.28
BAND E*	NON-MD	4 hours & above	N33.80
	MD-1	4 hours & above	N42.90
	MD-2	4 hours & above	N45.28

***Band D and E temporarily frozen**

NOTE: The above tariff is from September to December, 2020


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Youth-Run Livestock Production in Ido Local Government, Oyo State, Nigeria

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Abstract. The objective of this study was to examine the youth-run livestock production in Ido Local Government, Oyo State, Nigeria. Cross-sectional data were obtained from 180 youth-run livestock producers who were selected through a multi-stage sampling procedure. Descriptive and inferential statistics were used for data analysis. The results showed that the major livestock the youths commonly reared was cattle (48.3%) while the major problems facing the youth-run livestock production were insufficient financial resources (4.5) and animal illnesses (4.2). Chi-square analysis shows that a significant relationship ($p < 0.05$) exists between sex ($\chi^2 = 8.8$), educational level ($\chi^2 = 35.1$) and income generated from livestock farming innovativeness. Pearson Product Moment Correlation showed that age ($r = 0.37$) and years of experience in livestock enterprises ($r = 0.41$) had a significant ($p < 0.05$) relationship with income generated from livestock production. The study concluded that youths in the study area are involved in livestock production and earn economic benefits from it and based on this it was recommended that financial assistance be provided to the youths and the need to create an enabling environment through the provision of basic social infrastructure by the government.

Keywords: Nigeria, youths, livestock, production

1. Introduction

The growth of young people and their sense of empowerment can both be greatly aided by their involvement in cattle enterprises. All profitable livestock-related operations are referred to as livestock businesses. The goal of incorporating young people in livestock operations is to use work as a tool

to combat poverty and juvenile delinquency (Oladejo, 2010; Eniola et al., 2020). Young people can acquire the mindset, information, and abilities necessary to participate actively in society, work with adults to evaluate pressing concerns, and positively respond to address their needs and solve their problems (Sosina and Babayemi, 2020).

Youth make up a sizable portion of Nigeria's population, hence the value of young people in livestock operations cannot be overstated. Youths need to be properly channelled and harnessed for greater livestock production since they are robust and have ample energy (Adeniran, et al., 2018). Young participation in agriculture will assist address issues related to an ageing farm population and rising young unemployment. The participation of youth in agricultural activities has progressively decreased in recent years despite these incentives and the growing markets for primary and secondary agricultural commodities, despite the high current young unemployment rate and the number of agricultural jobs accessible (Oke et al., 2021).

Involving young people in livestock operations would not only give them employment options but will also boost food production and substantially close the gap between livestock supply and community demand (Oghenero et al., 2021). The study intends to provide useful information for policy implementation as regards youth participation in livestock enterprises and seeks to examine the youth-run livestock production in Ido Local Government, Oyo State, Nigeria.

The hypothesis of the study is stated in the null form as follows:

H₀₁: There is no significant association/relationship between youth characteristics and income from livestock ventures.

2. Methodology

Ido Local Government was purposefully chosen for this research among Ibadan's six outermost Local Government Areas because of its strong agrarian attitude and abundance of rural residents.

The land area of Ido Local Government is 986 square kilometres and includes Apata, Omi-Adio, Ido, Akufo, Awotan, Apete, Eleyele, and other communities. It is bordered by the local governments of Oluyole, Ibarapa East, Akinyele, Ibadan South-West, and Ibadan North-West in Oyo State, and Odeda in Ogun State. Ilaju, Akufo, Akinware, Apete, Idi-Iya, Erinwusi, Elenusonso, Ido, Omi-Adio, and Onidoko are the headquarters of the Local Government's 10 political wards. Ijokodo, Ido, Omi-Adio, Apata, Apete, Akufo, and Bakatari are just a few of the significant towns in the Local Government Area. Ijokodo, Ido, Omi-Adio, Apata, Apete, Akufo, and Bakatari are among the major cities within the Local Government Area, as are around 612 villages which include Dada, Olowofela, Apooyin, Oderemi, Odetola, Erinwusi, Tade, Alagbaa, and Iku-senla, among others. The majority of the members of the Yoruba ethnic group who speak the Yoruba language make up the Local Government, which is homogeneous. Their communities are kept together by their rich culture and belief in close familial relationships.

Farming is the main source of income for the locals, who mostly cultivate food and cash crops such as cocoa, oil palm, kola nut, cassava, maize, and yams (Omotayo and Oyekale, 2013). They also participated in non-farm activities (Omirin & Okpara, 2018). The activities that are not related to farming include commerce, food processing, metalworking, vocational jobs, and government service (Oladejo, 2010). For the processing of agricultural goods like cassava and cashew nuts, the region also benefits from the services of medium- and small-scale enterprises.

The study's target audience was youthful individuals in Oyo State's Ido Local Government Area. Out of

the ten existing wards, six (with a predominance rural population) were purposefully chosen for this study. It was discovered during the preliminary field research that the chosen wards shared several characteristics. 180 young people who work with animals were questioned, and the questionnaire was divided equally throughout the six wards. Due to this, the chosen wards received equal representation regardless of the number of adolescents in any one of them. Primary data were used in the study. The data were collected from the respondents with the use of a questionnaire. Other relevant information for the study was obtained from journals, textbooks, conference proceedings and the Internet. Data collected were analyzed using descriptive statistics such as frequency and percentage. A 5-point Likert-type scale was used to measure the problems of youth-run livestock production which was on the scale of not at all a problem (1) to a very serious problem (5). The hypotheses were tested using Chi-square and Pearson Product Moment Correlation.

3. Results and discussion

The majority of the respondents (53.3%) fell within 21-25 years of age while the mean age of the respondents was 24.8 years. The youths are within their productive and active working age range and appear to be more receptive to agriculture than their aged counterparts (Ogunlela & Mukhtar, 2009; Sumberg et al., 2021). The majority (47.8%) of the respondents had 6-10 persons as their family size with a mean size of 9 persons. Lanjouw & Lanjouw (2001) and Khan et al., (2021), affirmed that relatively large household sizes may likely enhance family labour supply on the farm, hence supporting favourable production. The majority (76.1%) of the respondents were males while the remaining 23.9% were females. A larger proportion (79.4%) of the youths were single. 45.6% of the respondents had ND/NCE while 22.2% had a secondary school education. The result revealed that most of the respondents had at least primary education. Ali et al., (2020) opined that the level of education provides the privilege to acquire better skills, results and impacts, as well as relevant variation on the adoption of innovation among people. This is presented in Table 1.

Table 1: Characteristics of the respondents

Variable		Freq.	%
Age (Mean = 24.8 Years)	< 21	35	19.4
	21 to 25	96	53.3
	>25	49	27.2
Family size (Mean = 9 members)	< 6	64	35.6
	6 to 10	86	47.8
	>10	30	16.7
Sex	Male	137	76.1
	Female	43	23.9
Marital status	Not married	143	79.4
	Married	37	20.6
Educational level	Primary	10	5.6
	Secondary	40	22.2
	ND/NCE	82	45.6
	HND/Degree	26	14.4
Quarterly Income from livestock (Mean = ₦102,58.03)	No formal education	22	12.2
	<100,000	57	31.7
	≥ 100,000	123	68.3
Years of Experience in livestock production (Mean = 8.92 Years)	<5	79	43.9
	≥6	101	56.1

The major livestock enterprises in which the youths commonly reared are cattle (48.3%), goats (34.4%) and sheep (32.8%).while the least are poultry (18.3%), pigs (10.6%) and rabbits (6.1%). This is presented in Table 2.

Table 2: Livestock commonly reared by youths

Livestock commonly reared	Frequency	Percentage
Cattle	87	48.3
Goat	62	34.4
Sheep	59	32.8
Poultry	33	18.3
Pigs	19	10.6
Rabbits	11	6.1

The problems facing youth-run livestock production include insufficient financial resources (4.5), animal illnesses (4.2), expensive animal feed (3.9), absence of government incentives (3.7), lack of economic infrastructure (3.5) high transit costs and inefficient service (3.2). This is presented in Table 3.

Table 3: Problems of Youth-run Livestock Production

Indicator	Mean
Insufficient financial resources	4.5
Animal illnesses	4.2
Expensive animal feed	3.9
Absence of government incentives	3.7
Lack of economic infrastructure	3.5
High transit costs and inefficient service	3.2

The chi-square analysis shows that a significant relationship ($p < 0.05$) exists between sex ($\chi^2 = 8.8$), educational level ($\chi^2 = 35.1$) and income generated from livestock farming innovativeness. The result indicated that the sex and educational level of the youths are very likely to affect the income they generate from livestock enterprises (Yekinni et al., 2015; Mulema et al., 2021). This is presented in Table 4.

Table 4: Association of selected variables and income from livestock ventures

Variable	χ^2	Decision
Sex	8.81**	S
Marital status	2.49	NS
Educational level	35.12**	S
Major occupation	11.36	NS
Constraints	32.63	NS

χ^2 = Chi-square **= p<0.05 NS = not significant S = significant

However, the Pearson Product Moment Correlation showed that age ($r = 0.37$) and years of experience in livestock enterprises ($r = 0.41$) had a significant ($p < 0.05$) relationship with income generated from livestock production. The result indicated that age and years of experience in livestock farming initiatives will have a positive effect on the income generated by the youths from livestock production (Sanusi et al., 2017; Oghenero et al., 2021). This is presented in Table 5.

Table 5: Relationship of selected variables and income from livestock ventures

Variable	r-value	Decision
Age	0.37**	S
Family size	-0.73	NS
Years of experience	0.41**	S

**= p<0.05 NS = not significant S = significant

4. Conclusion and Recommendations

It could be concluded from the study that youths in the study area are involved in livestock production and they earn economic benefits from it. The youths have potentials which needed to be tapped for agricultural development in the study area and Nigeria as a whole, especially against the backdrop of massive youth unemployment in the country.

Based on the result of this study, it was recommended that financial institutions should assist the youths through the provision of capital and the need to create an enabling environment through the provision of infrastructure such as roads, regular power supply and water. Also, policies that will give easy access to production resources for the youths should be encouraged while their education should be enhanced since it remains the most powerful tool to empower the youths.

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Enhancing Forest Landscape Spatial Data Modeling through Cloud-Based Approaches: A Case of Oluwa Forest Reserve, Ondo State Nigeria

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Abstract. The term "cloud computing" refers to Internet-based computing where virtual shared servers offer users software, infrastructure, platform, devices, and other resources on a pay-per-use basis. Remote sensing for the management of environmental resources can use cloud computing. Using cloud-based spatial data, this study will assess changes to the forest landscape in the Oluwa forest reserve. In this study, the reserve's existing and future forest cover is modelled utilising cloud data and cloud computing. This study shows how cloud computing may be used to detect different types of forest landscapes in Oluwa Forest Reserve based on projected future land cover patterns and simulated land cover utilising spatial data. The traditional approach to calculating forest cover is laborious and time-consuming. Using Google Earth and the cloud computing technology, it is possible to identify changes in forest cover more quickly and with less effort. According to the findings, forest land looked to have decreased between 1992 and 2022, with a larger rate of change between 2002 and 2012. The secondary forest increased with time as well, changing at a faster rate between 2002 and 2012 (approximately 6.5% growth) than between 2012 and 2022 (about 1.8% reduction). Between 1992 and 2022, non-forest land increased overall. Between 2002 and 2012, the non-forested area grew by 1.48%, while the 10-year period saw a 3.93% rise.

Keywords: Degradation, Cloud Computing, Modeling, Classification, Fragstats

1. Introduction

We depend on forests for a variety of goods and services, including wildlife habitat, hydrological functions, and carbon storage (FAO, 2009). Given

the significant contributions that forests make to human well-being, it is important to know the status of our forests. Assessing the forests will show whether they are degrading and the likely causes of the degradation. In order to prevent additional deterioration and to restore and rehabilitate degraded forests, it is important to have accurate information on the condition of the forest and the degree of forest degradation. Uncontrolled tree-cutting and other human activities like farming and grazing are to blame for the rise in forest loss in the tropics, particularly in Africa (Isaac et al. 2018). These are elements that may increase human migration, energy costs, fire outbreaks, and other causes of forest loss (Yang 2001).

There aren't many landscapes left on the earth's surface today that haven't undergone a major change (Yang, 2001). Man's activities on the surface of the Earth have changed the terrain, and this change has had a significant impact on the surrounding environment (Yang, 2001). It is unavoidable to monitor the forest to track its status for proper and effective management to prevent forest mortality and improve the services of a forest (Soraya, 2013).

Data can be accessed through the cloud at any time and from any location. Recent advances in cloud computing have made it possible to track how the ecological landscape is evolving (Rakesh et al., 2014). Utilising time series cloud data, change detection measures changes in the landscape's land cover. These online data offer a comprehensive picture of the landscape type (Alexa et al., 2011). Indicating the variability of the ecological landscape, cloud data enable the evaluation of the forest landscape across a wide area (Alexa 2011). The availability of trustworthy cloud data collected by

satellite, with methodical processing and creative analytical tools, will aid in the timely and cost-effective monitoring and analysis of forest cover and landscape metrics of wide areas (Li and Yeh, 2004; Huth, and Cebula 2011).

For understanding and characterising landscape changes and their effects, landscape metrics—also known as spatial metrics—are essential (Li and Wu, 2004). Landscape metrics are indicators that can be used to pinpoint various facets of the organisation of a landscape through time and geography (Li and Wu 2004). In recent years, there has been a rise in the use of spatial metrics models for analysing the dynamics of our changing ecosystem's terrain. Dietzel et al. (2005) and Porter Bolland et al. (2007) are two examples. To evaluate the properties of the individual classes and the overall landscape, many metrics models have been applied (Li and Wu, 2004; Uuemaa et al., 2009).

These are crucial tools that ecologists use to visualise ecological processes and their outcomes and to better understand how they work (Bharath et al., 2012). The changes in landscape patterns at various scales are explained by multi-spatial satellite or cloud data (Saura et al. 2007). The classification of landscape diversity and variations within a forest estate is made easier by landscape metrics. Forest cover reduction and its effects on ecosystem processes that supply ecosystem services for human well-being are causing growing worry (Chapin et al., 2000; Millennium Ecosystem Assessment MEA, 2005). This area of study has seen a great deal of activity. Agbor et al. (2017) conducted research on Geospatial Technologies for Assessing Forest Losses in South-West Nigeria. Using bio-spectral models, the study calculated the amount of forest cover in South West Nigeria, including Oluwa Forest Reserve.

Growing concern is being expressed about the loss of forest cover and how it affects ecosystem processes that provide ecosystem services for human well-being (Chapin et al., 2000; Millennium Ecosystem Assessment MEA, 2005). There has been a lot of research in this field. Geospatial Technologies for Assessing Forest Losses in South-West Nigeria were the subject of research by Agbor et al. (2017). The study estimated the quantity of forest cover in South West Nigeria, including Oluwa Forest Reserve, using bio-spectral models.

Therefore, this study will use a more reliable model that can take into account all image pixels, creating a better categorization and analysis of the pattern of landscape change. Deforestation: Change Detection

in Forest Cover Using Remote Sensing was the focus of Soraya Violini's (2013) research. This study looked at changes in forest cover but did not identify the causes of these changes or the fragmentation of the forest landscape, which is a crucial aspect of sustainable forest management. Toyinbo (2018) looked for signs of human activity in the Oluwa forest reserve. The project investigated the anthropogenic activities and affecting factors in Oluwa Forest Reserve.

In addition to looking at the causes of deforestation, this study will also look at landscape fragmentation. Flowers, B. et al. (2020) used data from three somewhat distinct years to undertake a study to comprehend the dynamics of habitat fragmentation of ecosystems. Area-weighted mean shape index (AWMSI), mean shape index (MSI), edge density (ED), mean patch size (MPS), number of patches (NUP), and class area (CA) metrics were employed in the investigation. For the years 2001, 2011, and 2017, the measures were created. According to Mandal and Chatterjee's (2020) research, spatial change is the most effective way to enhance habitat quality while lowering the complexity of the habitat's design.

They made use of metrics including the fractal dimension (FD), shape index (SI), and perimeter area ratio (PAR). The Radhanagar Forest Range's habitat fragmentation was studied using these metrics. Forest degradation is a process of change that adversely affects a forest's features, resulting in a drop in the value and output of the forest's goods and services. Forests, according to the authors, are areas with a canopy cover of 10% or more and a surface area of up to 0.5 ha; they are defined by the presence of trees and the lack of any other major land use, and the trees must be able to grow to a minimum height of 5m. The law 26.331/07 of Minimum Standards for Environmental Protection of Native Forests in Argentina defines forest as natural forest ecosystems made up primarily of mature native tree species, with various species of flora and fauna associated, as well as the surrounding medium-soil, subsoil, atmosphere, climate, and water - forming an interdependent web with its characteristics and multiple functions.

Deforestation is defined by the Programme Forest Resources Assessment as the conversion of forests to other land uses or a reduction in their cover that is less than 10% of their total area (0.5 hectares). Deforestation is also described as the direct conversion of human-caused forest land to non-forest land by the United Nations Framework Convention on Climate Change (UNFCCC). A variety of

regionally specific economic, social, and political factors contribute to deforestation. According to Lowe et al. (1992), logging and the conversion of tropical forests to agricultural or grazing land are the main sources of deforestation. The Programme Forest Resources Assessment defines deforestation as the conversion of forests to other land uses or a reduction in the cover of forests that is less than 10% of the total area (0.5 hectares) of the forest. The United Nations Framework Convention on Climate Change (UNFCCC) defines deforestation as the direct conversion of human-caused forest land to non-forest land. Deforestation is influenced by several locally unique economic, social, and political factors. The main causes of deforestation, according to Lowe et al. (1992), are logging and the conversion of tropical forests into agricultural or grazing land. Using bio-spectral models, Agbor et al. (2017) calculated the amount of forest cover in South West, of Nigeria, including Oluwa Forest Reserve. The crew makes use of the Forest Canopy Index as a bio-spectral model. The data from the Advance Vegetation Density Index (AVD), Bare-soil Index (BI), and Forest Shadow Index (FSI) were combined to create the Forest Canopy Density Index (FCD). The density of the forest canopy is a crucial element in the Forest Canopy Density model for characterising the state of the forest. This model uses data from four indices (Slady, 2016) to simulate and analyse bio-spectral phenomena. A parametric statistical model was used by Agbor et al. (2012) and Soraya Violini (2013) to extract information about land cover from satellite images. The average rate of change, which measures how quickly one quantity is changing relative to another, was used in this procedure. In other words, it computes the difference between the change in one item and the change in the other item. In the Oluwa Forest Reserve, anthropogenic activities were identified by Toyinbo (2018), along with their effects on the forest cover. The study looked at the anthropogenic activities and affecting factors in Oluwa Forest Reserve. Using roads, water bodies, and built-up regions as independent factors, he regressed the forest as the dependent variable. Human disturbances also referred to as human development, were found to have the greatest influence. Uzoma and Moses (2014) investigated the use of GIS and remote sensing to detect land use change in the Omo Biosphere Reserve. Between 1987 and 2011, this study evaluated the trends of land use change in Nigeria's Omo Biosphere Reserve. The study employed Landsat TM imagery from 1987 and Landsat ETM+ imagery from 2011. They used ArcGIS 9.2 and Erdas Imagine 9.2 to determine and analyse changes in land use. They conducted the study using space-based data, which allowed them to

evaluate the amount of forest cover in the past, which would have taken a long time using traditional surveying approaches.

Their main drawback was that they couldn't access some parts of the forest for accuracy evaluation. The findings showed that in 1987, areas occupied by farms, disturbed woods, communities, and rivers expanded while those occupied by natural forests, plantations, and highways shrank. Following disturbed woods (10917 hectares), towns (4262 hectares), and rivers (235 hectares), farmlands saw the largest area increase (19025 hectares) compared to 1987 estimates. Plantations (22699 hectares) experienced the greatest area decline, followed by natural forests (10803 hectares) and highways (937 hectares). Natural forests made up the majority of the reserve as of 1987, taking up 39.32% of it. Nevertheless, out of all land use types, disturbed forest today occupies the largest portion of the reserve (36.34%), followed by natural forest (32.05%), farms (14.78%), plantations (10.62%), settlements (4.11%), roads (1.22%), and rivers (0.87%). Due to excessive exploitation in the former and different conservation measures in the latter, the abundance of the natural forest cover drifted from the northeastern section of the reserve in 1987 to the northwestern part in 2011. It is anticipated that the data presented in this study will assist in making choices that will improve the reserve's sustainable management. Flowers, et al. (2020) used data from three somewhat distinct years to undertake a study to comprehend the dynamics of habitat fragmentation of ecosystems. Area-weighted mean shape index (AWMSI), mean shape index (MSI), edge density (ED), mean patch size (MPS), number of patches (NUMP), and class area (CA) are the metrics employed for the investigation. The measurements for 2001, 2011, and 2017 were created. In 10 years, agricultural land rose by 19.37%, but the NUMP of some habitats climbed by 284%. Additionally, the results revealed ED variation and a decline in total MPS, both of which pointed to significant fragmentation. According to Mandal and Chatterjee's (2020) research, spatial change is the most effective way to enhance habitat quality while lowering the complexity of the habitat's design. They made use of metrics including the fractal dimension (FD), shape index (SI), and perimeter area ratio (PAR). The Radhanagar Forest Range's habitat fragmentation was studied using these metrics. To determine the structural quality of the forest shape from the two maps, the study compared the index values. The comparison showed that the structural quality of the altered forest habitat was superior to that of the habitat quality of the current forest landscape.

2. Research Methodology

2.1 The Study Area

Oluwa Forest Reserve is positioned in the southwest of Nigeria, between latitudes 6° 40' and 7°59' N and longitudes 4°30' and 4°55' E (Figure 1). The region, which is 859 km² in size, is located on southern Ondo State's borders. The terrain's approximate height above sea level is 133 metres. It is a part of the Omo-Oluwa-Shasha Forest complex, a collection of forest reserves in southwest Nigeria. Despite being divided from the Omo and Shasha reserves (which are still connected as of 2011), the three reserves contain some of the last intact woodlands in the area. Despite the physiological differences between them, logging, hunting, and agriculture are threats to them (Oke, 2013). The average yearly rainfall in the area is about 2050 millimetres, while the average monthly temperature is roughly 27 °C. The natural vegetation, which was previously lowland tropical rainforest (wet evergreen type), has been reduced to secondary forest, thickets, and various degrees of fallow regrowth or annual and perennial crops, except some portions of the forest reserves. The reserve is surrounded by a region of wet mixed semi-evergreen rainforest. While *Nauclea diderrichii* and *Terminalia superba* are more common in the reserve's moist central portions, *Sterculia rhinopetala* and other common species are more common in the reserve's drier northern regions (Ola-Adams, 1999). In the wet forests in the south, which are situated on sandy marshy soils, *lophira* and trees from the *Meliaceae* family are also widely distributed. Over the course of over a century of continuous human activity, mostly farming and logging, the vegetation pattern of Oluwa has undergone significant change. There are also

natural woodlands that have been disturbed to varied degrees.

Tropical ferruginous soils predominate (Hall, 1977). They fall into the upper classification category's Ferric Luvisols type (Chijioke, 1980). The reserve contains a variety of soil types, however they all fall within the category of tertiary sediments (Ola-Adams, 1999). The reserve is located on crystalline rocks of the undifferentiated foundation complex, which are overlain by Eocene deposits of sand, clay, and gravel in the southern portions (Isichei et al 1995). The Reserve's lowest points are in the south, and the topography is undulating with a maximum elevation of 150 m above sea level in the west. The Reserve has a tropical wet-and-dry climate, which has two rainfall peaks that are separated by a somewhat dry phase that typically occurs in the month of August. The mean relative humidity is 80%, and the mean annual rainfall is approximately 1750 mm. The average daily temperature was determined to be 26.4 °C, which is 0.6 °C higher than Evans's (1939)'s average daily temperature of 25.80 °C. Typically, between 8 and 10 hours of sunshine per day are experienced throughout the wet season.

The US Geological Survey (USGS) website was mined for cloud data from Landsat satellite images taken in 1992, 2002, 2012, and 2022 to achieve the research objectives. Located on row 55 and Landsat path 190 is the research area. The images have pixel sizes of 30x30m (Chander, 2003). All of the images were taken during the same period (the dry season). The Level 1 Terrain Corrected (L1T) product of the gathered Landsat data was pre-georeferenced to the UTM zone 31 North projection using the WGS-84 datum. The images in this experiment received preprocessing.

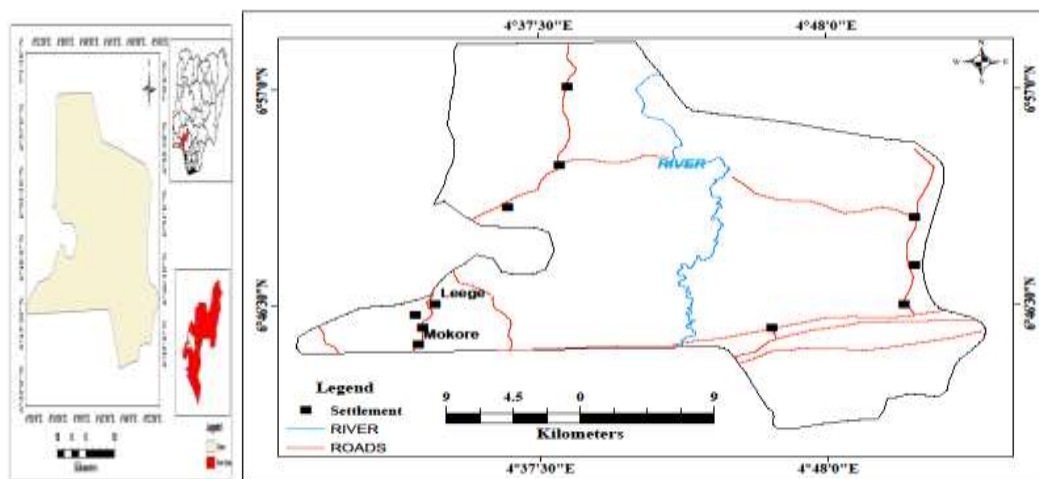


Fig. 1: The study area.

2.2 Data Set

To accomplish the research goals, cloud data from Landsat satellite photos taken in 1992, 2002, 2012, and 2022 were mined from the US Geological Survey (USGS) website. The research region is situated on row 55 and Landsat path 190. The photos have 30x30m pixel sizes (Chander, 2003). The same season (dry season) was used to capture all of the photographs. WGS-84 datum was used to pre-georeference the collected Landsat data (Level 1 Terrain Corrected (L1T) product) to UTM zone 31 North projection. In this investigation, the pictures underwent preprocessing. The details of the Landsat TM, ETM+, and OLI pictures are shown in Table 1.

Table 1: Research Materials to Use

Satellite Sensor	Spatial resolution	Acquisition years	Path	Row
Landsat 5, 7 & 8	30m x 30m	1992 2002, 2012, and 2022	190	55
Asterdem	30m interval	2018	-	-

The cloud data (Landsat image) were obtained via Google Earth Engine as shown in Figure 2. This figure shows the black and white Landsat data mined from the Google archive. The black and white images were enhanced by creating their composites as shown in Figure 3.

Figure 2: Black and white Landsat image

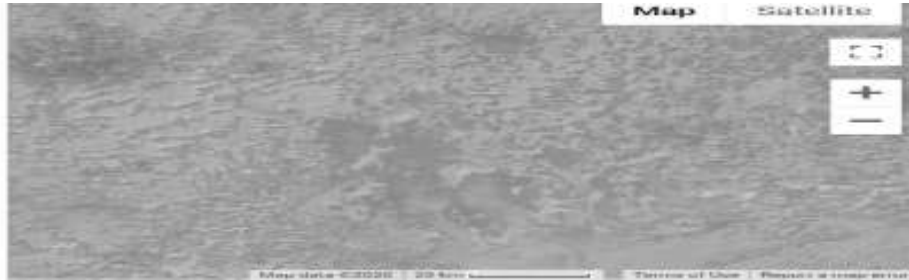


Figure 3: Composite image on Google Earth Engine

The black and white images were enhanced by creating their composites as shown in Figure 3.

2.3 Data Preprocessing

According to Giannini et al. (2015), each pixel in raw remote sensing data contains a digital number value that corresponds to a raw measure needed by the sensor. Images must be transformed from digital numbers to physical quantities, such as radiance and brightness temperature, to extract quantitative information from them. The previously calibrated photos must be adjusted for atmospheric impacts. The radiometric signal may be significantly distorted

when the atmosphere is present. Using equation 1 (Giannini et al., 2015), the pictures utilized in this investigation were first converted to Top of Atmosphere (TOA) radiance.

$$TOAr = \left(\frac{L_{MAX}\lambda - L_{MIN}\lambda}{Q_{CAL}} \right) Q_{CAL} + L_{MIN}\lambda \quad (1)$$

Where;

$L\lambda$ the radiance at the aperture [$W/(m^2 \text{ sr } \mu m)$]

Q_{CAL} is the Quantized calibrated pixel value [DN]

L_{MIN} λ is the Spectral at-sensor radiance that is scaled to $Q_{CAL}MIN$ [$W/(m^2 sr \mu m)$]

L_{MAX} λ is the Spectral at-sensor radiance that is scaled to $Q_{CAL}MAX$ [$W/(m^2 sr \mu m)$]. The above expression does not consider the atmospheric effects, therefore there is need to convert images from radiance to reflectance measures, using equation 2 (Gyanesh *et al*, 2009).

$$\rho\lambda = \frac{\pi \cdot TOA \cdot d^2}{E_{SUN} \lambda \cdot \cos \theta_{SZ}}$$

(2)

Where;

$\rho\lambda$ is the planetary TOA reflectance (unitless)

π is approximately 159

d^2 is the Earth-Sun distance (Astronomical unit)

$E_{SUN}\lambda$ is the mean exoatmospheric solar irradiance [$W/(m^2 sr \mu m)$].

θ_{SZ} is the solar zenith angle (degree). The cosine of this angle is equal to the sine of the sun elevation θ_{SE} . That is, $\theta_{SZ} = 90 - \theta_{SE}$.

2.4 Data Collection

The geographic coordinates of the observation sites from the GPS reading will be recorded, and the positions will be indicated on the satellite photos, and the GCPs will be located in the field using a GPS, topographic maps, and Landsat satellite images. The number, accuracy, and distribution of the GCPs will be taken into account when gathering the data, and a small sample of points (GPS points) representing a particular land use or cover type will be chosen at random in the field. With the GPS device, this will be done throughout the study region, and 100 sample sites will be chosen. A similar amount of GPS points (100 sample points) will be utilized to evaluate the classification accuracy.

Image Classification

To classify the images, a modified version of the Anderson scheme of land use/cover classification was adopted and the categories include:

- Forest area
- Grassland
- Bare surface area

Cloud data (Image geoprocessing is the computer-aided alteration and analysis of images. (2008) Lillesand *et al*. Digital image processing is based on the principle that an image should be sent to a computer that is programmed to insert it into an equation or set of equations and then save the results of the computation for each pixel of the image. The outcomes result in a brand-new digital image that can be exhibited or captured in pictorial format, as well

as further altered by other programmes. (2008) Lillesand *et al*.

In each band of imaging, the intersection of each row i and each column j contains the picture elements (pixels) that make up a digital cloud or satellite data (pictures) (Jensen, 1996). The Digital Number (DN) or Brightness Value (BV) assigned to each pixel serves as a representation of the average brightness of a very tiny area inside the image (Jensen, 1996). A smaller value denotes an area with low average radiation, while a greater number denotes an area with high radiant characteristics. In 2000, Jensen. Figure 3 shows a black-and-white, 30-by-30-pixel image of the study area. The main goal of image classification is to automatically assign land cover classes or themes to all of the pixels in an image. The spectral pattern found in the data for each pixel is employed as a numerical basis for classification when multispectral data are used to do the classification. According to their innate spectral reflectance and remittance characteristics, many feature types exhibit various combinations of DNs (Lillesand *et al.*, 2008). The unsupervised and supervised techniques of classification are the two basic approaches used in classical methods. The image analyst oversees the pixel classification process in the supervised approach to classification, which was used for this work, by providing the computer programme with numerical descriptors of the different land cover classes present at the study area. This was done by creating a numerical interpretation key that defines the spectral properties for each feature type of interest using representative sample sites of recognized cover categories, often known as training areas or training sites (Lillesand *et al.*, 2008).

2.5 Assessment of Forest Landscape Changes and Spatial Distribution

The images were divided into three categories: bare land, grassland, and forest land to evaluate the spatiotemporal pattern of forest cover. The land use/cover changes between 1992 and 2022 were calculated using a simple percentage (equation 3.3) and a dynamic weight model (equations 3 and 4), both of which used data from cross-classification (Liu *et al.*, 2011), to establish the rate of change.

$$\text{Cross classification} = \frac{S_{i-j}}{t} \times 100 \quad (3)$$

$$s = \sum_{ij}^N \left(\frac{\Delta s_{i-j}}{s_i} \right) \times \frac{1}{T} \times 100 \quad (4)$$

Where;

S_i is the area of land type i in the beginning of the period,

ΔS_{I-J} is the total area of land cover type I converted into other types

T is the study period; and

S is the land cover dynamic

Some spatial measures have been chosen to measure and monitor the landscape fragmentation, land use complexity, proximity, and diversity (McGarigal, et al. 2008) to evaluate changes to the forest landscape

using metric models. To understand the local landscape dynamics, these spatial metrics will be produced using FRAGSTAT interfaced with ArcGIS. Class Diversity Index, Class Evenness Index, Proximity Index, Shape Index, and Number of Patches are among the chosen criteria. Ecologists have measured the composition of the landscape using these indexes.

Table 2: Selected Spatial Metrics

S/N	Indicators	Formula	Range	Significance/ Description
1	Mean patch size (MPS)	$MPS = \frac{\sum_{i=1}^n a_i}{n_i} \frac{1}{10,000}$	$MPS > 0$, without limit	MPS is widely used to describe landscape structure. MPS is a measure of subdivision of the class or landscape.
2	Class diversity index	$the C_d = -\ln \sum_{a=1}^n p_a^2$	$C_d \geq 0$ $C_d = 0$ when the area contains only 1 fragment and it means no diversity.	This measures the relative patch diversity of class a . This diversity index has been used by ecologists to measure landscape composition.
3	Proximity Index (MPI):	$the p_{rox} = \sum_{s=1}^n \frac{w_{abs}}{d_{abs}^2}$	$Prox \geq 0$.	This is the sum of patch area (m^2) divided by the nearest edge-to-edge distance squared (m^2) between the patch and the focal patch of all patches of the corresponding patch type whose edges are within a specified distance (m) of the focal patch
4	Number of Patches	$N_p = n_a$	$NP \geq 0$, without limit. $NP = 1$ when the landscape contains only 1 patch.	A number of patches of a particular patch type is a simple measure of the extent of subdivision or fragmentation of the patch type.
5	Class Evenness Index	$C_e = -\ln \sum_{a=1}^n p_a^2 \div \ln n$	$0 \leq C_e \leq 1$	This measures the patch distribution and abundance of class a

Turner, 1990a, Rajesh et al, 2009, and Bharath et al, 2012

2.6 Cloud Technology

A cloud-based image processing solution that makes use of the Google Earth Engine's computer power is known as cloud technology. It supports Earth Observation analysis with a variety of features. This study will concentrate on applying the Change Detection approach to carry out a direct (supervised) change detection. Using a prebuilt mosaics module, the guided change detection system enables users to categorize change between two dates. Additionally, training data will be gathered via Collect Earth Online. Therefore, using the training data that will be put into Google Fusion Tables, the change detection analysis will try to pinpoint changes that occurred in the Oluwa forest reserve between 1992 and 2022. Using the distinctive Id that will be transferred to the clipboard, this table is connected to the cloud driver and the change detection module. The change detection analysis classification will now be handled by cloud technology, and the output results will be displayed on the screen. On the servers hosting the Google Earth Engine, this analysis will be done. Therefore, using the training data that will be put into Google Fusion Tables, the change detection analysis will try to pinpoint changes that occurred in the

Oluwa forest reserve between 1992 and 2022. Using the distinctive Id that will be transferred to the clipboard, this table is connected to the cloud driver and the change detection module. The change detection analysis classification will now be handled by cloud technology, and the output results will be displayed on the screen. On the server for the Google Earth Engine, this analysis will be performed.

2.7 Forecast of Landscape Changes Using Cellular Automata Markov.

To represent continuous data over space, a raster data model in GIS Cellular Automata Markov (CA Markov-based) will be utilised. The area will be divided into pixels or grid cells by the model. The measured attribute values in a matrix will be entered into each grid cell, and the cell values will be recorded in rows and columns. For instance, CA-Markov models depict a forest with a lattice of cells, where each cell can exist in one of a limited number of states. Future patterns will be set by transition rules that specify how cells should behave across time, with time progressing as a series of distinct steps (Kampanart et al., 2005). As a result of the conditions at each cell and its neighbouring cells at

each time step, for instance, a cell may change from a forest region to a built-up area. Each land is represented by a pixel value from the raster data model in the categorised photos and the CA-Markov simulated images. The Markov model is calculated thus using equation 5.

$$S(t, t+1) = P_{ij} \times S(t) \quad (5)$$

Using land use and cover change data derived from satellite images, this study will also establish the validity of the Markov process for describing and projecting land use and cover dynamics. The Markov chain has n states. The data vector is a column vector whose i th component represents the probability that the system is in the i th state at that time. It is important to note that the sum of the entries of a state vector is 1. For example, vectors X_0 and X_1 in the above example are state vectors. If p_{ij} is the probability of movement (transition) from one state j to state i , then the matrix

$$T = [p_{ij}] \quad (6)$$

is called the transition matrix as seen in equation 6 of the Markov chain (Kampanart *et al*, 2005 Takayama *et al*, 1997). A transition probability matrix and a transition regions matrix are the outputs of the CA-Markov analysis that was used to assess two images of land cover. The likelihood that each land cover category will change from each other is explained by the transition probability matrix. The number of pixels that are anticipated to change from one land cover type to another during the specified number of time units is represented by the transition areas matrix. A four-state Markov probability matrix has been created as a result of this. To project, the study will use cellular automata markov change prediction module in Idrisi software (Agbor *et al*, 2012 and Bangladesh *et al*, 2013). This was also manually calculated using a matrix model (equation 3.9). Both methods utilized the transition probability matrix generated from image cross classification as seen in equation 7.

$$A = \begin{pmatrix} x_{a11} & x_{a12} & x_{a13} \\ x_{a22} & x_{a22} & x_{a23} \\ x_{a31} & x_{a32} & x_{a33} \end{pmatrix} B = \begin{pmatrix} x_{b1} \\ x_{b2} \\ x_{b3} \end{pmatrix} C = \begin{pmatrix} x_{c1} \\ x_{c2} \\ x_{c3} \end{pmatrix} \quad (7)$$

Where

A is the array of probability values of land cover types conversion.

B is the percentag of land cover types for the base year.

C is ththe projectedatrix.

The product of A and B matrices produced the forecast values matrix C for each land cover type. The output of projection by calculation was

compared with the output of the projection module in Idrisi software.

The overall accuracy for the module is calculated as seen in equations 8, 9, 10 and 11.

$$(8) \quad Y = \frac{\sum_{i=1}^n x_i}{N} \times 100$$

$$(9) \quad \text{Producer's Accuracy} = \frac{\sum_{j=1}^n w}{w+x}$$

$$(10) \quad \text{User's Accuracy} = \frac{y}{y+z}$$

Where

w = number of times a classification agreed with the observed value,

x = number of times a point was wrongly classified,

y = number of times a point was correctly classified, and

z = number of times a point was not classified as 'a' when it was not observed to be 'a'

Kappa's coefficient measures perfect agreement between prediction and reality or classification results and real observation, as is the case in this study. It was computed as:

$$(11) \quad K = \frac{\sum_{ij=1}^r x_{ij} - \sum_{ij=1}^r (x_{ij} + x_{x+i})}{r}$$

Where r = numt r s and $\sum_{ij=1}^r (x_{ij} + x_{x+i})$ matrix,

N = total number of observations $ij-1$

x_{ij} = observations in the i th row a j th column,

$x+i$ = marginal total of the i th row, and

$x+j$ = marginal total of the j th column.

3. Results and Discussion

3.1 Data Analysis

The outcomes are shown in the form of charts, maps, and tables. They include the static, changes in landscape types, significant variables that lead to change in landscape types in the study area and the future pattern of landscape changes in the area.

Landscape changes and their spatial distribution using metrics models. The static land cover

distribution for each study year as derived from the images (Figures. 4-7) is presented in Table 3.

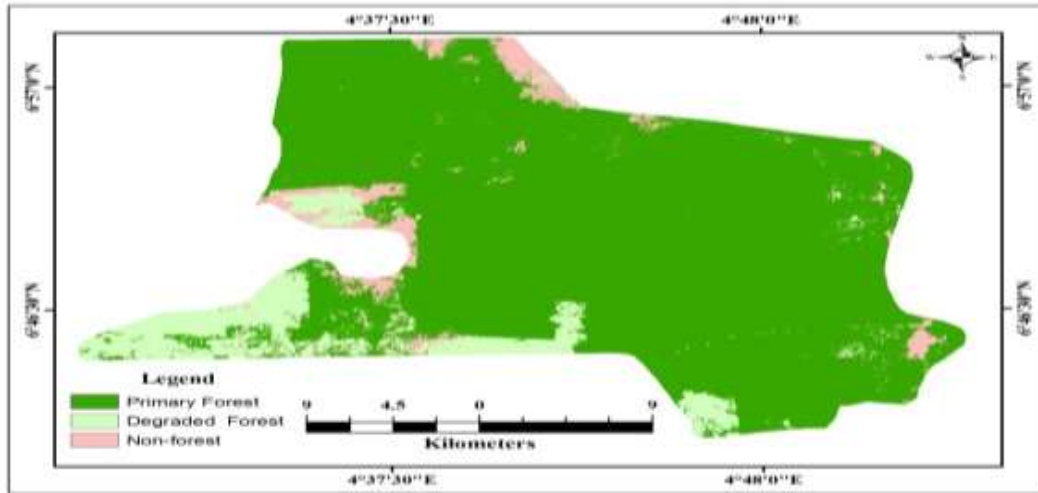


Figure 4: Land cover map of Oluwa forest reserve in 1992

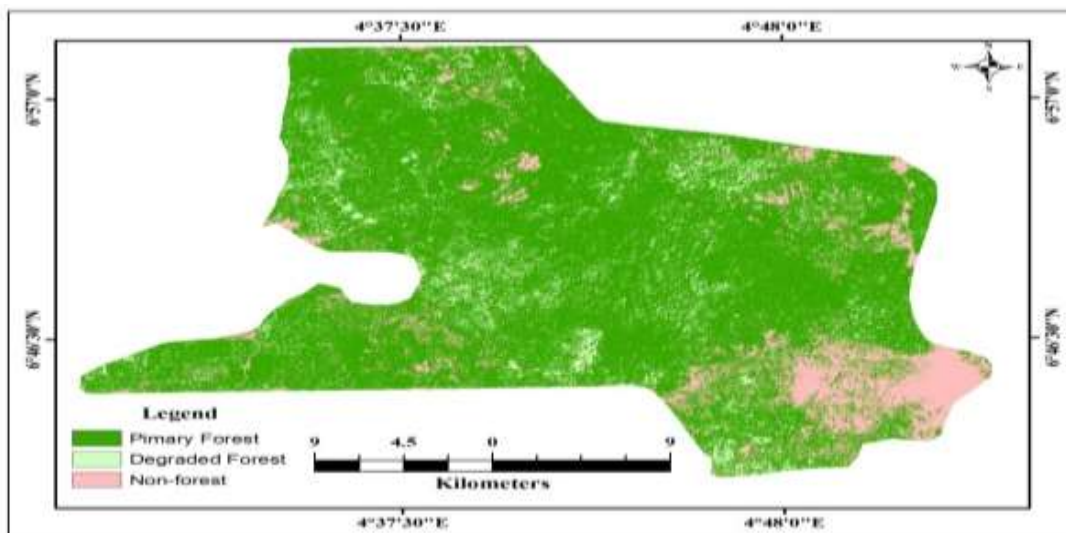


Figure 5: Land cover map of Oluwa forest reserve in 2002

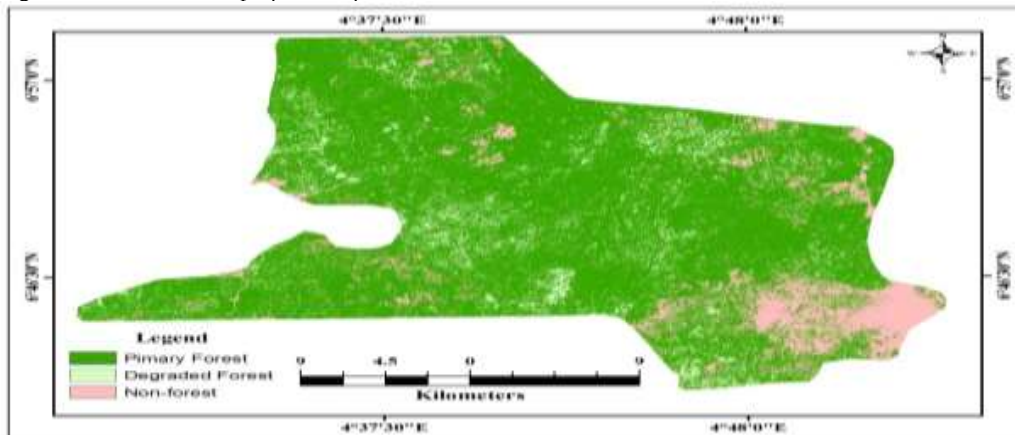


Figure 6: Land cover map of Oluwa forest reserve in 2012

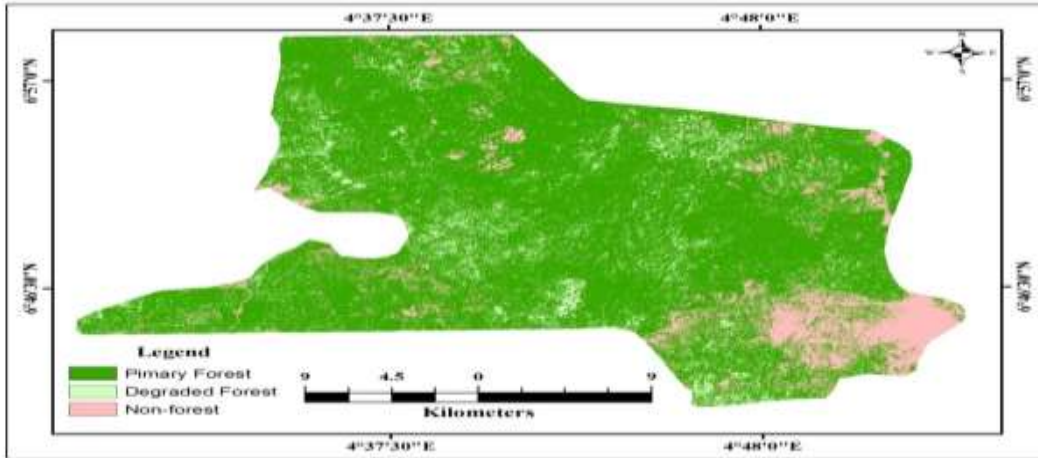


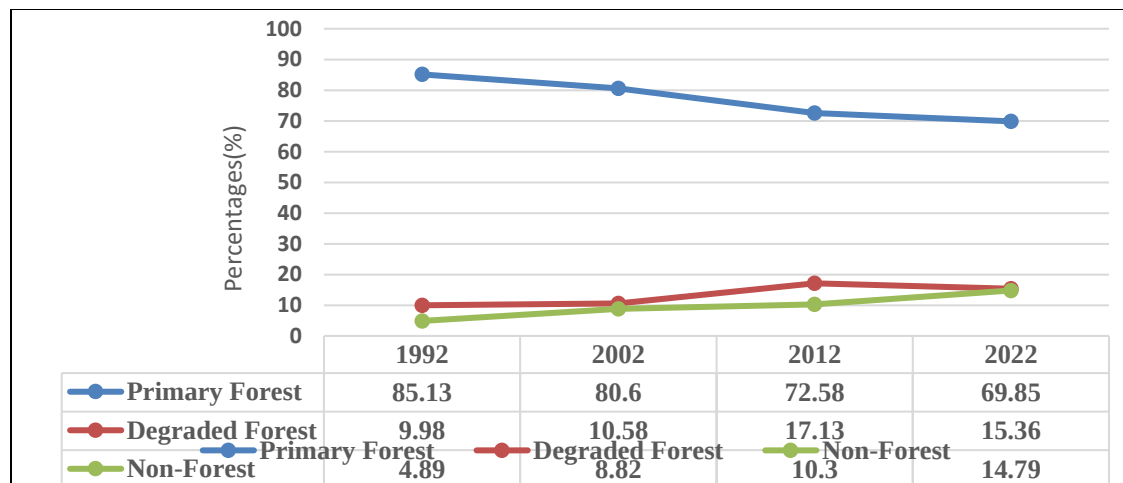
Figure7: Land cover map of Oluwa forest reserve in 2022

Land Cover maps for 2002, 2012, and 2022 are displayed in Figures 4.1–4.4, respectively. The images depict the land cover of the study region in 1992, 2002, 2012, and 2022 as shown on a land cover map of the Oluwa Forest Reserve for those years. The primary forest is shown in green, the degraded forest is shown in light green, and the non-forested region is shown in pink. The reserve's northern and western regions were mostly where the non-forest was located. Mostly primary forest made up the centre portion of the forest, while degraded forest made up the southern portion.

The continual loss of the area's natural forests and marshes over 27 years was shown to be caused by encroachment and illicit logging. Additionally, it appears that politics may have contributed to the demise of the forest. For instance, between 2002 and 2012, woodlands increased, and water bodies/swamps appeared to be largely steady. The statistics on the distribution of land cover are presented in Table 3.

Table 3: The Land cover spatial distribution statistics

Land cover categories	1992		2002		2012		2022	
	Area (Km)	Area %	Area (Km)	Area %	Area (Km)	Area %	Area (Km)	Area %
Primary forest	732.000	85.131	693.083	80.604	624.090	72.579	600.60	69.85
Degraded forest	85.808	9.979	90.969	10.579	147.250	17.126	132.07	15.36
Non-forest	42.052	4.890	75.808	8.817	88.520	10.295	127.19	14.79
Total	859.860	100.000	859.860	100.000	895.860	100.000	859.86	100



Line graph of land cover from 1992 to 2022

According to Table 3, forest land looked to have decreased between 1992 and 2022, with a higher rate of change occurring between 2002 and 2022. The secondary forest increased with time as well, changing at a faster rate between 2002 and 2012 (approximately 6.5% growth) than between 2012 and 2022 (about 1.8% reduction). Between 1988 and 2018, there was an overall rise in the area that wasn't forests. Between 2002 and 2012, the non-forested area grew by 1.48%, while the 10-year period saw a 3.93% rise. The alterations seen in the forest areas between 1992 and 2012 do not show this. This demonstrates that the most recent years saw the greatest loss of forest due to human activity. This is in line with research by Meshach et al. (2020) on a forest reserve, which revealed that the reserve underwent significant alteration over 27 years. Forest patches became dispersed as a result of the alterations. This study's finding is supported by additional studies by Adeyemi and Oyeleye from 2021. According to Oates et al. (2014), who conducted a similar study, the decline in natural forests was primarily caused by population growth, rapid urbanisation, and a lack of oversight from concerned forest management authorities. This conclusion is in line with Yu and Suganda (2012), who noted that vegetation cover decreases when factors like population growth are present. Additionally, there were indications of illicit wood extractions, which had a significant impact on the period's forest losses (Meshach et al. (2020, Adeyemi and Oyeleye 2021). The outcome of land use and land cover is consistent with (Kumar and Briti 2022) who proposed that there is a direct relationship between human activities and the depletion of the forest. The majority of subsistence farming methods indicate a slow but persistent degradation of the forest. The reserve contains several eroded sections. At the edges of the forest, the effects of deforestation are extremely noticeable. According to Meshach et al (2020), the change is currently caused by illegal and unrestrained logging that has devastated most of the forest, leaving it open to farmers for agricultural uses.

3.2 Image Classification Accuracy Assessment.

The producer's accuracy (Pa), user's accuracy (Ua), kappa statistics, and overall accuracy are all included in the accuracy statistics (Table 4). The Kappa Coefficient was used to calculate the accuracy values, as stated. The overall statistical picture indicates that the land cover analysis image classification was accurate.

Table 4: Error Matrix for years 1992, 2002, 2012, and 2022

Class Name	1992 <i>Pa, Ua.</i>	2002 <i>Pa, Ua.</i>	2012 <i>Pa, Ua.</i>	2022 <i>Pa, Ua.</i>
Primary forest	64, 78	50, 72.73	75.86, 78.60	78.86, 78.60
Secondary forest	51, 65	58.82, 78.13	66, 83.12	77, 83.12
Non-forest	96, 92	97.99, 90.15	97.79, 90.78	87.79, 90.78
KappaStatistics (<i>k</i>)	0.60	0.70	0.78	0.80
Overall accuracy	88.75%	87.75	88.50	89

Pa, = producer's accuracy, Ua = users' accuracy .

3.3 Forest Landscape Characterization

For ecologists and decision-makers, the negative effects of landscape fragmentation and heterogeneity development are a constant concern. The decrease in the overall area covered by forest trees is one of the main issues caused by this occurrence. It is clear from Table 4 that the number of patches (NumP) rose between 2002 and 2012 before falling in 2022. This suggests that recent years have seen a decrease in the fragmentation of the forest cover. The variations in NumP are reflected in the mean patch size (MPS), which climbed in 2022 after decreasing between 1992 and 2012.

This suggests that while the forest reserve had some forest Patches cleared, it eventually became a smaller single unit in 2022. The estimated Mean Proximity Index (MPI) for forest land, which grew with time, also shows that the forest cover was declining. The fact that class variety has increased over time, peaking in 2008, also suggests that class segments have grown from 1992 to 2012. The reduction of forest area over the years, as seen in Table 5, led one to the conclusion that reduced parts were given up to other land cover categories.

The growth of agricultural and grassland areas primarily came at the expense of plantation and natural forests. Due to cultivation and the rising demand for wood resources, plantations and natural forests underwent deforestation, degradation, and exploitation as a result of the development of agricultural land and grassland. Because the majority of the soils in the Reserve are nutrient-rich and excellent for agricultural production, the rich soils are more vulnerable to agricultural growth (Meshach et al. 2020).

Table 5: Metric statistics

Land cover	1992				
	MPS	SDI	SEI	NUMP	MPI
Primary forest	46.07	0.51	0.47	1589	201633.6
Degraded forest	6.67	-	-	1287	5902.4
Non-forest	1.47	-	-	2865	483.92
	2002				
	MPS	SDI	SEI	NUMP	MPI
Primary forest	26.74	0.68	0.62	2508	353928.7
Degraded forest	0.41	-	-	20073	44.39
Non-forest	0.84	-	-	12753	1651.34
	2012				
	MPS	SDI	SEI	NUMP	MPI
Primary forest	19.06	0.77	0.7	3274	392932.5
Degraded forest	2.14	-	-	6885	2667.26
Non-forest	3.76	-	-	2357	5098.75
	2022				
	MPS	SDI	SEI	NUMP	MPI
Primary forest	339.79	0.76	0.69	185	432565.6
Degraded forest	37.05	-	-	397	6630.03
Non-forest	30.95	-	-	272	5321.71

4. Conclusion and Recommendations

Plantation and natural forests were mostly lost to the expansion of agricultural and grassland areas. Plantations and natural forests endured destruction, degradation, and exploitation due to cultivation and the increasing need for wood resources as a result of the creation of agricultural land and grassland. Rich soils are more susceptible to agricultural growth because the majority of the Reserve's soils are nutrient-rich and ideal for agricultural output (Meshach et al. 2020). To assure the preservation of the natural forest, for instance, fifty seedlings of the same species as those that were cut down might be planted, but this raises the possibility of losing further indigenous species. During picture analysis, we found that monoculture plantations already resembled the natural forest, which will soon reduce species variety and native species. The final LULC map of 2022 in Figure 7 shows the visible land use changes that occurred in the Oluwa Forest Reserve between 1992, 2002, 2012, and 2022 as well as letting us know how the forest reserve is now doing. This graphic emphasises the vegetation changes and evaluates the change's severity on a qualitative level. This method made it evident where Oluwa Forest Reserve alterations have occurred.

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Effect of Malaria on Rural Households' Farm Income in Barkin Ladi LGA, Plateau State, Nigeria

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Abstract. The study was carried out to analyze the effect of malaria on rural households' farm income in Barikin Ladi Local Government Area, Plateau State, Nigeria. Data were obtained from a multi-stage random sampling of one hundred and sixty-five rural farming household heads through the use of a well-structured questionnaire. The data were analyzed using descriptive statistics and linear regression analysis. The descriptive statistics results showed that a majority of the respondents were male (73.9%), between the age brackets of 30 years and 49 years (70.3%), married (78.2%), educated (92.12%) and earned an income less than or equal to 200,000 Naira per quarter year (55.8%). The mean age, household size, estimated farm income and farm size were 41 years, 8 persons, 198,352 Naira per quarter year and 1.93 hectares respectively. The result of the regression showed that there was a significant effect of age ($\beta = 15.674$; $p < 0.05$), household size ($\beta = 8.897$; $p < 0.1$), farm size ($\beta = 1.016$; $p < 0.01$), periods of incapacitation due to malaria ($\beta = -0.894$; $p < 0.01$) and total income lost due to malaria ($\beta = -0.735$; $p < 0.01$) on total annual income of rural households in Barkin Ladi LGA, Plateau State, Nigeria. It was concluded that malaria had negative consequence on the rural households' farm income. It was recommended that there should be intervention programs should promote the awareness of about malaria and the measures to combat it for an effective prevention and control of the malaria.

Keywords: Nigeria, Malaria, rural households, farm income

1. Introduction

Agriculture remains the main source of livelihood for rural households in many developing countries and farm outputs continue to depend on the availability and quality of the labour force which sadly is hampered by health shocks and diseases (United States Agency for International Development. (USAID, 2015). Malaria remains one of the most disturbing parasite diseases in the world and its influence was more on poor and deprived households in Sub-Saharan Africa (SSA) World Health Organization (WHO, 2011). The global incidence of the disease is estimated at 300 million clinical cases annually resulting in over one million deaths. Malaria also accounts for a high number of adult morbidity in an endemic area. Evidenced abounds in the literature that malaria remains one of the harshest health problems globally particularly in developing countries (GHI, 2016).

Malaria and agriculture are closely related. This is because the agricultural environment provides suitable conditions for the breeding and survival of the mosquitoes which transmit the disease (WHO, 2011). Malaria influence agriculture through labour loss, decreasing productive time (labour time), loss of farming knowledge and skills in case of the death of a farmer and reduction in investment in agriculture due to high expenditures on malaria treatment and prevention (Ibrahim *et al.*, 2017). Despite the importance of labour to the sector, it is being negatively affected by malaria. The implication of this is that quality time is either lost as a result of

incapacitation from malaria or caring for family members affected. This has implications for on-farm labour supply and agricultural productivity. (Ibrahim *et al.*, 2017). Moreover, it has been recorded by past studies that the foremost community health problem in Nigeria is malaria and the main cause of sickness and death in Sub-Sahara Africa (WHO, 2014). It is estimated that the loss accrued to the malaria burden ranges from around 132 billion Naira. This is accounted for payments for treatment and prevention and economic loss for hours not worked and for time caring for the malaria-infected person (NPC, 2014). Malaria, therefore, has a direct impact on households' income, wealth, labour productivity and labour market participation of both the sick and the caregivers (Ajani & Ashagidigbi, 2008). Rural households unlike the fixed wage earners not only lose valuable working hours in treating the sickness but also lose the income that would have been generated during this period. This poor health status thus directly affects the productive capacity of the households. This in turn translates into an income loss and eventually poverty through the sick and the caregivers to the households (Alam & Mahal, 2014).

Lukwa *et al.*, (2019) reported that farmers' health status has a significant effect on their capacity to increase output, otherwise ill health could impact negatively the number of hours spent on the farm and the amount of income earned. Health risk and particularly malaria has some debilitating effect on the output and income through the cost of health care, labour man-days lost to malaria medication and physical weakness. Malaria leads to a loss of agro-cultural knowledge and skills especially if it kills an experienced farmer (Aram, 2021).

Therefore, the broad objective of the study was analyzed to determine effect of malaria on the rural household farm income in Barkin-Ladi Local Government Area, Plateau State, Nigeria, while the specific objectives examined the characteristics of rural households, ascertained the level of awareness of households to modern preventive measures, estimated the days of incapacitation and the income lost due to malaria illness and determined the effect of malaria on rural households' agricultural farm income.

The hypothesis of the study is stated in the null form as follows:

H_{01} : There is no significant effect of malaria on rural households' agricultural farm income.

2. Methodology

The study was carried out in Barkin Ladi Local Government Area in Plateau State, Nigeria. Its headquarters are in the town of Barkin Ladi (9°32'N 8°54'E). It has a land area of 1,141 km², an average amount of temperature ranging from 15.5°C to 18.5°C during the cold season and 27.5°C to 30.0°C during the hot season and the amount of rainfall in the area ranges from 1500mm to 2000mm per annum. The types of crops grown in the area include Irish potato, maize, guinea corn while the livestock reared include cattle, sheep, and goats.

Simple random sampling technique was used for the research survey. A random selection of four districts from fourteen districts in Barkin Ladi Local Government Area was done with two villages selected from each district. A total of one hundred and sixty-five rural household heads were randomly selected and interviewed. The information gotten was used for the data analysis.

Primary data was used with the aid of a well-structured open and closed questionnaire, oral interviews and physical observation. Descriptive statistics and regression analysis were used.

Mode of Specification

Regression analysis: the implicit form is as follows;

$$Y = f(X_1, X_2, X_3, X_4, X_5)$$

Where Y = Total annual income in Naira

X_1 = Age (Years)

X_2 = Household size (Members)

X_3 = Total farm size (Hectares)

X_4 = Total days of incapacitation due to malaria (Days)

X_5 = Estimated total income lost due to malaria (Naira).

3. Results and discussion

The result revealed that 73.9% of the respondents were male while about 26.1% were female. This finding re-validates the age-long dominance of men in agriculture. This agreed with the findings of Oluwatayo (2014) in his work revealed that a high proportion of the farming household heads were males. The result showed that about 70.3% of the respondents were between the age brackets of 30 years and 49 years. The mean age of the respondents is 41 years. This implied that most of the rural farming household heads were in their strong and active age and this finding was upheld with Ajani and Ashagidigbi (2008). The majority (78.2%) of the respondents were married. This could be attributed to

the concentration of the majority of rural farming household heads are within the marriageable age range of 26 years and 45 years (Oluwatayo, 2014). A majority (92.12%) of the rural farming household heads in the study area are literate. According to Oluwatayo, (2014), farmers' literacy level helped to eradicate ignorance and promote the adoption of innovation. The educational status of an individual played a significant role when it comes to their health status as the most educated farmers are well equipped with both preventive and curative strategies when it comes to the ailment (Oyibo *et al.*, 2020). The mean household size of the respondents is 8 persons. Ajani and Ashagidigbi, (2008) reported that household size had implications for labour availability and could influence the likelihood of innovation adoption and this trend had been noticed by Adesugba and Mavrotad, (2016) as well. The Northern zone kept the largest household size perhaps for agricultural production since farmers in Africa mainly use family

labour in farm activities (Awoniyi *et al.*, 2018). The highest proportion of the respondents (55.8%) earned an income less than or equal to 200,000 Naira per quarter year. An estimated mean farm income of 198,352 Naira per quarter year was made by the households. This result implied that rural farming households may be forced out of farming as a result of the low income derived and/or use more customary methods of treating malaria such as the use of plant extracts and consulting traditional healers which attracts little or no cost to them. This outcome was established by Nwakwasi *et al.*, (2017). A mean farm size of 1.93 hectares was available for farming by the households in the study area. This is due to the problem of land fragmentation as a result of inheritance which is quite common in the part of the country. Oyibo *et al.*, (2020) revealed a pooled mean farm size of 1.5 hectares. These results are presented in Table 1.

Table 1: Characteristics of the respondents

Variables		Frequency	Percentage
Sex	Male	122	73.94
	Female	43	26.06
Age (Years) Mean = 41	<=30	20	12.12
	31-50	116	70.30
	>50	29	17.58
Marital Status	Not married	36	21.82
	Married	129	78.18
Educational Level	No formal education	13	7.88
	Primary	36	21.82
	Secondary	80	48.48
	Tertiary	28	16.97
	Adult education	8	4.85
Household Size Mean = 8	<=5	33	20.00
	6 to 10	85	51.52
	>10	47	28.48
Estimated Farm Income (Naira) Mean = 198,352 Naira/quarter year	<=200,000	92	55.76
	>200,000	73	44.24
Farm Size (Ha) Mean = 1.93Ha	<=2	91	55.15
	>2	74	44.85

In the regression analysis, the linear functional form gave the best fit and was chosen as the best functional form that explains the causal relationship between productivity proxy (farm income).and malaria prevalence, also proxy by the days' frequency of malaria occurrences. Based on the consideration of statistical and economic criteria the results are presented below, the R-squared value is 0.691, showing that 69 percent of the variation in the dependent variable can be explained by the explanatory variables. This also showed that the model is a good fit for the data. Age, household size, farming size and income loss are found to be statistically significant factors affecting the productivity of rural farming households.

The coefficient of age (15.674) was positive and significant at the 5% level. This shows that age has a direct relationship with the rural farming households' income. This implied that farm income increases with age up to a certain level. This is because age has a great influence in instilling a deep sense of dedication and responsibility in individuals. However, the older the rural farming households' member becomes, the more the likelihood of susceptibility to malaria attack due to decreasing immunity against the disease (Oluwatayo, 2014). This is in line

with Oyibo *et al.*, (2017) who stated that individuals become less predisposed to malaria illness as they grow older. The households' size coefficient (8.897) was positive and significant at the 10% level. This means that household size has a direct relationship with their farm income. This implied that an increase in their households' size would lead to an increase in their productivity and output. This is because of the large household size in the study area which is still available to do the work despite some household members being infected with malaria or any illness. Also, labour is available to clear surrounding bushes and houses are safeguards against the breeding of malaria parasites. This is in line with Oyibo *et al.*, (2020), who stated that household size was positive and significant. Ochi *et al.*, (2015) reported that large household size and household labour may be less likely to predispose household heads to malaria illness since household members often supply the needed labour force for sanitary and farm work in a traditional agricultural setting. The coefficient of annual income (1.016) was positive and significant at the 1% level. This means a direct relationship with their farm income. This implied that annual income increases with an increase in the acreage of land cultivated. This agrees with the findings of Ajani and Ashagidigbi, (2008) in their work who stated that the farm size was positive and significant.

The coefficient of income loss (-0.735) was negative and significant at the 1% level. This means an inverse relationship. Thus, a unit increase in the income loss decreases the productivity of the rural farming households due to a decrease in annual farm income by 73.5%. This implied that income loss to malaria among rural farming households tends to be an economic burden and has widely reduced the efficiency of the rural farming households as there will be unproductive income diversification in which resources are diverted to treating the endemic disease. This is in line with Ogunniyi, Kehinde, and Adewuyi, (2015) in their work which stated that income loss has an inverse relationship with the productivity of rural farming households. Furthermore, Oyibo *et al.*, (2020) also stated that the income loss of farming households could lead to households reducing farm area and planting less labor-intensive crops.

Table 2: The effect of malaria on rural households' farm income

Variables	Coefficient	t-value
Constant	-5.343	-1.965
Age	15.674**	2.422
Household size	8.897*	1.761
Farm size	1.016***	8.688
Days of incapacitation	-0.894***	-0.166
Income loss	-0.735***	-4.671

Note: ***, ** and * significant at 1%, 5% and 10% levels of significance.

R-squared = 0.691; Adj. R-squared = 0.677

4. Conclusion and Recommendations

This study focused on examining the effect of malaria on rural households' farm income. The study found that malaria is a key health concern for many households in the study area, Nigeria. Malaria is a predominant cause of illness among rural households and therefore causes a major drawback in labour supply and eventually agricultural production. The number of workdays lost as a result of malaria illness poses a very serious threat to households members farming activities efficiency. Also, the direct and indirect costs of malaria tend to adversely affect productivity of the agrarian households in the study area.

Based on these, there should be interventions in form of mobilizing resources, formulating, implementing policies and programs that will promote awareness and measures that ensure effective prevention and

control of the malaria. Hospitals and clinics should also be easily accessible, readily available and affordable to the rural households to meet their health needs. Medication that can reduce the days of incapacitation should be intensified and made available to farming households at affordable prices to improve their quality of life and productivity.

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Asymmetric Impact of FDI on Inclusive Growth in Nigeria

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Abstract. This study investigates the asymmetric impact of Foreign Direct Investment (FDI) on inclusive growth in Nigeria over the period from 1991 to 2021. Non-linear autoregressive distributed lag (NARDL) model was employed. The findings of this study indicate that FDI has an asymmetric effect on inclusive growth in Nigeria. Positive changes in FDI inflows are found to have a significant and increasing impact on inclusive growth in the long run, while negative changes in FDI inflows are associated with a reduction in inclusive growth over time. Furthermore, the study reveals that the positive changes in FDI exert a greater influence on inclusive growth compared to negative changes. In addition, the study identifies other factors that impact inclusive growth in Nigeria. Gross fixed capital formation (GFCF) and the labor force are found to have a positive effect on inclusive growth, indicating their importance in driving economic development. Conversely, higher consumer prices are found to have a negative effect on inclusive growth, suggesting the need for policies to address inflationary pressures. Based on these findings, policymakers in Nigeria are recommended to prioritize policies that attract and retain foreign investors in sectors with high growth potential, particularly those that contribute to inclusive growth. Additionally, the Central Bank should implement monetary policies aimed at moderating the inflation rate to reduce economic risks and uncertainties that could deter potential foreign direct investors.

Keywords: Foreign direct investment, inclusive growth, Non linear ARDL, labour force, Consumer price index

1. Introduction

In recent years, the Sustainable Development Goals (SDGs) have gained immense global significance, captivating the attention of policymakers, businesses, and various stakeholders. Among the SDGs, SDG-1 stands out as it strives to foster inclusive growth by

ensuring that the benefits of economic advancement extend to all sections of society, particularly the impoverished and marginalized. Notably, Foreign Direct Investment (FDI) has emerged as a crucial catalyst for inclusive growth, attracting significant inflows to numerous countries, including Nigeria. The significance of FDI in the growth trajectory aligns with SDG-17, which endeavors to fortify global partnerships among economies. Consequently, the spotlight has turned towards FDI, with a growing recognition of its asymmetric implications for the Nigerian economy and its vital role in achieving the SDGs.

Inclusive growth refers to economic growth that benefits all members of a society, regardless of their socio-economic status or background (Jeyacheya, Hampton, 2020). The aim of inclusive growth is to reduce poverty, inequality and promote social inclusion. Inclusive growth is multidimensional and therefore encompasses attracting and managing domestic and foreign direct investments towards equity, sustainability, and social justice (Boarini, Causa, Fleurbaey, Grimalda, & Woolard, 2018; Schoneveld, 2020).

Foreign Direct Investment (FDI) has had a complex impact on inclusive growth in Nigeria. While the country has emerged as the largest recipient of FDI inflows in West Africa, with a total of \$3.31 billion in 2022 (World Business Report, 2022), achieving inclusive growth remains a challenge. Nigeria continues to grapple with persistent poverty and inequality, as evidenced by an average GDP per person employed of \$13,371.94 in 2021 (World Development Indicator, 2022). The concentration of FDI in specific sectors of the economy and the repatriation of profits to foreign investors' home countries contribute to the asymmetric nature of its impact. Multinational corporations, as the primary sources of FDI, have been subject to scrutiny for their potential adverse effects on the economy. Studies such as (Wasike, 2022; Abdullah & Hassan, 2022;

Otieno, 2022; Mlambe, 2022), have highlighted concerns such as the displacement of local businesses, the exploitation of labour in host countries as well as human rights abuses by foreign direct investors in Nigeria. These dynamics exacerbate the existing challenges faced by Nigeria, including high levels of poverty, regional disparities, unemployment, and social exclusion for a significant portion of the population (Ibrahim & Taiga, 2020; Ogede, Maku, Oshinowo & Ologundudu, 2022).

Importance of FDI to inclusive growth has made the government in recent time to implement policies tailored towards improving the investment climate and drive FDI towards inclusive growth in Nigeria. These policies include the liberalization of key sectors through structural adjustment reforms, the establishment of the Nigerian Investment Promotion Commission (NIPC) Act of 1995 to facilitate FDI promotion, and the introduction of incentives such as tax holidays, duty-free imports of capital equipment, and repatriation of profits and dividends for multinational corporations (NIPC Act of 1995; Finance Act 2020). Despite these policies, impact of FDI on inclusive growth in Nigeria is characterized by a mixed outcome, where certain segments of society benefit disproportionately while others are left behind.

Existing literature on FDI and growth have presented mixed results. Studies by Liang, Shah & Bifei (2021), and Mehmood, Iqbal, Bashir & Ahmad (2022) have demonstrated positive effects of FDI on growth indicators. On the other hand, Joo, Shawl & Makina (2022), Emako (2022) and Tamar & Luca (2019) found negative effect of FDI on economic growth. Hamid & Jena (2020) and Kumar & Singhal (2022) highlights the non-linear impact of FDI on inclusive growth. Most of these literatures have predominantly focused on the linear associations of FDI with economic growth, inadvertently disregarding the asymmetric effects of FDI on inclusive growth. These divergent findings pose challenges for policymakers as they grapple with determining the enduring benefits of FDI on inclusive growth as the deadline for the Sustainable Development Goals approaches.

This paper adds to existing literature by examining the asymmetric connection between FDI and inclusive growth in Nigeria through a time series analysis from 1991 to 2021. The remainder of this paper is structured as follows: the second section provides a literature review, the third section outlines the methodological framework and data used, while the fourth section presents the empirical results. The

final section concludes the research and presents significant policy implications.

2. Literature Review

The OECD (2018) defines inclusive growth refers to economic growth that generates opportunities for all population groups and distributes the benefits of increased prosperity fairly across society, both in monetary and non-monetary forms. Inclusive growth refers to economic growth that is sustained and results in broader social benefits, such as poverty reduction, job creation, and improved access to basic services (Purnamawati, 2021). Sharma (2013) defines inclusive growth as a development approach that ensures the inclusion of all individuals in a country, regardless of their gender, sex, disability, or belief system. The process of inclusive growth involves creating opportunities for productive and equitable employment and redistributing income over the long term (Shahzada, Asimb & Anwarc, 2021). Inclusive growth therefore goes beyond economic growth to encompass ensuring that the benefits of growth is sustainable, reduces poverty and is shared across society. GDP per persons employed is generally accepted as a measure of inclusive growth (Kouton, 2021).

There are different types and classifications of inclusive growth, each of which focuses on different dimensions of inclusivity. Pro-poor growth aims to ensure that the benefits of growth are targeted towards the poorest and most vulnerable segments of society (Ngepah, 2017). Gender-inclusive growth aims to promote gender equality and empower women. Other types of inclusive growth include environmentally sustainable growth and regionally inclusive growth.

2.1 Foreign Direct Investments

FDI is an investment strategy where a foreign entity purchases or takes control of an existing company, or establishes a new one in a host country, with the intention of creating a lasting economic relationship of mutual benefits between itself (foreign investor) and the host country (Boğa, 2019). Rather than mere stock investment in a foreign company, FDI involves a substantial investment well as the transfer of financial and other economic resources, including managerial expertise and technology, from the foreign investor to the local business.

The ability of a country to draw in FDI depends on a combination of economic, political, and social

factors. Dunning's (1980) eclectic paradigm, confers factors such as market size, infrastructure, labour costs, and natural resources are crucial in attracting FDI. Moreover, political stability and government policies are important in making FDI decisions, as investors desire a stable environment for their investments (Ross, A. G., Omar, M., Xu, A., & Pandey, S. (2019). In addition to these, other determinants of FDI include tax policies, exchange rates, and technological advancements (Jaiblai & Shenai, 2019; Azam, M., & Haseeb, M. (2021).

The literature on foreign direct investment (FDI) presents several theories that aim to explain why firms invest in foreign countries. Vernon's (1966) product cycle theory suggests that firms initially invest in their home country to develop and refine a product, then invest in foreign countries to take advantage of lower production costs, and finally invest in other countries to tap into new markets. The Internalization theory, developed by Hymer (1976) explains that multinational enterprises (MNEs) engage in foreign direct investment (FDI) to minimize competition, leverage unique firm-specific advantages, and expand their market share in the global economy. Thus, FDI is a strategic decision by firms to increase their competitiveness.

3. Theoretical Framework

The theory guiding this study is the Capability Approach by Sen (1999). The theory emphasizes the importance of expanding individuals' freedoms and capabilities to live the lives they have reason to

value. According to Sen, economic growth is a means, not an end, to improving people's well-being. The Capability Approach argues that economic growth should be inclusive and benefit all members of society, particularly those who are disadvantaged. It recognizes that growth alone does not guarantee that everyone benefits, and that policies are needed to ensure that opportunities are available to everyone to access resources, education, healthcare, and other essential services. Thus, the Capability Approach provides a framework for policymakers to focus on human development and well-being, rather than just economic growth, when designing policies and programs aimed at achieving inclusive growth.

4. Stylized Facts

4.1 Inclusive Growth in Nigeria

Inclusive growth in Nigeria as measured by gross domestic product per person employed has generally increased over the years, with a few exceptions such as a decline during the 1990s, a slight dip during the 2008 financial crisis and also in 2016. In 1991, the GDP per person employed was \$9,957.37, and it gradually increased to \$16,507.33 in 2012. From 2012 to 2015, there was a significant increase in the GDP per person employed, reaching a peak of \$18,760.85 in 2014. However, it has been relatively stagnant since then, with a slight decrease in 2016 and 2017, followed by a slight increase in 2018 and 2019. In 2020, the GDP per person employed was \$18,030.87, and in 2021, it was \$18,059.99.

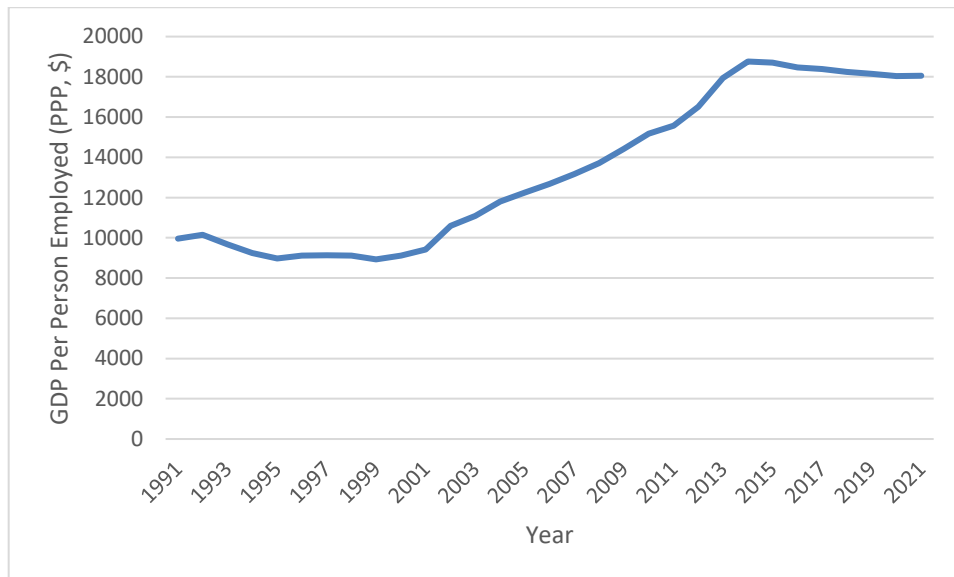


Figure 1. GDP per person employed (constant 2017 PPP \$). Source: World Bank, 2021.

4.2 Foreign Direct Investment Inflow in Nigeria

FDI in Nigeria has been unstable with periods of rapid increase and sudden declines. FDI increased significantly from 1991 to 1994, with a peak of \$1.96 billion in 1994. However, FDI declined drastically in 1995, recording a net inflow of \$335.84 million. Similarly, there was a significant increase in FDI inflows from 2000 to 2008, with a peak of \$8.19 billion in 2008. The increase in FDI during this period can be attributed to the rise in oil prices, economic reforms, and the privatization of state-owned enterprises. However, the global financial crisis of 2008 had a significant impact on FDI in Nigeria, causing it to decline to \$6.03 billion in 2010. Another notable increase in FDI occurred from 2011 to 2013, with a peak of \$8.84 billion in 2011. The increase can be attributed to Nigeria's favorable investment climate, particularly in the telecommunications, manufacturing, and agriculture sectors. However, FDI inflows declined from 2014 to 2016 due to the fall in oil prices, insecurity in some parts of Nigeria, and policy uncertainty. In 2017 and 2018, FDI inflows continued to decline, with the lowest inflow of \$775.25 million recorded in 2018. This decline can be attributed to political uncertainties associated with the 2019 presidential elections, the implementation of capital controls, and security concerns in some parts of Nigeria. However, FDI in Nigeria has recovered since 2019, with a net inflow of \$2.31 billion and \$3.31 billion in 2021. This increase can be attributed to Nigeria's economic recovery, improved business environment, and government efforts to attract foreign investment.

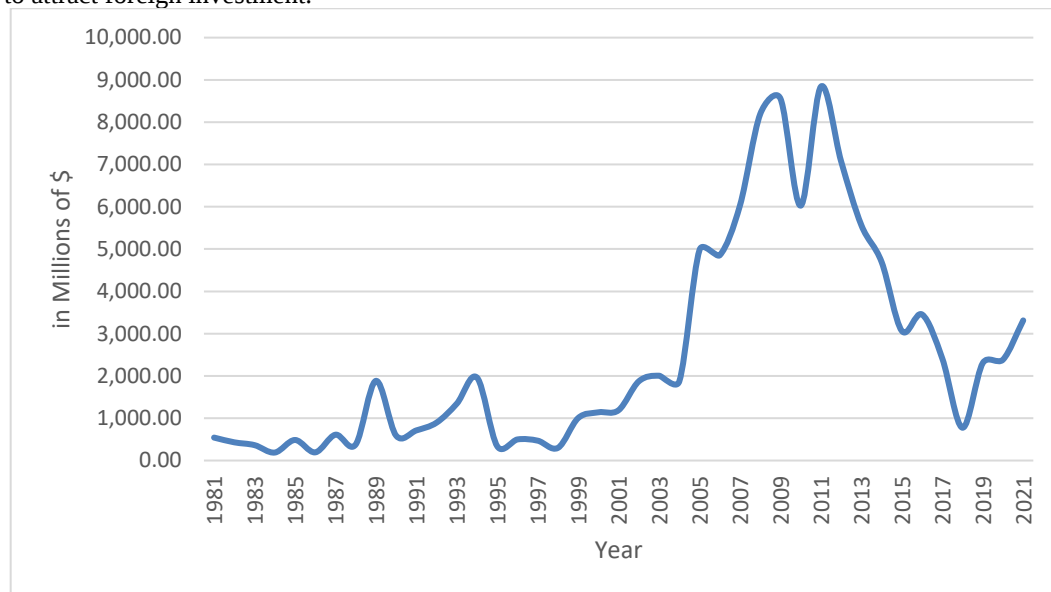


Figure 2. Foreign Direct Investment, net inflows in Nigeria (BoP, current US\$: 1981-2021). Source: World Bank, 2021.

4.3 Empirical Evidence

Various empirical studies have examined the relationship between foreign direct investment and inclusive growth and submitted varying conclusions. Ofori, Gbolonyo & Ojong (2023) examine the relationship between energy efficiency, foreign direct investment, and inclusive green growth in Africa. Using a dynamic GMM estimator and data from 23 African countries, the study found a negative relationship between FDI and inclusive green growth, while EE has a positive impact on inclusive green growth. However, the presence of energy efficiency mitigates the negative impact of FDI on inclusive green growth. Further analysis through threshold analysis indicates that improving energy efficiency in Africa leads to sustainable development gains in both the short and long terms.

Kamran, Rafique, Nadeem & Anwar (2023) examine levels of inclusive growth and sustainable development in 11 developing countries from 2008-2018, using PCA and Multivariate Analysis to extract variables. Results show Turkey and China achieved the highest level of inclusive growth, while Brazil and Pakistan have the lowest level of sustainable development. The study finds a negative relationship between social inclusion of inclusive growth and poverty with life-threatening factors of sustainable development, and a positive relationship between unsatisfactory medical services, education, and state transparency of inclusive growth and poverty and its consequences of sustainable development.

Emeka & Uko (2023) examine the role of domestic financial sector in enhancing FDI inflows for inclusive growth in Nigeria using secondary data between 1981 to 2020. The study used the

Autoregressive Distributed Lag (ARDL) mode to analyse the data. Findings indicate that FDI has a significant positive effect on inclusive growth only when the domestic financial sector has reached a certain minimum level of development. Furthermore, the study found that FDI alone has a significant negative effect on inclusive growth, highlighting the crucial role of the domestic financial sector in promoting inclusive growth through FDI in Nigeria. Mehmood, Iqbal, Bashir & Ahmad (2022) investigate the impact of FDI, rising oil prices, and industry value-added on the economic growth of Pakistan. Through an Autoregressive Distributed Lag (ARDL) framework, the study analysed data from 1980 to 2020. According to the findings, FDI and industry value-added has positive impacts on economic growth. However, rising oil prices negatively impacted on economic growth, while the combined effect of oil prices and FDI was found to have a dampening effect on economic growth.

Joo, Shawl & Makina (2022) study the impact of FDI on economic growth in BRICS countries, considering host country characteristics such as economic stability, human capital, financial development, and trade openness. The study used panel data for the period 1987 to 2018. A Feasible Generalized Least Squares (FGLS) estimation technique was used to analyse the data. Results showed that FDI alone had no significant impact on the economic growth of individual BRICS countries. Also, FDI impacted positively in the presence of host country characteristics. Additionally, FDI combined with financial development, trade openness, and human capital had a positive effect on economic growth, while FDI combined with economic instability had a negative impact in growth.

Osabohien, Iqbal, Osabuohien, Khan & Nguyen (2022) investigated the impact of agricultural trade and FDI on inclusive growth in West African countries, using data from 15 countries in the Economic Community of West African States (ECOWAS) region for the period 2000 to 2019. A Two-stage Least Squares (2SLS) method was employed to analyse the data. Results indicate that agricultural trade had a significant positive effect on inclusive growth, while the impact of FDI on inclusive growth was insignificant.

The study by Ofori & Asongu (2021) examines the relationship between FDI, the various governance indicators, and inclusive growth in Sub-Saharan Africa (SSA). Through the study employed fixed effects, random effects, and system GMM estimators, the study analysed data from 1990-2020. The results show that FDI and all governance indicators studied have a positive impact on inclusive growth in SSA, and that FDI amplifies the effects of governance

effectiveness, voice and accountability, and political stability.

Dang & Nguyen (2021) investigate the impact of tax burden, institutional quality, and selected macroeconomic determinants on attracting inflows of FDI in ASEAN-7. In a panel approach, they estimate their models using Feasible Generalized Least Squares (FGLS), fixed-effects models, and a Generalised Method of Moments (GMM). Results reveal that economic growth, tax burden, quality of economic institution, and inflation significantly attract FDI, while population growth and quality of political institution negatively affect FDI inflow.

Shahbaz, Mateev, Abosedra, Nasir & Jiao (2021) investigate the effect of education and transportation infrastructure on foreign direct investment (FDI) in the French economy between 1965 and 2017. The study used a ARDL model and a VECM Granger causality analysis to estimate the data. The findings reveal a positive relationship between education and transportation infrastructure and FDI, while financial development has a negative impact on FDI. The relationship between electricity consumption and FDI was found to be bidirectional, while the relationship between education and FDI was U-shaped.

5. Research Methodology

5.1 Data and Source

To achieve the study's objective, the empirical analysis utilized an annual time series data for Nigeria covering the period from 1991-2021. Variables used consist of inclusive growth, foreign direct investment, labour force participation, gross fixed capital formation, and consumer price index. The data was sourced from the World Bank Development Indicators (<https://data.worldbank.org>). Gross domestic product per persons employed was used as a proxy for inclusive growth.

5.2 Empirical Model

In exploring the influence of FDI inflow in inclusive growth, the baseline equation is specified in the functional form;

$$INC_t = FDI_t, LFP_t, GFCF_t, CPI_t \quad (1)$$

where INC is inclusive growth and FDI is foreign direct investment inflow. LFP , $GFCF$ and CPI are labour force participation, gross fixed capital formation and consumer price index respectively.

Equation (1) is transformed into natural logarithms as follows:

$$\ln INC_t = \alpha_0 + \beta_1 \ln FDI_t + \beta_2 \ln LFP_t + \beta_3 \ln GFCF_t + \beta_4 \ln CPI_t + \varepsilon_t \quad (2)$$

Where α is a constant, and all other variables are as previously defined. $\beta_1 \dots \beta_4$ are the coefficients of the independent variables, t indicates the period and ε represents residuals. In line with Nnadi & Soobaroyen (2015), FDI is measured as the annual ratio of foreign direct investment inflow with respect to gross domestic product. Previous studies on foreign direct investment (FDI) such as Hayat (2018), Saidi, Mani, Mefteh, Shahbaz & Akhtar (2020). Nguyen & Do (2020) have suggested the inclusion of control variables such as labour force, gross fixed capital formation and consumer price index in the model.

5.3 Estimation Technique

This study employs the non-linear ARDL (NARDL) technique developed by Shin et al. (2014). A major drawback of the conventional Autoregressive Distributed Lag (ARDL) models is its ineffectiveness in estimating series with intrinsic asymmetric properties thereby producing inconsistent results. To overcome this limitation, Shin et al. (2014) proposed a non-linear approach to estimating variables with non-linear properties. The NARDL approach is able to estimate the asymmetric relationship between variables while integrating the error correction mechanism simultaneously. By incorporating a flexible framework in estimation, non-linear ARDL approach allows for the modeling of symmetries as well as asymmetries along dynamic trends while simultaneously adjusting for long-run associations (Mehta, Qamruzzaman, Serfraz & Ali, 2021). The NARDL approach also incorporates a cointegration approach regardless of whether the variables being integrated are of the same order or not, and it is suitable when regressors are integrated of the same order or mixed, provided integration is not any higher than I(1) (Shin et al., 2014). Non-linear ARDL models produces consistent estimates is not affected by sample size. The NARDL model used for the bounds test and test of asymmetry for non-linearity is specified in equation (3):

$$\begin{aligned} \Delta INC_t = & \alpha_0 + \sum_{k=1}^p \alpha_1 \Delta \ln RGDP_{t-k} \\ & + \sum_{k=0}^{q_1} \alpha_2 \Delta \ln FDI_{t-k}^+ \\ & + \sum_{k=0}^{q_2} \alpha_3 \Delta \ln LFP_{t-k} \\ & + \sum_{k=0}^{q_3} \alpha_4 \Delta \ln GFCF_{t-k} \\ & + \sum_{k=0}^{q_4} \alpha_5 \Delta \ln CPI_{t-k} + \alpha_6 INC_{t-1} \\ & + \alpha_7 FDI_{t-1}^+ + \end{aligned}$$

$$+ \alpha_8 LFP_{t-1} + \alpha_9 GFCF_{t-1} + \alpha_{10} CPI_{t-1} + \varepsilon_t \quad (3)$$

where α_0 is constant and $\alpha_1 \dots \alpha_{10}$ are coefficients of the independent variables. The rest are as defined in equation (2). The asymmetric distributed parameters of FDI the model in both the short and long run are decomposed into positive partial and negative partial sums in equations (4) to ascertain the asymmetric effects of FDI on $RGDP$.

$$FDI_t = +FDI_t^+ + FDI_t^- \quad (4)$$

Where FDI_t , represents the initial value of foreign direct investment, in Nigeria. $FDI_t^+ = \sum_{j=1}^t \Delta FDI_j^+ = \sum_{j=1}^t \max(\Delta FDI_j, 0)$. Represents the partial sum process of positive changes in foreign direct investment for Nigeria, and $FDI_t^- = \sum_{j=1}^t \Delta FDI_j^- = \sum_{j=1}^t \min(\Delta FDI_j, 0)$ represents the partial sum process of negative changes in foreign direct investment.

The estimation of short-run and long-run coefficients of the NARDL model in equation (2) is specified in equation (5) and (6) respectively;

$$\begin{aligned} \Delta INC_t = & \alpha_0 + \sum_{k=1}^p \alpha_1 \Delta RGDP_{t-k} + \sum_{k=0}^{q_1} (\alpha_2^+ FDI_t^+ \\ & + \alpha_2^- FDI_t^-) + \sum_{k=0}^{q_2} \alpha_3 \Delta LFP_{t-k} \\ & + \sum_{k=0}^{q_3} \alpha_4 \Delta GFCF_{t-k} \\ & + \sum_{k=0}^{q_4} \alpha_5 \Delta CPI_{t-k} + \phi_1 ECT_{t-1} \\ & + \varepsilon_t \quad (5) \end{aligned}$$

$$\begin{aligned} \Delta INC_t = & \alpha_0 + \sum_{i=1}^q \alpha_1 \ln GDP_{t-i} + \sum_{i=1}^q \alpha_2^+ \ln FDI_t^+ \\ & + \alpha_2^- \ln FDI_t^- + \sum_{i=1}^q \alpha_3 \ln LFP_t \\ & + \sum_{i=1}^q \alpha_4 \ln GFCF_t + \sum_{i=1}^q \alpha_5 \ln CPI_t \\ & + \varepsilon_t \end{aligned} \quad (6)$$

Where q and p are lag orders in equation (5), α_0 is the constants. Whereas $\alpha_1, \alpha_3, \alpha_4$ and α_5 are the long and short-run coefficients in respect of the other independent variables, α_2^+ and α_2^- are coefficients of the positive shocks or changes in FDI for long and short run respectively, while ε_t represents the error correction term of the model. Before estimating long run cointegrating relationships among the variables, assessment if the model for non-linearity is carried out BDS test by Brock et al. (1996). The bounds test is conducted using a Wald test to produce joint F -statistic essentially for determining the presence of long-run associations among variables. The null hypothesis of no cointegration between the variables is tested against the alternative hypothesis of cointegration. The computed F -statistic and the

critical values of upper bound $I(1)$ and lower bound $I(0)$ are evaluated (Pesaran *et al.*, 2001) and provides the basis for obtaining valid inference on long-run relationship in respect of the variables in the model. The Wald test for asymmetry test is also employed to identify non-linear relationships between variables by considering the asymmetric impacts in a non-linear way through the calculation of decomposed positive and negative partial sums of the relevant regressor.

6. Empirical Results

6.1 Descriptive Statistics

The summary of descriptive statistics is indicated in Table 1. The mean growth rate for INC, FDI, GFCF and CPI between 1981 and 2021 are 13,371.95, 1.478, -0.567 and 18.949 percents per annum respectively. GFCF has the lowest minimum value of -30.172 while LFP has the highest maximum value of 53.444. In terms of standard deviation, FDI has the lowest standard deviation of 1.235 and INC (3,812.05) has as the highest. With the exception of INC and GFCF, the mean of the variables in the model exceeds their respective standard deviation.

Table 1. Descriptive Statistics

Variables	Mean	SD	Min.	Max.
INC	13371.95	3812.05	8926.64	18760.85
FDI	1.478	1.235	0.184	5.791
LFP	59.173	2.425	53.444	60.790
GFCF	-0.567	13.449	-30.172	40.389
CPI	18.949	16.659	5.388	72.836

Correlation Matrix

The correlation matrix in Table 2 indicates that the correlation coefficient for FDI is 0.165, LFP is 0.156, GFCF is 0.429 and CPI is -0.207 which implies that the variables have weak correlation with the dependent variable INC. In terms of relationships, FDI, LFP and GFCF have positive relations with FDI, while CPI is negatively related to INC.

Table 2. Correlation Matrix

	INC	FDI	LFP	GFCF	CPI
INC	1				
FDI	0.165	1			
LFP	0.156	-0.183	1		
GFCF	0.429	0.225	0.157	1	
CPI	-0.207	0.455	-0.313	-0.014	1

6.2 Stationarity Test

As reported in the ADP and PP unit root test result in Table 3, none of the variables are integrated of an order higher than one. Although, FDI and LFP were not stationary at level in both the ADF and PP test, their series achieved stationarity after first differencing. INC, GFCF and CPI series were stationary at level when tested under the ADF and PP methods.

Table 3. Unit Root Test Result

	<u>Level</u>		<u>First Difference</u>	
	ADF	PP	ADF	PP
INC	-4.730*** (0.002)	-4.734*** (0.003)	-8.644*** (0.000)	-20.19*** (0.000)
FDI	-3.154 (0.108)	-3.148 (0.110)	-7.765*** (0.000)	-8.176*** (0.000)
LFP	-2.139 (0.509)	-2.370 (0.389)	-5.704*** (0.000)	-5.704*** (0.000)
CPI	-4.799*** (0.002)	-4.750*** (0.002)	-6.526*** (0.000)	-10.33*** (0.000)
GFCF	-6.483*** (0.000)	-6.494*** (0.000)	-7.750*** (0.000)	-26.795*** (0.000)

Note: (1) ***, ** and * denotes significance at 1%, 5% and 10% respectively (2) The specification is constant and trend.

6.3 Break Point Unit Root Test

Table 4 reports the results of the breakpoint unit root test result. From the Table, INC, FDI and GFCF becomes stationary at level in the presence of structural breaks, while LFP and CPI become stationary after first differencing. The result confirmed that in the presence of structural breaks, the variables were not integrated beyond I(1).

Table 4. Break-point Unit Root Tests

Variables	<u>Level</u>	<u>First Difference</u>
INC	-5.807*** (0.000)	-4.603* (0.056)
FDI	-5.847*** (0.000)	-5.985*** (0.000)
LFP	1.135 (0.999)	-7.199*** (0.000)
GFCF	-5.025** (0.016)	-5.712*** (0.000)
CPI	-3.429 (0.482)	-4.090* (0.063)

Note: (1) ***, ** and * denotes significance at 1%, 5% and 10% respectively. (2) Dickey-Fuller min-t is the Break point selection criteria used. (3) Lag length method is F-statistic. (4) Specification is constant and trend. (2) innovation outlier break type is employed.

6.4 Nonlinearity Test

Over the various dimensions, the BDS test for non-linearity in Table 5 indicate the rejection of the null hypothesis of linearity in the residuals at the 1% level of significance. This implies that the data series is nonlinear. Hence, the result confirmed the condition for the application of a nonlinear ARDL methodology. Also, the Wald test statistics Table (6) for the null hypothesis of no long-run asymmetry and short-run symmetries in the non-linear ARDD error correction mechanism are rejected in all at the 5% level of significance thereby confirming the use of the non-linear ARDL model

Table 5. BDS nonlinearity tests results

BDS Statistics				Embedding dimensions	
Variables	m=2	m=3	m=4	m=5	m=6
INC	0.037*** (0.000)	0.052205*** (0.003)	0.065*** (0.003)	0.049** (0.030)	0.031** (0.010)
FDI	0.077*** (0.000)	0.133*** (0.000)	0.166*** (0.000)	0.192*** (0.000)	0.196*** (0.000)
LFP	0.148*** (0.000)	0.243*** (0.000)	0.293*** (0.000)	0.321*** (0.000)	0.333*** (0.000)
GFCF	0.203*** (0.000)	0.347*** (0.000)	0.448*** (0.000)	0.518*** (0.000)	0.567*** (0.000)
CPI	0.192*** (0.000)	0.323*** (0.000)	0.419*** (0.000)	0.485*** (0.000)	0.544*** (0.000)

Notes: (1) ***, ** denotes significance at 1% and 5% respectively (2) m represents the dimension. (3) Reported statistics are obtained from the application of the Brock et al. (BDS, 1996) test on the residuals of a VAR model for the selected variables.

Table 6. Long-run and Short-run Asymmetry

Test	F-Statistics	Prob.
WLRA	9.324***	0.006
WSRA	7.274**	0.013

Note: (1) *, ** and *** represents rejection of the null of no asymmetric and symmetric at 1%, 5% and 10% respectively. (2) WLRA and WSRA refer to the Wald statistics for the long run asymmetry and long run symmetry.

6.5 Cointegration Test

Table 7 presents the results of the NARDL Bound test for cointegration. As reported in the result, the calculated t_{BDM} and F_{PSS} values are greater than the upper boundaries $p < 0.05$ and $p < 0.01$ respectively. Hence, the null of no cointegration among the variables is rejected confirming that long run relationship exists among the variables. Based on the evidence of nonlinear cointegration, the next step is to present the short run parameters of the non-linear ARDL regression.

Table 7. Bounds Tests for Cointegration in Nonlinear Specification

$t_{BDM}=4.142$. $F_{PSS}=12.463$		
Signif.	Lower Bound (0)	Upper Bound (1)
10%	2.26	3.35
5%	2.62	3.79
1%	3.41	4.68

6.6 Short Run NARDL Regression Result

Table 8 summarizes the estimated results of equation (5). The signs of the estimated coefficients of FDI^+ and FDI^- are positive in the short-run. Specifically, a 1% increase (decrease) in foreign direct investment inflow increases (lowers) inclusive growth by 0.068 (0.058) percent. Positive changes in FDI inflows have larger impacts on inclusive growth than negative changes. However, the impacts of both positive and negative changes of foreign direct inflow on inclusive growth in Nigeria are insignificant during the short-run. Gross fixed capital formation impacted positively on inclusive growth. From the result, a 1% increase in GFCF increases INC by 0.233%, the result is also and significant at 1%. Labour force participation and consumer price index impacted negatively on inclusive growth. Explicitly, a 1% increase in LFP and CPI reduces INC by 0.480 and 0.019 respectively, although their impacts were insignificant. However, the impact of one-year and 2-year lagged values of consumer price index both impacted negatively and significantly on inclusive growth during the period under study. The R^2 of 0.661 indicate that about 66% of variations in the dependent variable can be attributed to the independent variables. The error correction term (-0.334) is both negative and significant and signifies that about 33% of disequilibrium in the INC in its relationship with the independent variables are corrected annually.

Table 8. Short-run Regression Results: Dependent Variable INC.

Regressors	Coefficient	Std. Error	Prob.
Short-run Coefficients			
INC(-1)*	-0.670	0.183	0.002
D(FDI_POS)	0.068	0.116	0.562
D(FDI_NEG)	0.058	0.190	0.761
D(LFP)	-0.480	0.373	0.213
D(GFCF)	0.233	0.041	0.000
D(CPI)	-0.019	0.156	0.904
D(CPI(-1))	-0.296	0.150	0.063
D(CPI(-2))	-0.234	0.123	0.071
ECT (-1)	-0.334	0.066	0.000
R-squared	0.661	Akaike info crit.	-1.696
Adjusted R-squared	0.551	Schwarz criterion	-0.956
F-statistic	5.386	Hannan-Quinn crit	-1.435
Prob(F-statistic)	0	Durbin-Watson	2.04

Note: (1) ***, ** and * denotes significance at 1%, 5% and 10% respectively.

6.7 Long-run NARDL Regression Result

The result of the long-run estimates in equation (6) indicates significant impacts of both positive and negative changes of FDI on INC. As displayed in Table 9, a 1% increase (decrease) in foreign direct investment inflow increases (lowers) inclusive growth by 0.389 (0.196) percent. Positive changes in FDI inflows have larger impacts on inclusive growth than negative changes in the long-run. Labour force impacted positively and significantly on inclusive growth. Specifically, a 1% increase in LFP increases INC by 0.284 %. In terms of investment, the relationship between GFCF and INC was positive and significant. A 1% increase in GFCF increases INC by 0.168% at a significant level of 10%. CPI impacted negatively on INC. A 1% increase in CPI reduces INC by 0.796% at a significant level of 1%. From the long-run results, the independent variables in the model are long-run determinants of inclusive growth in Nigeria.

Table 9. Long-run Regression Results: Dependent Variable INC.

Long-run Coefficients			
FDI ⁺	0.389	0.099	0.000
FDI ⁻	0.196	0.066	0.005
LFP	0.284	0.130	0.039
GCFC	0.168	0.097	0.098
CPI	-0.796	0.171	0.000

Note: (1) ***, ** and * denotes significance at 1%, 5% and 10% respectively.

6.8 Stability and Diagnostics

In Table 9, the p-values of the corresponding F-statistic in respect of the Breusch-Godfrey Serial Correlation LM Test (0.560), the Breusch-Pagan-Godfrey test for Heteroskedasticity (0.918) and the Ramsey Reset (0.013) were not significant (0.5811; 0.5634; 0.9114 respectively). This indicates that the null hypothesis of no serial correlation and heteroskedasticity in the residuals cannot be rejected. It also implies that the relationship between dependent and independent variables correctly specified. The cumulative sum of recursive residuals and cumulative sum of square of recursive residuals in Figures 3 and 4, are within the critical bounds at 5% significance level. This shows that all the parameters of the model exhibit a long-run stability at 5 per cent level of significance. Therefore, the models are stable during the period; this validates the integrity of the models.

Table 9. Test for Serial Correlation, Heteroskedasticity and Model Specification

Test	F-statistic	Prob. F
Breusch-Godfrey Serial Correlation LM	0.560	0.5811
Breusch-Pagan-Godfrey Heteroskedasticity	0.918	0.5634
Ramsey RESET Test	0.013	0.9114

Source: Author's Computation, (2023)

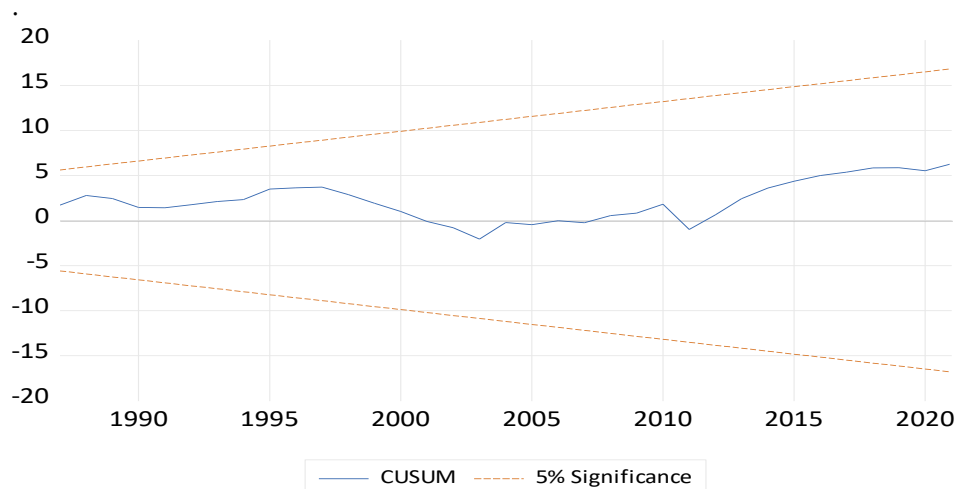


Figure3. Plot of CUSUM. Note: The straight lines represent critical bounds at the 5 per cent level of significance

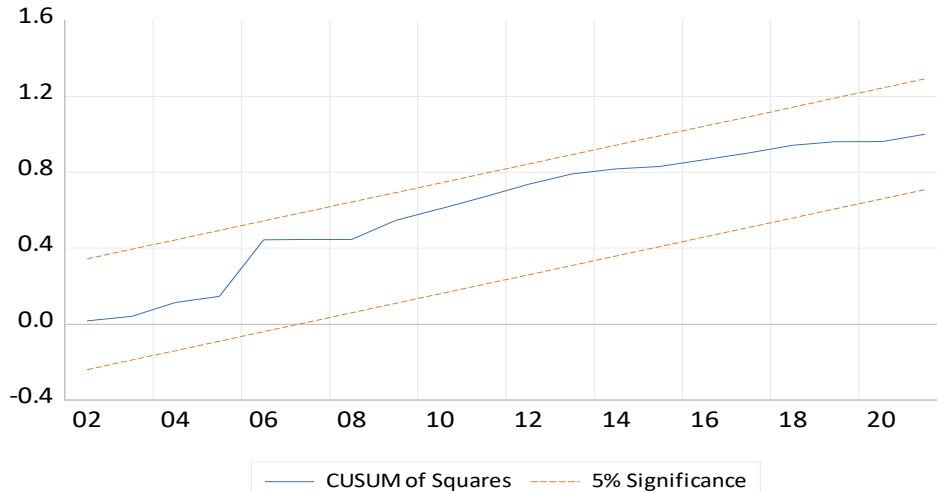


Figure 4. Plot of CUSUM of squares. Note: The straight lines represent critical bounds at the 5 per cent level of significance

7. Conclusion and Policy Implications

The objective of this study is essentially to generate additional insights on the relationship between FDI and growth by exploring the asymmetric influence of FDI on inclusive growth in Nigeria. Existing theoretical and empirical studies accede to the positive and negative role of FDI inflows on growth. These studies have neglected the potential asymmetric effects of FDI on inclusive growth. This study adds to empirical literature by taking an asymmetric look at how FDI impacts on inclusive growth in Nigeria over time. A non-linear ARDL model was employed to analyze the data to assess how foreign direct investment inflows affects inclusive growth in Nigeria from 1991 to 2021.

This study reveals that foreign direct investment (FDI) has an asymmetric impact on inclusive growth in Nigeria. Positive changes in FDI inflows have a significant and increasing impact on inclusive growth in the long run, while negative changes in FDI inflows reduce inclusive growth in the long run. Additionally, positive changes in FDI exert greater influences on inclusive growth than negative changes. While GFCF and labour force positively impacted on inclusive growth, higher consumer prices had negative effects on inclusive growth. In the light of these revelations, government should prioritize policies that attract and retain foreign investors in the main inclusive sectors with high growth potentials. The Central Bank should simultaneously prioritize and implement monetary policies to moderate inflation rate as a measure to reduce economic risks and uncertainty that could demotivate potential foreign direct investors perceived.

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Socio Economic Determinants of Fruits Marketing in Oyo State, Nigeria

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Abstract. The study assessed small scale fruits marketing in Lagelu Local Government Area, Oyo State Nigeria. Primary data was collected from seventy (70) small scale fruits marketers with well-structured questionnaires. Data collected were analyzed using descriptive statistics such as frequency, mean, percentage, Gross margin and inferential statistics. The result revealed that 75.7% of the marketers were female; 78.6% are married with mean age of 43 years and mean household size of 5.5 persons, 34.3% had access to credit through personal savings, majority (47.1%) had primary education. Majority of the fruits assessed were seasonal except banana and pawpaw which are all year round available. The Gross Margin was ₦1,341,400.00k and Benefit Cost Ratio of 1.23. The Multiple regression revealed that age was significant ($\beta=114.099$, $p<0.05$), household size ($\beta=785.549$, $p<0.01$), marital status ($\beta=1364.520$, $p<0.05$), educational level ($\beta= -1008.510$, $p<0.10$), access to credit ($\beta= -1145.089$, $p<0.10$) and capital ($\beta= 0.219$, $p<0.01$), R^2 was 0.86. Problems associated with fruits marketing among others are lack of organized market

(91.4%), inadequate storage facilities (78.6%), inadequate transportation, poor road networks (97.1%). It was concluded that marketers age, household size, marital status, educational level, access to credit and capital were the major factors to fruits marketing gross margin.

Keywords: Agribusiness, Fruits, Gross margin, Nigeria, Marketing, Small scale

1. Introduction

Nigeria is blessed with various types of fruits such as mango, pineapple, plantain/banana, citrus, guava, pawpaw, cashew, sweet oranges, water melon, avocados etcetera, this ranges from annual and all year-round availability which make it a source of agribusiness to common farmers (figure 1). Fruits are medicinal and the best sources for overcoming micro nutrients deficiency. They contain water soluble vitamins like vitamin B and Vitamin C, fat soluble vitamins including vitamin A and vitamin D, carbohydrates and minerals. These stable food crops

include Guava, pawpaw pineapple, mango and a variety of fruits and vegetables (Aju and Popoola, 2010). Fruits and vegetables generate more jobs per hectare, on-farm and off-farm, than staple based agricultural enterprises (Ali *et al.*, 2002). According to Joshi *et al.*, (2004) value addition to fruits and vegetables generates further employment in the associated agri-businesses and further down the commodity chain from the producer to the consumer. Fruits and vegetables can generate higher profits than staple crops, especially when land is relatively scarce and labour is abundant (Cock and Voss, 2004, Minot and Ngigi, 2004). The value of fruits and vegetables per unit area is significantly higher, the profits are higher and the income thus generated can be used for many different purposes in terms of eradication of hunger, access to affordable education and health care. Marketing is one of the most important factors determining the success of any fruit farming enterprise, encompassing all of the operations and decisions made by producers. These decisions range from identifying the most profitable crops for production, to decide how it should be delivered to buyers efficiently and economically while maintaining product quality. Contrary to popular belief, marketing does not begin after a crop is produced instead; marketing alternatives need to be considered well before production takes place. However, small scale fruit marketers are faced with series of challenges ranges from lack of storage facilities, poor record keeping, unreliable input delivery, poor patronage and low income (Brigitte, *et al.*, 2005). Due to this the study thereby assessed the small scale fruits marketing as a means of agribusiness for farmers' livelihood by providing answers to the following objectives:

1.2 Objectives of the study

These include:

- To examine the socio economic characteristics of the respondents,
- To identify the marketing channels, fruits seasonal availability,
- To analyse the fruit marketing profitability using gross margin,
- To determine the effect of socio economic factors on the marketers Gross Margin (GM) and
- To examine the constraints to fruits marketing in the study area.

2. Research Methodology

2.1 Study Area

The study was carried out in Lagelu Local Government Area (LGA) Oyo State, it has land areas of 416 square kilometers, it was created in 1976 with headquarters at Iyana Offa in Ibadan Oyo State. The Local Government consists of over 1076 towns and villages including the principal towns of Lalupon, Lagun, Monatan, Ofa, Ejioku, Oyedeji, Kelebe, Sagbe, Elegbaada, Olowode, Wofun, Ogburo, Kutayi, Apatere, Olorunda, Ogunjawa, Ile-Igbon, Iyana Church, Odo Oba, Sukuru and Akinsawe. The LGA is bounded by Egbeda LGA, Akinyele LGA and Iwo LGA in Osun State

2.2 Sample size and sampling procedure

Multi-stage random sampling technique was used to select small scale fruits marketers from four wards in Lagelu local government, this involved simple random selection of one major market from the four wards namely, Lalupon market, Lagelu market, Ejioku and Oyedeji market

2.3 Data collection and methods of analysis

Structured questionnaire was used to collect data from 25 respondents from Oyedeji, 20 from Lalupon, 15 from Lagelu and 10 from Ejioku markets making a total of Seventy (70) small scale fruit marketers for the study. The data collected was analyzed using descriptive statistics such as frequency tables, percentage, mean; Gross Margin (GM), Benefit Cost Ratio (BCR) and inferential statistics using Statistical Package for Social Science (SPSS)

2.4 Model Specification

Gross Margin (GM) = TR-TC

Where TC= TVC+FC

TR = (P*Q)

Where P = price of fruits sold

Q = quantity of fruits sold (basket)

Benefit Cost Ratio (BCR) = $\frac{TR}{TC}$

2.5 Multiple Regression analysis

The dependent variable = (GM) measured in Naira (₦)

The independent variables ($X_1, X_2, X_3, X_4, X_5, \dots, X_n$)

$GM = (a+b+X_1+X_2+X_3+X_4+X_5+X_6+\dots+X_{10})$

Where

G M = Gross Margin (Naira)

X_1 = Gender (dummy)
 X_2 = Age (year)
 X_3 = Marital status (dummy)
 X_4 = Educational level (dummy)
 X_5 = Marketing experience (year)
 X_6 = Credit facilities (dummy)
 X_7 = Source of income (dummy)
 X_8 = Household size (actual)
 X_9 = Association (dummy)
 X_{10} = Capital (Naira)
 a = Constant
 b = Parameter estimated

3. Results and Discussion

3.1 Socio Economic Characteristics of the Respondents

The table 1 of the socio-economic characteristics of the fruits marketers revealed that 75.7% of the respondents were female while 24.3% are male. This shows that majority of the marketers are females. This could be due to the nature of the business (fruits Marketing) to be a female dominated form of agribusiness in the study area, this is in line with Ugwumba *et al.*, (2010), and Oladejo *et al.*, (2020), 31.4% of them were between the ages of 31-40years, 25.7% are between the ages of 41-50years, 24.3% are between the ages of 51-60year of age with mean age of 42.9years. This indicated that the marketers were young, within the working age, energetic and are able to deal with the exigencies of travels; thus can bear the stress and take the risks involved in the enterprise, 78.6% are married, 11.4% widow, 5.7% divorced are 4.3% are single, this is line with Ani (2015) that marriage has a direct relationship with family stability; therefore, the high percentages of married respondents suggest that the fruits marketers are stable and able to make good business decisions, 24.3% of the marketers had no formal education, 47.1% had primary education, 27.1% had secondary education while only 1.4% of them had tertiary education. This implies that majority 75.7% had one form of formal education. This shows that the marketers are literate, and had advantage which could

translate to higher business acumen in terms of level of profit FAO (2019). 18.6% had 5years experience in fruits marketing, 55.7% had between 6 and 10years experience, 14.3% had 11-15years and 11.3% had 16-20years fruits marketing experience with mean 9.56 years of marketing experience. This implied that most of the respondents are not new in fruits marketing business, Chukwuji (2006) noted that success and stability of any business depends on the skill and experience of the manager. 68.6% of the marketers had access to credit facilities. 34.3% of the marketers' source of credit was through personal savings, 28.6% through money lender, 10.0% through relative and friend, 11.4% through co-operative society, 14.3% through commercial bank while only 1.4% through agricultural bank loan. This implies that majority of the marketers depends on personal savings to start up the fruits marketing business, this corroborates the finding of Suleiman *et al.*, (2020) that majority of the marketers depends on personal savings and have the ability to avert risk taken in agribusiness. The table also revealed that 60% of the marketers had between 1 and 5 household size, 38.6% had between 6 and 10, and about 1.4% of them had more than 11 household sizes with mean household size of 5.50 people. This shows that the marketers had fairly large members who can be useful for marketing activities and also rely on the income from the sales, 47.1% of the marketers do not belong to any association while 52.9% of the marketers belong to an association. This could enhance their ability to have access to credits and other related information through their society which in turn increase their income 38.6% of the marketers earn between ₦5,000 and ₦10,000 as income per month, 47.1% earn between ₦ 10,001 and ₦ 20,000 as income per month while 14.3% of them earn between ₦ 20,001 and ₦30,000 as income per month. This is an indication that fruit marketing business is a sustenance agribusiness, the channels of purchasing were through distributors 2.9%, wholesale 48.6%, farm gate 35.7% because the price is usually low, and attractive (fresh fruits), half 50% of the fruit marketers sold directly to the consumers and the middle men.

Table 1: Socio economic characteristics of the respondents

Variable	Frequency (N=70)	Percentage	Mean
Gender			
Female	53	75.7	
Male	17	24.3	
Age			
20-30	12	17.1	
31-40	22	31.4	
41-50	18	25.7	
51-60	18	25.8	42.9
Marital status			
Single	3	4.3	
Married	55	78.6	
Widowed	8	11.4	
Divorced	4	5.7	
Education status			
No formal education	17	24.3	
Primary education	33	47.1	
Secondary education	19	27.1	
Tertiary education	1	1.4	
Marketing experience			
1-5	13	18.6	
6-10	39	55.8	
11-15	10	14.2	
16-20	8	11.4	9.56
Access to credit			
No	22	31.4	
Yes	48	68.6	
Source of credit			
Personal savings	24	34.3	
Money lenders	20	28.6	
Relatives and friends	7	10.0	
Co-operative	8	11.4	
Commercial bank	10	14.3	
Agric bank	1	1.4	
Household size			
1-5	42	60	
6-10	27	38.5	
11 and above	1	1.4	5.50
Membership of association			
No	33	47.1	
Yes	37	52.9	
Income per month			
₦ 5000-₦ 10000	27	38.4	
₦ 11000-₦ 20000	33	47.2	
₦ 21000-₦ 30000	10	14.2	13971.43
Purchasing channel			
Distributor	2	2.9	
Wholesale	34	48.6	
Directly from farm	35	35.7	
Farmers market	9	12.9	
Marketing channel			
Directly to consumers	10	14.3	
Middle men	25	35.7	
Both	35	50.0	

Field Survey, 2022

3.2 Fruits Seasonal availability assessment

Table 2 shows the fruits seasonal availability in the study area. It revealed that banana and pawpaw were found to be available in every month of the year (All year round), cashew, available in every February of the year, mango and plantain are available in the month of March/April of every year, pineapple is available in the month of April, watermelon, May of every year, lemon and apple are available in every July of every year, cucumber is available in the month of October of every year, orange and tangerine are available in the month of November, and African sherry available in the month of December of each year. This can be deduced that there is no single month of the year that there won't be availability of fruits for marketing and consumption. The implication of this is that

availability of varieties of fruits throughout the year will individual household has access to it and thereby enhancing their health benefits and also serves as a lucrative source of agribusiness which will bring food to the farmers table and thereby make income available and reduce poverty levels among the marketers.

Table 2: Fruits Seasonal availability assessment

Fruits	Seasonal availability
Orange	November
Banana	All year round
Pawpaw	All year round
Cashew	February
African sherry	December
Pineapple	April
Mango	March
Lemon	July
Tangerine	November
Watermelon	May
Cucumber	October
Apple	July
Plantain	March

Field survey, 2022

3.3 Gross Margin analysis of profitability of fruits in the study area

Table 3 showing the Gross Margin analysis revealed that the Total Revenue (TR) from fruit marketing was ₦7,275,000.00k, Total Cost (TC) was ₦5,933,600.00k and Gross Margin (GM) was ₦1,341,400.00k and the Benefit Cost Ratio (BCR) was 1.23. This revealed that fruit marketing was profitable; indicating that for every ₦1 invested in fruit marketing there will be a return of ₦1.23k from the sales of fruit. It could therefore be deduced that fruit marketing was a profitable agribusiness in the study area. This result is consistent with the finding of Osondu *et al.*, (2014) and Oladejo *et al.*, (2020) that a business is considered to be profitable as the BCR is greater than 1

Table 3: Gross Margin analysis of profitability of fruits in the study area

Variables	Total items (₦)
Transportation cost	₦ 35700
Loading cost	₦ 47700
Rent	₦ 51500
Sanitation fee	₦ 25000
Security fee	₦ 24000
Total variable cost	₦ 5,425,700.00k
Fixed cost	
Purchasing cost	₦ 5,933,600.00k
Total revenue	₦ 7,275,000.00k
Gross Margin (GM)	₦ 1,341,400.00k
Benefit cost ratio (BCR)=TR/TC=	<u>7,275,000.00</u>
	5,933,600.00
BCR =	1.23

Authors' analysis, 2022

3.4 Socio-economic determinants of fruit marketers in the study area

The regression table 4 showing the socio-economic factors affecting fruits marketing profitability in the study, the table revealed that capita and household size were significant at ($p<0.01$), marital status at ($p<0.05$) and positively related to the Gross Margin (GM). This implied that marketer capita, household size and marital status has positive effect on the GM. This is showing that the more availability of capita to the marketers, increase in household size and marital status there will be a proportionate increase in the Gross Margin. This is in line with Mwema *et al.*, (2013) and supported by Nwibo *et al.*, (2013). However, marketers' age, educational level and access to credit were significant at ($p<0.05$) and ($p<0.10$) respectively and negatively signed to the GM. This shows that coefficient of age, educational level and access to credit tends to reduce the GM, this may be due to the low level of education of the majority of the marketers, ageing and lack of access to formal credit. R^2 was 0.86 indicating 86% level of variation in the model specification which could be explained by the variable combinations in the model specified while the 14% could be explained by the error term. It was therefore concluded that marketers' age, capital, household size, marital status, educational level and access to credit were the major determinants factors of fruits marketing business in the study.

Table 4: Socio-economic determinants of fruit marketers in the study area

Variable	Coefficient	Std error	t-value	Sig
C= Constant	4081.668	2371.572	1.721	.090
X ₁ = Gender	1581.192	1037.761	1.524	.133
X ₂ = Age	-114.099**	48.640	-2.346	.022
X ₃ = Marital status	1364.520**	672.173	2.030	.047
X ₄ =Educational level	-1008.510*	530.540	-1.901	.062
X ₅ =Marketing experience	-213.438	128.957	-1.655	.103
X ₆ = Access to credit	-1145.089*	601.763	-1.903	.062
X ₇ = Source of credit	107.762	251.315	.429	.670
X ₈ = Household size	785.549***	243.035	3.232	.002
X ₉ = Association	-676.984	748.540	-.908	.367
X ₁₀ = Capita	0.219***	0.016	13.641	.000
R ²	0.86			

Authors analysis, 2022.

3.5 Constraints to fruits marketing in the study area

Table 5 examined the constraints of fruits marketing in the study area. It revealed that 97.1% of respondents complaint of inadequate transportation facilities, this is in line with Abdulazeez *et al.*, (2019) and similar with findings of Christensen and Raynor (2003), 95.7% of poor hygienic preparation, 91.4% lack of organized market, 87.1% high transport charges, The result corroborate that of Sanusi (2016), 47.1% of the respondents have poor patronage in fruits marketing, 78.6% inadequate storage facilities, 80.0% weather dependency on fruits, 64.3% lack of capital based, 45.7% of the marketers have less demand of fruits competition because of carbonated fruits.

Table 5: Constraints to fruits marketing in the study area

Variable	Frequency	Percentage
Lack of organized market	64	91.4
Inadequate storage facilities	55	78.6
Inadequate transportation facilities	68	97.1
High transportation charges	61	87.1
Less demand of fruits because of competition with carbonated fruits	32	45.7
Poor patronage	33	47.1
Weather dependency	56	80.0
Hygienic	67	95.7
Lack of capital	45	64.3

Authors field survey, 2022

4. Conclusion

It can be concluded from this study that majority of the marketers were female (75.7%) and with the mean of age of (42.91%), majority of the marketers had primary education (47.1%), majority were married (78.6%), marketers age, household size, marital status, educational level, access to credit and capital were the major determinants factors affecting fruits marketers' gross margin. The problem associated with fruits marketing among others include lack of organized market, inadequate storage facilities, inadequate transportation facilities, high cost of transportation charges, weather dependency, hygienic, lack of capital based in the study area.

5. Recommendations

- The study hereby recommended among others that fruit marketing as a source of income be regarded as a viable and reliable agribusiness which can serve as a means of livelihood for average household.
- Formal credit should be made available for the marketers in order to be able to expand the agribusiness.
- Marketers should have an organized marketing system and due to the poor storage facilities; should concentrate or pay more attention on the value addition on the fruits availability

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The Implications of Party Defection on Consolidation of Nigeria's Democracy Prior To 2015, 2019 and 2022

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Abstract. A major worry for Nigerian democracy, particularly with regard to its consolidation and longevity, is the absence of internal democracy and Godfatherism, which has led to enormous defections from one party to another and a growing estrangement between voters and their elected representatives. Therefore, this study evaluated the "implications of party defection for consolidation of Nigeria's democracy prior to the pre-election seasons of 2015, 2019 and 2022." For the examination of the research framework, the study used game theory. The study made use of the content analysis approach, which analyzes data from sources such as published books, journals, conference papers, and internet materials. The study comes to the conclusion that Nigeria's democracy is in danger and that party politics in Nigeria are suffering as a result of the rate at which political members have defected to other parties since 2015, 2019 and in 2022. The report suggests strengthening, amending the Nigerian constitution and election rules to control the alarming incidence of political defection, as well as reorganizing political parties to combat party monopoly, a lack of internal democracy, and indiscipline.

Keywords: Consolidation, Defection, Democracy, Political Party.

1. Introduction

Political parties have structures, rules, processes, conventions, and principles under a democratic form of governance because they are not meant to be personalized or confined to serving the interests of the elite. Political parties are present at all governmental levels, including the national, regional, district, constituency, and ward levels. They function within specific legal frameworks that specify their membership, composition, roles, financial foundation, operational standards, and disciplinary guidelines (Friedrich, 2010).

In the past twenty years, there have been a number of political defections from one political party to another, which have affected Nigeria's democracy over time. Party defection, cross-carpeting, party-switching, floor-crossing, party-hopping, canoe-jumping, decamping, party-jumping, and a variety of other words used to describe this trend all relate to the same idea (Malthora, 2005). It has emerged as a very worrying aspect of Nigerian democracy, particularly in several states.

However, a candidate may leave a particular political party for a variety of reasons, including personality conflicts, power struggles, internal strife or division within the party, disagreements over the position taken on a particular issue, the fulfillment of personal political ambitions, party leaders breaking their word on political matters, likely in regard to the power-sharing formula, and differing viewpoints on the philosophy and ideology of a political party (Abimbola & Adesote, 2012). The typical perception of party defection as it exists in the Nigerian political scene today does not accurately reflect the reasons why most defectors switch parties, as self-interest frequently takes the place of the party's and the governed interests, which is detrimental to the growth and survival of our democracy (Mbah, 2011).

For instance, Mr. Opeyemi Bamidele, the previous Caucus Leader for the All Progressive Congress (APC), left the party and joined the Labour Party in the lower house (African Herald Express, 2014). Additionally, five state governors who had previously belonged to the ruling party PDP—Bukola Saraki of Kwara, Rabi'u Musa Kwankaso of Kano, Aliyu Wamakko of Sokoto, Murtala Nyako of Adamawa, and Rotimi Amaechi of Rivers—changed their party affiliation to the coalition of opposition party the APC before the 2015 General Elections, citing the president's refusal to pay attention to their demands regarding the (The Sunday Punch, 22nd December 2013, p.9).

It is well known that since Nigeria's restoration to democracy in 1999, the country's multi-party democracy has been facing difficulties that are viewed as harmful to the democratic system and to the life of the country as a whole. Godfatherism, internal party democracy, and the tricky issue of constant decamping, the attitude of card-carrying party members moving membership from one party to another, are a few of these difficulties. Therefore, the purpose of this study is to evaluate how party defection would affect the consolidation of Nigeria's democracy in the years leading up to 2015, 2019, and 2022.

2. Conceptual Clarifications

The context in which this study was conducted has been explained with regard to certain words. Party defection, political party, democracy, and democratic consolidation are a few of them.

Party Defection: Party flipping refers to the situation in which members of a political party (politicians and/or legislators) willingly quit their party for legitimate or invalid reasons. According to Malthora (2005) and Mbah (2011), party switching is the same as party defection, parties, cross-carpeting, floor-crossing, party-hopping, canoe-jumping, decamping, and other related behaviors.

Political Party: A political party is a group of like-minded individuals that band together to influence politics and win elections. Political parties fight with one another for political influence and the capacity to implement their ideologies and programs (Randall and Svasand, 2013). (2002).

Democracy: According to Abraham Lincoln, democracy is essentially the rule of the people, by the people, and for the people. A consensual administration that is freely chosen by the people to pursue ideas, aspirations, well-being, development, and the common interest of the people is implied by this sound and historical definition of democracy (Momoh, 2010).

Democratic Consolidation: Consolidation of democratic rule occurs when the actors in a system follow the formal rules of the democratic institution (Fayemi, 2012).

3. Theoretical Framework

For framework analysis, the Game Theory is used. The theory examines competitive scenarios in which two or more intelligent competitors engage in conflicting interests-based competition. The

participants in this tournament are given a variety of options, and each player aims to maximize his or her profit at the expense of the competition. In other words, critical interactions are examined using game theory. Since decisions made by two or more people can have an impact on one another's profits or losses at any time, their interaction is game-theoretical in nature (Morton, 2017). John Von Neumann, Schelling, Riker, Kaplan, and Raiffa are among of the theory's proponents who made significant contributions detailing the applicability of game theory to social sciences.

Games theory is predicated on a number of presumptions, including the following: (i) that there must be at least two players in any game; (ii) that each player of the game only cares about decisions that will benefit him; (iii) that every game has a tactic, which is chosen by the player; (iv) that the players of the game are motivated by reason; and (v) that the player is well aware of the options available to him and chooses one or two (Burns and Roszkowska, 2005).

Games theory's significance depends on its capacity to be applied to a variety of political situations. For instance, the game theory's "players" or "actors" may be compared to defection candidates in Nigeria's political arena who view the 2015, 2019 and upcoming 2023 general elections as a game that must be played to acquire absolute power importance. Each participant tries to use the best logical strategy to win in accordance with the optimum maximization concept. Two key actors, the PDP and APC, who were vying for rewards in the general elections of 2015 and 2019 become apparent when one examines the wave of defection among the registered political parties. Payoffs can imply various things to different presidential candidates; for some, it means joining the party that appears to have a good chance of winning the 2015 and 2019 elections, while for others, it means joining the party where their political and financial advantages are guaranteed.

The Game theory is disputed, nonetheless, on the grounds that political activity, such as switching political parties, especially during election seasons, should not be viewed as a game but rather as a logical decision to realize one's desire connected to the growth of the entire society. Additionally, the theory is more of a mathematical study than it is used to analyze political-relevant topics, therefore it should be used cautiously when drawing conclusions about politics.

4. Complexities surrounding Nigeria's High Rate of Party Defections

Politicians in Nigeria have a checkered history of switching from one political party to another dating back before the country gained its independence. According to Mbah (2011), the unheard-of party faults are a dangerous dimension. Nigeria's independence is older than sovereignty and undoubtedly before a political conflict between parties or a crossing. This was shaped by colonialism, emphasized by it, and sustained by post-colonial governmental systems.

However, Bello (2013) noted that in numerous states throughout Nigeria before to the 2019 elections, lawmakers defected to other political parties because they felt betrayed and angry of how their respective party's primaries were organized.

According to Kamara (2012), some people in every culture have a significant impact that might motivate members of their community to support them. In terms of electoral advantages, a political party greatly benefits from having these individuals' assistance. They are known as populist leaders, who are more influential than voters, and their support is crucial to a party's success in a certain area.

Adebayo, Ugiomoh, and Abdulmalik (2013) underlined that winning these people's support benefits the party at election time. Because doing so affords them advantages, the governing party always seeks to undermine an opposition party by convincing its leaders to defect to the government.

According to Bakare (2013), one justification for cross-campaigning in Nigeria is the absence of a strong political ideology. Party defectors are still attracted in huge numbers to the PDP, the Action Congress of Nigeria (ACN), and the Congress for Progressive Change (CPC), among others. Political divergences, interpersonal disputes, godfatherism, ethnoreligious emotions, and regional feelings are only a few of these elements. Of course, numerous politically driven motives might have a substantial influence on these decisions.

Mbah (2011) emphasized that whereas historically we would occasionally attend legislative cross-carpeting, it has now spread like a virus. The lack of a strong political philosophy is to blame for the detrimental and disruptive amount of defects impacting parties. Robinson (2010) said that political parties in Nigeria do not have an ideology aside from generating money at the same time. Everyone tries to fool the people by claiming to be democratic.

According to Omotola (2009), the Nigerian parties don't appear to have any distinct ideological convictions, despite all of the assertions to the contrary made through their manifestations and superficial labels like "left" and "right," "progressive," and "conservative." In any event, it is crucial to keep in mind that the crucial issue of political philosophy lies at the core of whether a political party succeeds or fails.

Most politicians in Nigeria, particularly at the state level, were unable to advance by winning elections, whether in primary or general elections. As a result, even though they are the parties' founders, they frequently compete against one other and readily switch sides at the first sign of an opening. In order to increase their chances of being chosen as the party's flag bearer, certain candidates from the three major political parties—PDP, APC, and APGA—for the 2019 general elections have left their original organizations. Politicians use Nigeria's defection to their advantage here.

According to Aleyomi (2012), Nigerian politicians are known for their aggressive, sleazy, and audacious maneuvers since they ensure their continued relevance. Some people at their events don't even need to move around. However, it is obvious why they are so callous and conceited. Since the country is a place where dignified and potentially productive individuals are mistreated and marginalized, neither good behavior nor strong convictions are encouraged. People who adhere to moral principles are viewed as eccentric, dumb, or suicidal.

However, Hoeane (2008) suggested that the major issue causing the defection within the political parties is the emergence of dishonest tendencies in some politicians that have caused the contamination of outstanding and genuine democratic processes.

According to Bakare (2013), political parties in all states take advantage of rivalries among opposition parties, internal tragedies, power struggles, and acrimonious disputes to enrage people who are displeased with change and advancement. This is the circumstance in Nigeria, which is handled in a Nigerian manner. Political parties are organizations that carry out and improve upon democratic ideas in a structured democratic society, according to Aleyomi (2010). To effectively fulfill what they should and are expected to perform in a democracy, they must adhere to a number of "institutional guarantees."

According to Baiyewu (2012), since democracy was restored in 1999, the political landscape in Nigeria

has seen a steady level of lawmakers who occasionally switch parties, especially between 2014 and 2019. This has never happened in the country's history of politics.

Since the first republic, switching parties has never been an impossible job for politicians in Nigeria, according to Baiyewu (2012); instead, history has demonstrated that incidents of party members who switched over were frequently met with fanfare and speculation about their true motivations. The high rate of defection, as observed before the general elections in 2015 and 2019 is the only distinction between the past style of defection and the present one.

Politicians frequently use the justification "I quit the party because some others hijacked it for their selfish purpose" when apologizing to voters. While some people point to issues with marginalization inside their party, others have offered explanations including the lack of internal party democracy. But only in Nigeria may a politician switch parties as frequently as four times each year. He will be welcomed by the other side with wide arms, to the point where they will host a feast in his honor.

The way Nigerian politicians defect is so harmful to our democracy that occasionally politicians who were elected on the platforms of opposition parties joined the governing party without any good reason—just a desire to ride the ruling party's bandwagon. These tendencies have affected both state and federal lawmakers, including certain state governors, like Rotimi Amaechi of Rivers, Aliyu Wamakko of Sokoto, Rabi'u Musa Kwankaso of Kano, and Murtala Nyako of Adamawa. They were elected on the PDP platform but eventually switched to the APC in November 2013, midway through their term (Premium Times, May 20th, 2015).

Prior to the 2015 and 2019 general elections, it was observed that politicians who were primarily focused on vying for their party's political positions engaged in a variety of schemes to represent their party in the upcoming general elections by any means necessary, rejecting the idea of holding party primaries that are a prerequisite for true internal democracy within their parties (NBF News, January 4th 2011).

5. The Relationship in Nigeria between Political Parties and Internal Democracy

According to Ukaeje (2011), internal democracy inside a political party may be characterized as a democratic process that calls for accountability and transparency from all participants, particularly when

choosing party leaders, flag bearers, and other party members.

As a result, internal democracy, in the words of Kari and Uchenna (2011), refers to political parties that ensure unfettered speech and unrestricted access for their members to participate in decision-making. Additionally, it implies that parties do business openly and fairly while upholding the established norms. Political parties' degrees and methods of including party members in debate and decision-making within the party structure are also referred to as internal democracy.

Simbine (2013) argues that holding party congresses and implementing open and efficient leader-election primaries are some of the most fundamental and important parts of political growth in a democracy (i.e. flag bearers). Since 1999, godfathers who have the last say in choosing party leaders and candidates have a propensity to predetermine the party pre-selections of almost all political parties in Nigeria.

According to Ikelegbe (2013), political parties lack internal democracy and exhibit poor governance, which leads to exclusionary participation and decision-making processes, a lack of opportunities for widespread participation, a lack of structures, rules, and concepts, a lack of clearly defined processes, the rejection of individuals and groups, and inadequate complaint resolution procedures.

According to Simbine (2013), political sponsors are not always prepared to implement internal democracy, which results in frequent disputes and hinders the growth of parties as well-liked organizations. This causes a crisis inside the party, as is to be expected, and corrupt politicians frequently defect to other political parties whose goals can be considered.

According to Ukaeje (2011), political party operations in Nigeria are somewhat paradoxical since they don't adhere to the normal party principles of internal discipline and coherence. Political parties in Nigeria have failed to adhere to these values. On the other hand, the absence of an internal party democracy, which now stands as one of the major barriers to establishing a functioning and participatory democracy in Nigeria, is evidence that the reverse of what should be attained is never done.

Ukaeje (2011) added support to the idea that blatant misuse of partisan democracy is what gives rise to party crises, either because of the commotion it produces inside the party or because of the

circumstances it creates. In Nigeria, internal party democracy is a major source of friction between political parties, either directly or indirectly. This evolution has limited political parties' opportunities and, as a result, has made it extremely difficult to establish durable democratic administration and consolidate it in our nation.

6. Party Defection's Effects on Nigeria's Democratic Consolidation

Nigeria's defection-related events demonstrate that political parties are not founded on or entrenched in ideas and ideals. Due to this ideological gap, Nigerian political parties are now nothing more than money-making enterprises that depend on the support and devotion of their constituents. The effectiveness of democratic sustenance through party mechanisms is undermined by this action. Politicians in Nigeria only switch parties in order to run for office or gain favor; they do not do so because of differences in party ideologies.

Such parties are compelled to present respectable alternatives in the shape of development strategies by the idea of opposition in a democracy. A dominant party may occasionally appropriate an opposition viewpoint and adopt it as its own. However, because everyone wants to be a part of the governing party, the notion of a powerful opposition party, which is the core of a multiparty system, is opposed for personal gain. This is a terrible reflection of Nigeria's current democratic situation. As a result, the ruling parties frequently lack a potent rival to assist rein in their excesses.

Unfortunately, in Nigeria, when an opposition party or individual members attempt to criticize actions taken by the government, the administration use government apparatus to bring charges against them. In our fight against corruption, which has done so much harm to our collective growth, the thought of courting or welcoming politicians from other political parties and writing off their dishonest acts against the state is unhealthy. This behavior has damaged our reputation on a global scale. Good governance results from a persistent perspective that prioritizes personal interests over those of the public. In Nigeria, defections frequently violate the requirements of the constitution, mocking our laws. For instance, the 2011 amendment to Section 68 (1. g) of the 1999 Constitution reads as follows:

If a person whose election to the House was sponsored by a political party joins another political party before the end of the term for which that House was elected, that person must resign from his or her

position in the House of which he or she is a member. As long as his affiliation with the later party is not the consequence of a split within the political party he previously belonged to or of a union of two or more political parties or factions by one of which he previously was sponsored (p.34).

Every time a topic comes up on the house floor, nasty politics are played at the cost of reliable sources and impartial legislation. The unpleasant rivalry and unproductive criticism between PDP and APC lawmakers in the lower legislative chamber is thus one of the most frequent obstacles to defection.

The MPs of the two major parties, the APC and PDP, got into a heated argument and verbally attacked each other during a session over the subject of South Africa's seizure of Nigerian cash for the purchase of weaponry in September 2014 (Premium Times, 18th July 2015). The PDP, on the other hand, views the APC as a potential enemy, even though some of its criticisms may be helpful to strengthen our democracy. The APC legislators, on the other hand, do not see anything positive in PDP programs and policies, even though some of these programs are credible and laudable.

So, according to Abimbola and Adesote (2012), defection has led to an unhealthy and unfriendly relationship between APC and PDP lawmakers in the lower legislative chamber. Numerous members of the house are politicizing the issue of the insurgency in the nation's northeast; rather than coming together to offer ideas on how to defeat Boko-Haram, they are playing politics with it by pointing the finger at one another and dividing up the limited resources of the nation among various rival groups.

Tatalo (2013) stressed that political parties in Nigeria sadly focused on improving societal structure via a certain ideology, and it is utterly devoid of constructive social purpose. A genuine political opposition group, for instance, should be aware of elected officials of a ruling party who drastically defect to boost their numbers for better or worse if the contrary occurs.

It is noteworthy to observe that in recent years, party alignment or defection has caused voters to lose trust in their representatives in the lower chamber of the legislature. It has degenerated to a scenario in which the lower house lawmakers were ridiculed, made fun of, and humiliated for their defection without regard for the benefit of the country. However, this has made voters believe that there is no positive outcome that can come from our politicians' approach toward Nigerian lawmakers and politicians. An instance in point occurred when party members accused former

members who defected to another party but remained silent and overlooked the defector's offenses when they were with them.

The instance of Ali-Modu Sherrif, who was accused of funding Boko-Haram militants by APC members because he had quit the party, was supported by Udo (2014) as evidence for this. Here, it is important to note why it took the APC so long to realize that Sherrif was funding rebels in Borno just a few days after he defected. Why did they not accuse him when he was present? These inquiries demonstrate the absence of ideology and the dishonesty of our political parties' leaders.

Especially with today's politicians, Odum (2002) emphasized that the consideration is where bets might be smaller and gain more. The nature of the offer is irrelevant. Therefore, in this game of defection, politicians switch parties just as prostitutes change their beds. As a reasonable inference from the foregoing remark, lower chamber defections of federal lawmakers who refuse to give up their initial platforms for political.

In unjustifiable circumstances when there have been several failures by lawmakers, governors, chairmen, and other party members of the party or opposition, Mbah (2011) suggested that the withdrawal of party members harms the consolidation of democracy. This trend has a negative impact on Nigeria's democratic consolidation and opposition groups' commitment to democracy.

The separation of the opposition parties from the ruling party, according to Mbah (2011), further emphasizes the significance of political power in Nigeria. This is so because having governmental power immediately translates into having economic power. The placement and distribution of economic resources and political incentives are decided by those in positions of power. This position's omission is expensive.

According to Ogundiya (2011), the alarming trend of politicians leaving Nigeria and the rise in party flipping after 2015 continue to be sources of anxiety for observers, political analysts, and scholars of Nigerian politics. The issue was justified since party exchange and related issues may have contributed to the demise of the previous republics.

According to Elombah (2010), who accurately summarized the situation, "In the past, we have sporadically had parliamentary deficits, today it is a complete government. from local governing councils

to the State Assembly and Executive Governor. Politics is affected, much like an epidemic.

In comparison to politicians everywhere, they have provided a plethora of justifications for switching parties. However, in the eyes of the electorate, these justifications are nebulous and irrelevant because politicians appear to have abandoned their original goals in favor of pursuing personal fulfillment and growth.

Momoh (2010) pointed out that one of the difficult problems with the nation's ongoing democratic experiment is that the political elite can only change from a ruling party to an opposition party. He emphasizes that because it was a component of the Second Progressive Alliance of the Second Republic's (PPA) ideology-based policy against the National Party of Nigeria, the progressive reactionary split does not comply with the present policy (NPN). Additionally, he emphasized that politicians do not separate themselves from other political parties based on party ideology or policies, but rather because doing so gives them a platform to run on during elections.

7. Discussion of Findings

According to information analysis, lawmakers who felt mistreated and angry about how their parties' primaries were conducted ahead to the 2015, 2019 and upcoming 2023 general elections in several states throughout Nigeria defected to other political parties.

According to Bello, these grudges and deceit could be observed in the way that Godfatherism used to sway primary elections in parties, leading to discord among party members who held membership cards (2013).

The absence of a strong partisan ideology in Nigeria is also cited as a justification for cross-campaigning, and Bakare supports this claim by citing political disputes, interpersonal conflicts, godfatherism, and regional and ethno-religious feelings as causes of party defection (2013).

The study's findings undoubtedly supported Baiyewu (2012)'s assertion that switching political parties in Nigerian politics has never been a herculean undertaking since the establishment of the first republic. History demonstrates that incidents of party card-carrying members defecting to other parties were frequently met with hoopla without asking about their true motivations. The high rate of defection, as observed before the general elections in

2015 and 2019 is the sole distinction between the current style of defection and it.

Because of the debate it stirs up inside the party or because of the crisis it produces, the gross misuse of partisan democracy has been highlighted as the cause of crisis within the party. The issue of internal party democracy, which has limited political parties' potential and as a result negatively impacted internal party conflict, is directly or indirectly connected to the majority of internal political party conflict in Nigeria.

According to the study, when elected officials, governors, chairmen, and other party members of the party or opposition repeatedly fail in their duties, it negatively affects the consolidation of democracy. According to Mbah, this tendency has a propensity to caricature democracy and undermine the spirit of opposition parties and the strengthening of democracy in Nigeria.

8. Conclusion

In order to achieve this, this study identified the lack of internal democracy and Godfatherism, which led to a mass exodus from one party to another prior to the general elections in 2015, 2019, and 2023, as the issue that is contributing to the growing disengagement between the electorate and their elected representatives.

As a result, the electoral process, party affiliations, and political leadership came to be seen with apathy and mistrust, which caused problems for democratic political parties, the consolidation of democracy, and elections in the Nigerian context. The study comes to the conclusion that Nigeria's democracy is in danger and that party politics in Nigeria are suffering as a result of the rate at which political members have defected to other parties since 2015, 2019 and in 2022.

9. Recommendations

As a result, the following recommendations are made by this study:

- Party members should be made more aware of the need of comprehending political parties' existence and functioning as a sine qua non for the survival of democracy in Nigeria.
- To stop the excesses of cross-carpeting inside political parties, INEC, the organization in charge of conducting general elections in Nigeria, should review and change current electoral rules.

- Political parties need to be reorganized in order to combat the monopoly of party decision-making, a lack of internal democracy, and party indiscipline.
- To prevent unhealthy rivalry among party members that might lead to party switching, the government should make all elected and political posts less appealing.
- The excessive use of money in the political sphere should be checked and reduced to the bare minimum and required by both the Nigerian state authorities and the leadership of the political parties.

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Government Expenditure and Infrastructural Development in Nigeria: An Empirical Analysis of its Economic Effects

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Abstract. This study examined the impact of government expenditure on infrastructure development in Nigeria for the period 1986-2022. The research was guided by three research questions and objectives. The Ordinary Least Squares (OLS) estimation technique was employed for testing the hypotheses of the study. The result of the OLS analysis showed that government expenditure has a positive impact on health, education, and transport infrastructure development in Nigeria. To improve on the gains of infrastructure development in the Nigerian economy, the study recommends that government should encourage the health sector by increasing its funding to equip the infrastructure pertaining to health matters, government should intensify efforts to strengthen its source of revenue for spending on education, and there must be a greater private sector participation, particularly in the air transport and seaport development, as well as effective coordination among the national, state and local levels, on capital investment of transport projects.

Keywords: Government Expenditure, Health, Education, Transport, Infrastructure Development, Nigeria.

1. Introduction

Government expenditure on infrastructure is important for a number of reasons. It is a capital-intensive activity and its effects are felt in many areas

such as production, construction, technology, and procurement (Babatunde, 2018). The availability of such infrastructure has a major impact on the lives of people in Nigeria (Fasoranti, 2012; Babatunde, 2018).

Development economists have long recognized the importance of government expenditure, particularly on infrastructure, as an important tool in the development process (Todaro and Smith, 2006; Jhingan, 2006). Government expenditure is thus a more efficient way of providing services and making investments in infrastructure. Classical economists also saw infrastructure as the sole responsibility of the governments in any nation (Fasoranti, 2012). This has translated to numerous budgetary allocations for infrastructure in Nigeria over the years. Government expenditure on infrastructure is so large because of the huge capital requirement, externalities, and jointness in the consumption of such goods (Buhari, 2000; Fasoranti, 2012).

The importance of government expenditure on infrastructure development in an economy cannot be understated. Investment in roads, communication networks, and electricity provision decreases the cost of production and encourages both public and private investment, leading to higher national output and development (Muhammad and Tasneem, 2017). Since 1986 when the Structural Adjustment Program (SAP) was implemented in Nigeria, the total government expenditure and its components have

steadily increased (Shuaib, Mohammed, and Igbinosun, 2015). The composition of government recurrent expenditure shows that expenditure on defense, internal security, education, health, agriculture, construction, transport, and communication has gone from ₦7 billion in 1986 to ₦9,145 billion in 2021 (CBN, 2021). Likewise, the components of capital expenditure such as defense, agriculture, transport and communication, education, power, and health have also increased from ₦8 billion in 1986 to ₦2,522 billion in 2021 (CBN, 2021). It is therefore expected that infrastructures in the Nigerian economy should benefit from this increased government expenditure. That is, as the level of government expenditure increases, the level of infrastructural development should increase as well.

The Nigerian government spends money on infrastructure projects such as education, defense, general administration, health, water supply, electricity generation and supply, roads, and telecommunications. Despite this, the country's infrastructure development has not improved as much as expected and the citizens' standard of living remains low. Scholars around the world have discussed the impact of government spending on infrastructure development in Nigeria, yet the poor infrastructure in the rural areas persist. After all, the Central Bank of Nigeria revealed there was increased government expenditure on infrastructure from ₦8 billion to ₦2,522 billion in 2021 (CBN, 2021). However, the gap still exist as there are yet no proof to confirm if government expenditure has translated into meaningful development in the transport, health, and education sectors. Therefore, the questions remain what impact does government expenditure have on health, education, and transport infrastructure development in Nigeria? In view of this, this study seeks to examine the impact of government expenditure on infrastructural development in Nigeria, particularly on health, education, and transport infrastructures. The aim is to assess the level of development of these sectors and identify the reasons for their underperformance. The study will be conducted over the period of 1986 to 2022, focusing on the health, education and transport sectors.

As a result, this paper will assist government, policy makers, economists, consultants, and procurement officers to power a wider debate on how funds are provided and managed for infrastructures in subsectors in the economy, and guide policymakers on how to create sustainable developmental policies that will aid in reducing the challenges facing the

infrastructures as a result of poor and inappropriate government spending. The rest of the paper dwells on the theoretical framework, empirical literature, methodology, discussion of results, conclusion and policy recommendations.

2. Literature

2.1 Theoretical Framework

The New Growth Theory, also known as the Endogenous Growth Model, is a key component of the emerging development theory that provides a theoretical framework to explain persistent GDP growth that is determined by the system governing the production process (Lucas Jr., 1988). This is in contrast to traditional neoclassical theory, which holds that GDP growth is a natural consequence of long-run equilibrium. The New Growth Theory is based on the idea that economic growth is an endogenous process and is determined by the system governing the production process rather than external factors (Lucas Jr., 1988). This new theory links growth with factor inputs and other public stock, which can be represented using a production equation as follows:

$$Y = f(A, K, L, I) \dots [1]$$

where A is technical change, K is the private capital stock, L is the share of labour force employed in sector I, I is the investment on public infrastructure, and Y denotes the output (value added) of the sector.

2.2 Empirical Literature

Arowolo, Amao, and Adebayo (2021) investigated the effect of government expenditure on economic growth in Nigeria from 1980 to 2020. The time series data were collected from CBN statistical bulletin of 2020, National Bureau of Statistics (NBS) of 2019, and World Bank Data of 2019, and were analyzed using the Ordinary Least Square (OLS) multiple regression estimation technique. The findings revealed that government expenditure (capital and recurrent) had a positive linear relationship with economic growth in Nigeria. In addition, the results indicated that government capital expenditure had a significant positive effect on the growth of Nigerian economy. Moreover, the study showed that government recurrent expenditure had a non-significant positive effect on economic growth in Nigeria.

Ayodele and Okeke (2020) evaluated the relationship between government expenditure and economic

growth in Nigeria from 1980 to 2018. The study employed the Engle-Granger co-integration and error correction modeling estimation techniques for its analysis. The data were sourced from CBN statistical bulletin of 2019, National Bureau of Statistics (NBS) of 2018, and World Bank Data of 2018. The findings revealed that there was a positive long-run relationship between government expenditure and economic growth in Nigeria. It also showed that government expenditure on health and education had a positive, but non-significant effect on economic growth in Nigeria. In addition, the study revealed that government expenditure on infrastructure, agriculture, and defense had a positive and significant effect on economic growth in Nigeria. However, government expenditure on transport had a negative and significant effect on economic growth in Nigeria. Akande, Adeleke, and Kanu (2019) assessed the impact of government expenditure on economic growth in Nigeria from 1986 to 2017. The data were sourced from CBN statistical bulletin of 2018, National Bureau of Statistics (NBS) of 2017, and World Bank Data of 2017. The study utilized the Engle-Granger co-integration and error correction modeling estimation techniques for its analysis. The findings revealed a positive long-run relationship between government expenditure and economic growth in Nigeria. It also showed that government expenditure on health and education had a positive, but non-significant effect on economic growth in Nigeria. Furthermore, the study revealed that government expenditure on infrastructure and agriculture had a positive and significant effect on economic growth in Nigeria. Additionally, the study showed that government expenditure on defense and transport had a negative and significant effect on economic growth in Nigeria.

Chinedu, Daniel, and Ezekwe (2018) ascertained the impact of sectoral spreads of government expenditure on economic growth in Nigeria from 1980 to 2017. The time series data were obtained from CBN statistical bulletin of 2017, and were analyzed using the error correction model (ECM) estimation technique. The findings submitted that there was a positive impact of sectoral spreads of government expenditure on economic performance in Nigeria. The study also verified that government expenditure on agriculture and defence had statistical significant effect on economic performance in Nigeria, while government expenditure in transportation and communication, health and education were not statistically significant on economic performance in Nigeria.

Okolo, Edeme, and Emmanuel (2018) examined the impact of capital expenditure on infrastructural development in Nigeria, utilizing time series from 1970 to 2017. The data for their study were sourced from CBN statistical bulletin of 2018, and were analyzed with the used of autoregressive distributed lag (ARDL) model. The findings of the analysis revealed that capital expenditure, construction expenditure, and non-oil revenue have the potency of accentuating infrastructural development in the long-run but such is being hampered by external debt.

Charles, Onuchuku, and Tamuno (2018) investigated the impact of government expenditure on construction, transport, and communication on economic growth in Nigeria between 1980 and 2016. Time series data were sourced from secondary sources via CBN statistical bulletin of 2017, which were analyzed using the Engle-Granger co-integration and error correction modeling techniques. The result of the analysis revealed that both government expenditure on construction, transport, and communication had a negative relationship with economic growth, and also do not impact on it.

Ewubare and Maeba (2018) examined the effect of public expenditure in construction and transportation sectors on employment in Nigeria from 1980 to 2017. The time series data were collected from CBN bulletin of 2017, and were analyzed by employing the co-integration test and error correction mechanism (ECM) estimation techniques. From the findings, it was revealed that in the long-run, there existed a long-run relationship or equilibrium among the variables. It also showed that in the long-run, government expenditure will address the pitfalls in the country employment. Government expenditure in the transport sector was not statistically significant with employment rate, while government expenditure in the construction sector was statistically significant with employment rate.

Obasikene (2017) examined government expenditure in Nigeria and its impact on the Nigerian economy from 1986 to 2014. The study used annual time series data extracted from CBN statistical bulletin of 2015, which was analyzed by the used of multiple regression techniques of the Ordinary Least Squares (OLS). The results revealed that government expenditure (capital and recurrent) and broad money supply have positive linear relationship with economic growth in Nigeria. In addition, government capital expenditure has significant positive effect on the growth of Nigerian economy. Whereas, government recurrent expenditure has a non-

significant positive effect on economic growth in Nigeria.

Oyediran, Sanni, Adedoyin, and Oyewole (2016) examined the relationship between government expenditure and economic growth in Nigeria from 1980 to 2013. Time series data were collected from secondary sources through the National Bureau of Statistics (NBS) and CBN statistical bulletin of 2014, and were analyzed using the Ordinary Least Square (OLS) multiple regression estimation technique. The finding showed that in Nigeria, there exist a significance relationship between the government expenditure and economic growth.

Peter (2015) evaluated the effects of public expenditure on selected macroeconomic variables from 1986 to 2012. Public expenditure was disaggregated into two components; capital expenditure and recurrent expenditure. The time series data for the study were sourced from CBN statistical bulletin of 2013, and various issues of National Bureau of Statistics (NBS) annual reports. The data were analyzed using the impulse response function from estimated vector error correction model and granger causality test. The findings showed that capital expenditure had positive impact on GDP growth rate and exchange rate, and negative impact on inflation and unemployment rate. It also revealed that recurrent expenditure had a positive impact on unemployment and exchange rate, and negative impact on inflation and GDP growth rate.

Shuaib, Mohammed, and Igbinosun (2015) examined the impact of government expenditure on economic development in Nigeria, using time series from 1960 to 2013. They employed secondary data sourced from Financial Reviews of CBN, 2014 and National Bureau of Statistics (NBS) of 2014. The data were analyzed with the use of Least Square Tests and Robust Least Squares analysis. Their findings submitted that there is a significant or direct relationship between government expenditure and economic development in Nigeria.

Edame and Fonta (2014) analyzed the macroeconomic impact of public expenditure on infrastructure and economic growth in Nigeria from 1970 to 2016. The study employed the co-integration and error correction mechanism (ECM) approach for its analysis, and the secondary time series data for the analysis were sourced from CBN statistical bulletin of 2007, World Bank Data, the International Financial Statistics (IFS) of the International Monetary Fund (IMF), and the Federal Bureau of Statistics (FBS) of 2008. The findings revealed that

the level of public infrastructure such as road construction, water supply, electricity supply, transport/telecommunication, and housing/environment is very low, particularly in the short-run and with a weak adjustment toward long-run static equilibrium.

Greg and Agboro (2014) examined the determinants of public expenditure on infrastructural facilities in education and economic growth in Nigeria from 1970 to 2009. Time series data on variables considered were sourced from CBN statistical bulletin of 2010, National Population Commission, National Bureau of Statistics (NBS), and World Bank Data of 2010. The study employed the Ordinary Least Squares (OLS) estimation technique for its analysis. The findings submitted that public expenditure on education had a significant impact on economic growth. However, expenditure on education was different between regimes, and was not significant.

Agbonkhese and Asekome (2014) assessed the impact of public expenditure on the growth of the Nigerian economy, and to ascertain whether there is a relationship between gross domestic product (GDP) and government in Nigeria from 1981 to 2011. The time series data were obtained from CBN statistical bulletin of 2012, which were analyzed with the Ordinary Least Square (OLS) estimation technique. Findings from the analysis revealed that there was a positive relationship between gross domestic product (GDP) and government expenditure in Nigeria.

Fasoranti (2012) examined the effects of government expenditures on infrastructure on the growth of the Nigerian economy from 1977 to 2009. The data were sourced majorly from the various issues of CBN statistical bulletin of 2010, which were analyzed with the estimation techniques of vector error correction estimation and multiple regression model. findings revealed a long-run relationship between the growth of the economy and government expenditures in education, environment and housing, health services, water resources, inflation rate, agriculture, security, transport and communication. The findings also submitted that government expenditures on health services, transport and communication impacted negatively on growth while expenditures on agriculture and security were not significant on the growth of the economy.

However, none of the existing literature on government expenditure and economic growth in Nigeria has examined the impact of government expenditure on infrastructural development. Previous works such as Greg and Agboro (2014), Ewubare and

Maeba (2018), Charles et al (2018), and Fasoranti (2012) have only focused on one infrastructural variable, such as transportation, education, and health, and do not extend their scope to the present day, utilizing the latest available data. This study seeks to fill this gap by employing a multiple regression estimation technique to examine the impact of government expenditure on infrastructural development in Nigeria, using the annual time series data spanning the period of 36 years, from 1986 to 2022. Variables such as total government expenditure (capital and recurrent), health infrastructure expenditure, education infrastructure expenditure, and transport infrastructure expenditure will be included in the analysis.

3. Methodology

3.1 Types and Sources of Data

This study will use secondary data from Central Bank of Nigeria (CBN) statistical bulletin (2022) and World Development Indicators (2022) covering 36 years (1986 – 2022). The data utilized consists of annual observations on infrastructural development proxied by government capital expenditure on health, government capital expenditure on education, and government capital expenditure on transport as dependent variables; recurrent expenditure and capital expenditure as independent variables. To investigate the impact of government expenditure on health, education, and transport infrastructure development in Nigeria, this study will employ the Ordinary Least Squares (OLS) estimation technique. The OLS is a linear least squares method used to estimate the unknown parameters in a linear regression model by minimizing the sum of the squared differences between the observed dependent variable in the given dataset and those predicted by the linear function (Gujarati and Porter, 2009).

3.2 Model Specification

By adopting the New Growth theoretical framework in Equation [1], it linked growth with factor inputs and other public stock. With this specification, the model adopted the Ordinary Least Squares (OLS) model to achieve the objectives of the study. Therefore, a three-equation model was formulated and used for this study.

The first equation examined the impact of government expenditure on health infrastructure development in Nigeria. Thus, the functional relationship is stated as in Equation [2]:

$$HDI = f(RGEX, CGEX) \quad [2]$$

The second equation examined the impact of government expenditure on education infrastructure development in Nigeria. Thus, the functional relationship is stated as in Equation [3]:

$$EDI = f(RGEX, CGEX) \quad [3]$$

The third equation examined the impact of government expenditure on transport infrastructure development in Nigeria. Thus, the functional relationship is stated as in Equation [4]:

$$TDI = f(RGEX, CGEX) \quad [4]$$

Thus, the above implicit equations were further reduced to their linear functional form as presented as follows:

$$HDI = a_0 + a_1RGEX + a_2CGEX + u_1 \quad [5]$$

$$EDI = b_0 + b_1RGEX + b_2CGEX + u_2 \quad [6]$$

$$TID = c_0 + c_1RGEP + c_2CGEP + u_3 \quad [7]$$

Where; *HDI* represents Health Infrastructure Development (proxied by capital expenditure on Health); *EDI* represents Education Infrastructure Development (proxied by capital expenditure on Education); *TDI* represents Transport Infrastructure Development (proxied by capital expenditure on Transport); *RGEX* represents Recurrent Government Expenditure; *CGEX* represents Capital Government Expenditure; a_0 , b_0 , and c_0 are the intercepts; a_1 , a_2 ; b_1 and b_2 ; c_1 and c_2 are the coefficients of the variables; u_1 , u_2 , and u_3 are the residuals or error terms of the models. The A Priori Expectation: $a_1, a_2 > 0$; $b_1, b_2 > 0$; $c_1, c_2 > 0$.

3.3 Evaluation Procedure

The evaluation criteria for this study will consist of economic, statistical, and econometric criteria. Economic criteria will explain the theoretical relationship between the dependent and independent variables; recurrent and capital government expenditure and health, education, and transport infrastructure development. Statistical criteria will include t-statistics, standard error, and f-statistics tests to determine the true values of the population parameter. The econometric criteria will involve a unit root test, specifically the Augmented Dickey-Fuller test and an auto-correlation test using the Durbin-Watson statistics. The results of these tests will help to determine the presence of unit root or auto-correlation in the time series data. The aim of these tests is to ensure the accuracy of the regression model and its estimates.

4. Discussion of Results and Policy Implications

4.1 Unit Root Test

The Augmented Dickey-Fuller unit root test result is presented on Table 1 for stationarity and non-stationarity of the time series.

Table 1: Unit Root Test Result

Variable	Order of Stationarity	ADF Calculated	ADF Critical Value	Order of Integration	Decision
<i>HDI</i>	At level	-0.606815	-2.957110	1(0)	Not stationary
	1 st difference	-6.403596	-3.622033	1(1)	Stationary
<i>EDI</i>	At level	-1.356649	-3.557759	1(0)	Not stationary
	1 st difference	-5.052306	-3.562882	1(1)	Stationary
<i>TDI</i>	At level	-2.828257	-2.960411	1(0)	Not stationary
	1 st difference	-4.465812	-3.562882	1(1)	Stationary
<i>RGEX</i>	At level	-2.771697	-2.957110	1(0)	Not stationary
	1 st difference	-7.403272	-3.562882	1(1)	Stationary
<i>CGEX</i>	At level	0.207301	-2.957110	1(0)	Not stationary
	1 st difference	-5.141954	-3.622033	1(1)	Stationary

Computed at 5% ADF critical value

Source: Researcher's Computation (2023) using Eviews 10.0.

The Augmented Dickey-Fuller unit root test results in Table 1 showed that none of the time series data were stationary at their levels, but did become stationary at their 1st difference. At a 5% critical level, *HDI*, *EDI*, *TDI*, *RGEX*, and *CGEX* were all found to be stationary at 1st difference.

4.2 Multiple Regression

The results of the estimated multiple regression models are presented on Table 2, Table 3, and Table 4 below.

Table 2: OLS Result for the Impact of Government Expenditure on Health Infrastructure Development in Nigeria

Dependent Variable	Independent Variables	Coefficient	Standard Error (S.E)	T-Statistics (Prob.)
<i>HDI</i>	<i>C</i>	-9.352306	4.780822	-1.956213 (0.0598)
	<i>RGEX</i>	0.017837	0.006060	-1.956213 (0.0062)
	<i>CGEX</i>	0.129564	0.007132	18.16743 (0.0000)
R ²	0.927741			
F-Statistic	192.5879			
Prob(F-statistic)	0.000000			
DW	1.937932			

Source: Researcher's Computation (2023) using Eviews 10.0.

Table 3: OLS Result for the Impact of Government Expenditure on Education Infrastructure Development in Nigeria

Dependent Variable	Independent Variables	Coefficient	Standard Error (S.E)	T-Statistics (Prob.)
<i>EDI</i>	<i>C</i>	1.101700	0.352794	3.122790 (0.0039)
	<i>RGEX</i>	0.000830	0.000447	1.856195 (0.0733)
	<i>CGEX</i>	0.004134	0.000526	7.856174 (0.0000)
R ²	0.717623			
F-Statistic	38.12051			
Prob(F-statistic)	0.000000			
DW	1.815499			

Source: Researcher's Computation (2023) using Eviews 10.0.

Table 4: OLS Result for the Impact of Government Expenditure on Transport Infrastructure Development in Nigeria

Dependent Variable	Independent Variables	Coefficient	Standard Error (S.E)	T-Statistics (Prob.)
TDI	C	-0.576575	0.303644	-1.898852 (0.0672)
	RGEX	0.001214	0.000385	3.155060 (0.0036)
	CGEX	0.003417	0.000453	7.544629 (0.0000)
R ²	0.733673			
F-Statistic	41.32169			
Prob(F-statistic)	0.000000			
DW	1.773421			

Source: Researcher's Computation (2023) using Eviews 10.0.

4.2.1 Economic Criterion

The results of the estimated multiple regression on Tables 2, 3 and 4 indicate that both Recurrent Government Expenditure (RGEX) and Capital Government Expenditure (CGEX) have a positive, significant impact on Health Infrastructure Development (HDI), Education Infrastructure Development (EDI) and Transport Infrastructure Development (TDI) respectively in Nigeria. Specifically, a percentage increase in RGEX and CGEX holding other variables constant increases HDI, EDI and TDI by 0.017%, 0.0008% and 0.001%, and 0.12%, 0.004% and 0.003%, respectively. This result is in line with the a priori expectation.

4.2.2 Statistical Criteria

T-statistics - The significance status of each of the parameters of variables was ascertained by conducting a T-statistics test, with degree of freedom defined by $v = n - k$, where n is 32, so that $v = 32 - 5 = 27$, therefore t-tabulated being obtained at 2.05 (two tailed test). From model one on Table 2, the t-statistics for a_1 was calculated to be -1.956213; since $T^{cal} < T^{tab}$ was $-1.95 < 2.05$, it was concluded that a_1 was not statistically significant; while the calculated t-statistics for a_2 was 18.16743, since $T^{cal} > T^{tab}$ was $18.16 > 2.05$, the alternative hypothesis was accepted which states that there is a significant impact of government expenditure on health infrastructure development in Nigeria.

For model two on Table 3, the estimated t-statistics for b_1 was 1.856195 which in absolute value was < 2.05 , as such it was concluded that b_1 was not significant. While, the calculated t-statistics for b_2 was 7.856174 which in absolute value was > 2.05 , and as such the null hypothesis which states that there is no significant impact of government expenditure on education infrastructure development in Nigeria was rejected and the alternative hypothesis which states there is a significant impact of government

expenditure on education infrastructure development in Nigeria was accepted.

For model three on Table 4, the estimated t-statistics for c_1 was 3.155060 which is absolute value was > 2.05 , as such it was concluded that c_1 was significant. While, the calculated t-statistics for c_2 was 7.544629 which in absolute value was > 2.05 , and as such the null hypothesis which states that there is no significant impact of government expenditure on transport infrastructure development in Nigeria was rejected and the alternative hypothesis which states there is a significant impact of government expenditure on transport infrastructure development in Nigeria was accepted.

Standard Error – The Standard Error test was used to test the hypothesis about the population parameter. If the coefficient is greater than half of its standard error, then the alternative hypothesis that the parameter is statistically significant is accepted. For example, for model one on Table 2, since the coefficient for a_1 is greater than half of its standard error, the conclusion is made that there is a significant impact of government expenditure on health infrastructure development in Nigeria. Similarly, for model two on Table 3, since the coefficient for b_2 is greater than half of its standard error, the conclusion is made that there is a significant impact of government expenditure on education infrastructure development in Nigeria. Lastly, for model three on Table 4, since the coefficients for c_1 and c_2 are greater than half of their standard errors, the conclusion is made that there is a significant impact of government expenditure on transport infrastructure development in Nigeria.

F-Statistics - The conclusion that the f-statistic which measures the joint statistical influence of the explanatory variables in explaining the dependent variable was found to be statistically significant was accepted by the alternative hypothesis and the null hypothesis was rejected when the F^{cal} was compared to the F^{tab} . The F^{tab} had $(k-1)$ $(n-k)$ degree of freedom,

$k = 3$, $n = 32$; (3-1) (32-3) and the F^{tab} at 5 per cent critical value was 3.33 while the F^{cal} was respectively 192.5879, 38.12051 and 41.32169 for models one, two and three on Table 2, 3 and 4.

R-Squared Statistics – The R-Squared statistics for the three models of Health Infrastructure Development (HDI), Education Infrastructure Development (EDI), and Transport Infrastructure Development (TDI) in Nigeria indicate that approximately 93%, 72%, and 73% of the variation in each respective infrastructure are explained by the independent variables included in the models.

4.2.3 Econometrics Criteria

Autocorrelation test – The Durbin-Watson (DW) test is employed to test for autocorrelation in the model. As a decision rule a Durbin-Watson value of ≥ 2 signifies the absence of autocorrelation. The Durbin-Watson statistic for all three models (Table 2, Table 3 and Table 4) is approximately 2, which indicates there is no serial autocorrelation present.

4.3 Policy Implications

The study discovered that an increase in recurrent government expenditure and capital government expenditure leads to an increase in health infrastructure development in Nigeria, which conforms to a priori expectations but however, with low contributions as indicated by recurrent and capital government expenditures by 0.017% and 0.12% respectively. This also implies that government expenditure has a positive relationship with health infrastructure, but it does not substantially impact on the development of health infrastructure in Nigeria. This could be traced to the misappropriation and diversion of public funds which have left most health care centers and hospitals to operate without adequate medical facilities and medications, thereby impeding the development of the nation at large.

In addition, the study also discovered that an increase in recurrent and capital government expenditures lead to an increase in education infrastructure development in Nigeria, which conforms to a priori expectations but however, with very low contributions of 0.0008% and 0.004% as indicated by the coefficient of RGEX and CGEX respectively. This implies that government expenditure has a positive relationship with spending on education infrastructure, but it does not adequately impact on the development of education infrastructure in Nigeria. This could be traced to the ill-equipped

library and laboratories, lack of ICT facilities, and inadequate classrooms, which has been as a result of poor funding by the government.

Finally, the study discovered that an increase in recurrent and capital government expenditure leads to an increase in transport infrastructure development in Nigeria, which conforms to a priori expectations but however, with a very low and poor contributions of 0.001% and 0.003% as indicated by the coefficient of RGEX and CGEX respectively. This also implies that total government spending has a positive relationship with public spending on transport infrastructure, but it does not substantially impact on the development of transport infrastructure in Nigeria. This could however be traced to the reduction in government or private investment on the sector which has engulfed to the poor quality of roads, poor construction of airports and runways as well as waterways, and inadequate administrative capacity for maintenance in transport infrastructure. This could also be traced due to sharp practices of corruption by government agents and lack of transparency.

5. Conclusion and Policy Recommendations

The study conducted examined the impact of government expenditure on infrastructure development in Nigeria from 1986 to 2018. It was observed that infrastructure in an economy indeed serves as a catalyst for public development in government agenda such as healthcare delivery, education, transportation, electricity generation and supply. Despite this, the findings of the study showed that government expenditure has a positive relationship but, does not substantially impact on the development of health, education, and transport infrastructure in Nigeria due to their low and poor contributions.

In light of this, it is recommended that government should encourage the health sector by increasing its funding to equip the infrastructure pertaining to the health matters. Additionally, educational institutions should also consider promoting public-private partnership to embark on projects such as construction of modern toilets in all institutions, provision of relaxation points at strategic places on campus and construction of lecture halls/hostels, provision of equipped laboratories and libraries. Furthermore, government should consider increasing the funding of the transport sector as this will also enhance capacity building to enforce existing regulations, traffic management measures, improve vehicle inspection and general improvement of service quality of the transport mode in the country.

It is envisaged that with this, overall regional infrastructural and economic development in Nigeria will be enhanced.

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Financial Burden of Households on the Treatment of Malaria in Southern Nigeria

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Abstract. The number of deaths attributed to malaria is highest in Nigeria when compared with other countries of the world. This study estimated the monetary expenditure of households in Southern Nigeria in the treatment of malaria as well as the income forgone as a result of incapacitation due to the ailment. The study employed the cost-of-illness approach to estimate the financial burden of malaria treatment using the data contained in the Harmonized National Living Standard Survey (HNLSS) 2010. More cases of malaria were reported among children aged under-five while immunity increases with age up till age 45. Females, farming households and rural residents were also more vulnerable than their respective counterparts. The pattern of the distribution of direct and indirect cost was mixed across the three zones in the study area. Malaria poses both health and financial challenges to households. The financial burden of malaria is too high for a country like Nigeria whose majority of her citizens wallow in poverty. The drug subsidy policy of government has to be reviewed in order to increase the awareness of the public of its availability at subsidized rate. Massive public education on the importance of prevention as against treatment as well as the importance of seeking prompt treatment will also go a long way in ameliorating the indirect burden of malaria which forms a larger proportion of the total burden of malaria to households.

Keywords: Cost burden, Cost of illness approach, Direct and indirect costs, Incapacitation, Malaria

1. Introduction

Health and well-being are vital issues of importance in social protection particularly for people in

developing countries. Over 1.3 billion people have no access to adequate or affordable healthcare. Health coverage is particularly bad for families living in rural areas; health posts are sparsely scattered and the lack of doctors and nurses is severe (WHO, 2015). Health has an intrinsic value (it produces well-being) and an instrumental value (it is an important determinant of economic development). The instrumental value is the result of the direct impact of health improvements on labour productivity and the economic burden of illnesses; but it also reflects an indirect impact on economic growth through education. Better health during childhood increases the opportunities to benefit from education and thereby to improve future income. Due to its direct and indirect impact, health is one of the important determinants of the incidence of poverty as well as its persistence over time, known as “poverty traps”. Poverty traps that are created by an adverse health shock not only expose numerous people to poverty, but also exclude them from contributing productively to the economy. It is therefore important to establish a link between health management programs and social protection in a way to minimise the impact of illness on families and caregivers (Folland *et al.* 2017). Frenket *al.* (2007) stressed that when exposed to an adverse health shock, families can react by selling assets, using credit or finding additional sources of income, which can include child labour, and/or decreasing the consumption of other goods and services. All these methods, depending on their magnitude, can trap a family already in poverty or impoverish a family that was not previously poor depending on the burden of illness (catastrophic or non-catastrophic).

Malaria, a disease caused by protozoan parasite of the genus plasmodium (and transmitted by the female

anopheles' mosquito) is one of the greatest health challenges facing human the world over, with the Africa continent having a disproportionate share. The World Health Organization (WHO) reported 216 million cases of malaria globally, with 81% of these occurring in Africa. Of these reported cases, 655,000 resulted in deaths, again, 91% of these deaths occurred in the Africa continents (Nigeria Malaria Fact Sheet, 2011). In Nigeria, the ailments accounts for more deaths than in any other country, with about 97% of the population at risk (Nigeria Malaria Fact Sheet, 2011). Asides its health consequences, malaria also has significant financial implications due to the high amount of money spent on its treatment. Laximinarayan, 2014 reported that both the sick person and the care givers are adversely affected by the disease. Governments at different levels including international and non-governmental organization had over the years devise different approaches in form of policies and programmes with a view to reducing the incidence of the disease. Prominent among such approaches includes distribution of free mosquito treated nets, subsidizing anti-malaria drugs, creating awareness on the prevention and the need for prompt treatment in case of infection (especially among the pregnant and the nursing mothers). Despite all these, the financial burden of malaria is still high as measured by the huge proportion of households' income spent on its treatment as well as long days of incapacitation and absenteeism (and the subsequent reduction in productivity) and loss of income. For instance, a 2009 study by Uguru *et al* reported that Enugu State households incurred US\$3.84 per capita per month as direct cost in the treatment of malaria alone, representing 2.9 percent of their monthly income as reported by Onwujekwe *et al.*, 2000.

Despite malaria been recognized as a serious health challenge, there has not been enough studies to investigate the extent of its burden at the household level. Most studies had looked at its effect on the national economy or on some selected strata of the society (Leighton and Foster, 1993) even though decisions about treatment and coping strategies are based on negotiations within the household because the cost mostly falls on household budget (Saurborn *et al*, 2009). This study provided an estimate of the naira value of treating malaria by Nigerian households in the southern part of the country. This, we hope, will be instrumental in public health policy debates on malaria treatment, thus helping policy makers to chart new paths to eradicate it. The direct and indirect components of the burden were presented separately to enable policy makers in formulating appropriate policies and programs in tackling the menace. The patterns and costs of

malaria incidence have been reported to be highly place-specific. Thus, we compared the financial burden of malaria between the three geopolitical zones in the study area.

Of the methods of quantifying the burden of an illness, the cost of illness approach is the most intuitive (WHO-WEF, 2011) as it estimates the maximum amount of money that could potentially be saved or gained if a disease were to be eradicated. The cost of malaria treatment can be divided into two: direct cost and indirect cost. The direct costs are the cash expenses on doctor's fees, laboratory tests and drugs (often termed as direct medical cost). It also includes payments for food, lodging, transport charges to and from health care facilities or drug stores and miscellaneous expenses associated with seeking and obtaining medical care as well as care givers visiting patients at hospital or clinic (often termed the direct non-medical cost). The indirect costs are estimated as productivity loss and income forgone due to morbidity and mortality as a result of the disease. This includes income/wage lost, school days missed and reduced productivity and output due to absenteeism as a result of malaria both by the patient and the caregiver.

Most microeconomic studies on the burden of malaria over the years have shown that the magnitude of the indirect costs is always higher than the direct costs (with few showing otherwise). Shepard *et al.*, 1991 aggregated the cost of treating a case of malaria in Sub-Saharan African in 1987 as \$9.84, out of which \$1.83 was direct cost and \$8.01 was indirect cost. Ettling *et al*, 1993 reported that low-income households in Malawi spent approximately 9.6% of their annual income on malaria treatment depending on the source of treatment. Alaba *et al*, 2009 estimated an average of ₦357.21 per household for the treatment of malaria in rural Oyo State in Nigeria with the burden higher in the agricultural sector than in the non-agricultural sector. Okorosobo *et al*, 2013 estimated the indirect cost of malaria treatment in Nigeria to be higher than the direct cost, even though the reverse was found for other countries compared in the study. Onwujekwe *et al*, 2013 estimated that a total of US\$12.57 and US\$23.20 was spent by outpatients and inpatients respectively for the treatment of malaria in Enugu State with the indirect cost been the highest for each category of patients. Omotayo *et al*, 2013 estimated the annual mean cost of malaria treatment per farm household in Ido Local Government Area of Oyo State Nigeria to be ₦26,694.58 representing ₦11,160.41 as direct costs and ₦15,534.17 as indirect cost.

2. Research Methodology

2.1 Study Area

The study was conducted in the Southern part of Nigeria which is made of three geo-political zones with seventeen states in all. The inhabitants are mainly of Yoruba and Igbo descendants with farming as their major occupation (Come to Nigeria, 2014). The population as at the 2006 census stood at 65,198,068, ranging from 16,431,555 in the south east and 27,722,432 in the south west. The population of the south south zone was estimated at 21,044,081(NPC, 2014).

2.2 Data and Analytical techniques

The study made use of the Health and the expenditure sections of the Harmonized National Living Standard Survey (HNLSS) conducted by the National Bureau of Statistics (NBS). The Health section contains data on households spending in the treatment of malaria as well as number of days of work/school lost due to malaria. The Household Expenditure section, on the other hand, contains information on households spending on various food and non-food items. Responses on all households in the study area reporting case(s) of malaria during the survey were used for the study.

This study adopted the cost of illness approach in estimating the naira amount incurred by households in the southern part of the country in the treatment of malaria. The study assumed an average household size of four. The costs were transformed into logarithm to assume the property of normality required for parametric tests while geometric mean was used to avoid overestimation as it is lower than arithmetic mean. After modifications to Malaney, 2003 and Okorosoboet *al*, 2011, the cost of malaria treatment was estimated as:

$$COI = \text{Private Medical Cost} + \text{Labor Loss}$$

The Private Medical Cost, which represents the Direct Cost of malaria, was estimated as the summation of the expenditure on medical consultation, hospitalization, medicine and transport related to treatment seeking (both by the sick and the care giver). That is,

Where:

- = Total direct cost or financial cost of malaria
- = Financial cost of medical consultation
- = Financial cost of hospitalization
- = Financial cost of drugs/medicine
- = Financial cost of transport related to malaria
- = Summation sign

Labor loss, which represented the indirect cost, was captured as productivity loss due to absenteeism and estimated as the value of lost workdays for each person who suffers from malaria and adult care-givers. Expenditure was used as the proxy for income/wage following Chumaet *al*, 2007; Chuma and Molyneux, 2009; Chumaet *al*, 2010; Hyacintheet *al*, 2013. Expenditure of households on different items were summed up for each household, divided by twelve to give the monthly value and then by thirty to give daily expenditure. The result was then multiplied by the number of days the sick person and the care-giver were absent from work.

The indirect cost or time cost of malaria was therefore estimated as follows:

Where:

- = Indirect cost or time cost of malaria (Income lost due to malaria morbidity)
- = Number of days of work missed
- = Daily wage rate in Naira
- Σ = summation sign

Hence, the cost of malaria in the study area was estimated as:

The financial burden was then calculated as below:

- Where; = Cost Burden of malaria
- = Household Income

3. Results and discussion

Table 1: Socioeconomic characteristics of respondents

Age	South East (%)	South South (%)	South West (%)
0 – 4	12.8	16.0	12.5
5 – 9	8.8	11.9	8.3
10 – 14	8.9	6.6	5.5
15 – 19	7.2	7.1	6.1
20 – 24	6.7	6.5	5.3
25 – 29	5.2	8.6	6.6
30 – 34	4.5	7.6	4.9
35 – 39	5.3	6.4	5.2
40 – 44	3.9	5.5	5.4
45 – 49	5.5	5.6	3.6

50 – 54	7.1	4.9	6.6
55 – 59	6.1	3.4	4.0
60 – 64	7.8	5.3	8.0
65 and above	10.2	4.6	18.0
Gender			
Male	49.1	47.6	48.5
Female	50.9	52.4	51.5
Sector of residence			
Urban	22.1	16.7	32.6
Rural	77.9	83.3	67.4

Source: Authors' computation

3.1 Socioeconomic Characteristics of Respondents

The socioeconomic characteristics of the respondents in relation to malaria illness were presented in Table 1. Across the three zones, vulnerability was the highest among children below the age 5 years, with those in the South-south been the most vulnerable. This could be the reason why most states of the federation offer free health care services to children especially those below age 5 and pregnant women and also in consonance with the epidemiology of the disease in the country. Immunity/resistance to the ailments slightly increases with increase in age up till age 45 – 49. The number of malaria ailment cases reported among the females were many than the males with females in the South-south recording the highest number of attack. Farming households were also mostly affected by the ailment, again the South-south zone recorded the highest value of 42.7% and the South east the least (36.9%). Rural households reported more cases of malaria than their counterparts in the urban areas.

Table 2: Direct cost of malaria

AGE GROUP	South East (N)	South South (N)	South West (N)
0 – 4	918.20	751.53	1177.62
5 – 9	715.98	664.33	898.13
10 – 14	1354.41	829.91	721.69
15 – 19	1099.47	1104.85	790.94
20 – 24	1070.50	1159.17	1030.13
25 – 29	1030	768.77	1094
30 – 34	1231.66	722.83	898.87
35 – 39	1618.32	938.19	817.80
40 – 44	1781.42	884.86	1267.03
45 – 49	1421.31	895.69	1347.21
50 – 54	1472	924.75	1228.03
55 – 59	1507.52	1010.36	851.90
60 – 64	1773.05	2873.67	862.55
65 and above	1567.24	1090.53	1064.47
Average	1240.10	908.59	993.77
OCCUPATION			
Farm	992.41	698.90	845.45
Non-Farm	900.82	1030.01	1031.43
Average	947.3691	766.19	953.4229
SECTOR OF RESIDENCE			
Rural	1342.09	859.53	960.17
Urban	966.0429	1158.127	1015.17
Average	1245.58	914.03	993.77
GENDER			
Male	1282.93	962.53	981.11
Female	1214.13	861.79	1006.57
Average	1244.55	914.03	993.77

Source: Authors' computation

3.2 Direct cost of malaria treatment

The average out of pocket cost for the treatment of malaria by households in the three geo-political zones was presented on the basis of age, household head's occupation (farm vs non-farm), sector of residence (rural vs urban) and gender in Table 2. The estimation of the direct cost on the basis age shows that the working class in the South east recorded the highest out of pocket cost (₦1391.60), followed by the south west (₦1066.87) while those in the South-south recorded the least cost (₦913.08). However, the direct cost of treatment among children under age five

was highest in the South west. Similarly, in the South east, households whose heads are engaged in the non-farm sector of the economy recorded a higher cost than those in the farm sector. The same pattern was observed when the direct cost was compared on the basis of area of residence among the three zones; urban residents recorded higher cost than the rural residents. On the basis of gender, male respondents recorded higher out of pocket cost than the female respondents in South east and South-south.

Table 3: Indirect cost of malaria

VARIABLES	SOUTH EAST				SOUTH SOUTH				SOUTH WEST			
	CARE GIVER		SICK PERSON		CARE GIVER		SICK PERSON		CARE GIVER		SICK PERSON	
	DAYS LOST	INCOME LOST (₦)	DAYS LOST	INCOME LOST (₦)	DAYS LOST	INCOME LOST (₦)	DAYS LOST	INCOME LOST (₦)	DAYS LOST	INCOME LOST (₦)	DAYS LOST	INCOME LOST (₦)
AGE												
18 – 39	3.5	2001.14	4.9	4052.07	6.5	4826.66	4.1	2526.18	4.8	4736.66	5.8	4864.89
40 – 59	4.4	3409.95	4.6	5001.51	4.2	2767.10	6.3	10351.85	5.3	3341.96	4.9	3348.98
60 and above	5.1	5040.74	6.0	4713.30	10.2	6114.08	8.3	6845.52	6.3	3692.28	7.5	3796.96
GENDER												
Male	4.1	6326.29	5.0	5373.51	6.4	4495.84	4.3	2860.22	5.1	4057.16	6.9	4394.21
Female	4.7	7343.89	5.3	4143.28	6.4	4111.50	7.1	10003.50	5.6	3623.46	5.3	3381.23
OCCUPATION												
Farm	3.7	2556.22	4.8	5937.39	4.6	2733.71	3.9	2390.01	4.6	2994.31	3.9	1978.73
Non-farm	4.1	3017.16	3.9	3065.10	4.3	5196.40	4.6	4337.93	4.7	3644.26	4.9	3920.10
SECTOR												
Rural	4.4	3567.88	5.3	5008.26	6.6	4239.67	5.4	3567.60	4.9	3384.74	7.5	4167.97
Urban	4.2	7719.04	4.5	3398.51	5.6	4294.34	7.7	19215.01	5.7	4087.52	5.2	3672.01

Source: Authors' computation

3.3 Indirect cost of malaria treatment

The number of days lost and the corresponding income lost by both the sick and the care giver was presented in the Table 3 for both the care givers and the sick person. Indirect cost was highest in the South-south zone; an average of 21days and ₦13707.84 for care giver and 19 days and ₦19723.55 for the sick person. Females spent more days providing care in the study area than males, although the corresponding income loss was less than the males except in the south east zone, this may be due to the special care giver responsibility of women in Africa culture and religion. With the exception of the South west, female attacked by malaria spent more days at home, although, the corresponding income loss was less, except for the South-south zone. This may not be unconnected to the fact that most women are usually menially engaged due to high unemployment rate among female folks. Female care givers whose husbands are engaged in the non-farm sector of the economy can afford to lose more days and thus more income than those engaged in the farming activities. The lower number of days lost among the farming households could be due to the fact that farming activities are timely and the farmer could not afford to stay at home despite his health condition. With the exception of the south east, farming households attacked by malaria also spent less days at home and thus also forgo less income compared to non-farm households. Rural residents suffer longer incapacitation due to malaria than their urban counterparts and thus their care givers. Furthermore, among the respondents under age 20, children below the age of five recorded the highest financial burden except in the South-south where the burden was more severe among those in the age bracket 10 – 14. Female respondents also spent higher percentage of their income on malaria treatment across the three zones with the south east recording the highest burden of 1.71%. On the basis of area of residency of the respondents, malaria burden was the highest for rural households than for urban households, with the south east recording the highest burden of 1.88%.

3.4 Financial burden of malaria

Table 5: Pair Wise Comparison of Means between the zones

Zones	South East	South South	South West
South East	-	10.22***	2.39**
South South	-	-	5.93***
South West	-	-	-

Source: Authors' computation; *** - significant at 1%; ** – significant at 5%

3.4 Pair Wise Comparison of Means between the zones

The result of the pair wise comparison between the zones shows that the means are significantly different among the three geo-political zones. South East and South-south are significantly different at 1%, likewise South-south and South west while South East and South West are different at 5%. Many reasons could be adduced for the differences in the burden of the illness as put forward by various authors in past research works on financial burden of illnesses. Such reasons include differences in transmission pattern, endemicity pattern, variation in the length of a malaria episode, illness perception by the respondents among others (Tanner and Vlassoff, 1998; Clarke *et al*, 2004 and Chuma *et al*, 2010).

4. Conclusion

Malaria poses not only health but also financial challenges both to individuals and the economy as a whole as revealed by the study. No wonder its eradication is among the Millennium Development Goals (MDGs), a policy documents subscribed to by many nations of the world. Its burden remains a serious challenge especially to poor households who spent a considerably high percentage of their income on its treatment, no wonder these households wallow in abject poverty. Despite claims by the government on the subsidization of anti-malaria drugs, especially the new Anti-malaria Combination Therapy (ACT), the cost of malaria is still very high. This puts into doubt the effectiveness of the US\$1 billion a year help proposed for African Countries for the treatment of malaria in the Abuja Target. The study revealed that no zone in the Southern part of Nigeria is free from the burden of malaria. Though the magnitude of the burden differs between the zones and along the different socio-economic characteristics' basis examined, the burden is too high for a country like Nigeria whose majority of her citizens live below the poverty line. The estimate of direct cost may be higher than was reported due to financial constraints that could prevent poor households (who are also the most vulnerable) from seeking treatment. This could possibly be responsible for the exacerbating indirect cost due to lack of treatment. Improving access to affordable health care service therefore has the tendency of increasing the direct cost while the indirect cost will be reduced for some households.

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APPENDIX

Table 4: Financial burden of malaria

	SOUTH EAST			SOUTH SOUTH			SOUTH WEST		
Variables	Per Capita Expenditure (₦)	Direct Cost (₦)	Financial burden (%)	Per Capita Expenditure (₦)	Direct Cost (₦)	Financial burden (%)	Per Capita Expenditure (₦)	Direct Cost (₦)	Financial burden (%)
AGE (years)									
0 – 4	41683.42	918.20	2.20	46350.18	751.53	1.62	53346.59	1177.62	2.21
5 – 9	59731.67	715.98	1.20	51131.11	664.33	1.30	56007.93	898.13	1.60
10 – 14	62127.46	1354.41	2.18	44232.81	829.91	1.88	69124.75	721.69	1.04
15 – 19	76811.96	1099.47	1.43	55390.01	1104.85	1.10	65794.83	790.94	1.20
20 – 24	83633.64	1070.50	1.28	56995.6	1159.17	2.03	93846.66	1030.13	1.10
25 – 29	74858.9	1030	1.38	89541.89	768.77	0.86	95688.6	1094	1.14
30 – 34	79240.36	1231.66	1.55	71815.42	722.83	1.00	87899.35	898.87	1.02
35 – 39	68963.24	1618.32	2.35	63085.92	938.19	1.48	62980.37	817.80	1.30
40 – 44	64716.31	1781.42	2.75	49985.55	884.86	1.77	64202.47	1267.03	1.97
45 – 49	66336.94	1421.31	2.14	54798.03	895.69	1.63	105810.6	1347.21	1.27
50 – 54	61150.65	1472	2.41	52845.55	924.75	1.75	85220.77	1228.03	1.44
55 – 59	71735.67	1507.52	2.10	65961.83	1010.36	1.53	80030.41	851.90	1.06
60 – 64	79757.53	1773.05	2.22	51848.71	2873.67	5.54	100085.2	862.55	0.86
65 and above	98109.84	1567.24	1.60	106968.3	1090.53	1.10	101862.7	1064.47	1.05
GENDER									
Male	69647.24	1282.93	1.84	64832	962.53	1.48	85763.51	981.11	1.14
Female	71173.03	1214.13	1.71	55923.94	861.79	1.54	78590.97	1006.57	1.28
OCCUPATION									
Farm	62044.11	992.41	1.60	43396.68	698.90	1.61	43146.83	845.45	1.96
Non-farm	51969.31	900.82	1.73	51370.86	1030.01	2.00	66252.99	1031.43	1.56
SECTOR									
Rural	71236.42	1342.09	1.88	54395.5	859.53	1.58	68970.13	960.17	1.39
Urban	67289.69	966.04	1.44	90651.65	1158.12	1.28	88889.15	1015.17	1.14

Source: Authors' computation



Impact of Criminal Acts on Point of Sales (POS) Business Operations in Karu Local Government Area of Nasarawa State.

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Abstracts. This study examines Impact of criminal acts on Point of Sales (POS) Business Operations in Karu Local Government Area of Nasarawa State, Nigeria. Primary data were derived from questionnaires using twenty (20) businesses comprises of Medicine, Pharmaceuticals, Oil/Gas, Electronics, Electricals, Book Publishing, Bookshops, Agriculture, Agro-allied industry, Education, Telecommunication, Computer, Technology, Fashion design and Lifestyle, Event management, Entertainment, and Supermarket/Stores from the study area. The Technology Acceptance Model was adopted which states that an individual's behavioral intention to adopt a system is determined by the perceived usefulness and perceived ease of use. However, it was revealed that the importance of Point of Sales (POS) business operations cannot be overlooked because of its electronic means of carrying out transactions, and as critical factor for a successful business, the necessary infrastructure such as internet access should be made available. It is imperative to strengthen and support Government's strategy on financial inclusion compliance to rules and regulations on the management of agent banking so as to prevent financial and other predicate crimes that may be perpetrated by fraudsters due to the vulnerable nature of the business. Therefore, the paper recommends that competent authorities saddled with inspection responsibilities should ensure compliance on all guidelines and regulations by the CBN and other sector regulators on agent banking guidelines on adequate record keeping of transactions. Implore latest transaction monitoring systems for detecting transactions in line with international best practice and grant license to people of integrity to avoid abuse of the system, and CBN should ensure banks comply with their obligations to monitor agent's activities. The operators should be routinely trained and identify red flags and indicators of POS machine. They should keep proper records of transactions on customers and the procedure for

reporting suspicious activities of suspicious customers.

Keywords: Criminal Acts, Financial Crime, Point of Sales (POS)

1. Introduction

The need to develop effective and efficient payment systems that will guarantee transactions required for a sustainable economic development led to the introduction of Point of Sale (POS) system which has been cash driven. Yaqub et al (2013) asserts that the use of POS terminals to make financial payment in Nigeria was introduced by the Central Bank of Nigeria to promote its cashless policy with the aim of improving payment system. Ever since the introduction, there has been increasingly growth in the number of active POS terminals provided by banks to mobile money merchants (Ogunfuwa, 2018). Statistical figures from Nigeria Inter-Bank Settlement Scheme (NIBSS, 2015) indicated that the number of active POS terminals in Nigeria was 164,607. Point of Sale is a device that allows local debit cardholders to make withdrawals or make payment for product and services. This machine is mainly used in retail shops where customers pay for good or services using their ATM cards, it is also used to pay utility bills like electricity, airtime, cable or decoder subscription etc. However, because the services of the banks do not serve everybody in Nigeria especially those in remote areas, banks created POS business as terminals to bring financial services closer to the unbanked and under banked segment of the society which had led in decongesting the already crowded banks and the often crowd witnessed at ATM spots and also encourage entrepreneur who might have interest as bank agent while earning their own commission (NFIU, 2022).

Adeoti & Oshotimehin (2012) reported that despite the general increase on the rate of adoption of e-

payment instruments in Nigeria, the rate of adoption and use of Point of Sales (POS) is low compared to the rest of the e-payment system, and the factors attributed to the low adoption of POS in Nigeria is low level of awareness of the benefit of using POS, lack of adequate infrastructure, low internet penetration, network failure, absence of open standards or trust among banks and providers, awareness of POS availability, frequent power outage, limited numbers of POS per merchant store where they are available, preference for cash, as well as security of communication over the network, (Ayo & Babajide, 2006; Adeoti, 2013, NIBSS, 2015). In a survey carried out by NIBSS (2012), it was found that in spite of having POS terminals, avenue to electronic funds transfer, cheques payment remains a mirage as most merchants still accept cash above POS. Investigations on why merchant accepted cash over electronic payment while having POS terminals revealed that POS deployment was involuntary as they were deployed by banks without being solicited for by the merchants. Also, that non-use was due to delays associated with access to funds after sales from the POS, poor connectivity to POS usage etc. (NIBSS, 2012). Adeoti (2013) assert that the inefficient use of POS terminals in Nigeria indicates that Nigeria is challenged with issues such as; unreliable network, power outage and security of communication over transaction network. Therefore, the paper seeks to examine the Impact criminal acts on Point of Sales (POS) business operations in Karu Local Government Area of Nasarawa State.

2. Conceptual Framework

2.1 Concept of Criminal Acts

Criminals are people who carry out acts that are against the law. The extant literature on point of sales business operation recognizes that financial crimes negatively affect both the economy, organizations and individuals as criminals are known to target all economic entities, as long as they exhibit weakness in their structure that can be exploited. Adegbe & Fakile, (2012) holds that economic and financial crimes are the greatest obstacles to national economic development considering its effects on revenue. Similarly, Akenbor & Oghoghomeh, (2013) notes that financial crimes in any organization leads to economic loss, loss of goodwill, loss of staff and in extreme case; business failure. They also noted that financial crimes can result in loss of livelihood to individuals. Thus, financial crimes as used in this study involves the crime committed against property, it entails the illegal conversion of ownership of the property specifically committed through electronic

payment systems which include fraud, embezzlement, forgery, counterfeiting, and identity theft, electronic accounting high-jacking, payment fraud, scams or confidence tricks, among others. Financial crimes in Nigeria, has been perceived to have greatly increased in volume since the introduction of the electronic payment system. With the growth in the use of electronic payments, criminals have found yet another means to increase their nefarious ways of fleecing innocent victims of their money.

2.2 Concept of Point of Sales (POS)

Point of Sales (POS) is a payment-processing system or terminal that allows users to perform several financial transactions and those who run this enterprise are often seen in shops, kiosks and big shades or umbrellas with the device where funds are withdrawn, payments made, and money deposited into accounts without visiting the bank. POS transaction may occur physically or online, with receipts generated either in print or electronically. Wada & Odulaja (2012) asserts that despite the advantages of POS business and obvious guidelines on their management, the sector is still susceptible to Money Laundering and Terrorism Financing. Due to the cash-based economy a high proportion of POS transactions involve cash. Customers deposit and withdraw huge amounts of cash which makes the business vulnerable or attractive to money laundering. An agent can accept deposit into customers' bank account from any location in Nigeria. Though there are limits to such deposits but cash-in can be structured between an agent and the customer involved to suit an unusual circumstance that may not be easily acceptable by the bank.

Edori (2018) asserts that professional money launderers can provide unscrupulous banking agents with huge illicit sums of money to move into the financial sector through series of transfers to different bank accounts. He further states that money mules can be used to easily transfer proceeds of crime to criminal organizations or terrorists. Similarly, Adeoti, (2013) holds that customers can easily get value in cash immediately the accounts of the merchants are credited without knowing the source and destination of the funds, and that compromised banking details could be used by fraudsters to transfer funds from victim accounts to the POS merchant, and thereafter receive cash. Adeoti, (2013) further asserts that some POS operators overcharged customers on their commission by charging higher than the agreed amount. They also carry out skimming fraud by stealing card details of customers to clone their cards

which will be used to make unauthorized withdrawals from their accounts. Also, there could be network issues resulting to failure or reversal of transaction after the customer has received value and left the premises of the agent. Modern internet-enabled POS system allow users do much more like clocking in and out. To authorize and perform transactions using the channel, the operator requires you inserting your readable ATM card and key in your password after which it process the payment and a certain amount of fee is charged depending on the nature of transaction (Adeoti & Oshotimehin, 2012).

Braimah & Okonkwo (2016) in a study titled: statistical monitoring of electronic fraud occurring in Nigerian banks revealed that there was an increase trend in the occurrence of fraud in Nigerian banks. Olaleye & Fashina (2019) explored the effects and controls of electronic banking fraud in Nigeria; the research examined the nature of electronic banking related fraud on deposit money banks, its effects and controls put in place to prevent financial loss and was observed that the year 2016 witnessed a significant increase in electronic fraud cases, but with marginal reduction in attempted fraud value and actual loss which shows that there is a significant relationship between e-banking practices and the rate of increase in the security of bank transactions. Maitanmi et al (2013) used structured questionnaire as a means of data collection which were analyzed using simple percentage to study the drivers and challenges of adoption of cashless policy in Nigeria; the results indicate that majority of Nigerians are already aware of the policy and agree that the policy will help fight against corruption/ money laundering, and reduce the risk of carrying cash. In addition to fostering economic growth, Maitanmi et al (2013) enumerated the major problems that can hinder the implementation of the policy to include: cyber fraud, limited POS, numeracy and illiteracy.

3. Empirical Review

3.1 Evolution of the Payment System in Nigeria

The payments system in Nigeria has evolved over the past few decades, but the modern payments system started with the use of banks notes, payment orders, and cheque. In 1996, the payments system was modified to include card-based e-payment products which was followed by the introduction of pay card in 1997. By 1999, card-based payment products assumed an open platform with authorization from the CBN for the floating of two card service companies by a consortium of over 20 banks. CBN in collaboration with the Bankers Committee, launched

the first major initiative to modernize the payment system, granting approval to a number of banks to introduce international money transfer products, telephone banking, and online banking via the internet on a limited scale (CBN 2012). Today, virtually all banks have introduced electronic funds transfers (EFT), debit and credit cards, internet banking, mobile banking and deployed Automated Teller Machines (ATM). The Nigerian payments system has further evolved with the introduction of the Payments System Vision 2020, launched in 2007 to facilitate a wider range of electronic payment methods such as POS terminals, facilitated by a wider range of service providers. By 2007, the payment system had transitioned from being cash-heavy to a bulk payer status, which is a combination of cash, and some electronic instruments, mainly Automated Teller Machine (ATM). Post 2007, Nigeria embarked on measures to increase the use of electronic channels in its journey to a cashless society with efficient payment systems. The CBN (2011), launched a cashless policy to modernize Nigeria's payment system (in line with the country's vision 2020), reduce the cost of banking, foster economic growth and improve the effectiveness of monetary policy.

The cashless economy, as explained by NIBSS (2015) is aimed at reducing and not eliminating the stock of paper currency circulating within the economy. It does not refer to an outright absence of cash transactions in the economic setting but one in which the amount of cash-based transactions is kept to the barest minimum. Several electronic payment systems such as payment cards (smart card) and paper-based instrument that were introduced by the CBN gave rise to significant growth in the use of electronic payment systems. The CBN strategic plan on e-payment system is to ensure that a larger proportion of currency in circulation is captured within the banking system, thereby enhancing the efficacy of monetary policy operations and economic stabilization measures. E-payment initiatives such as the establishment of switching companies that facilitate interconnectivity, introduction of payment instruments such as Automated Teller Machine (ATM), web transaction, e-money products such as credit and debit cards and Point of Sales (POS) have drastically helped reduce the volume of cash transactions and the flow of cash in the Nigeria economy. Electronic payment systems that have been introduced in Nigeria are Automated Teller Machine (ATM), web transaction, electronic money products (such as credit and debit cards), and POS. These e-payment systems provide a better audit trail than transactions which involve physical cash and thus

reduce the amount of currency in circulation (Adeoti & Oshotimehin, 2012).

According Asaolu et al. (2011), a payment system implies any system that is used to settle payments in financial transactions through the transfer of monetary value. This includes the instruments, institutions, people, standards, rules, procedures and technologies that make the exchange possible. Okoro & Kigho (2013) described a payment system as an operational network governed by laws, rules and standards that link bank accounts and provides the functionality of monetary exchange, using bank deposits. Thus, it is any electronic payment system that is designed and operated through the use of electronic / computing devices for financial and monetary transactions and exchanges. The electronic payment system, in addition to being guided by the inherent technological rules and procedures of its development, also adheres to the basic rules that govern the non-electronic payment system. Asaolu et al. (2011) stated that electronic payment (also referred to as e-payment) involves effecting payments from one end to another, through the medium of the computer without manual intervention, beyond inputting the payment data. Through the adoption of electronic payment systems, the delays and other inefficiencies associated with the traditional payment system has been largely eliminated. For example, business transactions involving monetary exchanges are no longer bound by banking hours. In essence, transactions can be carried out at any-time of the day or night without recourse to constraints imposed by banking hours.

Okifo & Igbunu, (2016) asserted that electronic payment systems boast a number of economic benefits which include efficient mobilization of savings and ensuring that most of the cash available in the economy are controlled by banks. This allows for efficient and effective transmission of monetary policy by the Central Bank, whenever necessary. An electronic payment system also has the ability to reduce cash handling and printing costs. Olaleye (2019) described electronic payment as an exchange of digital financial instruments between buyers and sellers, which takes place online, as payments by direct credit, electronic transfer of payment card details or through other electronic channels. Olaleye (2019) further opined that electronic payment system is one in which monetary value, as represented by a claim on the issuer, is stored on an electronic device and accepted as means of payment by undertakings other than the issuing authority. Thus, the use of electronic means for financial transactions has greatly accelerated the

emergence of the much-touted cashless society, as it accentuates transactions, via speed and ease of payments. The development has greatly improved financial services by the institutions involved, in terms of reduced costs of operations, increased volume of transactions, faster services and fostered more financial liberalization in the economy. Wada & Odulaja (2012) assert that electronic banking has enabled banks to overcome borders, adopt strategic outlook, and bring in new possibilities. Thus, electronic payment systems adopted by banks have reduced the cost of processing and facilitating the transmission of information, leading to changes in the banking business.

Also, the introduction of cashless policy by the Central Bank of Nigeria (CBN) has led to a boom in Point of Sales (POS) businesses, especially in remote areas, however, these POS agents are becoming easy targets for miscreants, who rob and sometimes kill them. Agbi & Yusuf (2018) argued that standing in queues in banking halls or at Automated Teller Machines (ATMs) is something the average Nigerian can do without if they can help it. This is why many find it more convenient to patronise Point of Sales (POS) agents who handle cash withdrawal, deposit, payment of utility bills, among other services for a fee but with relative ease and to the satisfaction of clients. Agbi & Yusuf (2018) further stated that the services of these POS agents are more appreciated in remote villages and areas where banks are not close to settlements. Most bank customers in such places naturally prefer to pay a token of N200 to deposit or withdraw money from their accounts within few minutes, instead of spending more money and time going to banks for the same purpose. However, despite the financial services the agents render they are often targets of attack by armed robbers and fraudsters, who rob and sometimes kill them.

Also, report by International Centre for Investigative Reporting (ICIR) exposed the threat faced by the thriving multi-billion-naira business due to the activities of fraudsters and the unguaranteed safety of operators and customers. The ICIR called on the CBN to immediately review its policy regarding POS system, stressing that the apex bank must be proactive and intelligent to ensure fraudsters and criminals are prevented from undermining the innovation. Maitanmi et al. (2013) added that a policy audit would help CBN monitor the loopholes in the POS innovation to be a step ahead of the exploiters. Maitanmi et al. (2013) further maintained that Government needs to be more proactive, government need to think ahead of these guys (POS fraudsters) are smarter in the sense that they are tech-

savvy. As an era of technology, where most of them research how to manipulate the system, the government needs to be ahead, not playing from behind. They need to be ahead of such that each policy should be able to address from time to time some of these problems unravelled in the report. There must be a strategy to audit policies and how it affected the lives of the people because policies are for the people, and when policies are not audited in this technology era, fraudsters would exploit any loophole seen in the system (Maitanmi et al. 2013).

3.2 Criminal Acts and Point of Sales (POS) Business Operations in Nigeria

It is no longer news that fraudsters have been deploying criminal strategies to rob point of sales vendors. This criminal who sometimes appears as point of sales operators, also obtain the details of Automated Teller Machine (ATM) cards of persons who use their machines and, in a few hours, or days, empty their bank accounts. Maitanmi et al. (2013) have argued that point of sales (POS) is a fast-rising business in Nigeria as criminals and armed robbers now have significant number of POS deployed in their network. They further states that this network is fed by some illegal merchants stealing terminals from accredited dealers. This situation is very disturbing as armed robbers now go about cities with POS machines forcing their victims to effect cash transfers to designated accounts. Davis (2020) asserts that the digital revolution in the banking has resulted in an equivalent revolution in e-banking frauds. Davis (2020) further stated that in order to meet the need for financial inclusion, there is needs for expansion of new technologies and innovations which would help in making it more economically viable for banks to reach the unbanked or underbanked populations. Technology has leap frogged from branch banking to e-banking and now, mobile money, which has helped to create pockets of strength even among the less financially inclusive countries.

Adeoti, & Oshotimehin, (2011) notes that armed criminals who specializes in swindling and attacking POS operators are on the prowl across the country, dispossessing innocent POS operators of money and other items, a development that excluded many residents from financial inclusion. They further stated that hoodlums perpetrate their evil acts in broad daylight, particularly in areas that are not close to police stations and other security agencies. Also, apart from using buses for their evil acts, it was further revealed that the criminals also use bikes to carry out their attacks. The development has forced many POS operators to keep the money they use for

transactions in places that are very far from POS machines. Often times, these POS operators abandon their shops and run away for fear of being attacked by the criminals. In addition, Wada, & Odulaja, (2012) asserts that the activities of these criminals have instilled fear in most of the operators as they now scrutinize their customers before attending to them. Apart from stealing the cash belonging to the operators, most times the criminals at gun point force their victims to transfer the remaining money in the bank to their accounts.

Studies have further revealed that the situation is even worse in rural communities and the outskirts of the communities as operators in these areas are complaining of incessant attacks. Adeoti, (2013) asserts that some of the POS operators decried incessant attacks on them by unknown gunmen. He noted that the robbers have continued to attack them in broad daylight, stealing their money and most times, taking their POS machines. All these is attributed to the high level of unemployment in the country (Adeoti, 2013). Similarly, Adegbeie, & Fakile, (2012) observed that there are gaps in the banking system which fraudsters take advantage of to rob unsuspecting individuals. They noted that illegal POS operators can get a terminal in two ways; one is that they may steal it from petty traders who are now seen having POS terminals. When such terminal is stolen, the thief can send a mail to the bank that he has opened a new account which should be linked to the POS machine. Also, they stated that the criminals can disguise as merchants and forge documents knowing that some banks are negligent in the thorough assessment of customers. Adegbeie, & Fakile, (2012) asserts that banks should be able to visit the said business location to verify if it exists or if its legal or illegal before giving out the POS machine. For Bankole (2010), asserts that some fraudulent POS agents installed chips that read and copy users' account information and use such to have unauthorized access to their accounts.

Furthermore, with the growth in the use of electronic payments, criminals have found yet another means to increase their nefarious activities of fleecing innocent victims of their money. They employ methods such as counterfeiting, cloning, malware attack, identity theft, card trapping, and phishing, among many other methods to defraud and steal from users of electronic payment platforms. Most criminals are known to target all economic entities, as long as they exhibit weakness in their structure that can be exploited. Adegbeie & Fakile, (2012) holds that economic and financial crimes are the greatest obstacles to national economic development

considering its effects on revenue. Akenbor & Oghoghomeh (2013) notes that financial crimes in any organization leads to economic loss, loss of goodwill, loss of staff and in extreme cases-business failure. The adoption and widespread use of electronic payment platforms have come with benefits and related challenges. Wada & Odulaja (2012) states that the proliferation of electronic payment platforms has considerable impact on the Nigerian financial system by expanding financial services, improving speed of transactions and reducing cash handling with its attendant costs. Also, Ibanichuka (2019) studies shows the relationship between electronic frauds and financial performance of commercial banks in Nigeria and asserted that the desire to reduce banks' operating costs and improve financial performance led to the deployment of electronic banking channels.

Edori (2018) stated that financial crimes are carried out by individuals, corporate institutions, as well as organized crime groups with a view to obtaining criminal prosperity. Often, the victims can be individuals, government, institutions or the entire economy. Financial crimes are not peculiar to any country because it is a global problem. The prevalence of financial crimes in Nigeria was one of the over-riding justifications for the establishment of the Economic and Financial Crimes Commission (EFCC) and Independent Corrupt Practices and other related offences Commission (ICPC) and the Nigeria Financial Intelligence Unit (NFIU). Edori (2018) further notes that economic and financial crime in Nigeria is deeply rooted in almost all the aspects and levels of the economy, with the attendant negative effects on the economy. With electronic-banking gaining ground in Nigeria and other parts of Sub-Saharan Africa, through the myriad of electronic payment platforms, customers and online buyers are facing greater risk of unwittingly passing on their personal information to fraudsters. Hackers defraud people illegally and frequently via deploying various schemes to obtain the information needed to access the peoples' accounts who may have unwittingly disclosed their card details, as well as giving access to those who have taken a career in fleecing people. This ugly scenario has been accentuated by the absence of enabling laws, specifically dealing with card-related crimes which has led to creating loopholes for criminals to operate without check.

4. Theoretical Framework

4.1 Technology Acceptance Model

This model was introduced by Venkatesh & Davis (2000) to explain why users adopt or reject an innovative information system that offers an explanation for acceptance and usage behavior of information technology. The theory states that an individual's behavioral intention to adopt a system is determined by the perceived usefulness and perceived ease of use. The theory extended the constructs and included additional determinants of perceived usefulness and usage intention constructs. This model helps to understand how the effects of these determinants change with increasing user experience over time with the target system. The model incorporates additional theoretical constructs spanning social influence processes and cognitive instrumental processes and explained that the additional constructs- social influence processes (subjective norm, voluntariness, and image) and cognitive instrumental processes (job relevance, output quality and result demonstrability) significantly influenced user acceptance (Venkatesh & Davis, 2000). The model framework holds that the characteristics of the business organizations such as the size of the organization, and the year of establishment could influence the adoption of Point of Sales (POS). According to Bankole (2010), the age and size of an enterprise are determining variables in adoption decision, the age in this case means the number of years of establishment of the business organization, while the size is whether the organization is small, medium or large scale.

The subjective norm is a person's perception that most people who are important to him think he should or should not perform the behavior in question (Fishbein & Ajzen, 1975). These norms represent the expectations of other people regarding the performance of a particular behavior. Thus Subjective Norm represent how a person is influenced by the perception of his/her behavior by reference people such as family, friends, colleagues, business counterparts, competitors, etc. Fishbein & Ajzen further explained that intention originates from two determining factors; the first factor is personal in nature and is reflected in one's attitude, while the second factor is subjective norm which reflects social influence. There is a significant body of theoretical and empirical evidence regarding the importance of the role of subjective norm on technology use, directly or indirectly (Haghighi, Rahrovay & Vaezi, 2012; Hsu & Lu, 2004; Kim, Shin & Kim, 2011; Venkatesh & Davis, 2000). Therefore, the paper

suggests that subjective norm influences the adoption of Point of Sales (POS) by business organizations. It is for this reason that the theory was adopted as a guide for the study.

5. Research Methodology

Karu is one of the Local Government Areas created in 1991 out of Keffi Local Government Area of Nasarawa State. Karu Local Government Area has five indigenous ethnic groups - Gbagyi, Koro, Gwandara, Yeskwa and Gade. Karu Local Government Area shares boundaries with Nasarawa Local Government Area in the Southeast, Panda in the North and Abuja (the Federal Capital Territory of Nigeria) in the West. The population of Karu has been projected to be 1,068,480 (NPC Projection, 2022). The population of study comprised of twenty

(20) businesses from the study area, comprises of Medicine, Pharmaceuticals, Oil/Gas, Electronics, Electricals, Book Publishing/Shops, Bookstore, Agriculture, Agro-allied industry, Education, Telecommunication, Computer, Technology, Fashion design and Lifestyle, Event management, Entertainment, and Supermarket/Stores etc. In this study, the sampled population was 680, with this population and the margin of error of 0.05 confidence level of 95% and with the recommended sample size of the study based on the total population of the selected Point of Sales (POS) Business Operations is 246 using the Research Advisors (2006). 246 questionnaires were administered to respondents in the study area, and only 215 were filled and returned. Chi square was used for the analysis at 0.05 level of significance as well as in-depth summary and code used for the analysis.

6. Analysis and Discussion of Findings

Respondent Responses on Criminal Acts and Point of Sales (POS) Business Operations in Karu LGA.

Responses	Christians	Islam	ATR	Total
Yes	100	85	3	188
No	10	15	2	27
Total	110	100	5	215

Source: Field Survey, 2023.

Contingency Table

Cells	O	E	O – E	$\Sigma(O - E)^2$	$(O - E)^2/E$
1	100	96.2	3.8	14.44	0.15
2	85	87.4	-2.4	5.76	0.07
3	3	4.4	-1.4	1.96	0.45
4	10	13.8	-3.8	14.44	1.05
5	15	12.6	2.4	5.76	0.46
6	2	0.6	1.4	1.96	3.27
Total	215				$\Sigma 5.45$

Based on the statistical analysis, finding indicates that there is no significance relationship between criminal acts and Point of Sales (POS) business operations in Karu Local Government Area of Nasarawa State, Nigeria. Although previous studies have shown that there is a significance relationship between criminal acts and point of sales operation. These findings were in line with Edori (2018) who stated that financial crimes are carried out by individuals, corporate institutions, and organized crime groups with a view to obtaining criminal prosperity. Edori (2018) further noted that hackers defraud people illegally and frequently via deploying various schemes to obtain information needed to access peoples' accounts and that this ugly scenario has been accentuated by the absence of enabling laws, specifically dealing with card-related crimes which has led to creating loopholes for criminals to operate without checks. In addition, Adegbie &

Fakile, (2012) holds that economic and financial crimes are the greatest obstacles to national economic development considering its effects on revenue. Akenbor & Oghoghomeh, (2013) who also note that financial crimes in any organization leads to economic loss, loss of goodwill, loss of staff and in extreme cases- business failure. They further noted that financial crimes can also result in loss of livelihood to individuals. Interview carried out with Point of Sales (POS) Business Operators in Karu Local Government Area of Nasarawa State have shown that robbers break into houses of these operators at midnight or anytime of the day with guns in their hands, and victims are ordered to furnish their ATM cards, as well as disclose their pin numbers, which are then confirmed with POS device before the cards are taken away. The robbers proceed to withdraw as much cash as possible before daybreak until when the incident is reported to designated

banks and cash withdrawal stopped. All this may sound incredible, as it seems to defeat the purpose of Central Bank of Nigeria's (CBN) cashless policy, aimed at reducing the volume of physical cash in the system and protect bank customers in their transactions. The CBN in exercise of its powers in Section 47 (3) of the CBN Act 2007 (as amended) issued guidelines on the maintenance of adequate and reasonable financial services for the public, ensure high standards of conduct and management throughout the banking system, as regards the Point of Sales (POS) (CBN, 2013).

7. Conclusion and Recommendations

The importance of Point of Sales (POS) business operations cannot be overemphasized because of its electronic means of carrying out transaction in Nigeria. As a critical factor for any successful business, the necessary infrastructure such as internet access that would make the cash-less policy not to work should be made available. It is imperative to strengthen and support Government's strategy on financial inclusion compliance to rules and regulations on the management of agent banking so as to prevent money laundering, terrorism financing and other predatory crimes that may be perpetrated by fraudsters due to the vulnerable nature of the business. The paper therefore recommends that:

- Competent authorities saddled with inspection responsibilities should ensure compliance on all guidelines and regulations issued by CBN and other sector regulators on agent banking guidelines on adequate record keeping of transactions.
- Implore latest transaction monitoring systems for detecting anomalous transactions in line with international best practice and grant license to people of integrity to avoid abuse of the system, and CBN should ensure banks comply with their obligations to monitor agent's activities.
- The operators should be routinely trained and re-trained to identify red flags and indicators of POS machine. They should keep proper records of transactions on customers and the procedure for reporting suspicious activities of suspicious customers.
- Report suspicious activities through relevant channels, and liaise with banks to acquire electronic record tracking devices such as the biometric authentication machine that would help verify customers in case of any fraudulent acts and maintain integrity and professional ethics in the

course of their work with a continuous review of products and services with the risks associated.

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History of the 1950 Ibadan Conference and the Entrenchment of Regionalist Politics in Nigeria

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Abstract. The people of Nigeria demanded greater political participation in the administration of their territories in the post-World War II period. The process of regaining independence from the British Colonial government culminated in various constitutional conferences in Nigeria. The January 1950 Ibadan Conference was one of these conferences organised. However, the conference rather than being a tool for integration of the politics and people of Nigeria became an avenue through which regionalist politics became part and parcel of Nigerian political terrain. Its significance was visible in the entrenchment of regions as centres of political power control with all the executive powers under regional premiers. Each region became distinct and separate from other regions, whereby regional political parties became centre of politics, rather than national integration. This was a clear demarcation from the existence of the North, West and East as administrative centres only. This act in the long run, defeated the objective of the nationalist struggle, which propagated the unity of Nigeria as a single political and economic entity, rather than a divisive unit created based on myopic standing and ideas of regionalism. This research will employ the use of primary source in the form of Proceedings of the January 1950 General Conference, autobiographies and account of participants, and secondary sources which will enable us to reconstruct the history of that historical development in Nigeria.

Keywords: Nigeria, regionalism, politics, integration, nationalist

1. Introduction

The formation of a unified Nigerian state serving the general and common interest of the people of the Nigeria area was the aim of the nationalists' struggle.

There was the formation of nationalists' fronts, using a common ground with the formation of nationalist parties, such as Nigerian National Democratic Party (NNDP) in 1923, National Youth Movement (NYM) in 1938, and National Council of Nigeria and Cameroons (NCNC) in 1944. These political parties started on a nationalist footing and their activities were significant in the independence struggle against the shackles of British colonial domination. In fact, the activities of the nationalists' struggle served as a heavy blow to the colonial government, with the Nigerian labour strike of 1945, which was anchored and supported by the NCNC. Therefore, in order to curtail the power of the nationalists' movement and prevent the emergence of a unified Nigeria, the colonialists transfigured the regions into centres of political power as independent entities by organising the Ibadan Conference of 1950, which became a prelude to the Macpherson Constitution grafted in 1951. Consequently, there was not only the emergence of regionalist politics but it became part and parcel of Nigerian politics. This is so, as political parties such as NCNC formed with a nationalist vision was pushed to the helm of regionalist politics. The significance of regionalist politics is deleterious to the corporate existence of Nigeria as a single polity, thereby affecting its development politically, economically and socially.

1.1 Development towards a Common National Front

The Nigerian area as a whole was conquered by the forces of the British and subdued the area under its control and Nigerians were rarely associated with the central institutions that administered the territories. It was administered as a separate unit with the southern part administered differently from the Northern Province. The division became more pronounced

with the creation of Western and Eastern Provinces from the southern Province by Boudillon in 1939. This was a move that ushered in the division of the Nigerian area into three different administrative units instead of the emergence of a single political unit. Therefore, for the emergence of a single political unit in Nigeria, there was the emergence of nationalist forces that clamoured for a single unit. There was the emergence of a nationalist movement that clamoured for greater political participation by Nigerians in their affairs. Thus, there was the creation of the Nigerian National Democratic Party under the leadership of Herbert Macaulay in 1923. The party was Nigerian in outlook and was able to win an election in the central legislature. Also, Macaulay co-founded the Daily News Newspaper as a medium to propagate and anchor their struggle against colonial exploitation. The NNDP and its activities was a milestone in the political history of Nigeria.

A further step was taken with the nationalists' struggle, and this had with the formation of another political party, the National Youth Movement (NYM) in 1938. Its activities went further than NNDP, as it came to encompass membership from other parts of the Nigerian territory, as it was not a Lagos-based party. Also, its activities were radicalised in order to press home their grievances of self-government. In fact, it was some of the dissent members of the NYM that established a new radical party, the Nigerian Council for Nigeria and Cameroons (NCNC) whose nature, identity and activities were nationalist in nature. The NCNC was established in August 1944 with the sole aim of working against foreign exploitation and the realisation of self-government in Nigeria. According to Azikwe "The NCNC was founded in order to unify the various elements of our communities, to crystallise the various aspirations of our people and the emancipation of our people from foreign control." The NCNC called upon all patriots to join them in the salvation of Nigeria from the yoke of colonialism. The membership of the political party was indeed national in outlook as people from different segments of the society joined it in different parts of Nigeria, cutting across tribal, religious and social affiliations. Membership was organisational and affiliated branches were defined and recognised by the constitution of the party as the representatives of people in various towns. This means that individuals could only join the party through affiliating with a certain organisation and it was these organisations that joined the party on behalf of the people. By January 1945, the NCNC comprised of 87 member unions constituted of tribal unions, existing political parties, market women unions, and students'

unions whom all joined in order to protest colonial exploitation.

The formation of the NCNC as a force to reckon with in the nationalist movement was not a single, isolated and peculiar event that happened in Nigeria. There were similar happenings in the decolonisation process which were unfolding in West Africa at that time. In fact, there was the formation of the United Gold Coast Convention in 1947, and the following year it organised a riot and protested against inflation and the cutting down of trees that were infected with swollen shoot disease that affected cocoa trees. This move was significant in shaping the hold of colonialism on the Gold Coast. And this event did not go unnoticed in Nigeria as the news percolated in Nigeria and inspired the activities of the nationalist movement.

It was indeed true to its constitution as the NCNC and its activities and programmes were channelled towards the decolonisation of Nigeria. In 1945 there were many grievances against the colonial government including: the enactment of four ordinances considered obnoxious by the nationalists on land and minerals exploitation which were considered exploitative in nature and therefore, were utterly rejected by the NCNC. Also, the Richards Constitution proposal which was published was as well rejected as it did not conform to the aspirations of Nigerians. This shows that the demands were nationalist in nature and not in any way reflecting sectional interest, representing the collective interest of the Nigerian people was detrimental to the corporate existence of colonial administration.

Thus, a few months after, there occurred a movement which shook the colonial government and this was Nigerian Labour Union, which organised a strike in 1945 under its leader Michael Imoudu. About half a million workers participated in the strike, making it the greatest in the history of Nigeria. The workers had their grudges on inflation which had reached up to 150% and they demanded a salary increase of about 100% to be relieved of the hardship, and other grievances of the Nigerian workers. They were not given the necessary attention by the colonial government as they were ignored, which triggered the strike. The strike paralysed the activities of the colonial government for over a month as all sectors were closed including the railway sector, a move that was supported by workers in all parts of Nigeria. This move by the Nigerian workers was a watershed in the independence struggle of Nigeria. Also, the activities which unfolded have shown that there was a move towards the development of a pan Nigeria movement

towards the actualisation of independence. The general opinion was that Azikwe and the NCNC were the brains behind the strike as they engineered, nurtured and supported it. Thus, in July 1945, The West African Pilot and the Daily Comet were banned for supporting the strike.

It is interesting to note nationalist's activities were supported by the use of combative journalism. There was the establishment of newspapers that championed the struggle against colonial exploitation. The West African Pilot established in 1937 and the Comet newspapers left an indelible mark in the history of the nationalists' movement in Nigeria. Obafemi Awolowo argued on the significance of the west African Pilot "..... whatever its literary defects, was a fire-eating and aggressive nationalist paper of the highest order" The newspapers played the role of educating the people on the exploitative nature of the colonial administration and the anti-colonial struggles were widely covered. The newspapers gave wider coverage to the 1945 strike which made it receive wide attention from the public which in turn did not go well with the British colonialists. Also, the press was important in articulating and conveying political ideas to the people.

The significance of the move towards the development of a nationalist movement has shown the unifying effect of binding people and groups together, who worked towards the decolonisation process on the one hand and on another hand a wrong signal was sent to the British, that if they allowed the people to come together their days were numbered in Nigeria. After, the British were not in Nigeria on humanitarian grounds. They came for the human and material exploitation of Nigeria. It is, therefore, a clear indication that the general awareness of their rule amongst the people was detrimental to their continued rule. Therefore, it was likely that the British were going to orchestrate more divisive tendencies that would thwart the nationalist struggle and in the long run prolong their rule.

1.2 The emergence of Sectional Divisive Politics

Therefore, for the British to curtail the development of a national front in the struggle against colonial rule they introduced the Richards Constitution in 1946. A constitution that was designed to breach the unity and corporate survival of Nigeria as a nation whereby the unity of the people is prioritised. The creation of regions was given prominence, which was a move towards division among the people. This does not imply that regions were first created in that period;

rather, at that particular period regions were given political power which changed their former position as administrative units only. Also, there was an attempt to link the indirect rule system with the Crown Colony method of administration. And this was not all that the constitution offered in terms of division of the people, there was the imposition of an undemocratic system of election, using the Electoral College. The usage of the Electoral College was an undemocratic system of selection of officials from the regional legislature, which is a bottleneck to a wider representation of the peoples' interest. In fact, it was a move towards the prevention of radical elements from being part of the decision-making in the regions. This was a constitution viewed as an imposition, without consultation with the people.

The administration and power control remained in the hands of the British colonialists, who embedded their rule with all forms of exploitation of human and material resources in the Nigerian area. Moreover, the income or property qualification of £100 for voting representatives in Lagos and Calabar was a huge blow to the rights and aspirations of the people, who wanted to vote and be voted for into office without any form of restriction. This was a move to dwindle the strength of the people towards integration into strong trade unions to fight colonial exploitation. There was the existence of a legislative council which was dominated by the British. In fact, the chiefs remained as stooges, without any form of power vested in them. It was until 1947 that there was a legislative council which had representatives from different parts of Nigeria. This means that before that period in 1947, there was no central representative to serve as a unifying factor for the people of Nigeria. This explains the fact that before the period the Nigerian people did not have a sense of belonging to a single entity that command their dedication and loyalty in terms of serving the interest of a nation. The exploitative and discriminatory nature of the colonial administration made some Nigerians organise themselves in groups to challenge the status quo which culminated in the formation of political parties within the national interest.

However, the imposition of the Richards Constitution was a kind of method and way of challenging the national unity which was beginning to unfold. The imposition of such divisive politics instead of a national integration did not go unchallenged by the nationalists. After all, it was a move to create division and independent development of the regions instead of promulgation of policies that would enhance the unity of the Nigerian people. The unity of Nigeria, which was beginning to manifest was visible in the

support the people of Nigeria granted the NCNC during its tour in 1946.

The NCNC decided to carry out protests and demonstrations against the Richards Constitution in order to inhibit the development of regional politics. Their radical ideas manifested in their writings in the Daily Comet Newspaper which were channelled towards the overthrow of the exploitative regime. These write-ups were visible under the editorship of Anthony Enahoro of the paper. Indeed, the activities against the British colonial policies were radical in nature by radical proponents who later formed the Zikist Movement which was radical in outlook and resistance to exploitation. Therefore, the struggle against the constitution took a new dimension which was pan- Nigerian in outlook.

As a form of a radicalised move towards resistance to the exploitative tendencies and division of the Nigerian people into enclaves, the NCNC decided to embark on a Nigeria-wide tour to galvanise and educate the people against the imposition of division amongst them as contained in the Constitution. Thus, the major way to inculcate knowledge of the happenings was only by educating the people about it. That was why Herbert Marcoulay, Nnamadi Azikwe and Micheal Imoudu were elected to lead the delegation on the tour. They educated chiefs and rulers in different Nigerian communities. In fact, they travelled to different communities in Nigeria and Cameroon. About 153 communities were visited covering all the regions of North, East and West. They were there to educate the people and seek for their mandate in protesting against the Constitution in London.

It should be noted that, all nationalists were against the exploitative nature of the Richards Constitution. It was the method and form of fighting against it that differed. The NYM believed that the Constitution imposition could be fought on the Nigerian soil. While the NCNC believed in sending a delegation to the Colonial Secretary that was why they travelled in order to seek for peoples' mandate in that regards. The people gave their mandate and even went to the extent of contributing money to support the nationalists' course embarked upon. Thus, the people of Nigeria contributed the sum of £ 13,500 to protest against the Constitution in London.

Indeed, the national peregrinate was so effective as it created awareness on the nationalist struggle among a larger chunk of the population located in the interior of Nigeria. On the other hand, it created fear, in the minds of the colonialists of the move towards national integration. This was why they did not

remain unconcerned they had to make a move to sabotage the struggle against national unification. Thus, on the tour Kalu Ezera stated that:

"In fact, the Nigerian government was so worried about the effectiveness of the NCNC tour, the Governor Richards himself undertook to tour several of the places visited by the NCNC leaders to counteract the propaganda effect of the latter."

Thus, in June 1947, Azikwe led an NCNC delegation to protest against the Constitution in London. They were received back by people in thousands as they returned to Nigeria. However, the travelling of the NCNC to London did not yield much result, as they were not given any concession by the Colonial Secretary. This had an adverse effect on the NCNC which led to the dwindling of its light in the eyes of many Nigerians, who saw its failure in reversing the obnoxious policies enshrined in the Constitution. The party remained as a shadow of its former self and much of its existence survived on the pages of the newspaper. This development dealt a heavy blow to the NCNC that it was unable to recover from its standing as a national party. In the same vein, the precarious position found by the national party was further exploited in the new development orchestrated to curtail the development of a national front in the struggle against colonial rule.

It is significant to note that, an attempt towards frustrating the development of nationalist politics was planted by several groups such as the coinage of 'northern' and 'southern' regional enclaves by the people themselves. Some of the politicians in the northern part of the Nigeria such as Abubakar Tafawa Balewa referred to as the other people from southern part as "our neighbours", which was an indicator of an emergence of enclaves. Similar development occurred with the formation of *Egbe Omo Oduduwa*, a Yoruba cultural group to thwart the emergence of a nationalists' front and to frustrate the effort of the NCNC in the emergence as a nationalists' party. Thus, later developments made the seed of regionalism sown by the Richards Constitution to germinate and bear fruits of sectionalism in Nigeria.

2. The 1950 Ibadan Conference and the Emergence of Divisive Politics

The Richards Constitution met with lots of criticism by the Nigerian leaders. The effort of the national party the NCNC cannot go unnoticed. The NCNC delegation to London to protest against the constitution yielded some fruits even though it was made to look otherwise. It is wrong to believe the

delegation did not have any impact on the planning in the colonial office, and even on the administration of Nigeria. Thus, the British learning from their Gold Coast experience decided to halt disastrous consequences and embarked on a review of Richard Constitution which was supposed to be reviewed after nine years, but the situation in Nigeria at that time made it imperative to review the constitution in what culminated in the January 1950 Ibadan Constitutional Conference in preparation of the Macpherson Constitution of 1951, by the new Governor appointed into office in 1947, Sir John Macpherson.

Some of the major criticisms heaped on the Richard Constitution were that, it was an imposition on the people; without consultation. Thus, that was why the legislative council composed a committee composing of all the unofficial members, including the chief Commissioner, the Attorney General, the Honourable Financial Secretary and the Acting Commissioner of Colony. The Select Committee Recommended that consultation should be at the Provincial and regional levels, as well as the centre. Thus, based on the recommendation public hearing was organised at the villages and districts, to Provincial and Divisional Conferences, and later culminated in the Regional Conferences up to the National Conference. According to Hugh Foot:

It was I believe the most ambitious plan for public consultation ever undertaken in any colonial territory. And its purpose was of course not only consultation but also the awakening of political awareness in every corner of the country.

The Constitution revision gave great attention to people in the rural areas while the nationalists and the educated groups based in the cities were sidelined. This was done in order to inhibit and dwindle the influence of the educated groups towards radical nationalism. Also, it was a move toward incorporating and propagating regionalists' ideas in the review of the new constitution. This is so because for example in the Northern Region, Nigerians from other parts of the territory were barred from participating in the exercise. Thereby sowing the seed of sectionalism, and it was becoming clear at that time that the issue of regionalism was beginning to take shape in the history of Nigeria.

Alkasum Abba argued on the exercise of revision of the Richard Constitution that:

So, it was a political process that was undertaken without the participation of politicians and political parties; and, strictly speaking, it was conducted within the context of regions and confined to regional identities. The purpose of that exercise was to allow

regional consciousness to develop, grow and consolidate outside the framework of pan-Nigerian politics and political parties.

Following the consultation and conferences, the recommendations from the three regions and the Colony of Nigeria were in October, 1949. Then these recommendations were reviewed by the Drafting Committee of the constitution, which completed its work in November, 1949. On the 9th -28th January, 1950, there was a General Conference in Ibadan in order to discuss all suggestions and recommendations at the lower level. The General Conference was charged with the sole function of deciding the Nigerian political system and it was in it that recommendations were to be made to the Governor and Secretary of State.

The General Conference composed of twenty-five representatives from the regional conference, twenty-five unofficial members of the representative council and three unofficial non-Nigerians. The meeting was headed by the Attorney general of Nigeria who had no vote.

The views of the participants from the regional Conferences became the bedrock of the discussions at the General Conference. These views were published in October, 1949, prior to the General Conference. Of course, all the three regions favoured the establishment of a federal system of government however with a much more increase in regional powers both in the parliament and the executive level. However, there were divergent and similar opinions on matters as regards to the composition of parliament from the regions to the centre, appointment of ministers from the three regions. All the three regions favoured the establishment of federal and regional parliaments, and the regional parliament should have the power to legislate on residual matters as the centre. In terms of election the Northern and Western Regions favoured the employment of Electoral Colleges while the Eastern Region favoured a direct Election. The fact is the road to regionalism was opened up at that time.

The procedure of the General Conference was a general debate on the proposal from the regions. At the end, recommendations were made which include more and more regional autonomy in Nigeria. At the regions more political legislative and executive powers were devolved to the regions, making the regions semi-independent in the corporate existence of Nigeria. This means that the General Conference became an avenue where by the regions took centre stage in the political development of Nigeria with

powers to make and implement laws for the regions, making the emergence of three separate units with different orientations each for its people in their respective regions instead of resolving to have a united Nigeria where people would look up to for unity, harmony and development of a single entity. A clear diversion from the earlier period where by the region only had administrative powers under the Richards Constitution.

On the nature of the Ibadan Conference Alkasum Abba argued:

That process of the constitutional review culminated in the Ibadan General Conference in January 1950. Delegates at that conference were representatives of their regions. This was to ensure that only people who accepted the balkanization of Nigeria into regional political enclaves took part. Thus Dr. Nnamdi Azikiwe and the NCNC refused to participate in the conference. Therefore, negotiations at the Ibadan General Conference, agreements and disagreements were based on regions and within the context of identified regional interests, simply put Nigeria's national interest was relegated to the background!

Indeed, the *modus operandi* of the whole exercise was division of the country along regional lines for divide and rule; this is because Lagos was suggested to be merged with the Western Region, to ensure that only three units existed. Though this move was opposed by the other two regions and was supported by the Western region, but at the end of the day a select committee recommended the merging of Lagos with the Western Region. Similarly, Kabba and Ilorin which happened to be Yoruba speaking areas thus it was suggested to be pulled out of the Northern Region where it happened to be administered and be part of the Western region. However, at the end, the status quo was maintained as the areas remained in the Northern Region. Thus, the creation of three regions as centres of authority in their own right was completed.

With the provision made in the Macpherson Constitution under the Ibadan General Conference that the stage was set for the establishment of regional parliaments. Indeed, the Macpherson Constitution happened to be the brain work of the General Conference, and it ended up in transforming the regions into more powerful centres of executive and legislative units of government. It gave more powers to the regions. The regions were transformed from administrative units as provided under the Richards Constitution, to centres of political power in their own right. In each region there was the provision for the office of premier who happened to

be the head of a region vested with executive powers, as well as regional ministers and parliaments who were given absolute powers in the implementation of policies that affected the regions.

Also, in order to accentuate the existence of regionalism, the legislators at the centre were to come from the three regions. This is significant in ensuring that the legislators represented the interest of their regions and the people of the regions, instead of the representing the interest of the generality of the people. And this was backed up in practice as the allocation to each region was and to the central parliament at that time. This was why it was recommended that the Central House of Assembly consisted of a president, six ex-officio members, one hundred and thirty-six (136) members to be elected from the regions to the centre; and it was in the discretion of the governor to appoint members to committees not adequately represented in the House of assembly. What is clear is that it was a move towards the tripartite division of Nigeria based on regional interest.

The breakdown of the representation of the 136 members from the regional parliament to the centre is as follows: sixty-eight (68) of the members were to be elected from the Northern Regional Parliament to the centre, thirty-four (34) representatives were to come from the Western House Parliament and thirty four (34) were to come from the Eastern Region to the centre. Indeed, the representation to the Central legislature was recommended to come from the Regional Parliament during the conference. The Northern Region recommended that the number of representations from the region to the House of Representatives should be based on population, which happened to double that of the West and East. While the other regions favoured equal representation.

However, the representation was made based on the size of population in each region. This was why the number from the Northern region was equal to that of the East and Western Regions put together. A move opposed by the Western and Eastern Regions, but was later accepted as part of the recommendations. And also, allocation of resources was base size of the population. The division of the three regional parliaments and shouldered with the responsibility of producing representations from the region to the centre was nothing short of creating a path towards implanting disharmony, rivalry and competition between the three regions. Consequently, people began to see themselves as distinct and separate with others from other regions. A process which was

designed to accentuated the division of the country along regional lines and creation of regional identities. What is clear is that, regional interest superseded national interest at the Ibadan general Conference

It was at the Ibadan Conference that election was made an indirect system of choosing representatives through the employment of electoral colleges for the whole territory. On the pretext that only a negligible percentage of the population had the experience of voting, and had an understanding of the nature and operation of a British Parliament. Therefore, the electoral college involved different tiers starting at method was carried out at the village and town level who will successively through a formal gathering elect people to represent them at the division or provincial level. This was done in the absence of local party branches at some village. It was set up in order to prevent non-indigenous people from emerging into elected position from the villages. It was made difficult for a non-indigene to be elected at the primaries of the Electoral College. Therefore, the Electoral College made it difficult for foreigners to contest election outside their regions. It was an attempt to make the people at the grass root to choose people amongst them to rule, and prevent the emergence of educated elite in the various political offices.

The sad reality of the matter is that, the General Conference laid the foundation of the Macpherson Constitution and that constitution made no provision for parties to nominate their candidates. Therefore, the only option left was for the parties to become regionally based. The Electoral College has not represented the will of the voter; in fact, the will of the voter to elect people directly to represent them has been truncated. The Electoral College was a system opposed as undemocratic, and yet despite the opposition it was recommended for the whole territory. Therefore, any one contesting into any political position had the opportunity to do so only through the undemocratic form. The only option left for the political parties to participate in the election was to become regionally based. Thus, it was one of the ways through which the Ibadan Conference of 1950 entrenched regionalist politics in Nigeria.

The entrenchment of regionalist politics in the General Conference, which shaped the 1951 Macpherson Constitution in Nigeria, took a clear-cut form, when it became obvious that contesting and winning election has become an affair orchestrated to hold on regional basis, not national interest, Therefore, in order to win election, it was necessary

to form regionally based political parties in the West and North. This was why the Action Group (AG) in April 1951, it was formerly a Yoruba Cultural Group called *Egbe Omo Oduduwa* formed in 1945 for the enlightenment and well being of people of Yoruba descent. It was turned into a political party due to the provisions of the Macpherson Constitution which the Ibadan Conference championed, that only a Yoruba political party could win election in the Western Region. Nnoli argued "AG was born to exploit this new constitutional development; the new party was formed under the prevailing condition in the country the certain avenue to political power was through regional political party." Thus, during that period regions were given authority as centres of political powers. As such the Action Group was established to win election in the Western Region. Udoma argued that the "AG under the leadership of Obafemi Awolowo, Chief Samuel Akintola, Anthony Enahoro for the purpose of General election the party concentrated in the western region. In fact, it was originally a pan Yoruba cultural movement." In the same vein, the Northern Peoples' Congress NPC was formed in October, 1951, formed from a cultural organization that was regionally based called *Jamiyyar Mutanen Arewa*. The NPC was formed as a political party to exploit the provisions of the Macpherson Constitution in the Northern region in competition a rival party the Northern Elements Progressive Union (NEPU), in a bid to dominate the politics of the region.

It is a fact that the AG and NPC were formed to win election in their respective regions due to the provisions made in the Macpherson Constitution. Prior to the Ibadan General Conference there was no political party apart from the NCNC which was more like a national organisation than a political party. This was why Udo Udoma argued that "Nothing appears to have been heard of the existence of any political party nor, if any existed by the role played by it during the introduction of Macpherson Constitution in 1950." It is wrong to assume there was no political party before 1951 in Nigeria; after all, there was the existence of NNDP and NCNC. What is clear is that before that period partisan politics was almost unknown in Nigeria until the entry of NCNC into the political arena.

Indeed, it was in the 1951 General election that the regionalist politics became manifest in Nigeria. The political parties NCNC, AG, NPC came to compete extensively amongst themselves to contest election during the Nigeria-wide election into the regions, in 1951. Though there was no manifest restriction on any party to contest election in any part of the territory during the period in question. NCNC was

the only party that had a national outlook and tried to contest election in all the regions. In the Western region, out of 80 seats in the regional parliament the NCNC won 35 seats, and the AG despite being a regional party ended up with only 29. However, AG was not ready to concede defeat that was why it deemed it fit to forge alliance with smaller parties and at the end of the day the alliance resulted in securing 16 seats and it became a major party with 45 seats, as against NCNC 35 seats in the Western Region. This was how AG dominated the politics of the Western Region. Similarly, in the Northern Region the NCNC formed alliance with NEPU in order to win election in the region, and despite the effort put to it, they were few seats and NPC became the dominant party in the Northern Region.

The emergence of AG and NPC as regionally based parties sowed the seed of regionalist and regionalist politics in Nigeria. This development consequently frustrated the development of nationalist politics in Nigeria. This is so because Nnamdi Azikwe was frustrated out of bid of implanting nationalist politics, as he ended up forming opposition in the Western Region and without any hope of NCNC wining in the Northern Region, then the only option he had was to recline and form majority in the Eastern Region. The NCNC was transformed into regionalists' party and Azikwe into a regional politician. Therefore, during that period there was the emergence of regionalist politics where there was struggle between the three regions for the control of power and resources, instead of the emergence of a national front to fight for self independence. The regions came to appear as distinct units, where rivalry became the watch word.

It should also be noted that, the emergence of the NPC, AG and NCNC in the North, West and East respectively as regionally based parties was the outcome of implanting the Electoral College system of election. As a result of the Electoral College indigenes came to contest the election as sons of the soil. Oluwale Odumosu argued:

As a result of the General Conference the election of 1951, the Eastern, northern and western Regions had been controlled by NCNC, NPC and AG respectively, since election to House of representation was based on electoral system. It was for each party to choose the representation of its own region.

The discussion above has depicted the origin and development of regionalist politics, and we are right to argue that the Ibadan General Conference of January 1950 entrenched regionalists' politics in Nigeria. In fact, the representation and discussions at the General Conference reflect division along

regional lines whereby regional interests were promoted, propagated and implanted. It is clear that, the people who went there championed regionalist' politics and divide the territory along regional lines and south and north politics became preeminent. The conference would have been of an opportunity to forge Nigerian unity and form a nationalist front in the political atmosphere of Nigeria considering the wide representation at the village, town, provinces, and up to the general conference. If all the conferences organized had advocated for national unity there would have been a change in the content of the General Conference and the unity of Nigeria would have been an utmost priority. Politics would not have been on regional basis; rather, any politician could contest for election and be voted for in any part of the country. This would have minimised the disunity, distrust, and division which later came to define politics in Nigeria after 1951.

The people even came to align themselves as part of their regions, that was why the 'northerner' 'southerner' dichotomy became manifest even after political independence in 1960, in Nigeria. Udoma argued "Had this evolutionary process and devolution of powers from the centre to the regions been pursued normally and naturally by further breaking up of the so-called autonomous regions....", the unity of Nigeria was certain and guaranteed. Also, Odumosu further argued on the General Conference and its role of entrenching regionalists politics that:

For the first time the North, East and West sat together to frame a new constitution for 'one Nigeria'. Many issues were addressed which came to plague the unity of Nigeria. The atmosphere of the conference was characterised by promised sectional interest and mutual distrust, particularly between the north and the south, but every speaker made a speech on the need for Nigerian unity.

Therefore, the discussions, deliberations and recommendations at the January Ibadan General Conference in all ramifications were centred on propagating regionalist politics in Nigeria. The Conference propagated the establishment of regional powers inculcated based on regionalist politics. However, it was a move which did not go unchecked as some minority members opposed the recommendations of the conference by opposing the division of Nigeria into North, East and West but into more states based on ethnic groupings. Advocated universal adult suffrage, whereby all adults could vote, as an indication that all people were equal, without any form of discrimination and segregation.

The first minority report was signed by only two people. Later representatives from the Eastern Region opposed the recommendation of the North that only adults of 25 years with 3 years residence in the North could contest an election in the Northern Region. This was seen as a move to prevent people from other areas from contesting for election in the north. However, the general opinion of member at the conference superseded the opposition of the minority as electoral system of election and political agile regions were entrenched and regionalists' politics manifested.

3. Conclusion

Ibadan General Conference of January, 1950, was an avenue used to decide the developments that later led to division and the emergence of regionalist politics in Nigeria. During the General Conference that prelude the Macpherson Constitution, the regions were transformed from administrative units created under the Richard Constitution of 1946, to more centres of political powers. The irony of it all is that, the General Conference was a medium to revise the Richards Constitution, criticised as deficient in the views and opinions of Nigerians. The Ibadan General Conference instead of utilising the opportunity to decide on a unified Nigeria, turned out that it was a forum used to entrench regionalists politics as it ushered in the emergence of Western, Northern and Eastern Regions with executive and parliamentary powers. In fact, the 1951 Nigeria-wide election into the regions saw virile competition between the regions for the control of power instead of the emergence of a united Nigeria. Thus, the Ibadan General Conference was a medium used to entrench regionalist politics in Nigeria.

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Identity Politics and Separatist Movement in Post-colonial Sub-Saharan Africa: The Case of the Nigeria State (2015-2021)

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Abstract. The Nigeria State had fought a gruesome war to keep the country one from a separatist movement in the 1960s shortly after its independence. In Over sixty (60) years of post-independence, the separatist movement demanding for an independent state of Biafra has not faded with the passing of time, rather, it re-emerged in a new cast called the Indigenous People of Biafra (IPOB) with membership in diaspora and at home. Even when the Nigerian government had proscribed the group and labeled it as a terrorist organization, the group may have employed the nuances of globalization and social media in registering their presence and attacking the government of the day. This study seeks to interrogate the socio-political dynamic of identity politics that has shaped and sustained the agitation for an independent Biafran state from the sovereign Nigerian state for over five decades. The study employed ethnography, qualitative data and content analysis in its methodology. This work argues that identity politics along religious and ethnic lines has sustained the call for the Biafran nation in the post-colonial Nigerian state. The study concludes that the Nigerian state is politically bifurcated along ethnic and religious lines and these have sustained the perennial call for a sovereign Biafran State. The study suggests that structural imbalances within the Nigerian state should be properly addressed to reflect equity, justice and fairness among the components units that constitutes the Nigerian state

Keywords: Identity Politics, Biafra, Agitation, Separatist Movement and Post-Colonial Africa.

1. Introduction

Post-colonial sub-Saharan Africa is one region in the world that has been strained by multifarious secessionist groups especially in the West African sub-region. According to the West African Insight,

Centre for Democracy and Development (2017), from the late 1960s to the late 1990s, many countries in West Africa experienced a growing demand for autonomy, right to self-determination and secession, which threatened the territorial integrity of some nation-states. Currently, the region is witnessing a resurgence of these separatist movements; from the Biafra agitation in Nigeria, separatist movements in Northern Niger and Mali and the Cassamance in Senegal and Gambia. These have received divergent responses from host governments in these countries but little has been done to lessen the tension. These separatist movements are mainly caused by inequalities, failure of state development policies, ethnic chauvinism, problems with leadership, and a lack of respect for resolutions of peace accords. This is further exacerbated by the growth of a criminal economy that affects these countries. Outside of West Africa, we have the Ambazonian movement in southern Cameroon. Nigeria is peculiar in terms of its ethnic and religious diversity which has led to many internal conflicts, including the resurfacing of the separatist movement for the sovereign state of Biafra. While causes of the re-emergence of a call for Biafra are divergent and controversial, it may be attributed to continuous neglect and marginalisation of Igbos in Nigeria, unsettled group grievances, and weak democratic structures (West African Insight, Centre for Democracy and Development, 2017). The government's militarist approach to preventing the agitation, in the guise of protecting continuous existence of the Nigerian State, has further aggravated the tension. Amid the quest for national unity, it is important that the government adopts practical strategies to address the problem. Power sharing, healing of memories and development of the South East could be among several options the government may consider in bringing about lasting peace in the Southeast.

2. Theoretical Framework

For the purpose of theoretical underpinnings, this study shall harvest and use two relevant theories which are the theories of Nationalism and Invented Identity and the Relative Deprivation Theories.

Definitions of the concepts and theoretical debates surrounding nationalism have long dominated political science. Studying the concept of nationalism contributes to the understanding of ethno-national conflicts and its causes.

According to Benedict Anderson (1991, 6-7), nations are a political project of identity creation, employed to create a nation and to achieve a coherent collective identity, and in the mobilisation of people within a certain territory. He contends that the nation 'is imagined as a community, because, regardless of the actual inequality and exploitation that may prevail in each, the nation is conceived as a deep, horizontal comradeship. Ultimately it is this fraternity that makes it possible, over the past two centuries, for so many millions of people, not so much to kill, as willingly to die for such limited imaginings' Charles Tilly (1994: 133) also calls such nationalism 'state-led Nationalism' or 'state-building nationalism'. According to Anthony Smith (2002: 135) "the state is a territorial entity with a jurisdiction that, although sovereign, is also strictly bounded; and the sense of boundness, of inclusion and exclusion, is vital to the definition of the community of citizens". He, identifies historic territory, legal-political community, equality among citizens, common culture, and common ideology as main component of the modern nation. (Smith, 1991:11) Similarly, Ernest Gellner (2006: 1) states: Nationalism is a theory of political legitimacy, which requires that ethnic boundaries should not cut across political ones, and, in particular, that ethnic boundaries within a given state- a contingency already formally excluded by the principle in its general formulation-should not separate the powerholders from the rest. Gellner adds that, 'nationalism is not the awakening of nations to self-consciousness: it invents nations where they do not exist' (1964: 169). Elsewhere he maintains 'Nationalism is a political principle which maintains that similarity of culture is the basic social bond' (1997: 3). A nation, thus, is imaginary, invented by historical and political processes and socially constructed. Political identity is employed to merge people, based on the sense of common identity within a given territorial entity. Hans Cohn (Kohn, 1944: 6-10) asserts that nationalism is 'a state of mind' 'an act of consciousness' and maintains that, 'nationalism is not a natural phenomenon, not a

product of "eternal" or "natural" laws; it is a product of the growth of social and intellectual factors at a certain stage of history'. In so doing, the role of elites, the media, publications, law, regulations, and the education system in portraying other nations negatively and mistakenly glorifying the self is crucial (Anderson, 1991: 33-36). These naturally explains ethnic based conflict, secessionist movement and sometimes, ultimately ethnic war.

On the other hand, Ted Robert Gurr (1971: 23) refers to Relative Deprivation (RD) as 'the tension that develops from a discrepancy between the 'ought' and the 'is' of collective value satisfaction, and this disposes men to (resentment and) violence'. According to the definition provided by Gurr, Relative Deprivation is the discrepancies between what people want, their value expectations, and what they actually gain, their value accruing capabilities. Gurr states that: 'the intensity of relative deprivation varies strongly in terms of the average degree of perceived discrepancy between value expectation and value capabilities'. He contends that people are more likely to revolt when they lose hope of attaining their societal values, and the intensity of discontent/frustration '[varies] with the severity of depression and inflation' (1971: 87). Ethnicity, Gurr asserts, 'is the obvious basis for mobilizing oppositions' against the state. Gurr states that, the higher the degree of frustration, the greater the political instability. In short, the intensification of RD with regard to political participation, prosperity, collective/communal values and societal status can lead to a 'decline in ideational coherence' which consequently leads to a breakdown in the social order and to violence. Migdal asserts that 'the state's centrality in people's lives, its relationship to ongoing conflicts in society, people's expressive relationship to it, all depend on its cohesion' (2001: 150). Katzenstein (1996: 15), speaking of how people perceive themselves, states that: 'the answer lies in the issue of identity, in variations in the degree of expansiveness and restrictiveness, with which people and organizations relate to one another'. Gurr, speaking of societal security dilemmas, maintains that in such cases 'the benefit of one group is an automatic loss for all the others. Life is an inelastic pie' (1971: 125). The failure of the state to meet people's value expectations which they believe they are rightfully entitled to can eventually lead to disorientation amongst the citizenry and discontentment on the part of the people towards the state. (Saleh, 2011: 236) Gurr holds that: 'Societal conditions that increase the average level or intensity of expectations without increasing capabilities increase the intensity of discontent' (1971: 125).

Identity is dynamic and changeable over the course of time; ‘People change and adapt’ (Roy, 2004: 9). Buzan points out that societal security as a concept is concerned with states when they are ‘undermined or destabilized by “their” societies, becoming threatened or weakened in terms of social cohesion and identity’ (1993: 24). Societal insecurity occurs when people within a certain geographically defined state assume that their identity is threatened. This perceived threat could be triggered and bolstered by a collective feeling of relative deprivation, be it social, economic, political or cultural. The result manifests itself in societal insecurity. Moaddel, for instance, points out that intensive economic and political insufficiency leads to insecurity within the state. (1993: 5) The discrepancy between people’s expectations and what they can actually attain consequently leads to frustration. Gurr suggests that, ‘the existence of frustration always leads to some form of violence’, secessionism, and other forms of nationalistic agitations.

3. Background to the Resurgence of the Biafran Agitation in Nigeria

The history of Nigeria is faced with several issues bordering unsettled national questions which centres within sensitive national issues like ethnic militancy, politicization of religion, terrorism, revenue allocation, ethnic or group marginalization, corruption, etc. But, one major externalisation of some of these unresolved challenges is the surfacing of groups demanding for self-determination and political independence such as the Indigenous People of Biafra (IPOB), in the South-East (Abada, 2020.). Awofeso (2017), opines that the threat of separatist agitations and secessionist movements are not entirely new to the Nigerian political landscape. According to him, this phenomenon has always been with the Nigerian state, but the dimension of the movement today is rather unprecedented. Hence, this has continued to be a weapon in the hands of agitators in demanding political accommodation ((Alumona, *et al.*, 2017).

Historically, it was Tamuno (1970), who first attributed the origin of separatist movement in Nigeria to the 1914 Amalgamation when he quoted the then Sardunana of Sokoto to have called the 1914 merger of the North and South as “the mistake of 1914”. Tamuno cited Sir Ahmadu Bello’s account who had averred that the North would rather go their separate ways than be joined to the South. Apart from this, there was a call for a separate Yoruba nation in the 1950s within the Action Group socio-political organization resulting from the contentions surrounding the status of Lagos (Awofeso, 2017).

The primary and focal point of this study stems from the Eastern region’s secessionist and indeed the first active separatist movement in Nigeria backed up by both political will and military action. It in 1967 when the then Premier of Eastern Region under the leadership of Lt. Col. Emeka Odumegwu Ojukwu, launched a massive attempt to break away from Nigeria. This was heavily attributed to the killing of Nigerians of the Igbo extract in the Northern Region of the country in a bloody counter coup of July, 1966 (six month after the January 15, 1966 coup that saw military personnel of Northern extracts as primary victims) (Ezemenaka and Prouza, 2016). The wanton killing of the Igbos and the perceived “I don’t care” attitude of the Nigerian state made the Igbos see themselves as a threatened species, hence, the need to create an independent Biafran state where they would be safe and their property protected. The call for a separate Biafran state culminated to a civil war where over 1.8 million civilian of Igbo ethnic group died ((Ezemenaka and Prouza, 2016; Awofeso, 2017).

This notwithstanding, the Nigerian state has been accused of doing little or nothing to correct the anomalies that resulted in the call for a separate Biafran state. Instead, the Igbo ethnic group has constantly suffered socio-political and economic marginalization within the Nigerian state. Like all people who lost in a war, the thought of Biafra evokes a strong feeling of common victimhood in an average Igbo man. This becomes a rallying point for the resurgence of the Biafran separatist agitation especially with the continued sense and feeling of marginalization from the successive Nigerian government.

The resurgence of separatist movement started with the Ralph Uwazurike organization which he called the Actualization of the Sovereign State of Biafra (MASSOB). This group emerged in the Fourth Republic Nigeria in 1999 and declared a non-violent agitation. However, the group and its leader were accused of back patting by the Nigerian government and this led to the fractionalization of the group into other movements such as the Ben Onwuka led Biafra Zionist Movement (BZM) and the Nnamdi Kanu led Indigenous People of Biafra (IPOB), (Amanambu, 2017). However, it was the IPOB that became more popular after it succeeded in mobilizing millions of Igbo youths’ world over.

Consequently, Nnamdi Kanu was able to renew the agitation for Biafra by revamping the defunct Radio Biafra and using it as a platform to educate and sensitize Igbos both at home and in diaspora on the need for an independent Biafran state. His approach

in the new call for a Biafran state, protest, hoisting of flags in designate areas in Eastern Nigeria and the use of incisive and inflammatory statements that appeals to the Igbos but derogates the Nigerian government. Consequent upon the above, the renewed separatist agitation has continued to raise national eyebrows particularly as it pertains the indivisibility of the country. The activities of IPOB have made separatism an open movement in Nigeria. Before then, it was covert cum verbal threat. IPOB approach and modus operandi had divergent implications on the Nigerian state and this was attributed to a number of factors such as the country's heterogeneous ethnic composition, religious intolerance, cultural diversity, controversial policies, constitutional imbalances and most importantly, identity politics. This is in line with the view of Adangor (2017), who opines that separatist propensities in Nigeria are caused by the country's heterogeneous ethnic composition, cultural diversity, vast size, varied administrative practices, etc. Ibeanu, Orji and Iwuamadi (2016) highlight the way in which feeling of collective victimization that connects all secessionist movements together cannot be overlooked in a sincere attempt to understand the resurgence of separatist agitation in the South-east, Nigeria. Thus, it is against this backdrop that this study seeks to situate the resurgence of Biafran separatist movement within the context of identity politics within the Nigerian state in the Fourth Republic.

4. Extant Literature Review

Jega (2000), opines that the previous secretary of the United Nations avers that Negative types of identity politics are a powerful and possibly dangerous phenomena. In this way, that Great consideration should be taken to perceive, confront and control them otherwise they might annihilate the potential for peace, harmony and progress that the new era holds in store. The word "identity" is a household concept in social anthropology and psychology, especially by structuralists and post-structuralists, and it has acquired uncommon acknowledgment in the post-modernist writing. As a socio-political concept, "identity" has both an individualist and a collective significance. Regardless, it can just be defined as "a person's sense of belonging to a group if (it) influences his political behaviour" (Erickson, 1968). It is believed to be "always anchored both in physiological 'givens' and in social roles..." The people who share an interest share an identity; the interest of each requires the cooperation of all (Pye, 1962). In this manner, conventionally, identities functions as revitalizing and arranging standards of social activity inside the common society, and in

state-civil society relations. They illuminate and guide political conduct, and they add dynamism to political conduct with regards to plural society (Parry and Moran, 1994). Consequently, Parry and Moran have seen that in cutting edge social orders, what is however critical as superseding national identities may be the various identities which go to make up plural societies. Identity is not just about individuality and self-awareness, but additionally and particularly about identification with, and obligation to, shared values and convictions, in a social collectivity into which an individual has a place of belonging. At some random time, an individual might have numerous identities, every one of which may consistently make them bear on their political role and social conduct in the society. Subsequently, as Adesina noted, where identities are concerned, an individual is Janus-confronted. This implies that identity politics is an instrument of interest articulations and aggregate in the society. Identity politics issues, as such, is essentially legislative issues either beginning from or focusing on guaranteed identity of their heroes (Calhoun, 1994) in national political battles over access to the state and a means of resource allocation. It includes the mobilisation of identity awareness to make a mass base of support for the decision-making classes, and the elites generally, in their factional battles in the resource control process. Likewise, identity politics suggests a somewhat serious level of the emotions going into political and legislative issues. Tamuno (1970) highlight bad leadership, administration and absence of a philosophy with mass appeal.

From the religious dimension of collective identity and how this influences political outcome, Thomson (2007), states that "...religious mobilization can often be found at the heart of political competition. As with all social cleavages; fault lines within societies form along these identities, creating opposing interests. These differences of interest, in turn, offer themselves to potential or occasionally violent, conflict." Religious contentions in the perspectives on Jega (2002) can be similar to a situation in which the relationship between individuals from one ethnic gathering and another, or for the most part among ethnic groups, in a multicultural nation like Nigeria, is described by an absence of sincerity, by increased common suspicion and fears, by animosity and by an inclination towards vengeful showdowns. A community encountering ethno-religious strain is, in a real sense, is sitting on a keg of gun powder, and perpetually insecure and unstable. Any minor misunderstanding involving individuals from at least two diverse ethno-religious group could have a catastrophic impact and push things past the cliff.

Within the Nigerian political space, Jega (2000) observes that the Northern region took advantage of the fears of domination by the Southerners, considering their region's economic and educational disadvantages, to mobilise a Northern identity to ensure control of political power with which they hoped to check-mate the perceived threat of Southern domination. Then again, the Southern elites despised the utilization of numbers for never-ending control of political power by the Northern elites in spite of the economic and educational backwardness of the Northern region, and felt bothered by the inverse connection between political power and economic advantage. Henceforth, they additionally mobilised a Southern identity to go against and battle against an apparent treachery and injustice in the matrix of national power. In any case, the assembly of a Southern identity appeared to be ineffectual contrasted with that of a Northern character to a great extent as a result of the distinctive contending ethnic groups in the western and eastern regions of Southern Nigeria. very recently, a similar manifestation of identity politics played out within the country's political space in view of the 2023 presidential candidature and the ensuing election.

Adeyemi, *et al* (2021), maintains that two months after their May 11 meeting in Delta State tagged the 'Asaba Accord', the Southern Governors Forum, met in Lagos State wherein it declared that Nigeria's next president have to be from the southern a part of the United States. Adeyemi states that other long-way accomplishing decisions arrived at as contained in the communiqué released, which was signed with the aid of the convener, Ondo State Governor and Chairman, Southern Governors' Forum, Arakunrin Oluwarotimi Akeredolu (SAN), include a rejection of the proposed allocation of as a minimum 30% earnings generated through the proposed Nigerian National Petroleum Company Limited for the exploration of oil in 'frontier basins' as recognized via Section nine of the recently passed Petroleum Industry Bill(PIB); placing a timeline of September 1, 2021 for promulgation of the anti-open grazing law in all 17 member states; and asking that security agencies should notify them as Security Chiefs in their states before they perform any operation inside their states. On the PIB these days exceeded by the Senate and the House of Representatives, the governors commended the "National Assembly for the development made within the passage of the PIB, however rejected the proposed 3% and insist on the 5% of the oil revenue to the host community as encouraged by the House of Representatives." Reacting to the decisions of the Southern Governors, Akinkuotu (2021) says that apex Igbo socio-cultural organisation, Ohanaeze

Ndigbo, applauded the decision of the Southern governors for the strength of demanding the presidency slot for 2023 and entreated them to move further and allow the Southeast geo-political zone to provide the next president. Ohanaeze also gave complete backing for the promulgation of the anti-open grazing regulation within the 17 states of the vicinity by using September 1.National Publicity Secretary of Ohanaeze Ndigbo, Chief Alex Chiedozie Ogbonna, insisted that political energy at the centre of the Nigerian state had always turned around between the North and South, stressing that for justice, equity, equity and team spirit, the region that had not tasted the presidency position ought to be allowed to provide President Buhari's successor. These literatures are very rich and quite revealing on the interplay of group and identity politics in Nigeria as the relate to resource control and political power. However, they have not stressed the impact of identity politics in spurring and budding of separatist agitations in Nigeria and this is the gap this work seeks to address. It is against this background that this work seeks to examine Identity Politics and Separatist Movement in Post-colonial Sub-Saharan Africa: the case of Biafra in Nigeria. The remainder of the paper is structured along the following discursive themes: Conceptual clarification, Theoretical Framework, Political Prebendalism, Ethnic, Socio-Economic Exclusivity in Separatist Movement in Nigeria Discussion, Conclusions, Recommendations The study adopted the qualitative research design; it is also analytical. Documentary method was used to generate secondary data from books, journal articles, official publications and conference papers. The data generated were analysed using logical induction and content analysis.

5. Conceptual Clarification

5.1 Identity and Identity Politics

According to Wonah (2017), the terms "identity politics" and "politics" are a mash up of one another. Identity in this context refers to the quality of being distinct from others based on a set of standards or traits. It follows that a group of people could have specific tendencies, traits, cultural realities, financial popularity, etc. that bind them together and set them apart from others. These characteristics set a group apart from other groups and determine their place in society based on how they come together to defend their identity. The declaration of the group's identity may not be wishful thinking; it finds expression in the framework of the group's discernible interest and is concretized and actualized not only by the group's members but also by other members of the group.

Politics, on the other hand, is the distribution of resources through formalized channels for the balancing and protection of the many interests within a polity. Thus, in order to protect its interests and establish its identity, each group competes for the resources that are accessible. Identity politics are therefore the deliberate actions taken by a group of people to defend their interests and claim their identity. Additionally, it meant that political debates that consider the self-interest and viewpoints of social minorities or self-identified social interest groups, as well as the ways in which group politics are shaped through positive aspects of their identity, such as race, elegance, faith, sexual orientation, or traditional dominance, are embodied in the identities of interest groups. When there is an oppressive mechanism in the form of a governmental framework intended to enslave, oppress, exploit, and consign a group of people to the past, it appears more obvious that this group has a predisposition to assert its identity. Young (1990) eloquently expressed this viewpoint when he claimed that identity politics is inextricably linked to the idea that a select group of social companies is repressed. As a result, it can be viewed as a politics of group identification movement that claims to advocate for the interests and identity of a specific group rather than community-wide policy problems. Combining the two ideas, Hayward and Watson (2010) describe identity politics as the type of politics in which individuals participate after mobilizing on the basis of a shared identity and after defining their experiences, political issues, and objectives in terms of the interests of their identity group. Identity politics originated historically from the experience of identity-based oppression, or the disparities in opportunities and resources that people encountered as members of particular identity groups.

In the social sciences and humanities, identity politics is widely used to explain a variety of phenomena, including multiculturalism, the women's movement, civil rights, lesbian and gay movements, separatist movements in Canada and Spain, violent ethnic and nationalist conflict in postcolonial Africa and Asia, as well as in the formerly communist nations of Eastern Europe. In addition to the term "identity politics" being used to refer to any political, social, or cultural mobilization, sociological analyses of the relationship between identity and politics and normative political evaluations of identity politics as a political practice have frequently been combined in scholarly analyses. According to Brubaker and Cooper (2000), there are too many protagonists and not enough analysts in the literature on identity politics. Identity politics has been referred to as "a slippery phrase" by Lichterman (1999), and according to Bickford (1997), the

concept has developed more as a critique of specific political behaviors than as a cohesive field of social and political study. The phrase "identity politics" is increasingly being used as a disparaging term for feminism, anti-racism, and anti-heterosexism, according to Fraser (1997). What may be called identity politics is one of the notable features of modern politics worldwide. In fact, the politics of identities may be experiencing a rebirth around the globe, with Africa in particular. Personal, "given," shared, and chosen identities are increasingly serving as rallying points for group action in the crisis-ridden post-colonial state of Africa (Jega, 2000). Additionally, he claims that traditional forms of identity, which have been denigrated as primitive and long trivialized, have shown to be durable and are rapidly gaining popularity and political relevance in the contemporary political economy, with all kinds of outcomes and repercussions. Even new identity styles have developed and proven to be highly significant. All of them are successfully competing with and frequently outperforming post-colonial ideas of national identity. These 3 conditioning elements explain for the alleged patrimonial and prebendal man or woman of Nigeria (Diamond, 1988; Joseph, 1987; Graf, 1988). A domestic elite that is divided along racial and ethnic lines fights for political influence. These are also essential to the faction's ability to establish hegemony and maintain control over state power. In this way, identity-based politics have traditionally played a significant role in conflicts over political dominance and governmental control of the country. Evidently, this resulted in fractious and crisis-ridden politics.

5.2 Political prebendalism, ethnic exclusivity, and socioeconomic exclusion in the Nigerian separatist movement

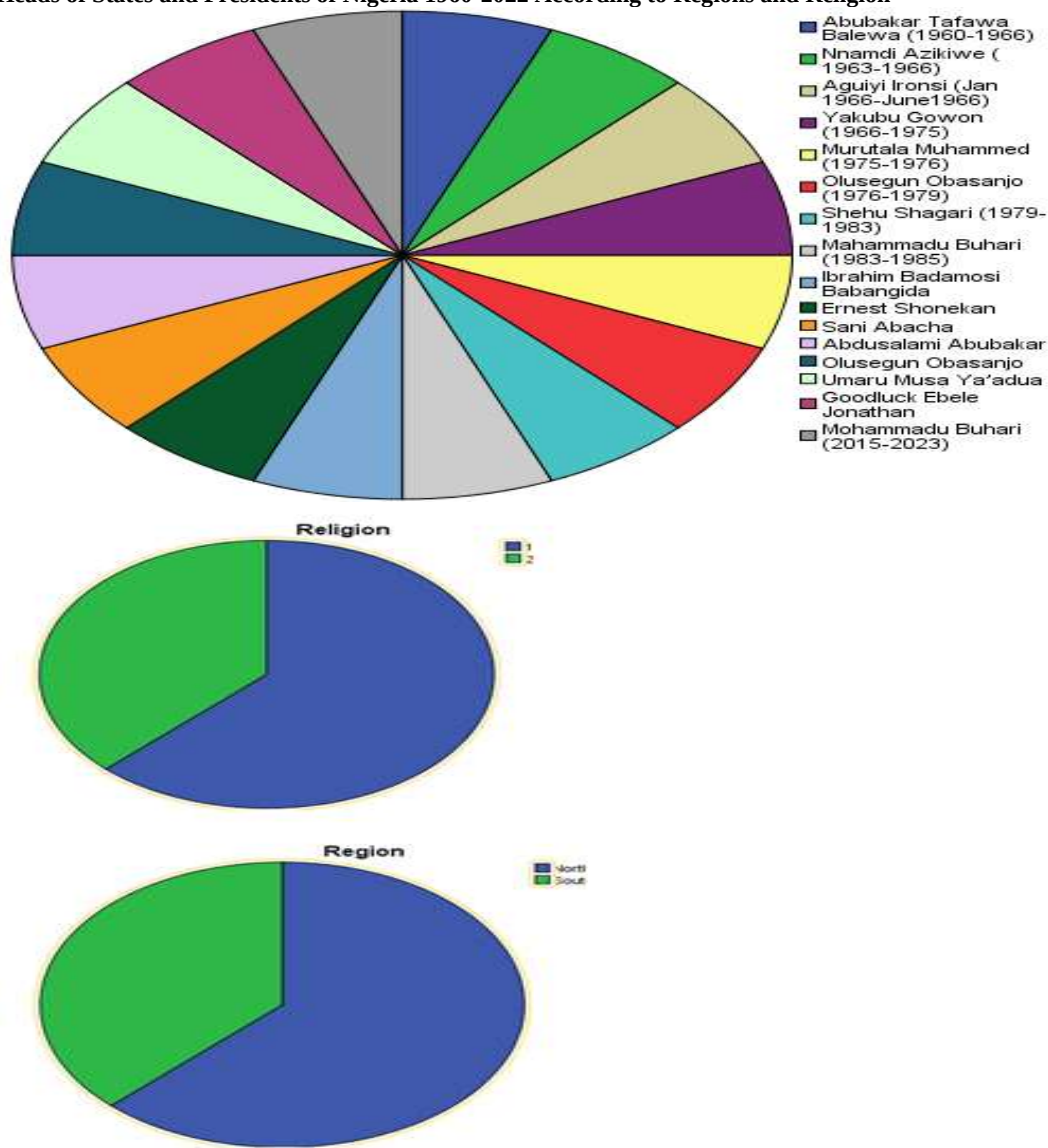
Nigeria is widely acknowledged to be deeply divided along religious, ethnic, political, party, and geopolitical emotions, cleavages, and boundaries. Nigeria's socio-political and economic matrices have been continually molded by them. Nigeria may be categorized along eight primary cleavages, according to Mustapha (2007). In his opinion Eight key cleavages in Nigerian political life have resulted from the interaction of this tripodal ethnic structure with administrative divides and communal identities, the most significant of which are the differences between the three majority ethnic groups, between the three majority ethnic groups and the 350 or so minority ethnic groups, between the north and south, and between the 36 states of the federation and the rest of the country. The southeast zone and Igbo ethnicity and religious affiliation overlap, whereas the north-

central zone and northern ethnic minorities overlap. These are only two examples of how these cleavages coexist. The systematic and overlapping patterns of disparities that correlate to the ethnic, regional, and religious divisions in Nigerian society make them more problematic (Mustapha, 2007). According to Adeleke and Charles (2015), ethnic politics, gang politics, and political parties with ethnic affinity are all used in Nigerian politics.

These many ethnic, religious, and political factions' constant quest for dominance has a profound effect on the corporate life of the country and has recently taken the shape of a separatist movement. Prebendal

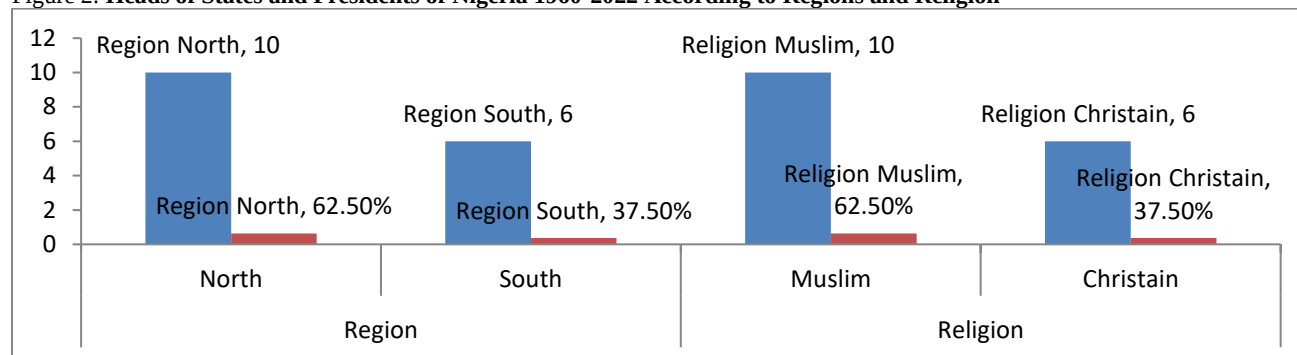
politics have inevitably arisen as a result of this. This report provides confirmed data on the skewed nature of national appointments into federal ministries and parastatals, security agencies, leaders of paramilitary agencies, enrollment requirements into Unity Schools, and state allocations in the part that follows. The article also questions the justification for Nigeria's port operations and the building of a "sea port" in the north while those in the south are shut down. Nigerian border crossings are also questioned using data and figure presentation and interpretation. The goal is to justify or explain the persistent growth of the separatist movement in a politically, religiously, and ethnically divided Nigeria.

Figure 1
Heads of States and Presidents of Nigeria 1960-2022 According to Regions and Religion



Source: Author's computation, 2022.

Figure 2: Heads of States and Presidents of Nigeria 1960-2022 According to Regions and Religion



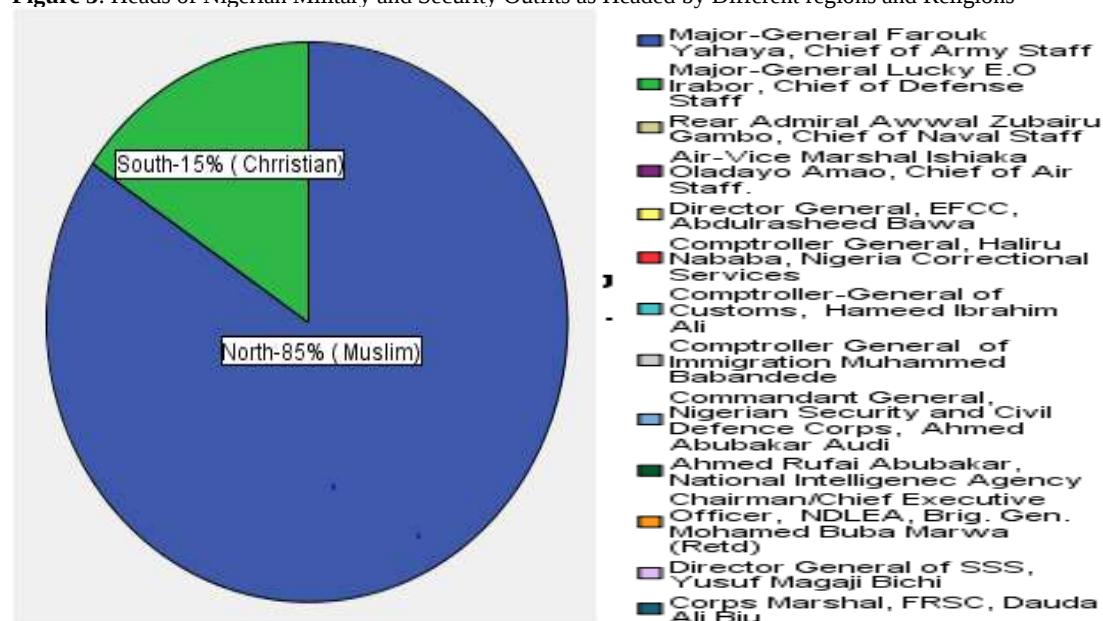
Source: Author's computation, 2022

Table 1: Top National Positions of Government in Nigeria from 2015-2021, According to Regions and Religion

S/N	Position	Region		Religion	
1	President	North		Muslim	
2	Vice President		South		Christian
3	Senate President	North		Muslim	
4	Deputy Senate President		South		Christian
5	Speaker, House of Rep		South	Muslim	
6	Deputy Speaker, House of Rep	North		Muslim	
7	Attorney General of the federation	North		Muslim	
8	Secretary to the government of the Federation	North		Muslim	
9	Chief of Staff to the President	North		Muslim	
10	National Security Adviser to the president	North		Muslim	
11	Chief Justice of the federation	North		Muslim	
#	Total	8	3	9	2
#	Percentage	73%	27%	82	18%

Source: Author's compilation

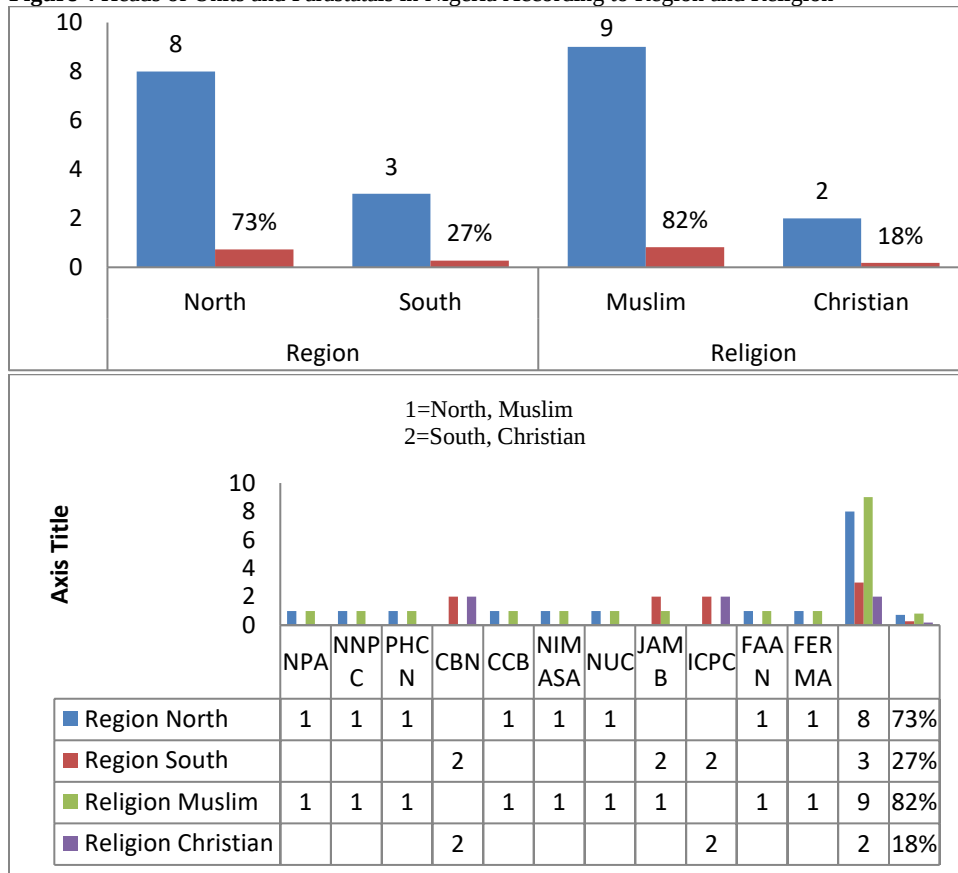
Figure 3: Heads of Nigerian Military and Security Outfits as Headed by Different regions and Religions



Religion

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Muslims-85%	11	84.6	84.6	84.6
Christian-15%	2	15.4	15.4	100.0
Total	13	100.0	100.0	

Source: Author's computation, 2022

Figure 4 Heads of Units and Parastatals in Nigeria According to Region and Religion

Region

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid North	9	81.8	81.8	81.8
Valid South	2	18.2	18.2	100.0
Total	11	100.0	100.0	

Religion

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Muslim	10	90.9	90.9	90.9
Valid Christian	1	9.1	9.1	100.0
Total	11	100.0	100.0	

Source: Author's computation, 2022

Table 2: Number of states According to Geopolitical Zone

S/N	Geopolitical Zone	No. of state	Geopolitical Zone	No. of states
1	North East:	5	South East	5
2	North West	7	South South	6
3	North Central Plus FCT	7	South West	6
	Total	19		17
5	Percentage	53%		47%

Source: Author's compilation

Table 3: Cut off Points of Unity Schools for selected States in Northern and Southern Nigeria

S/N	State	Southern States' cut off point		State	Northern States' Cut Off Points	
		Male	female		Male	Female
1	Osun	127	127	Yobe	2	27
2	Oyo	127	127	Taraba	3	11
3	Abia	130	130	Zamfara	4	2
4	Edo	130	130	Sokoto	9	13
5	Delta	131	131	Kebbi	9	20
6	Ogun	131.	131.	Bauchi	35	35
7	Lagos	133,	133,	Jigawa	44	44
8	Enugu	134	134	Borno	45	45
9	Imo	138	138	Gombe	58	58
10	Anambra	139	139	Nasarawa	58	58

Source: Compiled from Business Day, July 22, 2022

Table 4: Top Ten Positions in NNPC 2022

S/N	Position	Name	Region		Religion	
1	Group Managing Director (GMD)	Mele Kyari	North		Muslim	
2	CFO Finance & Accounts	Umar Ajiya	North		Muslim	
3	CFO, Gas and Power	Yusuf Usman	North		Muslim	
4	CFO, Corporate Services	Farouk Garba Sa'id	North		Muslim	
5	CFO, Refining & Petrochem	Mustapha Yakubu	North		Muslim	
6	Corporate Secretary/Legal Adviser	Hadiza Coomassie	North		Muslim	
7	GGM, Int'l Energy Relations, IER	Omar Ibrahim	North		Muslim	
8	GGM, Renewable Energy	Kallamu Abdullahi	North		Muslim	
9	GGM, Governance Risk & Compliance	Ibrahim Birma	North		Muslim	
10	GGM, NAPIMS	Bala Wunti	North		Muslim	
#	Total	10	10	0	10	0
#	Percentage	100%	100%	0	100%	0

Source: Author's compilation

Table 5: Top Eight Positions in FAAN

S/N	Position	Name	Region		Religion	
1	Managing Director & CE	Capt. Rabi'u Hamisu Yadudu	North		Muslim	
2	Director Commercial and Business Development	Sadiku Abdulkadir Rafindadi	North		Muslim	
3	Director of Engineering Services	Engr. Ali, Ali Maina	North		Muslim	
4	Director of Finance and Accounts	Nike Aboderin		South		Christian
5	Director of Security Services	Group Capt. Usman Abubakar Sadiq (Rtd)	North		Muslim	
6	Director of Human Resource & Administrations	Norris Anozie		South		Christian
7	Company Secretary/Legal Adviser	Bridget Iwinose Gold		South		Christian
8	Director of Airport Operations	Capt. Mukhtar Yusuf Muye	North		Muslim	
#	Total		5	3	5	3
#	Percentage		62.5%	37.5%	62.5%	37.5%

Source: Author's compilation

6. Discussion

From figure 1 and figure 2, showing the regions and religion that have ruled Nigeria from independence to date, it is clear that the North has ruled the country for an average of 10 times amounting to 62.5% average compared to all other ethnic nationalities and the entire southern region that has ruled Nigeria for an average of 6 times amounting to 37.5% on the average. It means that in a multiethnic country like Nigeria, The North and in particular, the Hausa/Fulani has ruled the country 4 times more than any other ethnic group amounting to 25% on the

average. It shows the North has so far dominated the political landscape of Nigeria. This analysis suggests that there is a dominance of Nigeria's political landscape by a given region and religion in the country.

Table 1 shows the top national positions of government in Nigeria from 2015-2021, according to the identities of regions and religion. According to this analysis Northerners and also Muslims occupies 8 of the 11 top government positions in Nigeria amounting to an average of 73% as against 3 slots amounting to 27% of the positions occupied by

southern Christians. In the same table, Muslims occupy 9 of the 11 top national positions amounting to 82% of national government positions while Christians occupy only 2 national positions amounting to 18% of the same making a particular religion have an overwhelming representation in a highly diversified, multiethnic and religion conscious state like Nigeria.

Figure 3 shows heads of Nigerian military, paramilitary and security outfits as headed by different regions and religions under the period in review. This analysis tells that 11 of the 13 security outfits are headed by the Northerners and Muslims amounting to 85% as opposed to 2 security positions heads by southern Christians amounting to 15% of all the national security and paramilitary outfits being headed by the south. This analysis tells that regional and religious factors play a vital role in determining security chiefs in Nigeria

Figure 4 shows heads of units and parastatals in Nigeria according to region and religion. They are basically either government appointees or civil servants who grew through the ranks and files of the selected units and parastatals under review. This table shows that 8 of the 11 units and parastatals are headed by northern Muslim amounting to 73% of the heads of units and parastatals in Nigeria. in the same table, 9 of the 11 positions are occupied by Muslims amounting to 82%. While the south and Christians occupy 3 and 2 respectively, of the 11 units under review amounting to 27% and 18% respectively.

Table 2 attempts to show the relative number of states according to geopolitical zones. From the table, it is clear that the entire northern states have 19 states altogether amounting to 53% of the states in Nigeria while the southern states accounts for 17 states amounting to 47% of the states in Nigeria.

Table 3 presents the cut off points of Unity Schools for selected States in Northern and Southern Nigeria. from the table above, the least cut off point in the northern region is 2 for male and 27 for female for Yobe state. However, the least cutoff point in southern Nigeria is 127 for both male and female for Osun state. On the other hand, the highest cutoff point in the country is in the southern region, which is 139 for Anambra. However, the highest cutoff point in the north is 58 for Nasarawa. This is showing a relative an absolute advantage of northern students to gain admission into unity schools for easily than their southern counterpart. The difference between the least cutoff point in the South and the north is 125 which is more than two times the highest cutoff

points in the north plus 9 extra points which is exactly the cutoff point for Sokoto and Kebbi states. on the other hands, the difference between the highest cutoff point in the south and the north is 81 points which is far more than the highest cutoff point in the North which is 58 for Nasarawa state.

Table 4 presents to us the ten top positions in NNPC. From the table above, the ten top positions in NNPC are all occupied by the North and Muslims in particular, making it a 100% dominance over other regions and religion in a multi ethnic and secular state as Nigeria. the implication of this is that the south has 0 representation the top ten positions of a company situated in southern Nigeria and from where over 100% of Nigerian crude oil is drilled.

Tables 5 shows the 8 top positions in Federal Aviation Agency of Nigeria (FAAN). From the table the north and Muslims occupy 5 positions, representing 62.5% of all the eight top positions in FAAN. While the south and Christians occupy 3 positions representing 37% of top eight positions in FAAN.

7. Conclusions

From the various figures and tables shown above, In all the indicators for regional and religious representation in socio-economic, security and political structure in Nigeria, the variable indicators shows that the current political, security and economic positions in Nigeria is extremely skewed to the north and this could be a veritable recipe for all forms of fears, suspicion, misgivings, misunderstandings, misrepresentations and ultimately, the rise of separatist movement like we have seen in southern Nigeria both east and west. Nigeria is a multiethnic, multi-religious, and of course a secular state as provided by the 1999 constitution of Nigeria as amended 2011. However, from the table above, it suggests that the north is now synonymous with Islam which is not a true picture of reality on ground. Though Muslims might be majority in the North, but there are also many Christians across all the states of the north. Hence, are there no qualify Christian northerners who could also occupy all the positions allotted to the northern region?

This study therefore submits that religious and ethnic politics which are all forms of prebendal and identity politics are basically responsible for the rise of suspicion and ethno-national movements in Nigeria like the Biafran movement and Ilana Omo Oodua separatist movement.

8. Recommendations

- To douse the tension of interethnic and interreligious suspicion in the country, the government must intentionally correct the skewed structurally imbalances in the country's security architecture allowing regional, ethnic and religious balance in the composition of the country's chief securities and other paramilitary outfits.
- The federal character principle should be upheld in the appointment of key positions in the country.
- Other northern ethnic and religious groups in the north other than Islam should not be marginalized as this would breed fear, suspicion and irritation against the Northern Hausa/Fulani ethnic group in the believe that they want to dominate other over 350 ethnic groups in county. This is so, because according to Badru (2010), this would generate two logics of conflictual interactions, which is: the logic of 'I' Superiority (logic of domination) and the logic of Self- Affirmation (self- assertion). The first logic motivates any given X group to attempt to dominate any given Y group, relative to accessing some social income, wealth, and opportunities, and the second logic also motivates the Y group to resist the attempt, relative to accessing the noted social income, wealth and opportunities. Now, the interaction of the two logics cannot but occasion social conflict between the X and Y groups. This can degenerate into secessionist movements and inter-religious/ethnic intolerance as we see today in Nigeria.
- They should be amendment to reflects these concerns as a matter of urgency to save the Nigerian state from unnecessary tensions and rhetorics of disintegration.
- The restructuring of the country should be considered a necessary thing to be done.

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Part Two

Social Psychology



Knowledge and Attitude of Pregnant Women at the University of Benin Teaching Hospital, Benin City, Nigeria, towards Substance Abuse among Pregnant Women

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Abstract. There is a severe dearth of study on the knowledge and attitude of pregnant women towards substance abuse among pregnant women. Therefore, this study was carried out to determine the knowledge and attitude of antenatal clients at the University of Benin Teaching Hospital to substance use among pregnant women. The study was a descriptive cross-sectional one carried out among 364 pregnant women selected by balloting. An interviewer administered questionnaire made up of items concerning socio-demographic data, Knowledge and Attitude towards substance use by pregnant women was used. Most of the respondent 314 (86.3%) were aware of substance abuse and a higher proportion 223 (71.0%) heard about it from television. Of the 314 respondents who were aware of substance abuse, 143 (45.54%) had good knowledge while 171 (54.46%) had poor knowledge. Similarly, 242 (77.10%) had a negative attitude while only 72 (22.90%) had a positive attitude. Although the greatest proportion of pregnant women who had positive attitude towards substance use in pregnancy was represented in those 21-30 years (59.7%), age did not significantly differentiate between pregnant women with positive attitude and those with negative attitude. Education significantly differentiated pregnant women with positive attitude from those with negative attitude. The highest number of those with positive attitude (43.1%) was found among those with secondary level of education. Like age, other variables were not significant. There is need to carry out targeted health education on substance abuse for pregnant women. One should also note the role of disseminating information on substance abuse through the television.

Keywords: Knowledge, Attitude, Pregnant, Women, Nigeria, Substance-Abuse

1. Introduction

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs (World Health Organisation, 2021). Psychoactive substance use can lead to dependence syndrome- a cluster of behavioral, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulty in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state (World Health Organisation, 2021)). In general, abused drugs may be classified as per the legal status of the substances, as licit or illicit (Marangoni and Félix de Oliveira, 2013). Licit drugs have legal permission for production and its trading and use are not criminalized. Examples are alcohol, tobacco and medications. Whereas for illicit drugs, their production and trade is criminalized (Marangoni and Félix de Oliveira, 2013). Substances are also classified according to their effects on the central nervous system as depressants, stimulants or hallucinogens (Marangoni and Félix de Oliveira, 2013).

According to the 2009 Global Health Risks report, psychoactive substance use is among the top 20 risk factors for death and disability worldwide (Adebawale and James, 2018). Globally, there is an increasing trend for people to use multiple substances, either together at the same time or at different times, further increasing the risk (Adebawale and James, 2018).

Psychoactive substance use is now common among Nigerian women, including pregnant women, and its use during pregnancy has been a major public health issue (Adebawale and James, 2018). Abuse of prescription and illicit drugs in pregnancy is a

growing cause of maternal and neonatal morbidity and mortality (Costa Portela, Moreira Barros, Marques Frota, Pequeno Landim, A, Áfio Caetano, and Ribeiro de Farias, 2013; Reitan, 2019). According to data from the 2012 and 2013 United States of America National Survey on Drug Use and Health, the rate of current illicit drug use (including non-medical use of prescription drugs) in pregnant adolescents and adult was 14.6% among adolescents (aged 15–17 years), 8.6% among young adults (aged 18–25 years) and 3.2% among adults aged 26–44 years (Reitan, 2019). The consequences of drug use in pregnancy include spontaneous abortions, stillbirths, low birth weight, prematurity, neonatal abstinence syndrome and congenital malformations (Reitan, 2019). Many reasons have been put forward as to why a pregnant woman may use a substance. Some of them are use of alcohol prior to pregnancy, use of alcohol by friends and relatives, low socioeconomic status/food shortages, low educational status, being a victim of violence, difficult relationship, personal history of mental symptoms or illness, anxiety, depression, suicidal ideation and behaviour (Onah, Field, van Heyningen and Honikman, 2016; Mpelo, Kibusi, Moshi, Nyundo, Ntwenya and Mpondo, 2018).

Some authors have reported that substance use among pregnant women in Nigeria is a recent phenomenon as Nigeria women embrace western culture (Mutihir, Musa, Daru, Nyango and Audu, 2012). Some reasons why they take these substances during pregnancy include, to help them eat better, because their husbands want them to, to relieve vomiting, perceived benefit for the unborn baby, few have no reason (Mutihir, Musa, Daru, Nyango and Audu, 2012). More worrisome is the current finding showing that there is no safe level of alcohol exposure for the developing fetus (Mutihir, Musa, Daru, Nyango and Audu, 2012). Pregnant women in some cultures often use alcohol-based herbal mixtures due to the myth that it prevents abortions/premature labor, improves sleep and enable them have a strong and healthy baby (Adebowale and James, 2018; Tabatabaei, Behmanesh-Pour, Salimi-Khorashad, Zaboli, Sargazi-Moakhar and Shaare-Mollashahi, 2018).

The incidence of substance abuse among women of reproductive age has continued to increase, thus contributing to the growing problem of substance abuse during pregnancy (Coleman-Cowger, Oga, Peters, Trocin, Koszowski and Mark, 2018). The highest rate of alcohol and drug use in North America is among women in the child bearing age, with 6 million women experiencing alcohol use problems,

and more than 5 million currently using illicit substances (Coleman-Cowger, Oga, Peters, Trocin, Koszowski and Mark, 2018). Prenatal alcohol abuse is associated with long-term effects, such as cognitive and behavioral challenges, adverse speech and language outcomes, executive functioning deficits in children, and psychosocial consequences in adulthood (Envuladu, Agbo, Ashikeni and Zoakah, 2013).

Also of concern are the deleterious health effects of second-hand smoke on newborns, which include higher rates of respiratory and ear infections, sudden infant death syndrome, behavioral dysfunction and cognitive impairment (Envuladu, Agbo, Ashikeni and Zoakah, 2013). Additionally, women who were smokers before pregnancy are likely to stop breastfeeding early so that they can take up smoking again (Envuladu, Agbo, Ashikeni and Zoakah, 2013). Infants who are not breastfed or weaned early are at increased risks of otitis media, diarrhea, lower respiratory tract infection, sudden infant death syndrome, leukemia, and type 1 diabetes. Among mothers, those who did not breastfeeding or whose babies were weaned off breast early are at increased risks of breast cancer, ovarian cancer, diabetes, hypertension, and myocardial infarction (Forray, 2016).

Substance abuse during pregnancy may be difficult to detect because the signs and symptoms of this behavior are often subtle, and self-reports of substance use may be infrequently elicited. Physicians may fail to routinely screen for substance use among pregnant women and some pregnant women may seek little or no prenatal care (Stuebe, Horton, Chetwynd, Watkins, Grewen and Meltzer-Brody, 2014). While routine checks are available for some medical conditions (for example, diabetes and anemia) at the ante-natal clinic, healthcare providers are reluctant to screen for psychoactive substance use citing lack of effective screening tools and knowledge deficits (Adebowale and James, 2018). The implication is that women who are at risk are not identified and managed appropriately (Rausgaard, Ibsen, Jørgensen, Lamont and Ravn, 2015). This is worrisome because of the unacceptable high prevalence of lifetime and current use of substances among pregnant women (Passey, Sanson-Fisher, D'Este and Stirling, 2014; Ajogbon, Babalola, Adebowale, 2018).

As serious and complex the problem of substance use in pregnancy is, there is a dearth of study on the knowledge and attitude of pregnant women towards substance abuse among pregnant women. Therefore,

this study was carried out to determine the knowledge and attitude of antenatal clients at the University of Benin Teaching Hospital towards psychoactive substance use among pregnant women. The outcome of the study would constitute veritable ingredients to formulate prevention and control strategies for drug use among pregnant women.

2. Research Methodology

The study was a descriptive cross-sectional one carried out among pregnant women visiting the antenatal clinic of the University of Benin Teaching Hospital (UBTH). UBTH is a tertiary health facility located in Ugbowo, Benin City, Nigeria and was established in 1973 as the sixth of the first-generation Teaching Hospitals in Nigeria, to complement the University of Benin and to provide secondary and tertiary care to the then Midwestern region (now Edo and Delta States) and its environs.

All pregnant women visiting the antenatal clinic of UBTH to receive antenatal services during the period of the study and were selected by the sampling technique and gave written informed consent were included in the study. The minimum sample size, n was calculated using the formula $n = Z^2pq/d^2$ and n was found to be 331. In order to provide a backup for poor or non-response, a ten percent (10%) margin was allowed and therefore sample size became 364. Simple random sampling technique (balloting) was used to recruit participants from a sampling frame of four hundred registered pregnant women.

An interviewer administered questionnaire was used to collect data. Section A was made up of socio-demographic data, B, Knowledge of Respondents and section C, Attitude of Respondents. The questionnaire was pre-tested using 10% of the sample size at Central Hospital, Benin City, Edo State, all errors or inconsistencies were noted and thereafter corrected. The data collected was analyzed using the Statistical Package for Social Sciences version 22.0

software (IBM Corp., 2013). Univariate analysis was done to assess socio-demographic variables as well as variables assessing the knowledge and attitude. Bivariate analysis was done to determine the association between the socio-demographic variables and knowledge/attitude to substance use. Chi square was used to test for the associations and Fisher's exact was used in cases where expected frequencies were less than 5 in greater than or equal to 20% of cells.

A total of 20 questions were used to assess for knowledge under 3 domains, which were knowledge of substances abuse, knowledge of types of substances abused and knowledge of effects of substances. Questions under each of these domains were scored. A score of 1 was given to questions answered correctly and 0 for wrong answers. Minimum and maximum scores for each domain were calculated and scores were converted to percentages and graded as follows: scores of 70% and above were categorized as good knowledge while scores below 70% were categorized as poor knowledge.

Six questions were used to assess the attitude of the respondents towards substance abuse using a 3-point Likert scale. The most correct response was given a score of 2 and the least correct response was given a score of 0, giving a minimum score of 0 and a maximum score of 12. The total attitude score obtained was converted to percentages and graded as follows: those with scores of 60% or greater had a positive attitude, while those with scores less than 60% had a negative attitude.

Approvals for the study were obtained from the Head, Department of Community Health, University of Benin, Benin City, Nigeria and the State Ministry of Health, Edo State, Nigeria. Written informed consent was obtained from each respondent before collection of data; names and other identifiers were not obtained. Respondents were informed that they had the right to withdraw from the study at any time.

3. Results

A total of 364 respondents participated in the study and their questionnaires were analyzed. The results are presented in the tables below:

Table 1: Socio-demographic characteristics of the respondents

Variable	Frequency (n=364)	Percent
Age (years)		
18-20	14	3.8
21-30	207	56.9
31-40	131	36.0
41-47	12	3.3
Mean age $\pm$ SD (29.77 $\pm$ 5.453)		
Level of education	47	12.9
No formal education	67	18.4
Primary	121	33.2
Secondary	129	35.4
Tertiary		
Religion	318	87.4
Christianity	38	10.4
Islam	8	2.2
Africa traditional religion, ATR		
Family type		
Nuclear	292	80.2
Extended	72	19.8
Family structure		
Monogamous	299	82.1
Polygamous	65	17.9
Occupation		
Skill level 0	50	13.7
Skill level 1	18	4.9
Skill level 2	199	54.7
Skill level 3	84	23.1
Skill level 4	13	3.6
Household size		
≤ 6	278	76.4
> 6	86	23.6

A higher proportion, 207 (56.9%) of the respondents fell within the age group of 21-30 years with a mean (SD) age of 29.77 (5.453) years. The proportion of the respondents with tertiary level of education was 129 (35.4%). A majority, 140 (39.2%) of the respondents belonged to the Benin ethnic group. Most 318 (87.4%) of the respondents were Christians, while Islam and Africa traditional religion (ATR) accounted for 10.4% and 2.2% respectively. More than half, 292 (80.2%) of the respondents were from nuclear family type while 299 (82.1%) of the respondents were from monogamous family structure. A majority of the respondents fell into skill level 2 of the International Labour Organisation (ILO) occupational classification, accounting for 199 (54.7%).

Table 2: Knowledge (awareness and source of awareness) of substance abuse

Variable	Frequency (n=364)	Percent
Awareness of substance abuse		
Aware	314	86.3
Not aware	50	13.7
Source of information on substance abuse (n = 314)		
Internet	190	60.5
Television	223	71.0
Radio	165	47.5
Health workers	152	48.4
Print media	86	27.4

N.B: Some respondents had more than one source of information.

Most of the respondent 314 (86.3%) were aware of substance abuse and a higher proportion 223 (71.0%) heard about it from television. While print media was the least source of information, with 86 (27.4%).

Table 3: Knowledge (meaning or definition) of substance abuse

Variable	Correct Frequency (%)	Incorrect Frequency (%)
What is substance abuse		
Harmful use of psychoactive substance	190 (60.5)	124 (39.5)
Consumption of drugs and or alcohol in amounts that is harmful to an individual	235 (74.8)	79 (25.2)
Use of drugs that makes you feel good	90 (28.7)	224 (71.3)
Use of drugs that are expired	59 (18.8)	255 (81.2)
Consumption of drugs not prescribed by the doctor	150 (47.8)	164 (52.2)
Use of substance that makes you look good	4 (7.6)	290 (92.4)

Majority 235 (74.8%) of the respondents said substance abuse is the consumption of drugs and or alcohol in amounts that is harmful to an individual.

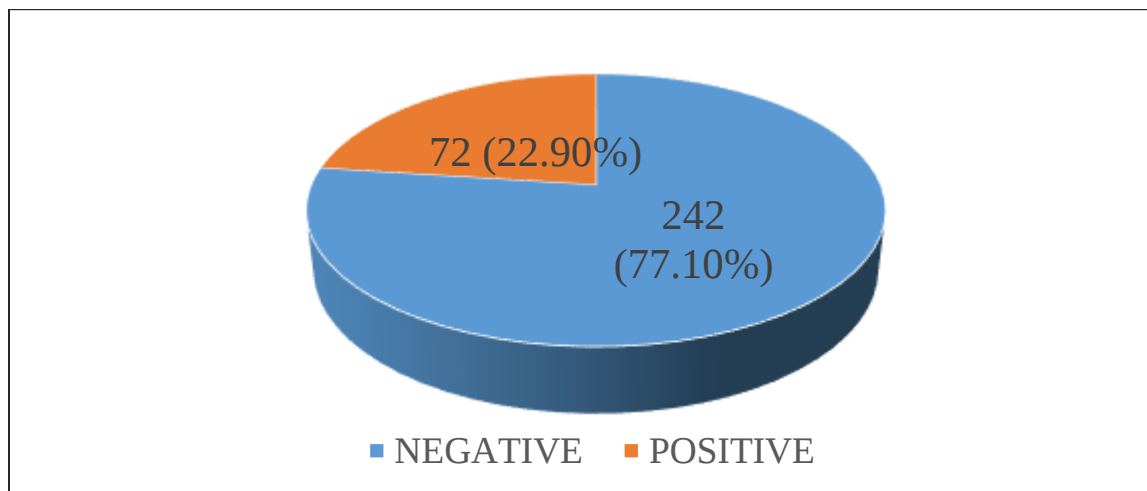
Table 4: knowledge of types of substances of abuse and effects

Variable	Correct Frequency (%)	Incorrect Frequency (%)
Knowledge of types		
Tramadol	259 (82.5)	55 (17.5)
Codeine	216 (68.8)	98 (31.2)
Marijuana	215 (68.5)	99 (31.5)
Alcohol	199 (63.4)	115 (36.6)
Agbo	120 (38.2)	194 (61.8)
Nicotine	113 (36.0)	201 (64.0)
Monkey tail	107 (34.1)	207 (65.9)
Kola nut	63 (20.1)	251 (79.9)
Paracetamol	26 (8.3)	288 (91.7)
Vitamin C	12 (3.8)	302 (96.2)
Ampicillin	11 (3.5)	303 (96.5)
Do this substance have beneficial effects to the mother	234 (74.5)	80 (25.5)
Beneficial effects		
Boost immunity	61 (76.25)	19 (23.75)
Improves brain function	22 (27.5)	58 (72.5)
Do the substance have beneficial effect to the fetus	264 (84.1)	50 (15.9)
Beneficial effects		
Boost immunity	29 (58.0)	21 (42.0)
Improves brain function	29 (58.0)	21 (42.0)
Harmful effect of substance use to the mother		
Hallucination	97 (35.7)	175 (64.3)
Poor judgement	128 (47.1)	144 (52.9)
Addiction	214 (78.7)	58 (21.3)
Development of chronic disease	120 (43.8)	154 (56.2)
Harmful effect of substance to the fetus		
Miscarriage	223(82.3)	48 (17.7)
Low birth weight	127(46.9)	144 (53.1)
Premature birth	144(53.1)	127(46.9)
Poor brain development	105(38.7)	166 (61.3)

Table 5: Attitude towards substance abuse

Variable	Agree (n = 314) Freq (%)	I don't know (n = 314) Freq (%)	Disagree (n = 314) Freq (%)
Substance abuse is good practice among pregnant women	42 (13.4)	50 (15.9)	222 (70.7)
Substance abuse should be encouraged	36 (11.5)	26 (8.3)	252 (80.3)
Substance abuse is common among pregnant women	81 (25.8)	95 (30.3)	138 (43.9)
Women who practice substance abuse are more likely to have poor delivery outcomes	197 (62.7)	55 (17.5)	62 (19.7)
Women who practice substance abuse are likely to give birth to babies with birth defect	196 (62.4)	67 (21.3)	51 (16.2)
Children born to women who abuse substances are likely to have healthy babies	75 (23.9)	78 (24.8)	161 (51.3)

Most 222 (70.7%) of the respondents disagreed that substance abuse is a good practice among pregnant women, 252 (80.3%) disagreed that substance abuse should be encouraged, while 138 (43.9%) disagreed that substance abuse is common among pregnant women. A higher proportion 197 (62.7%) of respondents agreed that women who practice substance abuse are more likely to have poor delivery outcomes, 196 (62.4%) agreed that women who practice substance abuse are likely to give birth to babies with birth defect, 161 (51.3%) disagreed that children born to women who abuse substances are likely to be healthy babies.


Figure: Attitude of respondents towards substance abuse

Pie chart depicting overall score for Attitude towards substance abuse. A higher proportion 242 (77.10%) had negative attitude while a lower proportion 72 (22.90%) had positive attitude.

Table 6: Factors associated with attitude to substance abuse

VARIABLE	Attitude		χ^2	P VALUE
	Negative (n = 242) Freq (%)	Positive (n = 72) Freq (%)		
Age group				
18-20	10 (4.2)	3 (4.2)		
21-30	139 (57.4)	43 (59.7)		
31-40	85 (35.1)	23 (31.9)		
41-47	8 (3.3)	3 (4.2)	0.331	0.954
Level of education				
No formal education	22 (9.1)	8 (11.1)		
Primary	39 (16.1)	16 (22.2)		
Secondary	74 (30.6)	31 (43.1)		
Tertiary	107 (44.2)	17 (23.6)	9.967	0.019
Religion				
Christianity	218 (90.1)	59 (81.9)		
Islam	21 (8.7)	11 (15.3)		
Africa traditional religion	3 (1.2)	2 (2.8)	3.613	0.164
Family structure				
Monogamous	202 (83.5)	58 (80.6)		
Polygamous	40 (16.5)	14 (19.4)	1.33	0.565
Family type				
Nuclear	199 (82.2)	55 (76.4)		
Extended	43 (17.8)	17 (23.6)	1.225	0.268
Occupation				
Skill level 0	32 (13.2)	10 (13.9)		
Skill level 1	8 (3.3)	5 (6.9)		
Skill level 2	126 (52.1)	40 (55.6)		
Skill level 3	63 (26.0)	17 (23.6)	5.916	0.205
Skill level 4	13 (5.4)	0 (0.0)		
Household size				
≤ 6	189 (78.1)	56 (77.8)	0.003	0.954
> 6	53 (21.9)	16 (22.2)		

The greatest proportion of pregnant women who had positive attitude towards substance use in pregnancy was represented in these 21-30 years (59.7%), age did not significantly differentiate between pregnant women with positive attitude and those with negative attitude. Education significantly differentiated pregnant women with positive attitude from those with negative attitude. The highest number of those with positive attitude (43.1%) was found among those with secondary level of education. Like age, other variables were not significant.

Table 7: Association between attitude and knowledge of substance abuse

	Attitude		χ^2	p value
	Negative frequency (%)	Positive frequency (%)		
Knowledge of substance abuse				
Good	112 (78.3)	31 (21.7)		
Poor	130 (76.0)	41 (24.0)	0.233	0.629

One hundred and twelve (78.3%) of those that had good knowledge of substance use had a negative attitude while 41 (24.0%) of those who had poor knowledge had a positive attitude.

4. Discussion on the findings

A higher proportion of respondents fell within the age group of 20-30 years. The mean age of respondents in this study was 29.77 ± 5.453 . This is not too different from the finding of a descriptive cross-sectional study done in 2011 at the antenatal clinic of Jos University Teaching Hospital. The mean age found in the Jos study was 22.5 ± 5.1 years (Mutihir, Musa, Daru, Nyango and Audu, 2012). This variation in age may be due to the culture of early age of marriage that is common in the Northern Nigeria and the Middle belt where Jos is located compared to the Southern Nigeria, where the current study was conducted. The higher female education in the southern Nigeria may also explain it, as higher female education delays age at marriage (Madgula, Groshkova and Mayet, 2011).

A higher proportion of the respondents had tertiary level of education. This may show that female education has gained significant root in Nigeria. The predominant ethnic group was Benin, which is the indigenous ethnic group in Benin City. Since the study was carried out in Benin City, this may not come as a surprise. Majority of the respondents were Christians, which is known to be the predominant religion in the southern part of Nigeria, while Islam and Africa traditional religion (ATR) accounted for a small proportion of the respondents. More than three-quartre of the respondents were of nuclear family type and a similar number were from monogamous family structure. This is in keeping with a descriptive cross-sectional study carried out in 2015 among 130 pregnant women attending antenatal clinic at a federal government owned tertiary hospital in Ogun State, southwestern Nigeria, that sought to explore psychoactive substance use among pregnant women. The Ogun State study showed that most of the respondents were married in a monogamous setting (Wilson and Thorp, Jr., 2008). This may be due to the influence of Christianity which is the predominant religion practiced in southern Nigeria. Christianity encourages the union of one man one wife. Majority of the respondents (more than half) fell into skill level 2 of the ILO classification. This finding is paradoxical since majority of the respondents had tertiary level of education.

Most of the respondent 314 (86.3%) were aware of substance abuse and a higher proportion 223 (71.0%) heard about it from television. While print media was the least source of information, with 86 (27.4%). Majority, 235 (74.8%) of the respondents rightly said substance abuse is the consumption of drugs and or alcohol in amounts that is harmful to an individual.

Most, 222 (70.7%) of the respondents disagreed that substance abuse is a good practice among pregnant women; 252 (80.3%) disagreed that substance abuse should be encouraged; while 138 (43.9%) disagreed that substance abuse is common among pregnant women. A higher proportion, 197 (62.7%) of respondents agreed that women who practice substance abuse are more likely to have poor delivery outcomes; 196 (62.4%) agreed that women who practice substance abuse are likely to give birth to babies with birth defect; 161 (51.3%) disagreed that children born to women who abuse substances are likely to be healthy babies.

A higher proportion 242 (77.10%) had negative attitude while a lower proportion 72 (22.90%) had positive attitude. Although the greatest proportion of pregnant women who had positive attitude towards substance use in pregnancy was represented in those 21-30 years (59.7%), age did not significantly differentiate between pregnant women with positive attitude and those with negative attitude. Education significantly differentiated pregnant women with positive attitude from those with negative attitude. The highest number of those with positive attitude (43.1%) was found among those with secondary level of education. Like age, other variables were not significant.

One hundred and twelve (78.3%) of those that had good knowledge of substance use had a negative attitude while 41 (24.0%) of those who had poor knowledge had a positive attitude. This may be seemingly absurd or self-contradictory. One would have expected that a good knowledge of substance abuse would mean the right (positive) attitude to substance abuse. Even though this was not statistically significant, it is a cause for concern.

The finding that most of the respondents had negative (poor) attitude toward substance abuse is inconsistent with the descriptive cross-sectional study conducted among 130 pregnant women in Jos, Plateau State, Nigeria. Most of the pregnant women of the stated study agreed that abusing substance is wrong (Coleman-Cowger, Oga, Peters, Trocin, Koszowski and Mark, 2018). The differences in the method of determining attitude can explain the difference. A poor attitude toward substance abuse may translate to abuse of substance during pregnancy and consequently impairment of maternal and child health. Most of the respondents with negative attitude were also found among respondents within the age group of 21-30 years while a lower proportion, 8 (3.3%) of those with negative attitude were within the age group of 41-47 years. This is in tandem with a study done in Jos, Nigeria, which reported that most

of the respondents with negative attitude were within the age group of 20–30 years (Envuladu, Agbo, Ashikeni and Zoakah, 2013). This age group was most represented in this study and this age group may be most impressionable, being immediately after adolescent or young adults.

5. Conclusion and Recommendation

The Knowledge and attitude of the pregnant women towards substance use in pregnancy was poor. There is need to carry out targeted health education on substance abuse for pregnant women. One should also note the popular role of disseminating information on substance abuse through the television.

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Knowledge, Attitude and Difficulties of Wildlife Quarantine Policy Implementation of Nigeria Agricultural Quarantine Service Personnel in Ogun State, Nigeria

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Abstract. Quarantine policy provides a pathway towards animals and plants trafficking eradication and helps prevent the entering of dangerous exotic diseases into the country through imported faunas and floras. This study examined the Nigeria Agricultural Quarantine Service (NAQS) personnel knowledge on zoonotic diseases transmission, attitude to zoonotic disease risks and difficulties of wildlife quarantine policy implementation in Ogun State, Nigeria. A multistage sampling procedure was used to select the 70 personnel used for the study. Descriptive statistics was used to analyze the data collected. The results showed that NAQS personnel have a better knowledge on zoonotic diseases transmission (4.83) and gallant attitude to zoonotic disease risks (4.81) while the perceived most wildlife quarantine policy implementation difficulties were corruption (5.76) and nonexistence of appropriate technology for implementation (5.55). It was concluded from the study that despite the considerable Nigeria Agricultural Quarantine Service personnel knowledge on zoonotic diseases transmission and their attitude to zoonotic disease risks, they greatly perceived the implementation difficulties of wildlife quarantine policy which warranted the need for NAQS personnel health education programs to minimize the transmission of zoonotic pathogens from wildlife animals on trans-

boundary transits which is also an important factor for a successful wildlife quarantine policy implementation.

Keywords: knowledge, attitude, difficulties, wildlife, quarantine, policy

1. Introduction

A negative impact on our nation's agricultural economy, ecology, and public health might result from the illegal importation of animals and their products without taking into account the risk of hazardous exotic illnesses entering the country. Quarantine regulations are seen as a crucial component in preserving the privileged human, plant, and animal health in Nigeria. To protect the country's economy from harmful alien illnesses and pests, the Act No. 28 of 1959 established the quarantine service (Oyeleye et al., 2022).

The Nigerian Agricultural Quarantine Service (NAQS) has a number of difficulties that prevent its practice procedures from being as efficient as they should be in minimizing the danger to agriculture, the environment, and public safety (Agbeleomoge et al., 2021). Despite the efforts of the animal service to assure the entry of clean animals and animal

products, traffickers are becoming more active in the illegal wildlife trade (Hilderink & de Winter, 2021). Although they share a same objective—security—the paucity of holding facilities, limited manpower, a shortage of veterinary specialists, as well as a lack of coordination among other security organizations, cannot be overstated (Adejumo et al., 2021).

Current wildlife trading activities in Nigeria have increased human-animal contact, which has accelerated the spread of zoonotic illnesses (Rohr et al. 2019). The socioeconomic harm brought on by illnesses spread through the trade in wildlife has highlighted the necessity for quarantine laws and public health-related behavioral changes to reduce the danger of these infections (Wyatt et al., 2022). Quarantine, however, is a crucial risk management strategy that may be used to lessen the threat presented by deadly wild animal diseases, particularly when the animals are transported internationally or domestically between nations, or when they are introduced into new environments (Kumar et al., 2021).

Nigeria's animal quarantine laws might pave the road for the eradication of animal trafficking while also preventing the introduction of hazardous exotic illnesses into the nation via imported animals (Agbelemoge et al., 2021). However, having this policy on its own is insufficient without Nigeria Agricultural Quarantine Service personnel's awareness of zoonotic disease transmission, attitude toward zoonotic disease risks, and challenges of implementing wildlife quarantine policy.

Therefore, this study examined the Nigeria Agricultural Quarantine Service personnel knowledge on zoonotic diseases transmission, attitude to zoonotic disease risks and difficulties of wildlife quarantine policy implementation in Ogun State, Nigeria.

2. Research Methodology

Ogun State was created in 1976 from the former Western State. The State is located in the South Western part of Nigeria. It covers a total of 1,640,076 square kilometres of land mass where over 60 percent are cultivable arable land, with an estimated population of about 3.391 million. The state has the largest land entry parts.

All personnel of the Nigerian Agricultural Quarantine Service (NAQS) at the land borders, in Nigeria comprised the population of the study.

A multistage sampling procedure was used to select the respondents in the study area.

Stage 1: Ogun State was purposively selected because most smugglings of agricultural products are through land borders and the state has the largest land entry points.

Stage 2: Simple random sampling was used to select 5 stations out of 6 stations of the agency. This was done based on the population of personnel in the stations.

Stage 3: Disproportionate simple random sampling was used to select 70 personnel in the selected 5 stations of the agency because of the difference in population.

Data was collected was collected through the administration of a set of questionnaire. The questionnaire was designed to elicit basic socio – demographic information, the perceptions of the respondents on transboundary zoonotic diseases and its transmission and the constraints of guidelines enforcement of quarantine policy in Nigeria. The rating used was based on a 7-point Likert-type scale ranging from “strongly disagree” (1) to “strongly agree” (7) and “not a constraint” (1) to “extremely serious constraint” (7) respectively. Data was analyzed using SPSS (Statistical Package for Social Sciences) and subjected to descriptive statistics.

3. Results and discussion

Table 1 presented the NAQS personnel knowledge on zoonotic diseases transmission. From the table, the respondents have a better knowledge on the threat of zoonotic diseases to human health (6.69), the maintenance of optimum health in humans and wild animals in preventing zoonosis (6.14), the cause of abortion in wild animals because of infectious diseases can also cause abortions in humans (5.39) and the likelihood of therapeutic success of some zoonotic diseases infected by humans (5.08). In all, it can be deduced from the results in the table that the NAQS personnel have a better knowledge on zoonotic diseases transmission (4.83).

Table 1: Knowledge of quarantine personnel on zoonotic diseases transmission

Perceived Statements	Mean
Zoonotic diseases are threat to human health	6.69
Maintenance of optimum health in human and wild animals help prevent zoonosis	6.44
Infectious diseases that cause abortion in wild animals can also cause abortion in humans	5.39
Some zoonotic diseases maybe incurable if contracted by humans	5.08
Wild animals infected and treated with precaution can live longer	4.82
Many zoonotic diseases have been around for hundreds of years	4.41
Quarantine personnel are more at risk than others	4.21
A close contact with wild animals and their waste products is a risk for zoonotic diseases transmission	3.99
Zoonotic diseases can be avoided with proper measure	3.89
Grand Mean	4.99

Table 2 presented the NAQS personnel attitude to zoonotic disease risks. From the table, the respondents have a better attitude in understanding that wild animals' diseases are dangerous for people and care must be taken seriously (6.84), diseases that cause wild animals' abortion are serious and need highest consideration (6.69), assisting the wild animals in delivery with bare hand can expose us to disease risks (5.08) and collecting the aborted fetuses and placenta with bare hands can expose us to disease risks (4.82). As a whole, it can be deduced from the results in the table that the NAQS personnel have a better attitude to zoonotic disease risks (4.81).

Table 2: Attitude of quarantine personnel to zoonotic disease risks

Attitudinal Statements	Mean
Wild animals' diseases are dangerous for people and care must be taken seriously.	6.84
Diseases that cause wild animals' abortion are serious and need highest consideration.	6.69
Assisting the wild animals in delivery with bare hand can expose us to disease risks.	5.08
Collecting the aborted fetuses and placenta with bare hands can expose us to disease risks	4.82
Throwing aborted fetuses and placenta to the environment contribute the spread of the diseases in our country.	4.35
We are at risk of acquiring diseases from abortion causing agents.	4.13
Many of the agents that cause abortion in animals have the potential to cause disease in people.	3.89
Spread of animals' abortion causing agents to humans is preventable.	3.81
Animal health care providers can handle abortion outbreaks very well.	3.69
Grand Mean	4.81

Table 3 presented the perceived difficulties of quarantine policy implementation in Nigeria. These includes corruption (5.76), nonexistence of appropriate technology for implementation (5.55), privation of clear definition of responsibility and coordination (5.48), deficiency of clear definition of goals (5.41), lack of continuity commitment to policy (5.34), over ambitious policy goals (5.23) and comparison during implementation (5.16).

Table 3: Difficulties of quarantine policy implementation

Statements	Mean
Corruption	5.76
Nonexistence of appropriate technology for implementation	5.55
Privation of clear definition of responsibility and coordination	5.48
Deficiency of clear definition of goals	5.41
Lack of continuity commitment to policy	5.34
Over ambitious policy goals	5.23
Comparison during implementation	5.16

4. Conclusion

Quarantine is a necessary measure in Nigeria as it is the first line of action against exotic diseases into the country. However, despite the appreciable Nigeria Agricultural Quarantine Service personnel knowledge on zoonotic diseases transmission and attitude to zoonotic disease risks, they greatly perceived the difficulties of quarantine policy implementation of wildlife quarantine policy. Thus, wildlife animal quarantine service which is core to securing the nation against trans-boundary diseases is a major concern of this study, thus, the need for NAQS personnel health education programs to minimize the transmission of zoonotic pathogens from wildlife animals on trans-boundary transits which is an important factor for a successful wildlife policy implementation.

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Intelligence Management and its impact on Security Architecture in Karu Local Government Area of Nasarawa State, Nigeria.

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Abstracts. This study examines Intelligence Management and Its Impact on the Security Architecture in Karu Local Government Area of Nasarawa State, Nigeria. Primary data were derived from questionnaires and in-depth interviews with the Department of State Security Service, Defense Intelligence Agency, Nigerian Intelligence Agency, Force Intelligence Bureau, the Joint Intelligence Board, Office of the National Security Adviser, other security agencies like the Customs, Immigration, NSCDC, Prisons, NDLEA and other stakeholders. The system theory was adopted which holds that security architecture is made up of sub-systems, and when these sub-systems function properly, the system as a whole function well, but if one part is affected, it can impact on others. However, it was revealed that the similarities in the statutory roles of the various security agencies had made it difficult to demarcate their constitutional responsibilities, which often culminates in clashes between different personnel on various security issues rather than a joined-up approach to fighting crime in a joint security operations and the politicization of intelligence management had impacted negatively on the security architecture which has made recruitment easy for other forms of criminalities as they capitalize on the political situations of the country. Despite the provisions within the Intelligence Services Act 2001, the government is yet to appoint an ombudsman and standards unit for the intelligence agencies which will ensure it remains in compliance with Nigeria's democratic tenets. Therefore, the paper recommends that the Nigeria government should develop a mechanism capable of harmonizing the various agencies and enlighten them on the need to place national security above every other issues. In addition, the decision making's reaction to available intelligence is often slow and sometimes

uncoordinated; hence, intelligence operations need to be better coordinated, more robust and where possible, decentralized to identify potential threats within localities.

Keywords: Intelligence Management, Security, and Security Architecture

1. Introduction

The security architecture of a nation is the totality of its constitutional and legal framework, the institutions that form and provide safety and security services for its citizens in the defense of its territorial integrity. The national security architecture includes management, decision-making, and oversight structures of institutions as well as policies, strategies and plans (Bakrania & Haider 2016). In most countries, institutions and agencies like executive arms of governments, national security advisory bodies, legislative or parliamentary committees, ministry of defense, internal and external affairs, customary and traditional authorities, financial management bodies, and civil society organizations make up and contribute to national security management (OECD 2007). Beane, Olier, O'Brien, & Rathmell (2005) asserts that the coordination of decision making is important, and the effectiveness of security architecture depends on politically led security governance system, delivered by a constitutional mandated defense, security and intelligent institutions that are organized, trained, equipped and professionally led, with the various services and institutions that are constitutionally established are designed and mandated to address specific threats within defined domain. The reality and inevitability of overlaps responsibility across domains requires cooperation and collaboration to

denied space for any threat with the possibility to upsetting the whole architecture.

Global and local insecurities routinely inform and interact with each other. Hence, the acceptance that security measures designed to prevent and manage international threats, demands local intelligence sharing networks from remote to metropolitan settings. Impact from the proliferation of private security companies in Nigeria is not yet seen nor felt on the reduction of crime and criminalities due to the restricted operational landscape within which private security firms operate, and which could be seen in their inability to compete favorably in job security provision nor public safety delivery, as compared to their counterparts in other developed countries, whose operational spreads could be felt across the globe. (Mungadi & Onibiyo, 2020). But Bouwhuis (2018) submitted that tasks which are traditionally performed by public law enforcement agencies are being outsourced to private security companies due to rise in new threats level from non-state actors ranging from international terrorism, religious extremism, radicalism. The liberalists view of the provision of security is that, the pursuance of security can be achieved with the involvement of other actors offering the same services (Mutonyi et al. 2020). The deterioration and disintegration of the security architecture and arrangements in Nigeria has attracted serious concern as it has shown the failure of the Nigerian state to link the security of administrations to the physical security of the citizens as well as the failure to guarantee the security of the administration it represents. Consequently, both state and non -state actors, security analysts and the academia are compelled by necessity to rethink the concept and strategies for strategic paradigm shift. This is because there seem to be an ineradicable tendency to think that the nation seems not to realize that the best guarantee to security is the security of their citizens and the acceptance by the citizens of the political rule of the game upon which the legitimacy of the Nigeria rests.

The security architecture in Nigeria has been grossly accused of being concentric and archaic (Mai-Bashira, 2022). The Nigeria National Security architecture is too unitary to respond to complex federal structure like Nigeria (Yunusa et al. 2022). The Nigeria security architecture deemphasizes human security for State Security, and collaboration is mostly seen as reactive measures at the outbreak of ethno religious or communal clash, display of show of force as electoral process deterrence, counter-insurgency operation, and collaboration remain a mirage (Mungadi et al. 2020). Abysmal failure of the

national security architecture in achieving inter agency cooperation is seen in the incessant attack of correctional facilities by terrorists (Afuzie, 2022). This stresses the idea that security policies should capture all conditions that affect dignity, welfare, freedom of individuals and not only protect against war. It focuses on social and economic issues as they affect individual, promoting the view that security is dependent upon human development and stability (Crawford, 2013). Nnadozie, Usman & Okolie (2019) asserts that there is need for synergy between the Nigeria defense, security and intelligence organizations when they hold that collaborations and effective communication are much in deficiency and even in some cases absent among security agencies in Nigeria. It takes a robust and elaborate multi-agency, multi-disciplinary and professional network of agencies to effectively combat the modern security challenges emerging around the world, especially where they are enhanced by diverse uses of its conveniences which technological advancements and transport provide.

The need for inter-agency collaboration and coordination was rooted in global security experience and as a matter of global security best practices (Han 2013). Carton (2016) holds that some levels of coordination exist within Nigeria internal security services, but sometime information is hoarded and other agencies are treated with suspicion, leading to information silos and analysis gap. The unfortunate Boko Haram insurgents' abduction of the Chibok schoolgirls, show the command and control coordination and collaboration among state institutions causes grave breaches to national security and safety of citizens. Han (2013) holds that in dealing with threats that are highly networked, and run by operatives that communicate with each other in a complex way, state security information management must be coordinated at inter-agency levels from the strategic to the operational cadres. Intelligence and operational units at state services must synergizes efforts to achieved sustainable successes. Inter-agency coordination and collaboration in security services are mutually beneficial and well-defined relationship entered by organizations to achieved common goal. Intelligence management procedure for exchange of information between participating agencies must be worked out for cooperation to work, and this procedure must be broad-based covering local, national and regional levels administrative units of participating agencies. The relevant cadre of each executive officers in each agency need to have quick and easy access to availability and needed information within other participating agencies. However, the rate of

insecurity and the poor level of coordination and collaborations between inter-agency towards intelligence management in Nigeria have led to this study not only in Karu Local Government Area of Nasarawa State, but Nigeria in general.

2. Conceptual Framework

2.1 Concept of Intelligence

A review of literature indicates that intelligence has been conceptualized and presented by scholars and practitioners in diverse contexts. Gustavo (2005) observed that there is no universally acceptable definition of the concept of intelligence as most scholars look at the definition from different scope and perception. Randol (2009) observed that one of the most meaningful purposes of intelligence is to predict where future security challenges may arise. Security intelligence may be defined as the threat of major, politically motivated violence, or equal grievous harm to national security or the economy, inflicted within the nation's territorial limits by international terrorists, homegrown terrorists, or spies of saboteurs employed or financed by foreign nations (Posner, 2002). Duyan (2012) conceptualized intelligence as Information and knowledge about an adversary obtained through observation, investigation, analysis, or understanding. Oghi & Unumen, (2014) sees intelligence as the collection, evaluation, analysis, integration and interpretation of all available information which concerns areas of operations and potentially significant to planning. Intelligence, with regards to the military, could be strategic, tactical and counter intelligence. Intelligence in this context is a response to a specific question or issue, structured to provide a basis for action and presented to an individual or group empowered to act. Lowenthal (2002) notes that, Intelligence is the process by which specific types of information important to national security are requested, collected, analyzed, and provided to policymakers; the products of that process; the safeguarding of these processes and this information by counterintelligence activities; and the carrying out of operations as requested by lawful authorities.

Shulsky & Schmitt (2002), the term intelligence is applied to different kinds of information activities and organization. Intelligence is the information relevant to a government's formulation and implementation of policy to further its national security interests and to deal with actual and potential adversaries. This definition seems to have been drawn from State-centric perspective of national security with emphasis on information relevant only

to government even though the advantages and the application are relevant universally and not restricted to government enterprises alone. The goal of intelligence is one of eliminating or reducing uncertainty for government decision-makers. Johnson (2010) states that the purpose of intelligence is to provide information to policy makers that may help illuminate their decision options. West (2004) argues that the reality of intelligence operations cannot be portrayed entirely accurately in works of fiction (Gustavo, 2005). Bruneau & Dombroski (2014) asserts that reform in the intelligence sector has been difficult because of its pervasive public distrust of institutions, the problem of politicization of the bureaucracy, and the consequent lack of a corporate culture or tradition of public service. Hammond (2015) suggest that intelligence exists because governments seek to hide information from other governments, which in turn, seek to discover hidden information by means that they wish to keep secret. Ratcliffe (2003) views intelligence "as a structure, a process and a product." He explains that intelligence units are typically units with specialized skills and people within police departments. According to Ratcliffe, (2003) "Intelligence is also a process, incorporating a continuous cycle of tasking, data collection, collation, analysis, dissemination and feedback, prior to the next, or a refined task, this continuous process is responsible for the generation of an intelligence product was designed to shape the thinking of decision-makers" (Ratcliffe, 2003).

Pillar (2017) observed that the biggest challenge is the inherent difficulty of discovering plots that involve small numbers of people who do their planning and preparation in secret and are highly conscious of operational security. Metscher & Gilbride (2005) argued that Intelligence is a product created through the process of collecting, collating, and analyzing data, for dissemination as usable information that typically assesses events, locations or adversaries, to allow the appropriate deployment of resources to reach the desired outcome. Bruneau & Dombroski, (2014) stated that in most instances the intelligence service rhetorically linked internal opposition to putative foreign enemies, the overwhelming focus of the intelligence service in most countries was on domestic opposition. Johnson (2010) states that 'national security intelligence is the knowledge and foreknowledge of the world around us- the prelude to presidential decisions and actions.' Johnson (2010) further observes that the national security intelligence, other than information product also refer to a set of missions carried out by a nation's secret agencies and organizations that carry out the missions of collection and-analysis,

counterintelligence, and covert action. Johnson (2010) elucidates that the national security intelligence may be different from strategic intelligence, although the concepts are used interchangeably as it encompasses tactical as well as strategic intelligence. Kuosa (2014) reports that “the term ‘foresight’ refers to a systematic process where one attempts to say something comprehensive and grounded about the futures probabilities, change drivers, change factors, interrelations, and options for actions. National security intelligence depends on resources; data needs; creative thinking; bonding between practitioners and management; and reliability of judgments and forecasts’ impactful to the organization.

2.2 Concept of Security

Security is a normative and emotionally idea with no independent meaning but related to a context and a specific individual or societal value system and its realization (Brauch, 2008; Mesjasz, 2004). Security in an objective sense, measures the absence of threats to acquired values. The traditional notion of security places emphasis on the protection of state’s sovereignty and territorial integrity against domestic and external threats. However, in the last decade of the Twentieth Century the Bretton Woods institutions upheld that the State-centric notion of security must change from an exclusive stress on national security to a much greater stress on human security. That is, from security through armaments to security through human development, from territorial security to food, employment and environmental security (Watson, 2011). Security according to this people-centered conception means safety from the constant threats of hunger, disease, crime and repression. It also means protection from sudden and hurtful disruption in the pattern of daily lives - whether in homes, jobs, communities or environment (Kumssa & Jones, 2010). Brauch (2004) critically examined the concept, concludes that the political and scientific concept of security has changed with the international order. It stands to reason that the conventional concept of security wherein the state is both the object of security and the primary provider of security falls short of a comprehensive and an adequate consideration of the phenomenal essence of security.

Pam (2005), adopting the Human Security Report, notes that the term ‘human security’ defines security in terms of an integrated idea of positive peace, human rights and sustainable development. It is related to the enhancement of livelihood of all people at risk, the values of the respect of human rights, the

dignity of the individual, respect for diversity, community empowerment, decentralized forms of government, peace and coexistence and the accountability and transparency of actions aimed at the betterment of livelihood (Human security Report, 2003; Ikonne, et al 2005). The promotion of human security is realized ultimately through freedom from want and fear. The realization of human securitization clearly requires multiple efforts, all of which should be integrated and linked to the ultimate goal of providing for the sanctity of life and liberty (Watson, 2011; Liotta, 2002). Human security has been associated with freedom from danger to life and property and the presence of conducive atmosphere for the people to pursue their legitimate interests within the society (Bassey, 2004). Human security requires rules and impartial adjudication and application which can hardly exist without due provision of adequate national security. Indeed, aggressive and repressive states can be major sources of human insecurity and a greater cause of human travail (Idowu, 2013). The security threats and challenges in Nigeria are enormous, the growing incidence of hostage-taking and kidnapping, militant insurgencies, pipeline vandalism, ethnic insurrections, fatal inter- and intra-community conflicts, inter- and intra-religious wars, illegal arms trafficking, armed banditry, political violence and gangsters, the quality and quantity of ordinance on charge to militant insurgents and hoodlums, the courage and zeal usually exhibited by bandits in their nefarious activities, the spate of unemployment, the state of poverty among the citizens, the infrastructural and institutional collapse and the obvious ineffective state response are veritable indicators of the scale of insecurity in Nigeria today. These indices also indicate that the national security architecture may have fallen short of the security objectives.

2.3 Concept of Security Architecture

The major explanation for the upsurge in the scale of violent insecurity and the poor delivery of Nigeria’s security architecture is the centralization of security apparatus. This partly relates to the historical evolution and philosophy of the security services. The Nigeria Police Force was created by the British colonialists to deal with the ‘troublesome natives’. Originating from the West African Frontier Force, the Police was centralized and oriented towards ensuring compliance with the imperial Acts of 1807 and 1833 which abolished slavery and slave trade as well as achieving the colonial objectives of ‘divide and rule’ and for facilitating the passage of raw materials to the metropole (Jemibewon, 2001).

However, over five decades since Nigeria got political independence, the country's security architecture remains structurally centralized with damning consequences for management of crime and insecurity at the grassroots. Despite persistent agitations for community and state policing so that local people familiar with the language, geography and socio-political terrains will be in charge of security, the federal government continues to hold on to the police and armed forces tenaciously. However, the intrusion of the military into politics disrupted the functioning of Nigerian federalism. The country experienced military coups in 1966 (January and July), 1975, 1976, 1983, 1985 and 1993) as well as a civil war (1967-1970). These long years of military rule resulted in the hyper-centralization of power (including the police and armed forces) and resources at the federal level. For example, the regional constitutions which existed between 1960 and 1967 were abolished; the regional police formations were centralized; the universities established by the regions were taken over; the local government system of administration was unified; and a Land Use Decree was promulgated in 1978 ceding the ownership of all lands to the government (Aghedo & Osumah, 2009). These were some of the features that characterized military rule and dismantled Nigerian federalism (Ekeh, 2007). This over-centralization was made possible by the oil boom of the early 1970s which made the first phase of Nigerian military government (1966-1979) to be awash with enormous oil rents. During this period, the application of the federal character principle was badly assaulted; revenue allocation became terribly centralized.

Empirical Review

2.4 Intelligence Management and the Security Architecture in Nigeria.

Intelligence is the most vital instrument of any state and good intelligence is the best defense of a state. McDowell (2008) state that, this form of intelligence may be localized at district or regional level, or it may be conducted at headquarters level close to the organizational and national clients, whether they are in corporate executives, senior government officials, group commanders, or politicians. In essence, in the law enforcement context, strategic intelligence provides senior managers and executives with insight and understanding into current and emerging trends; changes in the crime environment; threats to public safety and order; opportunities for controlling action and the development of counter programs and likely avenues for change to policies, strategies, programs, and legislation. Literally, intelligence failure implies that intelligence was not available to, or fell short of,

or could not serve its purpose of aiding policy makers to take the correct decisions as may be revealed by later information and occurrence. Shulsky & Schmitt (2002) define intelligence failure as "essentially a misunderstanding of the situation that leads a government to take actions that are inappropriate and counterproductive to its own interest." Shulsky & Schmitt (2002) further assert that, "whether it is subjectively surprised by what happens is less important than the fact that the government or the military is doing or continues to do the wrong thing. And that 'the possible failure of intelligence to assess a situation correctly is a danger coeval to intelligence itself."

Jervis (2001) advances that the most obvious sense of intelligence failure is a mismatch between the estimates and what later information reveals. This is simultaneously the most important and least interesting sense of the term. It is the most important because to the extent that policy depends on accurate assessments, almost the only thing that matters is accuracy. Brockington, (2012) sees intelligence failure as the inability of one or more parts of the intelligence process-collection, evaluation and analysis, production, dissemination to produce timely, accurate intelligence on an issue or event of importance to national interests. Brockington (2012) further observes that Shulsky's definition gives an impression of misunderstanding of intelligence by consumers as the core in intelligence failure; Lowenthal's definition presents faulty analysis process as central to intelligence failure which is reconciled by Brockington (2012) that "intelligence failure is the result of an adversary actions that were not identified during the intelligence cycle and achieves strategic surprise, despite the government having all the information necessary to anticipate the events and its consequences.

Intelligence failure is a hitch at any stage or by any actor in the intelligence process that results in inaction and or inappropriate action that is inimical, or detrimental to national interest or the interest of an actor. Shulsky & Schmitt (2002) note that, "this involves instances in which relevant information cannot be obtained at all and or disorder of the analytical process that causes data to be ignored or misinterpreted and instances in which there are supervening institutional limitations." The consequences are usually surprise attacks, operational and tactical failures, or ignorance of the real facts of a situation resulting in the continuation of a wrong policy. Shulsky & Schmitt (2002) further asserts that intelligence is a word describing a perceived reality, event, action, state of affairs, subject or object. It

could only seem plausible to estimate that intelligence like most concepts in social inquiries has its definitional and conceptual nuances in relation to contexts, subject, object, environment and usage/register. Jervis (2001) observes that, despite the fact that most theories of international politics assume that actors see the world fairly accurately, many wars are preceded if not caused by failures to predict what others will do, and almost by definition crises involve intelligence failures. He argues that intelligence and critics rely on intuitive ways of and rhetorical forms of exposition. More careful, disciplined, and explicit reasoning will not automatically yield the right answers but will produce better analysis, do better job of revealing where the key differences in opinion lie, and increase the chances of being correct.

More so, intelligence is considered the first line of defense against terrorists. Collecting it does no good if it is not analyzed and then shared with other institutions and agencies combating terrorism. Amaraegbu (2013) opined that intelligence gathering is key in fighting chronic and difficult battles that makes up insurgency. To evaluate accurately terror threats and the character of terrorist organizations is an extremely challenging task for states. In Nigeria, there are four statutory security intelligence agencies, the State Security Service (SSS), Defense Intelligence Agency, Nigerian Intelligence Agency (NIA) and Force Intelligence Bureau (FIB). Though each of the four intelligence agencies has its specific tasks defined by law, to undertake their tasks efficiently and effectively, they coordinate their activities among themselves with the aim of providing adequate security of lives and property. The only existing channels of coordination between them is the Joint Intelligence Board and the Office of the National Security Adviser (Arase, 2013). The four security intelligence agencies have different responsibilities relating to intelligence generation concerning internal security, defense and external subversion respectively. The state security services are in charge of protecting government officials and property and gathering vital domestic intelligence; the defense intelligence agency protect the territorial sovereignty of Nigeria and promote cooperation with military allies to foster regional and global security. The national intelligence agency is charged with external intelligence, while the Force Intelligence Bureau is to gather intelligence for the department of police on criminal activities and the lead agency for counter terrorism in Nigeria is the office of the National Security Adviser.

However, the role of the office has been politicized by forces of religion and ethnicity and this has made it very difficult to gather human intelligence. This weakness has made it possible for foot soldiers of Boko Haram to carry out their attacks on soft targets which include places of worship and businesses. Blanchard (2016) argued that the group has grown increasingly active and deadly in its attacks against state and civilian targets in Nigeria. He further stated that the inability of the Nigerian government's response to Boko Haram were a lack of coordination and cooperation between security agencies; corruption; misallocation of resources; limited requisite databases; the slow pace of the judicial system; and lack of sufficient training for prosecutors and judges to implement anti-terrorism laws" (Blanchard, 2016). The Nigerian security forces in their present state do not appear to be in a position to defeat terrorists and kidnappers. Amaraegbu (2013) noted that their ubiquitous roadblocks, token arrests, reactive soldiers neither frighten Boko Haram nor other contestants (kidnappers and armed robbers) with superior fire power. This politicization of the intelligence community has made recruitments easy for Boko Haram leaders as they capitalize on the political situations (corruption and political instability) of the country. Osumah (2013) state that this is because security issues have allegedly been manipulated by the Nigerian ruling-elite at various levels of government to allow them set aside huge sums of money as security votes (Money received to counter-terrorism), which is often subject to abuses. Informants have directly linked corruption to the lack of weapons to fight terrorism (Pate, 2015).

Amaraegbu, (2013) holds that Nigeria's effort to defeat Boko Haram has not yielded the expected results, despite allocating approximately 25% of its budget to security in what ought to translate to improved military and intelligence coordination sector. Pate (2015) further opined that several informants allege that money allocated for arming and training forces fighting Boko Haram has instead been misappropriated by military and political leaders for their personal gain. Amaraegbu (2013) notes that at some point, President Jonathan inadvertently admitted that Nigeria's security and intelligence community, under his watch lack required intelligence capacity to carry out their basic duty of identifying enemy of State. Amaraegbu (2013) concluded that Boko Haram operates undetected because the local residents do not trust the government well enough to offer intelligence information. Majority of locals are hesitant, or unwilling, to provide information to security operatives about the hideouts and activities of the

sect members. The absolute mistrust, suspicion, and fear characterize the relationship between the security operatives and the civilian populations in the volatile states, undermining intelligence undertakings that would lead to definite identification and extirpation of the sect's members and their activities (Amaraegbu, 2013). There is need for human intelligence in other to know the activities and operations of the group, modern technologies like GPS and satellites have their limitations and these cannot be 100% accurate as human intelligence which is based on primary source (Amaraegbu, 2013).

3. Theoretical Framework

3.1 Systems Theory

The system theory is more easily understood if one understands the concept of sub-systems. The security architecture is made up of sub-systems, and when these sub-systems function properly, the system as a whole function well, but if one part is affected, it can impact on others, so the sub-systems are interconnected and their functions impact the others. Given the dynamic nature of events and crowds, bringing security goals and actions together in a way that is holistic and integrated requires a systems approach. A system is an integrated collection of parts (agencies). Each part, although it is bounded, is interrelated to other parts. Systems theory seeks to understand this and to predict how developments and changes will affect the system as a whole. Generally, systems theory is about broadly applicable concepts and principles, as opposed to concepts and principles applicable to one domain of knowledge. It distinguishes dynamic or active systems from static or passive ones. Active systems are activity structures or components that interact in behaviors and processes while passive systems are structures and components that are being processed. Security

implementation is an active system because changes made to increase security presence and security controls and response will change the other actors and agents in the event environment which may be a positive change for e.g. increasing the number of personnel can make a crowd feel safer or happier. On the other hand, increasing the number of personnel may increase the crowd hostility. Adequate and prompt dissemination of information to personnel may reduce any intending security threats that might occur. Therefore, in developing security planning and methodology aimed at improving management of the security architecture of a country, a systems approach is the overarching theoretical framework on which the process relies.

4. Research Methodology

Karu is one of the Local Government Areas created in 1991 out of Keffi Local Government Area of Nasarawa State. Karu Local Government Area has five indigenous ethnic groups - Gbagyi, Koro, Gwandara, Yeskwa and Gade. Karu LGA shares boundaries with Nasarawa Local Government Area in the Southeast, Panda in the North and Abuja (the Federal Capital Territory of Nigeria) in the West. The population of Karu has been projected to be 1,068,480 (NPC Projection, 2022). In this study, the sampled population was 10,980, with this population and the margin of error of 0.05 confidence level of 95% and with the recommended sample size of the study based on the total population of the selected agencies is 370 using the Research Advisors (2006). 370 questionnaires were administered to respondents in the sampled agencies and was filled and returned. Chi square was used for the analysis at 0.05 level of significance with the used of the statistical package for social sciences (SPSS) version 20. In-depth interviews were conducted with stakeholders and an in-depth summary and coding were used for the analysis.

5. Analysis and Discussion of Findings

Table 1: Respondents Responses on the Causes of Intelligence Management Failure on the Security Architecture in Karu Local Government Area of Nasarawa State.

Causes of Intelligence Failure	Frequencies	Percentages
Politicization	153	41.4
Denial and Deception	102	27.6
Insufficient Information	64	17.3
Conflicting Pressure	51	13.8
Total	370	100

Source: Field Survey, 2023.

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Chi-Square	19.870 ^a	6	.087
Likelihood Ratio	18.608	6	.074
Linear-by-Linear Association	7.917	1	.019
N of Valid Cases	370		

4 cells (33.3%) have expected count less than 5. The minimum expected count is .08.

Table 2: Respondents Responses on the Impact of Intelligence Management Failure on the Security Architecture in Karu Local Government Area of Nasarawa State.

Impact of Intelligence Management Failure on the Security Architecture in Karu	Frequencies	Percentages
Suspicious Attacks	125	33.8
Tactical Failure	107	28.9
Wrong Policies	77	20.8
Misunderstanding/mismanagement of information	61	16.5
Total	370	100

Source: Field Survey, 2023. contingency

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Chi-Square	11.808 ^a	6	.066
Likelihood Ratio	12.308	6	.055
Linear-by-Linear Association	5.991	1	.014
N of Valid Cases	370		

4 cells (33.3%) have expected count less than 5. The minimum expected count is .07.

Table 1 above shows that 153 of the respondents representing (41.4%) of the total respondents asserts that politicization is the cause of intelligence failure on the security architecture in Karu Local Government Area of Nasarawa State. 102 of the respondents representing (27.6%) of the total respondents holds that Denial and Deception are the causes of intelligent failure on security architecture in Karu Local Government Area. 64 of the respondents constituting (17.3%) of the responses from respondents asserts that Insufficient Information is the cause of intelligence failure in Karu Local Government Area, while 51 of the respondents representing (13.8%) of the responses made from respondents' states that Conflicting Pressure is one of the causes of intelligence failure on security architecture in Karu Local Government Area. Also, in table 2, 125 of the respondents holds that suspicious attacks are the cause of intelligence management failure, this figure represents (33.8%) of the total responses given by respondents on security architecture in Karu Local Government Area. Also, Based on the statistical analysis, the result indicates that there is no relationship between intelligence management failure and its impacts on the security architecture in Karu Local Government Area. Although studies conducted by Shulsky & Schmitt (2002) affirmed that intelligence management failure

107 respondents constituting (28.9%) of the total respondents affirmed that tactical failure was as a result of intelligence management failure on the security architecture Karu Local Government Area. 77 (20.8%) of the respondents affirmed that wrong government policies were the cause of intelligence management failure on the security architecture Karu Local Government Area, while the 61 of the respondents representing (16.5%) asserts that Misunderstanding or the mismanagement of information was the cause of intelligence management failure on the security architecture in Karu Local Government Area. This result is in line with that of Shulsky & Schmitt (2002) who define intelligence failure as "essentially a misunderstanding of the situation that leads a government to take actions that are inappropriate and counterproductive to its own interest." They also drew instances from empirical cases on the causes of intelligence failure to unavailability of information when and where needed.

is essentially a misunderstanding of a situation that leads Government to take actions that are inappropriate and counterproductive to its own interest. The consequences are usually surprise-attacks, operational and tactical failures, or ignorance of the real facts of a situation resulting in the

continuation of a wrong policy. Similarly, Brockington (2012) holds that intelligence failure is the result of an adversary actions that were not identified during intelligence cycle and achieves strategic surprise, despite government having all information necessary to anticipate the events and its consequences. However, result have shown that there is a relationship between the politicization of intelligence management and its impact on the security architecture in Karu Local Government Area. This result is in line with Pate (2015) opinion that several informants allege that money allocated for arming and training forces fighting insurgents have been misappropriated by military and political leaders for their personal gain. Similarly, Amaraegbu (2013) holds that ubiquitous roadblocks, token arrests, reactive soldiers neither frighten insurgents nor other contestants (kidnappers and armed robbers) with superior fire power. This politicization of intelligence agencies has made recruitment easy for criminal elements as they capitalize on the political situations (corruption and political instability) of the country. Also, Osumah (2013) state that this is because security issues have allegedly been manipulated by the Nigerian ruling-elite at various levels of government to allow them to set aside huge sums of money as security votes, which is often subject to abuses. However, security experts have call for precise, concise and operational concepts to facilitate objective application in security administration in Nigeria.

6. Conclusion and Recommendations

The security architecture in Nigeria has been grossly accused of being concentric and archaic, and too unitary to respond to complex federal structure like Nigeria. This security architecture deemphasizes human security for State Security, and collaboration is mostly seen as reactive measures at the outbreak of ethno religious/communal clash, display of show of force as electoral process deterrence, counter-insurgency while collaboration remains a mirage. The abysmal failure of the security architecture in achieving inter agency cooperation is seen in the incessant attack of facilities by terror. Although, there are similarities in the statutory roles of the security agencies that had made it difficult to demarcate their constitutional responsibilities, which often culminates in clashes between different personnel on various security matters rather than a joined-up approach to fighting crime in a joint security environment. To achieve overall security, cooperative and team operations are necessary between or among these agencies. It is not an exaggeration to assert that the fight against insurgency and banditry in the country

is unsuccessful, because of the disharmonious disposition of the security agencies. Therefore, the Nigeria government should develop a mechanism capable of harmonizing the various agencies and enlighten them on the need to place national security above everything else. One other factor that has worsened insecurity in the country is the inadequacies within the production of credible intelligence, including the lack of synergy and poor usage of intelligence products, which has allowed the threat elements to persist and foster. Where there is sufficient information on the threats, the process of collection and analysis of same is stifled by service bureaucracy. In addition, the decision maker's reaction to available intelligence is often slow and sometimes uncoordinated. Intelligence operations need to be better coordinated, more robust and where possible, decentralized to identify threats within localities. Additionally, despite provisions within the Intelligence Services Act 2001, the government is yet to appoint an ombudsman and standards unit for the intelligence community which will ensure it remains in compliance with Nigeria's democratic tenets.

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Spatial Location and the Utilization of Primary Health Care Services by Nursing Mothers in Niger South Senatorial Zone, Niger State, Nigeria

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Abstract. Nigeria's infant mortality ranking has become worrisome despite efforts to curb the negative trend. Rural areas are the most affected. The establishment of Primary Health Care Centers (PHCs) as a move to improve child and maternal health is yet to decimate the problem. Thus, this study is informed by the need to explore the role of spatial location on the utilization of PHCs in a bid to find a lasting solution to infant mortality in Niger South senatorial zone. The study leverages the 3-Delays model as its theoretical framework. 400 nursing mothers were purposively selected for the study and data were collected using structured questionnaire and focus group guide. Interviews were also conducted with heads of PHCs. Results from the findings revealed that nursing mothers significantly patronized the PHCs, especially in the rural areas. Many of them visited the PHCs at least once a year. Access to PHCs was easier in the rural areas than the urban areas and rural mothers were relatively satisfied with the service rendered to them compared to the urban mothers. However, the rural areas still recorded more infant mortalities than the urban areas owing to poor staffing, lack of medical equipment and supplies in the PHCs. Therefore, the study concludes that patronage of PHCs alone is not adequate in resolving the infant mortality crisis. Thus, the study recommends proper staffing and equipping of PHCs and establishment of additional ones in order to halt the trend in infant mortality.

Keywords: Infant Mortality; Neonatal Mortality; Nursing Mothers; Primary Health Care Centers; Spatial Location

1. Introduction

A healthy population is an indispensable asset for socioeconomic growth and stability. Despite its indispensability, Nigeria's healthcare system is submerged in a pool of perennial challenges such as

service failure, financial and material leakages, poor human resources and management, infrastructural deficit, among others (Dada et al., 2022). These challenges have resulted in increased cases of infant, child, and maternal mortalities; and rising vaccine-preventable deaths, etc. due to poor management of such conditions. In this empirical piece, infant mortality takes the front burner as Nigeria's poor ranking in the area of infant, child and maternal health has become worrisome. Specifically, the country's listing among countries with the highest Infant Mortality Rates (IMRs) in the world (World Health Organization [WHO], 2022) is suggestive of a negative trend in neonatal health services utilization. The importance attached the wellbeing of mothers and children led the United Nations in the year 2000, to adopt and specifically dedicate goals 2, 3, 4 and 5 of the Millennium Development Goals (MDGs) to the wellbeing of mothers and children (World Bank, 2005). Similarly, The Primary Health Care approach was initiated in response to rising cases of diseases and deaths among mothers and children in third world countries like Nigeria. This explains why a component of Primary Health Care is dedicated to wellbeing of women and children (Nwaebuni, 2014).

Unfortunately, despite these efforts and initiatives, Nigeria's maternal and child health have only worsened. Globally, Nigeria ranks second, after India, in the list of countries with the highest neonatal deaths (WHO, 2022). The World Health Organization attributes the trend in neonatal mortalities to preterm births, child-related complications, infections and birth defects. A close observation reveals the causes of neonatal deaths to be predominantly care-related issues which could be handled effectively if the mothers utilized the PHCs during pregnancy and child birth. In their study of infant mortality and risk factors in Nigeria, Shobiye et al., (2022) observe that Nigeria's record in the area of infant mortality is shocking and it suggests the

country has missed its track towards achieving the Sustainable Development Goal (SDG) of reducing infant and child mortality. The study further asserts that the trend is worsened by the limited access of rural women of reproductive ages to health care services particularly in northern Nigeria.

Nigeria's 2021 IMR is 71/1,000 as against 72/1,000 live births in 2020 (UNICEF, 2023). This indicates a decrease of -1/1,000 live births. The data shows a marginal improvement. However, given the poor access of rural women to health care services, chances are that the marginal improvement reported may not be a true reflection of what obtains in the rural areas. Such statistics on mortality rates hide the differences between the 36 states of Nigeria and could also slow progress in some of them. These spatial discrepancies have been scarcely explored by researches and is poorly understood. The issue of access to, and utilization of, health services remains an understudied portion in the etiology of infant mortality in Nigeria especially in the rural suburbs where the phenomenon is unacceptably pervasive. Thus, this study seeks to investigate the role of spatial location in the utilization of primary health care services among nursing mothers in Niger South geographical zone.

2. Study Aim and Objectives

The objectives of the study are:

To determine the utilization of Primary Health Care facilities by mothers in Niger South senatorial zone.
To assess the impact of the utilization of Primary Healthcare facilities on infant mortality in Niger South senatorial zone.

3. Research Hypotheses

The hypothesis of this study is stated in the Null form while the alternative is implied.

H₀: There is no statistically significant relationship between the distance covered by mothers to primary health care centers and their level of access to primary health care services.

4. Theoretical Framework

The study is anchored on the Three-Delays model which was propounded by Thaddeus and Maine (1994). The model explains trends in maternal mortality as being caused by delays in three health seeking stages. Maternity worldwide (2023)

describes the three delays encountered by care seekers as follows:

Delay in seeking appropriate medical care: Delays in this stage may be due to one or all of the following reasons: low status of women, previous poor experience of health care, financial implications, power of decision making among others reasons.

Delay in reaching an appropriate health facility: In this stage, the decision to seek medical help is successfully taken. However, certain barriers affect access to the health facilities. These barriers include: poor road network, distance to the health facility, geographic obstructions such as rivers, mountains, etc. and high cost of transport.

Delay in receiving adequate care when facility is reached: Having successfully crossed the two preceding delays, a patient may still encounter delay upon reaching the health facility. Delays in the health facilities may be due to: lack of medical supplies and poor facilities, inadequate manpower, or inadequate referral system.

In the three-delays model, any of all the three delays may significantly affect mortality. From the decision to seek medical care, to reaching the care, and finally receiving the needed care. A delay in any of these stages may culminate in mortality. Early mortality is recorded when the care is not sought at all while late mortalities occur when care is sought but faces barriers in the subsequent stages of health seeking behavior.

Therefore, the study adopts the three-delays model given its ability to explain the concern of the study, utilization of PHCs by nursing mothers. The issue of utilization of health facilities is affected by many factors which fit into the stages outlined in the three-delays model. Firstly, the decision to seek care for an infant in a health facility is usually not the exclusive right of a woman. This is common in northern Nigeria due to the cultural and religious inclinations. Furthermore, the decision to seek care may be affected by economic difficulties and thus, the decision is delayed. Secondly, in the event, a mother secures consent for medical care from a health facility, the challenge of reaching the health facility at the appropriate time also constitutes a major challenge. Issues of distance, cost of transportation and road networks remain big challenges to medical care in this stage. Lastly, the successful arrival of a mother at a health facility may also not guarantee quality medical care as the third strand of delays such as poor facilities, inadequate manpower, poor referral

system may all constitute hindrances to medical care even after reaching the health centers. Thus, the study examines the role of the foregoing delays in the utilization of PHCs in the study area.

5. Research Methodology

The study was conducted in Niger South senatorial zone where three local governments were selected using balloting method. A mixed method research design was adopted for the study. As such, both quantitative and qualitative instruments were used in data collection. Structured questionnaire was administered in order to collect quantitative data, while Focus Group Discussion (FGD) and interview guide were used in the collection of qualitative data. Mothers of child-bearing age who were administered the questionnaires were sampled using purposive

sampling technique. In-depth interviews were conducted with heads of three (3) Primary Healthcare Centers (PHCs) from each of the Local Government Areas (LGAs) under study. FGDs were held with rural and urban mothers respectively to extract qualitative data from the respondents. In determining the sample size, the study adopted Yamane (1967) formula to determine the sample size with 90% confidence level and 5% error margin. Therefore, n is approximately equal to 400. Finally, the data collected were analyzed using descriptive and inferential statistics. Specifically, the descriptive technique employed is the frequency tables and cross tabulation (containing the actual counts and percentages) while the inferential statistics involves the testing the hypothesis of the study using T-test for independent sample.

6. Findings

Table 1: Socio-Demographic Characteristics of the Respondents

Items		Frequency	Percentage (%)
Total Number of Respondents		377	100
Age	15-20years	39	10.3
	21-25years	162	43.0
	26-30 years	148	39.3
	31-35 years	18	4.8
	36 and above	10	2.7
Education	No formal education	139	36.9
	First school certificate	47	12.5
	Secondary School	56	14.9
	Tertiary Institution	128	34.0
	Masters and above	7	1.9
Place of Residence	Urban	100	26.5
	Rural	277	73.5

Table 1 shows that the total number of the questionnaires retrieved was 377. The respondents' age groups vary with the majority (40.0%) falling between the age bracket of 21-25 years, 39.3% were between the age bracket of 26-30 years, while 2.7% of the respondents were between the age bracket of 30 years and above. This outcome was based on the fact that our sample population consists of married women of childbearing ages only.

The table further revealed that 36.9% of the respondents had no formal education, while 12.5% and 14.9% obtained primary and secondary education respectively, and 34.0% obtained postgraduate certificates. Another 1.9% of the respondents obtained other educational qualification other than the ones included in the study, mostly Quranic education. These patterns of educational attainment of the respondents can be attributed to the study locations and characteristics of the women, i.e. the majority of the respondents were married women and resident mostly in the rural areas known for low literacy level.

In terms of residential location of the respondents, majority (73.5%) of the respondents were resident in the rural areas, while the remaining 26.5% resided in the few urban locations of the study areas. This can be attributed to the fact that the Niger south senatorial zone was characterized by a higher number of rural areas compared to the urban areas.

Health Care Services Providers Patronized by Mothers

Table 2: Most Visited Places for Infant Health Care Services

PHC	Private hospital	Traditional Healer	Chemist	Total
310 (82.2%)	40 (10.6%)	11 (2.9%)	16 (4.2%)	377 (100%)

Table 2 indicates that majority (82.2%) of the respondents used the Primary Healthcare Centers (PHCs) more than any other healthcare service providers for the treatment of their infant children. The choice of the PHCs by mothers of infant can be attributed to the relatively low cost of the PHCs services and the reliability of the services rendered. The cost of PHCs services were relatively low and most nursing mothers were also confident of the services they provided. On the other hand, only 10.6%, 2.9% and 4.2% mostly patronized private hospitals, traditional healers and chemists respectively.

Distance Covered by Mothers to the Nearest PHC

The distance covered by the respondents to access primary health-care services in the study areas was also assessed. The various responses are shown in Table 3.

Table 3: Approximate Distance to the Nearest PHC

1km	2km	3km	4km	5km and above
114 (30.2%)	118 (31.3%)	89 (23.6%)	39 (10.3%)	17 (4.5%)

Table 3 shows that 30.2% of the respondents covered not more than 1 kilometer to access the nearest PHC, another 31.3% covered between 1 – 2 kilometers, while yet another 23.6% covered between 2 – 3 kilometers from their various residential abodes. A total of 10.3% covered between 4 – 5 kilometers, while only 4.5% covered more than 5 kilometers. This response pattern indicates that the PHCs were relatively not too far away from the residences of the mothers of infant and are therefore, relatively accessible distance-wise. This partly explains why visits to the PHCs is high as observed from table 2.

Estimated Interval of Visiting Periods

Table 4: Estimated Interval for Visiting the PHCs

Daily	Weekly	Monthly	Yearly	Never	Total
5 (1.3%)	78 (20.3%)	131 (35.0%)	158 (42.2%)	4 (1.1%)	374 (100)

Table 4 shows the intervals of visits by mothers to PHCs. The table shows that most mothers (42.2%) visited the PHCs about once in a year, 35.0% visited monthly, while a total of 20.3% reported that they visited on weekly basis. This pattern indicates that the visits of nursing mothers to the PHCs were considerable in the study area.

Analysis of Qualitative Response on the Distance to the PHC and Access to PHC

Qualitative Response from Rural Participants

In the FGD, the mothers in the rural parts of the study areas were of the view that the PHCs nearby (not too far away or walking distances) their residencies. According to one of the participants:

“The PHC I usually patronized is just about ten to 15 houses away from my house. As a result I can visit it whenever I want, I do not need a car or bike to take me there”.

Another FGD participant also added that:

“I can go there even in the night as the distance is not far from my house”.

Qualitative Response from Urban Participants

Contrary to the views expressed by most of the rural participants in the FGD, majority of the participants in the urban areas described the distance they usually covered to the PHCs to be relatively far from their residences as a

result many of them reported that they usually had to take commercial motorcycle before getting there. One of the participants had this to say:

"I spend about N100 to get to the PHC I usually patronized although there other smaller health care centers close by who offer similar services but the services were costly".

Another urban participant added that:

"I cannot readily determine the distance of the PHC to my house, however I mostly need to take a commercial motorcycle or taxi before I can get to the PHC".

Healthcare Service Satisfaction and Infant Mortality

Table 5: Cross-tabulation of Infant Deaths in the Community and PHC Service Satisfaction Level

Place of residence	Experience Infant Death In The Community			Health Care Service Satisfactory		
	Yes	No	Total	Satisfied	Not at all satisfied	Total
Rural	247 (89.2%)	30 (10.8%)	277	191 (69.0%)	86 (31.0%)	277
Urban	81 (81.0%)	19 (19.0%)	100	35 (35.0%)	65 (65.0%)	100
Total	328 (87.0%)	49 (13.0%)	377	226 (59.9%)	151 (40.1%)	377

Table 5 presents combined data on the health satisfaction of mothers and experience of infant mortality. majority (89.2% and 81.0%) of mothers indicated that they had in one or more occasions experienced infant death in their community. The result of the healthcare service satisfactory level also shows that two-third (69.0%) of the total respondents from the rural areas were satisfied with the services of the PHCs. On the contrary majority (87.0%) of the urban respondents indicated not to be satisfied with the services of the PHCs.

The implications of these findings can be related to the differences in the level of availability of health facilities in rural and urban communities. In urban communities there were several other hospitals aside the PHCs with better facilities and more qualified health personnel that offered better services than the PHCs. Given these scenarios, the urban dwellers were often unsatisfied with the services rendered by the PHCs. On the contrary, in the rural communities the best they had was usually the PHC which offered the better services compared to the chemists and other small health-care dispensaries which the people patronized. Given these scenarios, the rural dwellers were often more satisfied with the services rendered by the PHC.

Analysis of Qualitative Response on Pattern of Infant Mortality

Qualitative Response from Rural Participants

In the FGD, participants in rural areas were of the view that infant deaths in their community were rampant or frequent. One of the rural participants stated that:

"We do witness infant deaths most of the time, in fact many of our people have now believed it is normal to lose an infant on frequent occasion".

Similarly, during the IDI session in the rural areas, the heads of the PHC centers were asked how frequent the infants died in their respective PHCs. They also described infant deaths to be a frequent occurrence. One of the IDI participants from the rural areas commented that:

"We do witness infant deaths on regular occasions and this is because we do not have enough facilities to properly take care of the infants. In most cases when the case gets worst we do refer them to better facilities in the cities".

Another rural IDI participant stated that:

"I started working here about three years ago and I have lost count of the numbers of infant deaths I have witnessed. The main reason for this is the lack of sufficient staff and necessary health facilities".

Qualitative Response from Urban Participants

Compared to the rural participants the urban participants in the FDG held different opinions on the level of death of infants in their communities. Most of these participants from the urban areas described the level of deaths of as low in their communities and very occasional in their PHCs. In one of the FGD, one urban participant stated that:

"We do not witness so many infant deaths like that since there are several health care centers close by. People do go to the hospital during childbirth and whenever their infants become ill".

Another urban participant stated that:

"Yes, infants die but not that frequently. I cannot remember the last time I heard that any of my neighbours lost an infant".

This view regarding the low level of infant deaths in the urban communities was also supported by one of the heads of the PHCs during the IDI session. According to one of them:

"We witness infant death in this facility occasionally and this is because death is inevitable. Our health facilities are up to standard and we can take care of most of the cases reported to us".

Another urban IDI participant held a similar view by saying:

"We do not witness much of infant deaths here. We have the required manpower and the facilities to take care of most of the cases reported to us".

Test of Research Hypotheses

The null hypothesis that "there is no statistically significant relationship between the distance covered by mothers to primary health care centers and their level of access to primary health care services" was tested using the spearman rank-order correlation and the result is presented in Table 6.

Table 6: Spearman Rank-Order Correlation (Test of Hypothesis 3)

	Access to PHC	N	P-Value
Infants' parent distance to the nearest health care center	-0.252**	377	0.000

Note: The test is significant at 0.05 level of significance

Table 6 shows that the first figure (-0.252) gives the correlation coefficient, the middle (377) gives the total number of the sample, and the last (0.000) gives the probability. The correlations coefficient is weakly negative and statistically significant which implies the rejection of the null hypothesis. Thus, the study concludes that there is a significant negative relationship between the distance covered to the nearest health care center and the level of accessibility to primary health care centers among mothers in the study area. In other words, this result implies that an increase in the distance covered by the mothers to the nearest healthcare center decreases their access to primary healthcare services.

7. Discussion of Findings

The study findings revealed a significant negative relationship between mothers' distance to the nearest health care center and their access to primary health care centers. In other words, an increase in mothers' distance to the nearest health care center decreases their access to primary health care services in Niger South senatorial zone. This finding is similar to the

empirical result obtained by Kadobera, et al. (2012), and Azuh et al. (2017). This researcher generally contends that mothers who lived in homes with the networked distance of at least >5km to the nearest health facility has little access to health care services compared to those who live at a distance of <5km. Thus, higher distance network to the nearest health facility increases infant mortality due to poor access to health care services.

Furthermore, the study revealed that there is a significant difference in the experience of rural and urban infant parents in respect to infant mortality. In other words, the rate of infant mortality experienced in the rural areas is significantly higher than that which is experienced in urban areas of Niger South senatorial zone. This result confirms the submissions of Mahmood (2002), Sastry (2004), and Shobiye et al. (2022) who are of the view that infant mortality is generally higher in rural areas than in the urban areas for the fact that the urban areas usually have better health infrastructure, improve hygienic practices, clean water, sanitation among others, all of which cannot be found rural areas. The above scenario

implies that infants who are born in rural areas are more likely to suffer health problems and may have little or no access to better healthcare facilities thereby resulting in mortalities. It is pertinent to note that while the rural respondents expressed significant satisfaction with the healthcare services they received, such services were not adequate to forestall the recurrence of infant mortalities in the study area. This position was substantiated by the heads of PHCs interviewed. As such, it should be understood that expression of satisfaction does not suggest adequacy of services offered in the healthcare centers. In fact, the study attributed the rural satisfaction of the services of the PHCs to non-availability of competitors as opposed to the urban areas which have numerous healthcare centers competing with the PHCs in efficient service delivery. Reference to this has been made earlier.

On the whole, the study has established that nursing mothers in the community significantly patronize the PHCs for their infants' care. The frequency of the patronage is also commendable given that monthly visits were reported by one-third of the respondents. This implies that in the three stages of delay, the first two stages of delay have been successfully averted by the mothers. Furthermore, majority of the respondents, especially the rural dwellers expressed satisfaction with the services rendered to them at the PHCs. However, this did not translate to a positive outcome on the infant mortality rate. The rural areas still recorded higher infant mortalities than the urban areas who did not express much satisfaction with the services offered at the PHCs. Consequently, the study notes that the patronage of the PHCs in the study area is yet to yield the desired result despite the significant patronage by the rural dweller. By implication, this suggests the existence of the third stage of delay in the study area. Barriers or delays to efficient service delivery such as inadequate manpower, shortage of equipment and supplies were highlighted by heads of the PHCs interviewed. This explains why mortality remains high in the rural areas where other reliable health care options are almost non-existent. In this regard, this study suggests that future studies may explore the problem of service delivery in PHCs in order to deepen knowledge in the area.

8. Conclusion and Recommendations

Conclusively, the study submits that spatial factors such as rural-urban divide, distance to healthcare centers are major factors affecting the utilization of Primary Healthcare Centers (PHCs) in Niger South senatorial zone. These factors in turn affect the infant mortality rates in the area as rural areas experience

more mortalities than the urban areas despite their commendable patronage of PHCs. The study concludes that patronage of PHCs alone is not adequate to resolve the infant mortality problem as the inadequacy of personnel, equipment and supplies still pose great challenges to PHCs especially in the rural areas. Consequently, the study makes the following recommendations:

- The State Health services as well as Local Government Services Commission should recruit more medical personnel to equip the healthcare centers especially in the rural areas. Specifically, there should be at least one midwife in every health center to ensure safe delivery and reduce infant mortality.
- Also, there is a need to establish more health care centers in rural communities (at least one in each ward) in Niger south senatorial zone since the study disclosed that greater distance to the nearest health care center decreases access to primary health care services. A Step in this direction is necessary since shorter distances to health care facilities will boost patronage and consequently reduce infant mortality.

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Part Three

Educational Psychology



Assessment of Untimely Release of Semester Results on Academic Performance of Students in Economics Department in TCNN College of Education Bukuru of Plateau State, Nigeria.

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Abstract. The study examines the impact of untimely release of semester results on academic performance of students in economics department of TCNN College of Education Bukuru, Plateau State. The design used was a descriptive survey research design. The population of the study was 46 students and 6 teachers giving a total of 52 respondents. 40 students were sample randomly and all the 6 lecturers were used giving the total sample of 46 respondents. Three research questions and one hypothesis were stated. Structured questionnaires were developed by the researcher and used for data collection. The questionnaire was tagged “Untimely Release of Semester Result and Academic Performance of Students Questionnaire (URSRAPSQ). Descriptive statistics (mean and standard deviation) were used to analyze data and inferential statistics (chi-square) because the research questions were quantitative in nature. The findings of the study revealed that the students will withdraw by the student if asked lately to probate, reduced the moral of student, students’ demonstration or unrest, paying extra fee on teaching materials and waste of time, energy and resources of the student. The study also found that lecturers should forward their examination scripts and results to the Head of Department immediately the scripts are marked and results are produced, and Proper monitory of staff by the HODs, Deans, Directors, Registrar and the Provost. The study concluded that untimely release of semester result has great impact on the students’ academic performance. The study recommended that School management, academic advisors and staff should be involved in the efforts to addressing the untimely released of students’ results.

Keywords: Academic Performance, Assessment, College of Education, Economics, Semester result and Untimely.

1. Introduction

Result serves as feedback on the assessment of student’s performance on subject or course examination and the absence of prompt useful feedback reduces interest in learning.

Ekong (2012) opined that students who should have graduated since 2008 are still waiting for their results to be compiled, vetted and their names pasted for National Youth Service Corps (NYSC). Also, those students who registered in 2003,2004,2005,2006 and 2007 in UNIUYO who had since finished their academic requirements for graduation are still lingering around because their results have not been compiled or sent for vetting and approval.

Opadeyi (2013) observed that it is not easy to understand why a lecturer will not be able to mark examination scripts within two months and submit the marks even after classes have started in a new semester and the students want their grades to move on to other programmes. Also, stated that lecturers are still bent on not keeping the deadline of marking and submission of scripts to their departments.

Uzoukwu (2014) stated that there is also much corruption in the Nigerian educational system particularly in some higher institutions. For instance, lecturers are known to collect money or other support from students in exchange for good grades. Some students say they have to bribe University Administrators in order to have their exam results compiled and submitted to the National Youth Service Corps when required.

Adurokiya (2013) stated that even when the results are computed and compiled, to issue statement of result and certificate becomes another problem.

Awuzie (2014) disclosed that it is shocking that at a time when knowledge has become a crucial economic and political resource globally. When Universities and other higher institutions are competitively showcasing their strengths in order to attract international students; Nigerian higher institutions are still mired in the kind of dysfunction whereby graduating students have to wait for many years to receive their certificates or results. The minimal obligation that institutions owe their students is the timely release of their examination results, as well as, their certificates, which shows legal and authentic evidence that they have successfully completed their programmes.

Wordpress.com (2012) viewed that poor human resources are a major factor in this issue. It is unfortunate to mention that most of the human resources employed are employed on the basis of sentiments and not qualified for the job. This contributes greatly to the untimely release of result because of the errors and abnormalities at the end of the day.

Abhipsa (2022) observed that packaging and transportation of the question papers and answer sheets, exam dates stretched and omission of some courses on the examination timetable also delay in the release of results as expected.

Alvan Ikoku Federal College of Education Academic Advising Handbook (2014) declared that lecturers shall normally mark all scripts for his or her courses and determine the grades to be awarded to each student. Examination scripts and results shall be forwarded by the lecturer to the Head of Department immediately the scripts are marked and results are produced.

Alvan Anti-corruption and Transparency Monitoring Unit (2014) further explained that compilation of students' results starts from movement of moderated result from the office of the Dean, School of Education through the exam officer, and School of Education through Departmental Exam officers to the Head of Department's office.

Wikipedia (2014) disclosed that participation in academic advising has been shown to increase student satisfaction and mitigate students' feeling of isolation or disconnection from the institution; contributes immensely to the timely computation and compilation of students' results and graduation of students within the academic time- frame of the program enrolled for.

Alvan Ikoku Federal College of Education Academic Advising Handbook (2014) observed that the introduction of Management Information System is good because it will reduce the

difficulties being encountered in data collection, processing, storage and retrieval of students' results. Management Information System (MIS) will help institutions to achieve the following: Collecting and storing of data on students, staff and financial matters.

Processing such data and producing reports and statistical information for use by various Units/Departments and other agencies.

Therefore, there is need to assess the impact of untimely release of semester results on academic performance of students in Economics Department in TCNN College of Education Bukuru and proffer solutions to the problems.

2. Statement of Problem

Untimely release of academic result has continuously been a thing of concern not only to students but to the academic society in general.

Tribune Online (2021) viewed that the issue of delayed results is a problem that students in the country's public universities, polytechnics and colleges of education, whether owned by state governments or the Federal Government, have had to contend with over time. The delay in release of result reduces the moral of students and overall academic performance.

Andrew, A. (2016) disclosed that in November 2016, some students of the Federal College of Education, Pankshin, Plateau State, held members of the school management hostage for failing to release their results in time for their mobilisation for the NYSC programme. Also, In March 2018, students of the Moshood Abiola Polytechnic, Abeokuta, Ogun State, staged a protest over their delayed results.

Attah (2014) observed that one factor for untimely release of results is due to missing scripts. This can happen when scripts get missing as a result of inordinate quest of the teacher, attributed to the problem of sexual harassment especially ladies, inattentiveness of lecturers concerned and accidental folding of two scripts in one leading to the loss of the hidden one.

Samaila (2014) observed that missing of examination scripts is one out of many vices affecting the moral of students in tertiary institutions in Nigeria. It is a growing phenomenon that is causing untold hardship and frustration to many students and indeed shattering their destinies. Students are always anxious and curious about the results because they are important, and the delay will definitely affect their mental peace and make them confuse.

Agcas (2014) viewed that education administrators organize and manage the administration, support systems and activities that enable the effective running of an educational institution. The administration of an institution represents its interest and it is invested with the necessary rights to fulfill the duties it is charged with.

What really are the Exams and Records departments of the universities, polytechnics and colleges of education doing if they cannot guarantee the release of results? Just how can members of the Senate and Governing Councils of universities be proud members of an institution that typically delays students' results. For other categories of students, silence is the word, because they can easily get into trouble if they make their displeasure over their delayed results public.

In TCNN College of Education Bukuru, it is a decision of the management that marking should be done for three to four weeks after examination, results presented in Departmental levels for internal moderation before they are sent for external moderation.

Yet, it seems there is no adherence to the time-frame of computation and compilation of students' results in the study area.

However, inTCNN College of Education Bukuru, no study has been carried out on the impact of untimely release of semester results on academic performance of students in Economics Department. Therefore, the study focused on the assessment of the impact of untimely release of semester results on academic performance of students in Economics Department in TCNN College of Education Bukuru, Plateau State

3. Purpose of the Study

The purpose of the study is to assess the impact of untimely release of semester results on academic performance of students in Economics Department in TCNN College of Education Bukuru. The specific objectives include:

- To find out the factors responsible for untimely release of result in TCE, Bukuru.
- To find out the effects of untimely release of semester results on academic performance of students in TCE, Bukuru.
- To find out possible solutions to untimely release of semester results in TCE, Bukuru.

4. Research Questions

The following research questions were answered:

- What are the factors responsible for untimely release of semester result of students in TCE, Bukuru?
- What are the effects of untimely release of semester results on academic performance of students in TCE, Bukuru?
- What are the possible solutions to untimely release of semester results of students in TCE, Bukuru?

5. Hypothesis

The study tested the hypothesis:

There is no significant difference between untimely release of result and the academic performance of students.

6. Research Methodology

This study assessed the impact of untimely release of semester results on academic performance of students in Economics Department students in TCNN College of Education Bukuru. The research design adopted for this study was descriptive survey research design. Nworgu (2001), descriptive survey design is useful because it is aimed at collecting data and explaining in a systematic manner, the characteristic of features and facts. The target population for this study consisted of 40 NCE 2 & 3 students and 6 Lecturers in the department. The students were sampled using simple random sampling procedure and the staff was purposive sample. The study sampled 34 students and all the 6 lecturers in the department were used. This gave a total of 40 respondents. The questionnaire titled Untimely Release of Semester Result and Academic Performance of Students Questionnaire (URSRAPSQ). The questionnaire consisted of 18structured questions by the researcher. Section A comprised students' and teachers' personal data while section B consisted of 18 items structured with three clusters and Likert Format of the Four Point Rating Scale of strongly agreed (SA), Agree (A), Disagree (D) and Strongly Disagreed (SD). Data collected were analyses using mean, standard deviation and percentage to answer the research questions while chi-square was used to test the null hypothesis at 0.05 level of significance. The benchmark mean is 2.50

7. Results

The result of this study was obtained from research questions and hypothesis which were presented in table 1–4
Research Question One: What are the factors responsible for untimely release of semester result in Economics Department in TCE, Bukuru?

Table 1: Mean Rating and Standard Deviation of Students' and Lecturers' opinion on the factors responsible for untimely release of semester result.

N= 40; Cut-off points of 2.50

S/N	ITEM STATEMENT	MEAN ($\bar{X}$)	STANDARD DEVIATION (SD)
1	Delay in movement of scripts between lecturers and Heads of Departments before and after marking.	3.74	10.00
2	Lack of proper monitory of staff.	3.25	6.12
3	The increasing level of bribery and corruption in system	2.5	3.53
4	Lack of sanctions on lecturers that failed to submit students' scores within the stipulated time – frame	3.38	8.57
5.	Inadequate arrangement for external moderators and untimely moderation of exam scripts.	2.93	7.71
6.	Lack of proper database result processing system (Management Information System)	2.85	5.69

Source: Field Survey, 2022.

Table 1 showed that the mean of all the responses were above the mean cut off point of 2.50. This is shown by the means response of 3.74, 3.25, 2.50, 3.38. 2.93 and 2.85 with the standard deviation of 10, 6.12, 3.53, 8.57, 7.71 and 5.69 respectively. This means that all the respondents agreed with the given statements.

Research Question Two: What are the impacts of untimely release of semester results on academic performance of students in Economics Department TCE, Bukuru?

Table 2: Mean Rating and Standard Deviation of Students' and Lecturers' opinion on the impacts of untimely release of semester results on academic performance of students

N= 40; Cut-off points of 2.50

S/N	ITEM STATEMENT	MEAN ($\bar{X}$)	STANDARD DEVIATION (SD)
1	Result to total withdrawal by the student if asked lately to probate	3.25	6.12
2	Reduces the moral of student and overall academic performance.	3.75	10.31
3	Result to students' demonstration or unrest	3.00	7.91
4	Result to frustration, confusion and mental agony	3.38	8.57
5.	Paying extra fee on teaching materials and lately asked to probate or withdrawn	3.93	13.95
6.	Waste of time, energy and resources of the student	3.46	7.11

Source: Field Survey, 2022

Table 2 showed that the mean and standard deviation of the impacts of untimely release of semester results on academic performance of students. This is shown by the means response of 3.25, 3.75, 3.00. 3.38. 3.93 and 3.46 with the standard deviation of 6.12, 10.31, 7.91, 8.57, 13.95 and 7.11 respectively.

Research Question Three: What are the possible solutions to untimely release of semester results in Economics Department in TCE, Bukuru?

Table 3: Mean Rating and Standard Deviation of Students' and Lecturers' opinion on the possible solutions to untimely release of semester results.

N= 40; Cut-off points of 2.50

Source: Field Survey, 2022.

S/N	ITEM STATEMENT	MEAN (X)	STANDARD DEVIATION (SD)
1	Lecturers should forward their examination scripts and result to the Head of Department immediately the scripts are marked and results are produced	3.93	13.95
2	Academic Board should sit on results before the next semester or session	3.53	7.11
3	Internal and external moderation of scripts/results should be done within the school (internally)	3.75	10.00
4	Academic advisors contribute to the timely computation and compilation of students' results and graduation.	3.20	6.75
5.	Management Information System should be introduced to reduce the challenges faced in data collection, processing, storage and retrieval of students' results.	3.75	10.00
6.	Proper monitory of staff by the HODs, Deans, Directors, Registrar and the Provost will minimised the challenges.	3.63	7.91

Table 3 showed that the mean of all the responses were above the mean cut off point of 2.50. This is shown by the means response of 3.93, 3.53, 3.75, 3.20, 3.75 and 3.63 with the standard deviation of 13.95, 7.11, 10.00, 6.75, 10.00 and 7.91 respectively. This means that all the respondents agreed with the given statements.

Hypothesis: The null hypothesis which states that there is no significant difference between untimely release of semester result and the academic performance of students in Economics Department of TCE, Bukuru.

Test Statistics

	Withdrawal of the student	Low moral	Students' unrest	Frustration, confusion and mental agony	Paying extra charges	Waste of time, energy and resources
Chi-Square	.500 ^a	.000 ^b	1.000 ^c	.500 ^a	.500 ^a	.500 ^a
df	2	3	1	2	2	2
Asymp. Sig.	.779	1.000	.317	.779	.779	.779

Table 4 indicated that the calculated X^2 statistic for the students' withdrawal, low morale, student unrest, frustration confusion and mental agony; paying extra charges and waste of time, energy and resources with 2, 3, 1, 2, 2 and 2 degree of freedom. The P value of 0.779, 1.000, 0.317, 0.779, 0.779 and 0.779 respectively. In all cases, the p values were higher than 0.05 level of significance.

8. Discussion of findings

Result from the analysis of research question one revealed that delay in the movement of scripts between lecturers and Heads of Departments before and after marking, lack of proper monitory of staff by the school authority, increasing level of bribery and corruption in system, lack of sanctions on lecturers that failed to submit students' scores within the stipulated time – frame, inadequate arrangement for external moderators and lack of proper database result processing system (Management Information System) are some of the factors affecting untimely release of results. The result aligned with Abhipsa (2022) that packaging and transportation of the question papers and answer sheets, exam dates stretched and omission

of some courses on the examination timetable also delay in the release of results as expected.

The result of the analysis of research question two showed that there would be withdrawal by the student if asked lately to probate, reduced the moral of student and overall academic performance, students' demonstration or unrest, paying extra fee on teaching materials and lately asked to probate or withdrawn and waste of time, energy and resources of the student are some of the impacts of untimely release of semester results on academic performance of students. This is in line with Tribune Online (2021) viewed that the issue of delayed results is a problem that students in the country because it reduces the moral of students and overall academic performance.

Finding from the analysis of research question three revealed that lecturers should forward their examination scripts and result to their Head of Department immediately the scripts are marked and results are produced, academic board should sit on results before the next semester or session, internal and external moderation of scripts/results should be done within the school (internally), academic advisors should encourage timely computation and compilation of students' results and graduation, Management Information System should be

introduced to reduce the challenges faced in data collection, processing, storage and retrieval of students' results and Proper monitory of staff. The result of this finding is similar to the finding of Alvan Ikoku Federal College of Education Academic Advising Handbook (2014) observed that the introduction of Management Information System is good. The result is similar to the finding of Alvan Anti-corruption and Transparency Monitoring Unit (2014) that that compilation of students' results starts from movement of moderated result from the office of the Dean, School of Education through the exam officer, and School of Education through Departmental Exam officers to the Head of Department's office for effective release of result.

From the research hypothesis it revealed that the null hypothesis that there is no significant different between untimely release of semester result and the academic performance of students was rejected. This implied that there is significant different between untimely release of semester result and the academic performance of students. This is in line with Samaila (2014) observed that issues of results create untold hardship, frustration to many students and indeed shattering their destinies.

9. Conclusion

Based on the analysis of the study, it can be concluded that there is delay in the movement of scripts by the lecturers, lack of sanctions on lecturers that failed to submit students' scores within the stipulated time – frame, inadequate arrangement for external moderators and lack of proper database result processing system (Management Information System) are some of the factors affecting untimely release of results. The impact on the students include withdrawal, low moral for studies, demonstration or unrest, Paying extra fee and waste of time, energy and resources of the student. The way out includes; lecturers should forward their examination scripts and result on time, academic board should sit on results as expected, internal and external moderation of scripts/results should be done within the school (internally), Management Information System should be introduced and Proper monitory by the school authority

10. Recommendations

Based on study findings, the following recommendations were made:

- The College Administrators should strictly work on the stipulated time-frame of releasing students' results.

- Guidance and counseling services should be intensifying by the school management to counsel students that are affected due to untimely released of semester result.
- School management, staff, and academic advisors should be involved in the efforts to address the problems of untimely released of results to students.

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Impacts of Wildlife Conservation Education Effort on Selected Communities surrounding Kainji Lake National Park, Nigeria.

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Abstract. This study focused on the Impacts of Wildlife Conservation Education Effort on Selected Communities Surrounding Kainji Lake National Park was undertaken to derive information on the communities' level of knowledge and attitude as well as impact of education programs towards wildlife conservation in the area. The methodology employed in the study includes the use of structured questionnaire and oral interviews to acquire information from sampled members of the communities on the on the impact conservation education in their area. The data collected were analyzed using descriptive statistics- tables, charts and percentages. Non-parametric Chi-square χ^2 test was used to evaluate the significance of differences between data sets at 0.05 significance level. The results gathered revealed that majority of the respondents across the communities are aware of conservation education in their area. The chi-square test showed that the proportion of awareness is significantly different $*(P<0.05)$ between those who are aware and those who are not. Participation in the conservation program influenced the behavior of members of the communities; it increases the peoples understanding of wildlife management with 98.66% across the community saying yes and 98.66% respondents declaring interest in wildlife conservation. Hence there is significant relationship between communities' level of knowledge and their impact on the protection and conservation of park resources. It is therefore recommended that government should create more awareness on wildlife conservation through education programs and workshops so as to help minimize illegal activities in the park.

Keywords: Impacts, Wildlife, Conservation Education, Communities, Kainji Lake National Park.

1. Introduction

One of the key success factors for sustainable conservation is the level of awareness and appreciation on the heritage value of the resources by stakeholders, particularly the local communities. Globally, a key challenge to achieving conservation goals is the need to capture the interest of local people in a manner that stimulates cooperation and positive conservation actions (Brewer 2002). An informed society or community will make wise decisions about protecting and preserving resources that define the very essence of their culture and society (Norzaini *et al.*, 2009). This awareness is crucial to the effective implementation of conservation strategies (Steinmetz *et al.* 2006).

Broadly speaking, the goals of conservation education and outreach programmes are to increase knowledge about wildlife and conservation issues, help form or strengthen pro-environmental attitudes among target audiences, and facilitate behaviours that ultimately protect wildlife (Kuhar *et al.*, 2010). There is need to pass on knowledge about the environment to future generations in order for communities to understand how to maintain a sustainable relationship with nature. That knowledge and understanding can empower community members, as grass roots participants, to make appropriate decisions for sustainable community development. Conservation education also aims to teach critical thinking skills that involve solving problems that affect communities. Educating the community, school children and key decision makers on the conservation challenges may enhance their ability to achieve long lasting and effective conservation and sustainability programmes (Norzaini, *et al.*, 2009).

While there is a large and growing literature evaluating environmental education and interpretive programs in developed countries (Carleton-Hug and Hug 2010;

Collado, *et al.* 2013; Skibins, *et al.* 2012), there are relatively few such studies in the developing countries including Nigeria.

The Nigerian National Parks and Kainji Lake National Park in particular is home to a large population of fauna and flora. There have been few evaluations of Conservation education programs and their impacts on communities' participants. This study helped assess changes in wildlife conservation knowledge, opinions, and behaviors among school children and communities around the park. Also, it helped to know how it has helped in the reduction of anthropogenic activities in the park and also help in the livelihood enhancement of the communities. The objectives of the study include: to assess communities' level of knowledge and attitude towards wildlife conservation and to assess the conservation impact of education programs in the study area.

1.1 Research Questions

This study addresses the following research questions:

- What is the community's level of knowledge about the park resources?
- What is the attitude of the communities towards the park resources?
- Does conservation education knowledge gained help in the protection and conservation of park resources?

1.2 Hypotheses

The following hypotheses guided this study:

- There is a significant relationship between communities' level of knowledge and their impact on the protection and conservation of park resources?
- There is no significant relationship between communities' level of knowledge and their impact on the protection and conservation of park resources?

1.3 Period and duration of work

A period of three months was used for data collection. The study was conducted between June 2022 and December 2022.

2. Research Methodology

2.1 The Study Area

Kainji Lake National Park is located between latitudes 9° 40'N and 10° 30'N and longitudes 30°

30'E and 50° 50'E. It lies at the extreme west of the wooded savanna region and in area generally referred to as the middle belt of Nigeria, characterized by relatively sparse population and abundant wild animals (Ezealor, 2002).

The park lies only 560km North of Lagos and only 385 to the northwest of the Abuja, the federal capital of Nigeria. The park covers a total area of 5340.82sq.km. It is made up of two non-contiguous sectors, the Borgu and Zugurma sectors. The Borgu sector lies astride the Borgu and Baruten local government area of Niger and Kwara states respectively and covers an area of 3,970.02sq.km. It is bordered in the east by the Kainji Lake and in the west by the Republic of Benin (Ezealor, 2002).

The Zugurma sector on the other hand, occupies a relatively smaller area of 1,370.80sq.km and is situated in the Mariga Local Government area of Niger state. This sector is bordered by Kontagora River on the Northwest side and by the Manyara River on the North side.

Within the park enclave are found the river basins the Nanu River which flows Eastwards to Timo River to join River Oli flowing into the River Niger which flows south ward. Also found is the Kainji dam with an altitude of 1237m above sea level, which harbours the Kainji Hydro Electric power spillway (Ezealor, 2002).

2.2 Climate

The two major features of the climates of the park are the division into wet and dry seasons and the variability from year to year. The wet seasons extends from May to October while the dry season extends from November to April. The mean annual rainfall of the Borgu sector varies from 1.100mm in the eastern part to 1,150mm in the Western part. The rainfall data for Zugurma sector shows that the sector receives a mean annual rainfall of about 1,167mm. Rain generally falls for 8 to 9 months of the year starting in March and ending in October or November (Ezealor, 2002).

2.3 Vegetation

The major vegetation type of the Kainji lake National park as classified by Keay in 1959 Northern Guinea Savanna Ecotype. Ezealor, (2002). also identified seven vegetation sub-types for the park. These are;

Burkia african / Detarium, woodland, *Afzelia africana* woodland, *Isobertinia tomentosa* woodland, *Terminalia macroptera* woodland, *Diospyros mespeliforms* woodland, Acacia complex, Oli complex and Riparian forest.

2.4 Fauna Resources

Some of the fauna species found in the park includes;

Roan antelope, *Hippotamus- Hippotragus equines*,
Kob-Kobus kob, *Serval cat-Felis serval* Ratel,

Honey badger-Mellivora capensis, *Hare-Lepus capensis*, *Green Monkey-Cercopithecus aethiops*,
African Manatee-Trichechus senegalensis, *Lizard buzzard- Kaupifalco monogrammicus* Etc.

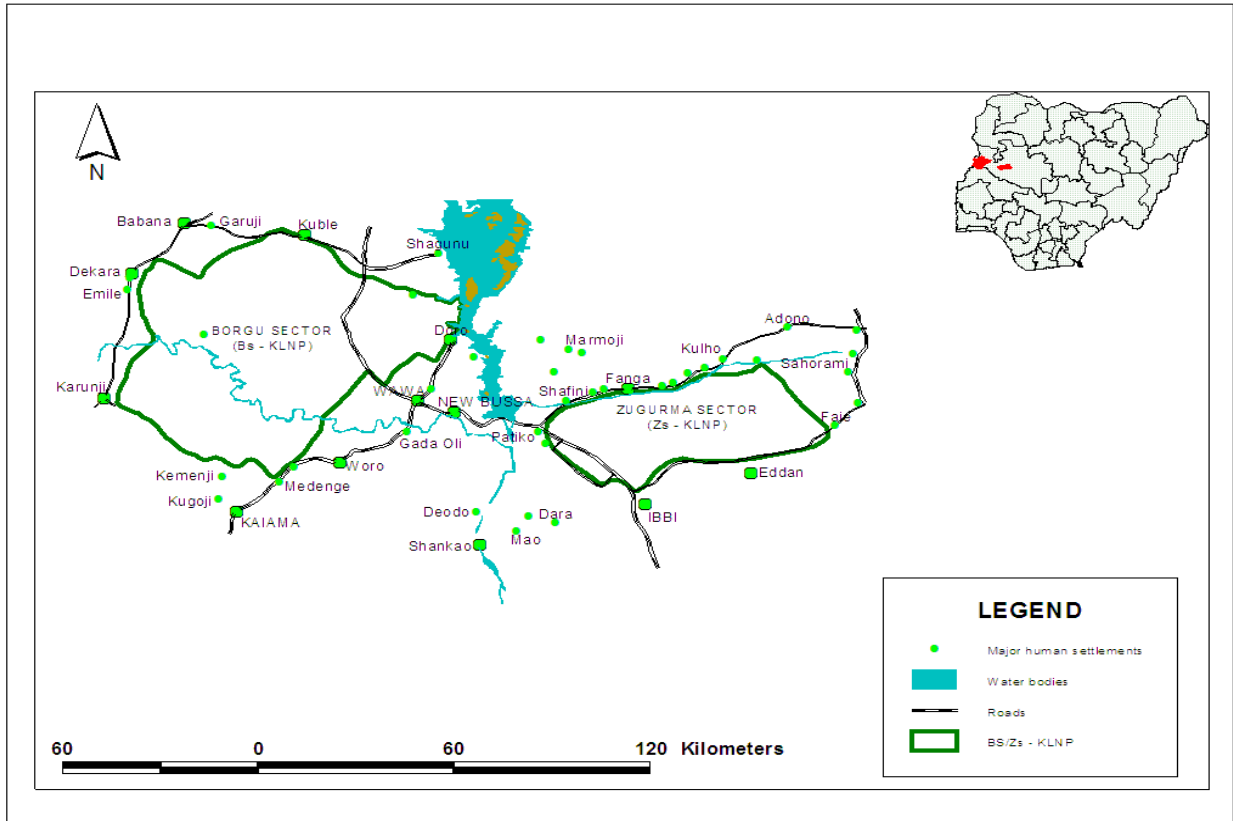


Figure 1. Map of KLNP showing the location of the study area

2.5 Study Design

Structured questionnaire and oral interviews was used to acquire information from sampled members of the communities' surrounding Kainji Lake National Park on the impact conservation education in their area. Fifteen (15) respondents in five communities was randomly picked for the data collection. Therefore, a total of 75 respondents was randomly sampled for the study.

2.6 Data Collection Techniques

Data was collected using structured questionnaire and oral interviews to elicit information from sampled members of the communities on the impact conservation education in their area. A total of seventy-five (75) structured questionnaires was administered randomly to respondents in 5 selected communities in the study area namely, Zuguruma, Ibbi, Wawa, Paiko, Malale. Interviews were made with each respondent which include school children, adult man and women as well park staff. (who may have administered conservation education) Personal interviews involving key village informants and focus group discussions was carried out with selected community groups consisting of men and women. The study was conducted between July and October 2022.

2.7 Data Analysis

Descriptive statistics was used to analyze the data obtained. The statistics include; - tables, charts, and percentages. The personal interviews combine questions of a more quantitative, closed-ended nature with more qualitatively oriented, open-ended questions. The analysis was guided by the constructs and interview questions. Coding and interpretation of the results consist of reading and re-reading the narratives and noting emerging patterns related to local community understanding, experience as well as perceptions.

Non-parametric Chi-square χ^2 test was used to evaluate the significance of differences between data sets at 0.05 significance level.

3. Result and Discussion

Table 1 shows the socio-demographic characteristics of the respondents. The result gathered shows that the males (80%) were more than the females (20%). The age 15 – 25years recorded the highest (38.67%). Majority (73.33%) of the respondents were Muslims, while only 26.67% are Christians. Majority 57.33% had formal education, while a few (42.67%) did not go to any school. The major occupation of the respondents are farming (45.33%), followed by students (37.33%), while civil servant was the least (17.33%).

Table 1. Socio-Demographic of the Respondents

Variables	Frequency(n=75)	Percentage (%)
Gender		
Male	58	80
Female	17	20
Marital Status		
Single	50	73.33
Married	22	26.67
Age		
15 – 25	29	38.67
26 – 35	6	8
36 – 45	33	44
46 & Above	7	9.33
Religion		
Islam	55	73.33
Christianity	20	26.67
Level of Education		
No formal	32	42.67
Formal	43	57.33
Occupation of the Respondents		
Farmer	34	45.33
Civil servants	13	17.33
Student	28	37.33
Employment status		
Employed	28	37.33
Unemployed	47	62.67

Source: Field Survey, 2022

Table 2. , show the Awareness of Conservation Education in the study area, the result indicates that majority of the respondents across the communities are aware of conservation education in their area with Ibibi, Paiko, Malale, having 17.33% Yes respectively being the highest, while Zuguruma (14.67%) said Yes and 5.33% said No being the lowest.

Table 2. Awareness of Conservation Education in the study area

Communities	Yes	No	χ^2	df	P
Zuguruma	11 (14.67%)	4 (5.33%)	1.4888	4	*(P<0.05)
Ibibi	13(17.33%)	2(2.67%)			
Wawa	12(16%)	3(4%)			
Paiko	13(17.33%)	2(2.67%)			
Malale	13(17.33%)	2(2.67%)			
Total	62(82.66%)	13(17.34%)			

Source: Field Survey, 2022 (χ^2 = Chi Square; df = degrees of freedom); (N = 75)

Figure 1 shows the place where awareness of conservation education are acquired in the study area%, the fig shows that (60%) respondents acquire their conservation education from the school being the highest while (13.33%) get awareness of conservation education while at home.

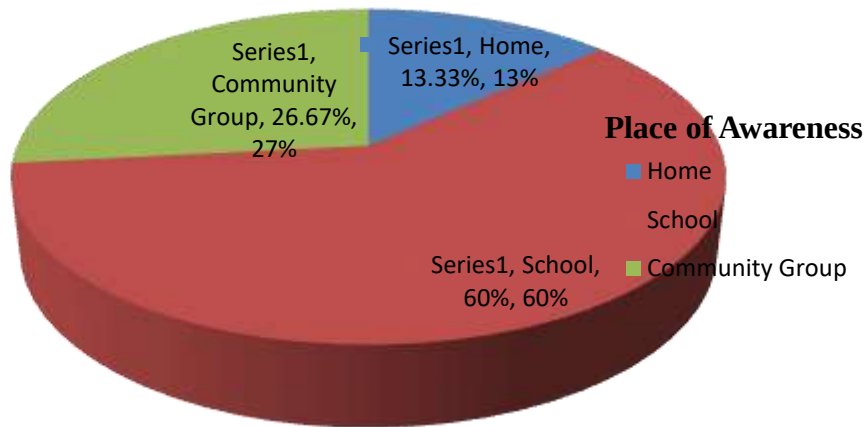


Figure 1. Place where Awareness of Conservation Education are acquired in the study area

Figure 2 shows the materials used and given during conservation education (%). The figure shows that 40% respondents admits that the materials given to them during the course of conservation education includes T. Shirts and books respectively while 20% respondents said they were given books.

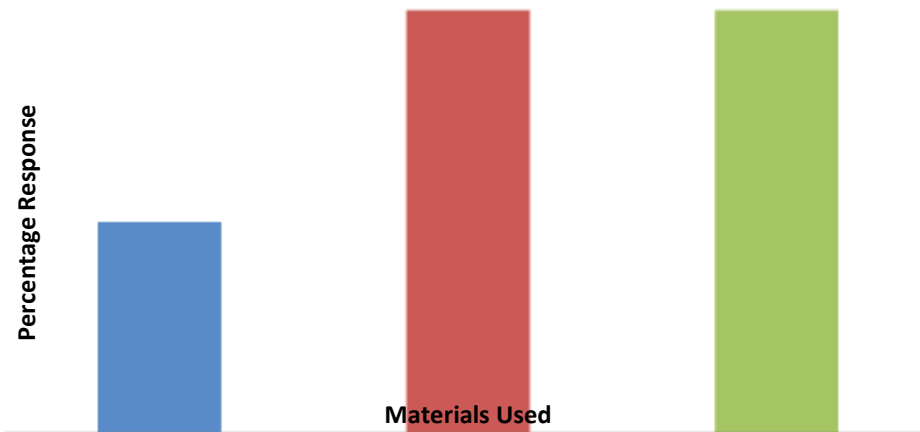


Figure 2. Materials used and given during conservation education (%)

Figure 3 shows the knowledge and attitude of communities towards wildlife conservation (%) , the result shows that 49.33% respondents are highly interested in wildlife conservation. While 9.33% are not interested.

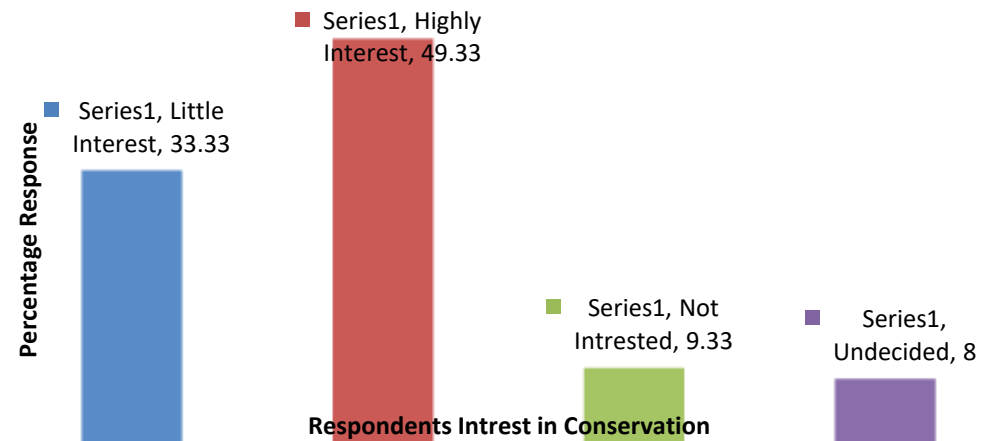


Figure 3 Knowledge and Attitude towards Wildlife Conservation (%)

Source: Field Survey, 2022

Figure 4 shows the Effectiveness of hearing Conservation Education Effort%. The figure shows that the park authority and community respondents reported the effort of the park to be effective having 30% and 30.67% respectively being the highest. While park authority and the community respondents who said that conservation education is not effective is only 10% and 14.67% respectively being the lowest.

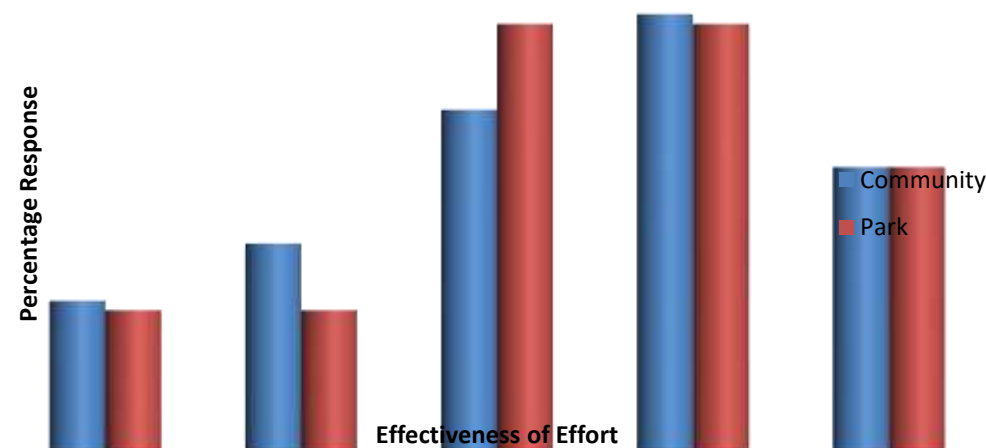


Figure 4. Effectiveness of hearing Conservation Education Effort

Table 3 show the Conservation Education Awareness Impact on the Communities. The table shows that Conservation Education Increase the peoples understanding of wildlife management with 98.66% across the community saying Yes and 98.66% respondents declaring interest in wildlife conservation. While 88% admits that conservation education of the park authority has help to increase the livelihood of most people in the communities.

Table 3. Conservation Education Awareness Impact on the Communities

Impacts	Overall Response	Across the Communities (df =4)	Reasons
Increase your understanding of wildlife	Yes (98.66%)	$\chi^2 = 4.054$ P= 0.39874	Conservation education increases our understanding of wildlife management and protection.
Interest in wildlife conservation	Yes (98.66%)	$\chi^2 = 4.054$ P= 0.39874	Wildlife is of value, Wild life health of environment. It help us to know that deforestation kill our native trees and deprive us from the many benefit of those tree e.g. Shae butter tree.
Visitation of National parks	Yes (86.66%)	$\chi^2 = 1.1538$ P= 0.88564	Provide bush meat Generates income and employment to people Raises Local income through ecotourism enterprises. Students and other group of people visit the park to view wildlife, and carry out research.
Community permission to hunt animals	No (88%)	$\chi^2 = 1.7677$ P= 0.77839	Through CE. Community is encouraged to consume less bush meat, hence Bush meat consumption is not common in the area.
Increase the livelihood enhancement of the communities.	Yes (88%)	$\chi^2 = 1.7677$ P= 0.77839	Alternative source of lively hood was thought and created for us, such as bee keeping, livestock rearing, tree planting as seen in Wawa, Zugruma etc

(χ^2 = Chi Square; df = degrees of freedom); (N = 75); N.S. (P>0.5) HO reject, it is therefore true that the proportion of impact is different for Yes and No across the communities

Table 4. Conservation Education Awareness Impact on Wildlife Protection in KLN%. The table shows that Conservation Education help promote livelihoods having (88%) positive response, it decreases environmental

impact, by reducing poaching (74.67), Reduce illegal bush burning (66.67), Reduce Deforestation (60%) and promote conservation of wildlife through visitation of National parks to view wildlife (74.67).

Table 4. Conservation Education Awareness Impact on Wildlife Protection in KLNP%

Impacts	Percentage Response		
	Yes	No	Undecided
Reduce Poaching	74.67	18.67	6.67
Reduce illegal bush burning	66.67	30.67	2.67
Reduce illegal fishing	60	24	16
Has increase	74.67	20	5.33
Visitation of National parks to view wildlife			
Reduce Deforestation	60	16	24
Others	58.67	10.67	30.67

Source: Field Survey, 2022

4. Discussion

Conservation education program carried out by KLNP at both schools and community area appear to be in good direction toward learning about the park and biodiversity. The finding in table 2, show the awareness of conservation education in the study area, the finding indicates that majority of the respondents across the communities are aware of conservation education in their area. The chi-square test showed that the proportion of awareness is significantly different $*(P<0.05)$ between those who are aware and those who are not.

Findings in figure 1 show the place where awareness of conservation education is acquired in the area. the finding indicates that majority of the respondents got informed in the school and at the community group gathering talk presentation, others were informed while at home either through house to house park visit, or from their school children or their family members working in the national park. Whichever way and were conservation message is passed. Steinmetz *et al.* (2006) stated that awareness is crucial to the effective implementation of conservation strategies, while a correctly designed conservation education would affect people's attitudes and behavior towards wildlife conservation and add to the protection of their environment (Sterling *et al.*, 2007).

Creating a strong sense of awareness of environmental issues was an element shared by all of the conservation education programs to varying degrees. Attention was drawn to the need to address problems in their own communities and understand the implications of these issues not only for their own lives but on a larger scale. Students through the conservation education message were well aware of the concerns related to health hazards of things like pollution and saw this as an important local issue in which they could become involved.

The materials used and given to the people during the course of conservation education includes flyers, T. Shirts and books (Figure 2). It is

therefore believed that strong environmental education programmes are essential for long-term conservation (NCF 2015), and the provision of environmental education-related newspapers and magazines is of paramount importance in schools (Akinuoye and Abd Rahim 2011). By doing so, information about project activities and regional issues is disseminated to a larger audience (Wals, 2014).

The findings on the conservation education awareness impact on the communities indicates that conservation education increases the peoples understanding of wildlife management and protection. It helps them to know that deforestation kill our native trees and deprive us from the many benefits of those tree e.g. Shea butter trees. Wildlife conservation increase the livelihood enhancement of the communities and also raises local income through ecotourism enterprises. This agrees with Rakotomamonjy *et al.*, (2015) report that conservation education may be beneficial for increasing sustainable and environmental behaviours, particularly in rural communities in the vicinity of protected areas.

Conservation education had a significant effect on the knowledge of wildlife conservation in the study area. Comparing the conservation education awareness impact on the communities indicates that impact was not significant at $(P>0.5)$ while H_0 is rejected, and shows that the proportion of impact is significantly different for Yes and No across the communities.

Conservation education awareness has a positive and statistically significant impact ($\chi^2 = 4.054$) on wildlife conservation. The program increases knowledge across the community, when combined with field trips and other learning tools, such as conservation films (Leeds *et al.*, 2017), it impacts on the members of the community visitation to National parks and it increases the livelihood enhancement of the communities. It helps to reduce poaching, illegal bush burning, reduce deforestation, and promote conservation of wildlife through visitation of National parks to view

wildlife. This agrees with Damerell *et al.*, (2013) assertion that there is some evidence to suggest that knowledge improves pro-environmental attitudes, which presumably precede pro-environmental behaviours, hence Norzaini *et al.*, (2009) asserted that an informed society or community will make wise decisions about protecting and preserving resources that define the very essence of their culture and society. This will lead to less conflict between the park protection methods and the community acceptance of development initiatives through conservation for instance in all the communities visited, reference was made by the community leader to the work which the park authority had undertaken in the communities grounds, given their old and young jobs in the park. Ornamental and fruit trees, shrubs and flowers were planted, plant nurseries were established, etc. In some schools, lands around the school were being cleared by club members to plant fruit trees and gardens. In several communities, through NGOs interventions, there were nurseries which provided tree seedlings and other plants to the community. Boreholes were provided as seen especially in Ibbi, Wawa and Zuguruma community. Sometimes quarterly magazine produced by the park authority covering all aspects of conservation work are sent to schools and individuals.

The park also regularly produces a variety of posters, pamphlets, calendars, and learning/teaching materials on environmental issues for visitors. Many of the materials, along with a wide variety of materials from other sources, were prominently displayed in the park information room, the first point of call for visitors and school children to have firsthand information about the park. Some posters and booklets have also been produced and are distributed during the Conservation education coordinators' visits to schools. Understanding of the implications of current forest-use practices, poaching un-authorize bush burning, illegal wildlife trade was clearly evident in the community. Creating awareness has helped to minimize these illegal activities.

5. Conclusion

This study has helped us to know that conservation education programs impacted positively on the growth and conservation of wildlife resources of the area. Conservation education knowledge gained has help in the protection and conservation of park resources. It has also helped in the livelihood enhancement of the communities through park authorities community interventions. Hence there is significant relationship between communities' level of knowledge and their impact on the protection and conservation of park resources.

6. Recommendations

The following recommendations are deduced from the study:

- To set up environmental conservation groups in villages for rural youth in close collaboration with field officers from the Wild Life Department stationed in these areas.
- The park and the community leaders should set up youth groups to also assist in organizing environmental programmes in the village schools in their areas. This would also increase the awareness of the importance of environmental education within the village community as a whole, leading to a better understanding of wildlife conservation.
- Additional research on outcomes associated with long-term conservation education programmes will be useful for continuing to identify best practices in wildlife conservation.

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Teachers' Psychosocial Characters and Students' Achievement in Basic Science and Technology

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Abstract. Teachers play an important role in the education of students in acquiring knowledge needed in the society they intend to live. The National Policy of Education (1981), Section 5, 32a and b dialogue on the acquisition, development and inculcation of the proper value-orientation for the survival of the individual and society; the development of the intellectual capacities of individuals to understand and appreciate their environments. It is in the view of this intention that this study aimed at examining influence of teachers' self-efficacy, motivation and pedagogical competence on student's academic achievement in Basic Science and Technology (BST) in Ijebu-North Local Government of Ogun State, Nigeria. The study adopted a descriptive survey research. Simple random sampling technique was used to select 150 BST students from 3 schools in Ijebu North Local Government of Ogun State. The study made use of validated BST achievement test and questionnaire for self-efficacy, motivation and pedagogical competence. The results of variables of study showed significant outcomes and recommendations were made accordingly in the study i.e emphasis should be laid on teachers' pedagogical competence in terms of training for teaching effectiveness while factors of motivation should be given adequate attention.

Keywords: Psychosocial characters, self-efficacy, motivation, pedagogical competence, behaviours, communication skill, conceptual clarity, personality and psychological equanimity, achievements, Basic Science and Technology

1. Introduction

The importance of education cannot be overemphasized in terms of nation's development. Bandura (2018) affirm that quality of education largely depends on the quality of teachers. Teachers are the people empowered to manage teaching and learning by giving direction and advice to the

learners. Their behaviours, communication skill, conceptual clarity and psychological equanimity have direct bearing on the behavior and personality of the students. A teacher is a great factor in the academic achievement of students. They are the pillars of Education. National Policy on Education (6th edition, 2014). The goal of teacher education goes thus:

- Produce highly motivated, conscientious and efficient class room teachers for all levels of the educational system;
- Further encourage the spirit of enquiry and creativity in teachers;
- Help teachers fit into the social life of the community and the society at large and enhance their commitment to national goals;
- Provide teachers with the intellectual and professional background adequate for the assignment and to make them adaptable to changing situations; and
- Enhance teachers' commitment to the teaching profession.
- Setting professional standards for teacher educators who train new teachers;

A good number of subjects constitute a body of knowledge and Basic Science and Technology is one of the most recognized science subjects at universal basic education level in Nigeria today. Afuwape (2011) in UNESCO-UNICEF (1971) described Basic Science and Technology as an approach to the teaching and learning of science in which concepts and principles are presented so as to express the fundamental unity of scientific thought and avoid premature or undue stress on the distinction between various scientific fields. As prescribed by National Universities Commission, Nigeria. The aim of Basic Science and Technology (Integrated Science) is targeted at the following objectives:

- Produce students who are well equipped with the knowledge and skills for teaching

Integrated Science at the Senior Secondary School level; such teachers will also be able to teach Basic Science and Technology Education at the lower, middle and upper basic education levels if the need arises.

- Produce students who will adopt the ethics of teaching as a profession
- Produce effective Integrated science teachers who are skilled in instructional designs, delivery and classroom management as well as in dealing with human learners.
- Equip graduates with necessary skills, competencies, intellectual and moral training for a career in science education;
- Produce students who will be adept in industrial applications of Integrated Science in such areas as pest and pollution controls, management of public health, wild life parks, fish and integrated farming, biotechnology centres and laboratories, water and sewage treatment plants;
- Equip students with effective laboratory skills and;
- Prepare integrated science graduates to assume responsible and leadership roles in Ministries of Education, government education agencies and private education establishments.

Advocates of integrated science believes that some majorities of children do not attend schools beyond the basic and compulsory education in most countries including Nigeria, the minimal science to make them survive the current world of science and technology should be integrated type which draws its contents from all specific science disciplines i.e Physics, Chemistry, Biology etc. Basic Science and Technology has not been yielding the expected results as reported in research studies of Afuwape 2002, Afuwape and Olugbuyi 2019; Alebiosu 2017. Among the uproars in Basic Science and Technology are the following psychosocial variables: Teachers (Self-efficacy, motivation, and pedagogical competence) that call for check and balances.

Tschannen Moran (2021) states that forethought and outcomes expectation can help to master a situation and achieve the desired target.

Self-efficacy refers to the strength of an individual's belief in his ability to achieve a goal. Self-efficacy is synonymous with self-confidence and self-esteem. (www.mariam-webster.com) defined self-efficacy as a feeling of satisfaction that one has in himself or herself, and self-respected. While self-esteem according to (Mbuva, 2016)

refers to a feeling of self-worth and confidence with regard to a specific activity or behavior. Self-esteem has been discussed by Maslow's hierarchy of needs. Shavelsen, Huber and starton (1976) identified these features of the concept as identified: organized, multifaceted, hierarchical, stable, developmental, evaluative, differentiable. Students are of different categories and individual differences, their potentialities, skills, and beliefs determine their academic performances. It is important to note that, their social life is characterised with self-efficacy, esteem and confidence. In that wise, student incentives are possible predictions of their clear-headed sound self-efficacy. Teachers' self-efficacy indicates confidence while teaching promotes students learning and academic achievement to desired levels. Teachers as pivotal of education desire self-efficacy. Self-efficacy is not concerned with specific attributes of an individual but the outcome of the attributes. It is concerned with the worth & value of an individual. It simply means that teachers are expected with high level of self-efficacy in order to be motivated in teaching and learning. It has been discovered that teachers with high levels of efficacy have positive attitude towards life and are open to new methods to yield positive academic achievement in students.

Motivation initiates guide and maintain goal-oriental behavior. It is a strong force directing individuals to act in more determined manner. Elliot et al (2020) noted that motivation is an important aspect of academic learning and success through childhood across adolescence. Teachers with a high developmental leadership profile will be able to create atmosphere which strengthens and help to reach a positive perception on student's studies while teachers with low developmental profile could create an atmosphere which is unsuitable for education. The concept of motivation is crucial in education and has been incorporated into the achievement literature as "expectancy" and "risk taking". Epitomizing Gewasari, Mnaullang and Sibuea, (2017). Motivation is seen as the power, urge, or need, passion, pressure, or psychological mechanism that encourages individuals to achieve specific targets. It is a level of anxiety that drives into accomplishing a task or mission or achieves a desired goal. Motivation could be used as an application of reinforcement approach in educational motivation as proposed by skinner. Studies in motivation investigated intrinsic and extrinsic motivation in the context of teaching and learning. Motivation is most important to everyday life activities for maximum achievement. Chia (2019) carried out research on the impact of teachers' motivation on academic performance of secondary school students, the study was conducted to investigate impact of teachers' motivation on

academic performance of secondary school students in Langtang North Local Government Area of Plateau State Four research questions were posed and two hypotheses tested. The descriptive research design was used for the study. The population for the study consisted of one thousand six hundred and fifty-six (1656) staff in the fifty (50) secondary schools in Langtang-North local government area. One hundred and fifty (150) teachers were drawn using simple random sampling technique. The instrument used for data collection was self-structured questionnaire which comprised of 18 items that investigated teachers' motivation on academic performance of students. Data were analyzed using mean score and chi-square. The findings revealed that lack of praise, teachers' reward being in heaven, gross insincerity and lack of political will to fund education are factors that influence poor motivation of teachers. The findings indicated that teachers' motivation help to enhance the psychomotor, affective and cognitive domains of the learners to perform well. Low motivation has an effect on the academic performance of the students.

Pedagogical competence is a powerful tool refers to as educational and teaching qualifications. Teacher's pedagogical competence is the ability to manage learning which includes planning, implementation and evaluation of learning outcomes. Pedagogical processes are reflections of competence, using procedures derived from established bodies of knowledge in curriculum areas, including methodological observation and instruction (Danielson, 2020). This level of competence is expected of teachers for the attainment of educational goals. And it is the mainstream of this study. The state of sound professional training and acquisition of teaching potentialities cannot be eroded in practice. Teacher with sound professional training and acquisition of teaching potentialities will find joy in the following:

- Mastery of subject matter
- Adequate and appropriate use of instructional materials and text series.
- Studying and understanding the learners' psychology
- Appropriate management of the learners in and outside the classroom
- Appropriate study and use of available educational plants
- Application of unending effective instructional interactions

Pedagogical competence is synonymous to teaching effectiveness, a dear need for a competent

educator. Dhurba Bahadur Shah (2022), carried out a research on TSE and its relationship on students affective and motivational variables in a higher institution. The sample of size of 95 teachers and 1924 students from Spanish Public Universities was used. Teachers were divided according to their prominent characters of self-efficacy. It was discovered from the result of the study that the teachers with intermediate self-efficacy responses had higher member of good students than the teacher with high self-efficacy. Teachers who believe highly in their teaching abilities had less control in assisting students to learn and the students' performance were not bold and encouraging but to low perception of self-efficacy, the students were not bold and encouraged in the content area but anxious than students of the teachers with the moderate self-efficacy. In all, 40% of the teachers believe in their abilities to assist the students think reasonably.

To suffice, the teachers, with high self-efficacy were strongly determined and believed, they can assist students' academic challenges effectively.

1.1 Research Questions

The following questions were raised for the study:

- Do teachers self-efficacy influence students' academic achievement in Basic Science and Technology
- Do teachers' motivation influence students' academic achievement in Basic Science and Technology?
- Do teachers' pedagogical competence influence students' academic achievement?

2. Research Methodology

The study adopted a descriptive survey research. Simple random sampling technique was used to select 150 Basic Science and Technology (BST) students from 3schools in Ijebu North Local Government of Ogun State. The study made use of validated BST. Achievement test and questionnaire for self-efficacy, motivation and pedagogical competence. The data collected was analyzed using inferential statistics of multiple regression analysis method to test the questions to show the influence of teachers' characteristics (self-efficacy, motivation, and pedagogical competence) on students' academic achievement in Basic Science and Technology.

3. Result and Discussion

Research Question 1: Do teachers self-efficacy affect students' academics achievements in Basic Science and Technology.

Table 1: Regression Analysis of Teachers Self-Efficacy on Academic achievement in Basic Science and Technology.

Model Summary	ANOVA					
	Model	Sum of Squares	Df	Mean Square	F	Sig.
R = .286	Regression	314.593	1	414.593	3.784	.042b
R ² = .0817	Residual	55232.249	148	53.262		
Adj. R ² = .506	Total	55646.842	149			
Std Errors = 7.29805						

Table 1 shows the result of the regression of teachers' self-efficacy on achievement in Basic Science and technology. The result shows significant outcome ($F(1,148) = 3.784$, $P < 0.05$). This implies that teacher efficacy as predictor variable contribute significantly to the variance in academic achievement in Basic Science and Technology. The result further shows a multiple correlation coefficient of .286, R^2 value of .0817 and adjusted R^2 value of .506. This shows that the predictor variable accounted for 8.1% of the variance in academic achievement in Basic science and technology. Thus, teachers' self-efficacy has significant effect on students' academic achievement in Basic Science and Technology.

Research Question 2: Of what effect is teachers' motivation on students' academic achievement in Basic science and technology?

Table 2: Regression Analysis of teacher motivation on students' Academic achievement in Basic Science and technology.

Model Summary	ANOVA					
	Model	Sum of Squares	Df	Mean Square	F	Sig.
R = .210	Regression	676.773	1	676.773	2.767	.000
R ² = .0441	Residual	54970.070	148	53.009		
Adj. R ² = .046	Total	55646.842	149			
Std Error = 7.28071						

Table 2 shows the result of the regression of teachers' motivation as predictor variable on academic achievement in Basic science and technology. The result shows significant outcome ($F(1,148) = 2.767$, $P < 0.05$). This implies that teachers' motivation as predictor variable contributed significantly to the variance in academic achievement in Basic science and technology. The result further shows a multiple correlation coefficient of .210, R^2 value of .0441 and adjusted R^2 value of .046 thus showing that the predictor variable accounted for 4.4% of the variance in academic achievement in Basic science and technology. Thus, teachers' motivation has significant effect on student achievement in Basic science and technology.

Research Question 3: Do teachers Pedagogical Competence influence students' academic achievements in Basic science and Technology?

Table 3: Regression Analysis of teachers' pedagogical competence on Basic science and technology.

Model Summary	ANOVA					
	Model	Sum of Squares	Df	Mean Square	F	Sig.
R = .188	Regression	2805.613	1	2805.613	9.127	.003
R ² = .035	Residual	76232.711	148	307.390		
Adj. R ² = .032	Total	79038.324	149			
Std Error = 17.53254						

Table 3 shows the result of the regression of teacher pedagogical competence as predictor variable on academic achievement in Basic science and technology. The result shows significant outcome ($F(1,148) = 9.127$, $P < 0.05$). This implies that teacher pedagogical competence as predictor variable contributed significantly to the variance in academic achievement in Basic science and technology. The result further shows a multiple correlation coefficient of .188, R^2 value of .035 and adjusted R^2 value of .032 thus showing that the predictor variable accounted for 3.5% of the variance in academic achievement in Basic science and technology. Thus, teachers' pedagogical competence has significant effect on students' academic achievement in Basic science and technology.

4. Discussion of findings

The result of the study shows that teachers' self-efficacy has significant effect on students' academic achievement in Basic science and technology. Teachers with high assurance of home, approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Such teacher approach threatening situations with assurance that they can exercise control over them. Maria Eliophotou Menon, Andreas (2021) described the relationship between teacher self-efficacy, i.e., the extent to which teachers believe they can affect student learning, and student learning. MS Hussain, S.A Khan (2022) as cited by Matoti and unqueira (ND) reviewed 88 teacher self-efficacy studies and suggested that teachers with higher levels of efficacy are more likely to learn and use new approaches and strategies for teaching, use management techniques that enhance student autonomy and diminish student control, provide special assistance to low achieving students, build students' self-perceptions of their academic skills, set attainable goals, and persist in the face of student failure. This shows that there is a relationship between teaching efficacy and student academic performance which is similar to the finding of this study. It also aligns with Marjolein zee (2018) report that there is significant correlation between teacher self-efficacy and students' academic achievement.

The study also finds out that teacher motivation has significant on students' achievement in Basic science and technology. Teacher's Motivation level has a substantial impact on student levels of engagement and achievement behavior. Teachers high level of motivation is of utmost importance as it is one of the factors enabling them to efficiently carry out their educational duties which in turns influence students' academic achievement. The finding corresponds with Ken and Orji (2016) who examined the impact of teachers' motivation on the academic performance of students and found that teachers' motivation could impact on students' academic achievements by helping to explore, harness and develop students cognitive, psychomotor and affective domains for the betterment of our society. It also corresponds with Debarshi (2019) which showed that components of teachers' motivation were significant predictors of students' academic achievement. It is also close to Chia (2019) report that teachers' motivation helps to enhance the psychomotor, affective and cognitive domains of the learners to perform well. Low or poor motivation has an effect on the academic performance of the students.

The study also reported significant influence of teachers' pedagogical competence on students' achievement in Basic science. Thus, this finding support Ebenezer and Augustus (2021) who conducted a research on pedagogical competence of teachers and students academic achievement in junior secondary schools and found that with pedagogical competence, the teachers provide appropriate feedback, adapt to changing conditions, explained content to students and communicated learning goals effectively. It also confirms the report of Adegbola (2019) who conducted a research on teachers pedagogical competence as determinants of students' attitude towards basic science in South West Nigeria. The study teachers' pedagogical competence significantly influences students' attitude towards Basic Science. Similarly, appreciate the report of Filgona, Sakiyo and Gwany (2020) who conducted a research on the effects of teachers pedagogical content knowledge and students' academic achievement. The study reported significant outcome of pedagogical competenc on students' achievement. Similarly, it corresponds with Fatmawada, Maswati and Krismiyati (2020) who conducted a research study on the Effect of Teacher's Pedagogical Competence and stated that teacher's pedagogical competence significantly influences the students' achievement.

Finally, the result shows that teachers' characteristics have influence on students' achievement in Basic science and technology. The role of teacher in achieving educational objectives cannot be over emphasized. Thus, factors related to teachers have always been of interest to researchers. This finding aligns with the report of Jeremie (2022), students' academic achievement is centered on school productivity and is largely influenced by teachers' characteristics. There is a consensus that teachers characteristics have significant effect on students learning outcomes (Oviawe, 2016). Adeniyi (2009) found out that teachers' characteristics are strongly associated with performance of students.

5. Recommendations

It is recommended that emphasis should be laid on teachers' pedagogical competence in terms of training while factors that will motivates teachers should also be given adequate attention. Teachers should also intensify efforts in using various teaching styles which could influence students' achievement. It was also recommended that adequate measures should be taken by the teachers to ensure that students benefit from their teaching. In addition, the government and other educational stakeholders should arrange for seminars and

workshops for their teachers to boost their levels of competence in the classroom. Teachers should also exhibit intrinsic motivation that can influence students' attitude towards Basic Science and Technology in Nigeria Schools.

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Effect of Health-Education Intervention on Knowledge Level and Motivation of Hypertension Prevention among Pre-Hypertensive Market Traders in Lagos State

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1. Introduction

Hypertension is a long-term medical disorder in which blood pressure in the arteries remains abnormally high (Naish & Court, 2014). Majority of the time, high blood pressure is asymptomatic (Ayogu, Ezech & Okafor, 2021). Nevertheless, persistent, uncontrolled high blood pressure is a major risk factor for cardiovascular diseases such as stroke, coronary artery disease, heart failure, atrial fibrillation and peripheral arterial disease. It also predisposes to vision loss, chronic kidney disease and dementia (Lackland & Weber 2015; Mendis, Puska & Norrving 2011; Hernandorena, Duron, Vidal & Hanon 2017; Lau, Nattel, Kalman & Sanders 2017). It accounts for significant cases of premature mortality worldwide (GBD, 2015; Mills, Obst, Shen, Molina, Zhang, He, Cooper, & He 2016).

High blood pressure affects around a billion people worldwide (Adeloye Basquill, Aderemi, Thompson, & Obi 2015; Beaglehole et al., 2011). Africa has a high prevalence of hypertension estimated to be about 57% of adult aged 50 years and above (Bosu, Reilly, Aheto, Zucchelli 2019). The incidence of hypertension in Nigeria adult population is rising, and the rate varies year to year and from region to region. Adeloye, et al. (2021) set the prevalence at 30.6%, whereas Akinlua et al. (2015) and Ogah et al. (2012) observed HBP prevalence ranging from 2.1 to 47.2 percent in adults and 8–46.4 percent in children (Ogah et al., 2012; Kayima et al., 2013 and Akinlua, Meakin, Umar, Freemantle 2015).

Hypertension is more common in the older population and responsible for the higher incidence of morbidity and death in this age group (Lewington et al., 2002). In addition, in adult

populations, demographic factors such as gender, family history of cardiovascular diseases, lifestyle factors such as unhealthy food intake, physical inactivity, tobacco and alcohol use, abnormal serum lipids and lipoproteins, obesity, chronic stress, and insufficient sleep are all strong risk factors for hypertension (Thawornchaisit et al., 2013; Koti & Roetzheim 2015;). However, data suggests that the majority of people with hypertension, particularly the elderly, are unaware, and this increases the risk of serious consequences (Adeloye et al 2015; Mills et al 2016). This non-communicable disease accounts for approximately 7.1 million deaths per year, and ranks third in terms of disability adjusted life years (DALYs) lost (Eze et al., 2020).

Studies have also proposed that changes in medication adherence, and lifestyle changes that rely on a thorough understanding of knowledge-based awareness are valuable in the prevention of hypertension and its comorbid conditions (Cohn et al., 2012). Hypertension knowledge and awareness is a strong predictor of hypertension prevention practices, treatment, and medication adherence among hypertensive patients (Cohn et al., 2012; Barr et al., 2014 & Chotisiri et al 2016). Previous studies have reported poor knowledge concerning hypertension and its consequences, the side effects of antihypertensive drugs, poor adherence with drug therapy, erroneous health beliefs, inability to make lifestyle changes, unrealistic treatment expectations and demographic factors as barriers to hypertension prevention and control practices (Odedosu, Schoenthaler, Vieira, Aggemang, & Ogedegbe, 2012; Okwuonu, Ojmadu, Okaka, & Akemokwe, 2014).

Prevalence of hypertension among adults in the informal sector, especially market women in

Nigeria is high (Ahaneku et al., 2011; Ulasi et al., 2011; Odugbemi, Onajole & Osibogun, 2012; Ogunmola, Olaifa, Oladapo & Oladoyinbo, Ekerette, Ogunubi, 2015 and Eze et al., 2020.). Market traders are at increased risk of high blood pressure as a result of sedentary lifestyle and reliance on salty, fast food at work (Ahaneku et al., 2011; Ulasi et al., 2011; Lucero et al., 2014; Oladoyinbo, Ekerette, Ogunubi, 2015; Dzhambov, Dimitrova, 2018; Eze et al., 2020;). One in four market traders had undiagnosed hypertension with a significantly higher prevalence among older, married and obese traders (Vincent-Onabajo, Adaji, Umeonwuka, 2017). Hence this study assessed Traders' knowledge level of hypertension and their motivation to prevent its occurrence with benefits of lifestyle in Alimosho Local Government Area of Lagos State.

2. Research Methodology

2.1 Research Design.

The study, which was part of a larger experimental study of 2 groups- control and experimental, adopted a quazi-experimental design and the population for the study consisted of traders from selected structured markets in Alimosho and Ajeromi-Ifelodun Local Government Areas of Lagos State.

2.2 Study population and location

Lagos State is the most populous city in Nigeria with an estimated 21 million inhabitants in 2016. Metropolitan areas have emerged on islands, including Lagos Island, and this is protected from the Atlantic Ocean with a sandy tongue. The city extends to the west mainland of the lagoon, with Ikeja, the capital of Lagos, and Agege, more than 25 miles northwest of Lagos Island.

Alimosho local government is the largest LGA in Lagos State and was established in 1945 under Ikeja division. It has six sub divisions created out along-side Agbado/Oke-odo. Ikotun/Igando, Ayobo/Ipaja, Mosan/Okunola and Egbeda/Akowonjo. The area is rich in culture and festivals such as Egugun, Oro, Igunnu by the dominating Egbados. Yoruba and Pidgin English are the most prominent languages of Alimosho people.

There are between 70 markets in Alimosho local government The biggest market is the Ile-Epo market mostly known for perishable or unprocessed food items and processed food items. Other markets are Iyana Ipaja market, Ipaja Market, Ile Baale, Iso Pako, Oja-Oba, Ataapa, Odo Eran, Egbeda, Power-line, Alagutan (motor spare parts), Estate, Water, Atan, Ayobo, Abule Egba

markets while others in the category of small markets are Kola, Agbado, Shasha, and Ikotun markets.

2.3 Inclusion and Exclusion Criteria

The inclusion criteria were adult market traders who are shop owners, member of traders' association and those who offer informed consent to participate. Market traders who are confirmed hypertensive, those that are ill at the time of the research, who are not members of the trader's association, free hawkers, non-shop owners and traders who do not consent to participate in the study were excluded.

2.4 Sample Size and Sampling Technique

The sample size was calculated based on a comparison of two independent means formulae with a standardized effect size of 0.50 and a standard deviation of 5% (Snedecor and Cochran, 1989). The level of significance was set at $p < 0.05$ and a study power of 80% was assumed.

$$n = \frac{2(Z_{\alpha/2} + Z_{1-\beta})^2}{\left(\frac{\mu_1 + \mu_2}{\sigma}\right)^2} = \frac{2(1.96 + 0.84)^2}{(0.5)^2} = \frac{16}{0.25} = 64.$$

The estimated sample size for each group was 64 giving a total number of 128 participants across the 2 groups. With an addition of 10% for attrition, we arrived at 140 participants.

2.5 Sampling Technique

A three-stage sampling technique was used to select market traders into the study. In stage one, 2 LGAs, Alimosho and Ajeromi-Ifelodun LGAs were randomly selected out of the 20 LGAs in Lagos State. Next was stage two, where one large market in each of the selected LGAs, Ile-epo Oke Odo market in Alimosho LGA (comprising 1954 shops) and Alayabiagba market in Ajeromi-Ifelodun LGA (comprising of 801 shops) were purposively selected. Besides their large sizes, these markets were selected because of size of their markets and that there is remarkable multiple ethnic group representation of possible participants and they also contained more merchants as compared with the other. Systematic random sampling technique was employed to recruit participants from their shop. A sampling interval of 19 was computed and the first shop was selected in a ballot between numbers 1 to 19. One eligible trader was recruited from each shop where there were more than one eligible potential participant.

2.6 Instrumentations of Data Collection

The instrument was a validated, structured questionnaire. This was used to collect data on participants' demographic characteristics,

hypertension related knowledge and motivation, on hypertension prevention. The instrument was drafted in English language, translated to Yoruba and Pidgin language for people who cannot read or understand English language and it was interviewer (research assistant) administered. The instrument was used to rate baseline, immediate post-intervention measures, and impact evaluation of the intervention.

The instrument had three sections, namely sections A, B, and C

Section A: Socio-demographic characteristics of the participants which include age, gender, level of education, religion, marital status, systolic and diastolic BP, weight and height. The BP levels were measured from the right and left arms of the subjects in a sitting position by the nurses/CHEW at the study site. The Blood Pressure was measured twice with maximum of 10 minutes interval. The systolic BP (SBP) and diastolic BP (DBP) was recorded using electronic sphygmomanometers. The participants blood pressure levels were then classified as follows: normal: SBP < 120 mmHg and DBP < 80 mmHg; PreHT: SBP 120–139 mmHg and/ or DBP 80–89 mmHg; hypertension: SBP ≥ 140 mmHg and/or DBP ≥ 90 mmHg. The participants receiving antihypertensive treatment will be considered to have hypertension and excluded from the study.

Section B: hypertension knowledge was being measured using 11 items with a response format of Yes, No. The 11 questions were question about the meaning of hypertension; questions about causes and risk factors for hypertension, also about signs and symptoms and blood pressure measurement and its interpretation, others are about hypertension complications, and blood pressure management and control. Each correct response was allotted 1 mark while an incorrect answer had 0 allotted. The knowledge index ranging from higher scores indicating greater hypertension knowledge.

Section C: motivation towards hypertension prevention will be assessed using 20 items. The response format was based on Likert scale of strongly agree (2 points) agree (1 point) disagree (0 point) and strongly disagree (0 point).

2.7 Validity and Reliability of Instrument

This instrument was reviewed by researcher's supervisor and other academics in the field of public health. The validity of the contents of the questionnaire was determined by consultation of relevant literature and previous research works to

ensure that items adequately measure the constructs of the study. Additionally, a total of twenty draft questionnaire was pre-tested among traders with similar socio-demographic characteristics with the study participants in Ipodo market to confirm clarity and comprehension of the instrument. Feedbacks from the pilot study was incorporated into the instrument.

Construct validity: The development of the questionnaire items was structured based on the objectives of the study and the conceptual framework of the study.

Test re-test was done. This was done by administering the questionnaire twice to 20 traders similar to the study participants in Ipodo market in Ikeja. The coefficient reliability was determined using IBM SPSS software version 22. A Cronbach's α score of 0.80 with a range of 0.79 – 0.87 was obtained.

Data Collection

Data collated and analyzed using IBM Statistical Package for Service Solution (IBM SPSS) version 22.0 and set at $P < 0.005$. Computed data was then subjected to descriptive (means, standard deviation, standard error) statistical analyses.

The prepared instrument was administered to each of the participants by the researcher and the research assistants. Required data were filled in as appropriate by the participants and/or research assistants and collected by the researcher and research assistants. Also, the participant's blood pressure and body mass index reading were taken and recorded

2.8 Data Analysis

The data obtained was screened by looking at each item on each questionnaire to ascertain that the respondents answered them correctly and, in some cases, where-by no response were given, the item were treated as missing variable. The data obtained from completed copies of the questionnaire were collated and analyzed using IBM Statistical Package for Service Solution (IBM SPSS) version 22.0 and set at $P < 0.005$. Computed data was then subjected to descriptive (means, standard deviation, standard error, Effect size) statistical analyses. Also, the information obtained were summarized and presented in tables. Each construct of the questionnaire was coded along the appropriate ranking scale. Maximum point-scales were generated for each construct to measure the stated research variables; mean scores were computed.

Table 1 Statistical Analysis

S/N	Objectives	Statistical Method
1	Socio-demographic characteristics	Frequency table, simple percentage count
2	Assess the level of knowledge of hypertension among the market traders.	Means, standard deviation
3	Determine the level of motivation towards hypertension prevention	Means, standard deviation
	Effect of health education intervention on knowledge of hypertension.	Means, Effect size
	Effect of health-education intervention on motivation to prevent hypertension	Means, Effect size

2.9 Ethical Consideration

Ethical approval was obtained from Babcock University Health Research Ethics Committee (BUHREC). Permission and cooperation were obtained from the Iya-ojas and Baba-ojas who are the custodian of the leadership and administrative roles in the market. Participation was completely voluntary or optional without coercion and the traders were informed that they were at liberty to decline to participate or withdraw from the study with no consequences to them. Written informed consent were obtained after thorough explanation given and understanding established. Confidentiality was assured to the participants. Personal identifiable information like name was not included except for information needed for identification of participants such as shop address and phone numbers that were be coded for reference purpose. The participants were offered free blood pressure check, height, weight and Body Mass index screening. No incentive or compensation for participating in the study. Also, there were explanation that no identified or associated risks in participating in the study.

Informed consent

The purpose of the study, content benefits, and risk of the study were explained to the participants. Informed consent was obtained before recruiting the participants and administering the questionnaire.

3. Result and Discussion of Findings

Socio-Demographic Characteristics of the Participants

As shown in Table 2 below, the result of the findings showed that the mean age of the participants in the both groups were 44.91 ± 8.82 and 44.37 ± 8.80 years. There were more females in both groups - 40(57.1%) and 37(52.9%). Forty 28 (40.0%) and 24 (34.3%) respectively of the participants in both groups had tertiary education. Majority of the participants were married – 79% (56%). The result of the findings also showed that Christianity was the dominant religion in both groups 81 (58.6%). Only a few of the participants in the intervention group 6 (8.6%) and the control group 8 (11.4%) were extremely obese. Both groups are considered comparable when looking at socio-demographic characteristics.

Table 2: Socio-demographic characteristics of the participants

Variable	Kinds	Intervention group (n=70)		Control group (n=70)		χ2	P
		F	%	F	%		
Age	30-40	26	37.1	27	38.6	0.35	0.84
	41-51	25	35.7	27	38.6		
	52-62	19	27.1	16	22.9		
Mean ±SD		44.91±8.82		44.37±8.80			
Gender	Male	30	42.9	33	47.1	0.26	0.73
	Female	40	57.1	37	52.9		
Educational level	No education	18	25.7	19	27.1	0.52	0.91
	Primary	11	15.7	12	17.1		
	Secondary	13	18.6	15	21.4		
	Tertiary	28	40.0	25	34.3		
Marital status	Married	41	58.6	38	54.3	1.48	0.69
	Single	13	18.6	10	14.3		
	Widowed	9	12.9	13	18.6		
	Divorced	7	10.0	9	12.9		
Religion	Christian	41	58.6	40	57.1	0.42	0.81
	Islam	27	38.6	29	41.4		
	Others	2	2.9	1	1.4		
BMI	Under weight	1	1.4	2	2.9	5.30	0.38

Normal	24	34.4	14	20.0
Overweight	16	22.9	14	20.0
Obesity class 1	15	21.4	18	25.7
Obesity class11	8	11.4	14	20.0
Extreme obesity	6	8.6	8	11.4

Knowledge level of hypertension

As shown in table 3 below, the participants' level of knowledge of hypertension was measured on a 21-points rating scale and categorized into low, moderate, and high at the baseline. The intervention group had a mean score of 15.37 ± 5.20 , while the control group had a mean knowledge score of 15.33 ± 3.93 . More than half of the participants in both groups had high level of knowledge, 38 (54.3%) and 46 (65.7%) in the experimental and the control group respectively.

The mean score of the intervention and the control groups were compared using an independent sample t- test at the baseline. The result revealed that there was no statistically significant difference in the mean score obtained by the two groups.

Table 3: Baseline Knowledge level of hypertension

Variable	Category	Intervention group		Control group		t-test	P
Knowledge Measured on a 21-points rating scale	Low	F 6	% 8.6	F 3	% 4.3	0.02	0.98
	Moderate	26	37.1	21	30.0		
	High	38	54.3	46	65.7		
Mean score		15.37 ± 5.20		15.33 ± 3.93			

Comparison of Participants' level of Knowledge regarding hypertension at the Immediate Post Intervention between the two groups

As shown in table 4 below, immediately after the intervention, the participants' level of knowledge in the two groups was assessed with the same instrument measured on 21-points rating scale and categorized into low, moderate, and high. The result of the analysis showed that the mean score obtained by the intervention group was 18.64 ± 1.68 and the control group had a mean score of 15.30 ± 3.85 . The analysis showed that all the participants 69 (98.6%) in the intervention group with the exception of the participant 1(1.4%) that dropped out of the program, had high level of knowledge regarding hypertension prevention. However, most 46 (65.7%) of the participants in the control group had high level of knowledge. The mean scores of the participants were compared using an independents t-test. The result of the analysis showed that there was a statistically significant difference between the two groups at the immediate post intervention.

Table 4: Comparison of Participants' level of Knowledge regarding hypertension at the Immediate Post Intervention between the two groups.

Variable	Category	Intervention group		Control group		t-test	P
Post Knowledge Measured on a 21-points rating scale	Low	-	-	3	4.3	6.60	<0.01
	Moderate	-	-	21	30.0		
	High	69	98.6	46	65.7		
Mean score		18.64 ± 1.68		15.30 ± 3.85			

Comparison of Participants' level of Knowledge regarding hypertension at the baseline and Immediate Post Intervention.

As shown in table 5 below, the mean score of the participants in the intervention group increased from 15.37 ± 5.20 , at the baseline to 18.64 ± 1.68 at the immediate post intervention. However, the mean score of the control group slightly decreased from 15.33 ± 3.93 at the baseline to 15.30 ± 3.85 at the immediate post intervention. The mean scores of the two groups were compared between the baseline and immediate post intervention using a paired sample t- test. The result of the analysis showed that there was a statistically significant difference in the mean score.

Table 5: Comparison of Participants' level of Knowledge regarding hypertension at the baseline and Immediate Post Intervention.

Variable		Category	Intervention group				Control group				t-test	P
			Baseline		Post Intervention		Baseline		Post Intervention			
			F	%	F	%	F	%	F	%		
Baseline and post intervention knowledge measured on 21-points rating scale	Low		6	8.6	-	-	3	4.3	3	4.3		
	Moderate		26	37.1	-	-	21	30.0	21	30.0		
	High		38	54.3	69	98.6	46	65.7	46	65.7	-5.15	<.01
Mean score			15.37 ± 5.20		18.64 ± 1.68		15.33 ± 3.93		15.30 ± 3.85			

Evaluation of the level of influence of health education on the level of knowledge of hypertension among the market traders at 6th weeks immediate post intervention.

Table 6. Impact of health education on the level of knowledge of hypertension in the intervention group between the baseline and at the immediate post intervention.

As shown in table 6 and 7. The impact of the health education was assessed in the intervention group. The result of the analysis showed that participants' level of knowledge increased from 15.37 ± 5.20 to 18.64 ± 1.68 after the health education. A paired sample t-test showed that the increase in knowledge was statistically significant ($p < 0.01$). An effect size was computed to determine the magnitude of change in means between the baseline and immediate post intervention. The intervention group had an effect size of -0.85 with a p- value of < 0.01 . Although there was a slight decrease in the level of knowledge of the control group from 15.33 ± 3.93 at the baseline to 15.30 ± 3.85 at the post intervention, a paired sample t- test analysis showed that there was no statistically significant difference in the mean scores of the control group ($p = 0.48$). An effect size computed showed a very small magnitude of change which was not significant. The control group had an effect size of 0.01 with a p- value of 0.48.

Table 6: Impact evaluation of participants' level of knowledge of hypertension between the baseline and immediate post intervention for the control group.

Variable	Control group				*ES (95% CI)	p- value
	Baseline N= 70		Post Intervention N= 70			
	$\bar{x}(SE)$	$\pm SD$	$\bar{x}(SE)$	$\pm SD$		
Mean score	15.33(0.47)	3.93	15.30 (0.46)	3.85	0.01 (-0.63 to 0.65)	0.48

Table 7: Impact evaluation of participants' level of knowledge of hypertension between the baseline and immediate post intervention for the intervention group.

Variable	Intervention group				*ES (95% CI)	p- value
	Baseline N= 70		Post Intervention N= 69			
	$\bar{x}(SE)$	$\pm SD$	$\bar{x}(SE)$	$\pm SD$		
Mean score	15.37(0.62)	5.20	18.64 (0.20)	1.68	-0.85 (-1.49 to -0.21)	<0.01

Participants' motivation towards hypertension prevention

As shown in table 8 below, the participants' motivation towards hypertension prevention was measured on a 40-points rating scale and categorized into low and high. The mean motivation score was 16.06 ± 7.60 and 17.99 ± 5.50 . Most 101 (71.6%) of the participants had low motivation towards hypertension prevention. The mean motivation score both groups were compared using an independent sample t- test. The result of the analysis showed that there was no statistically significant difference in the motivation score of the two groups.

Table 8: Participants' motivation towards hypertension prevention

Variable	Category	Intervention group		Control group		t-test	P
		F	%	F	%		
Motivation measured on a 40-points rating scale	Low	55	78.6	46	65.7		
	High	15	21.4	24	34.3	-1.74	0.08
Mean score		16.06±7.60		17.99±5.50			

The table 9 below showed that the participants motivation towards hypertension prevention at immediate post intervention period for both groups show mean score of 27.49± 11.52 and 17.91± 5.49for Intervention and control groups respectively. Independent t test was significant at 6.27 (p<0.01)

Table 9: Comparison of Participants' motivation towards hypertension prevention at the Immediate Post Intervention between the two groups.

Variable	Category	Intervention group		Control group		t-test	P
		F	%	F	%		
Post intervention Motivation skills Measured on a 40-points rating scale	Low	29	41.4	47	67.1		
	High	40	57.1	23	32.9		
						6.27	<0.01
Mean score		27.49 ± 11.52		17.91 ± 5.49			

Comparison of Participants' motivation towards hypertension prevention at the baseline and Immediate Post Intervention.

As shown in table 10 below, the result of the analysis showed that participants' motivation in the intervention group increased from 16.06 ± 7.60 at the baseline to 27.49 ± 11.51 at the immediate post intervention. Contrary to this result, the control group slightly decreased from 17.99 ± 5.50 at the baseline to 17.91 ± 5.49 post intervention. The mean scores of the two groups were compared between the baseline and immediate post intervention using a paired sample t- test. The result of the analysis showed that there was a statistically significant difference in the mean score.

Table 10: Comparison of Participants' motivation towards hypertension prevention at the baseline and Immediate Post Intervention.

Variable		Category	Intervention group				Control group				t-test	P
			Baseline		Post Intervention		Baseline		Post Intervention			
Baseline and post intervention measured on 40-points rating scale	Mean score	Low	F	%	F	%	F	%	F	%		
		High	55	78.6	29	41.4	46	65.7	47	67.1		
		15	21.4	40	57.1	24	34.3	23	32.9			
			16.06 ± 7.60		27.49 ± 11.52		17.99 ± 5.50		17.91 ± 5.49		-5.31	<0.01

Impact of the level of influence of health education intervention on level of motivation towards hypertension prevention among the market traders between the baseline at 6th weeks immediate post intervention.

Impact of health education on the level of motivation towards hypertension prevention in the intervention group and at the immediate post intervention.

As shown in table 12 and 13. The impact of the health education was assessed in the intervention group. The result of the analysis showed that participants' level of motivation increased from 16.06 ± 7.60 at the baseline to 27.49 ± 11.51 after the health education. A paired sample t-test showed that the increase in motivation was statistically significant (p <0.01). An effect size was computed to determine the magnitude of change in means

between the baseline and immediate post intervention. The intervention group had an effect size of -1.18 with a p- value of <0.01. Although there was a slight decrease in the level of motivation of the control group from 17.99 ± 5.50 at the baseline to 17.91 ± 5.49 at the post intervention, a paired sample t- test analysis showed that there was no statistically significant difference in the mean scores of the control group ($p = 0.17$). An effect size computed showed a very small magnitude of change which was not significant. The control group had an effect size of 0.02 with a p- value of 0.17.

Table 12: Impact evaluation of participants' level of motivation towards hypertension prevention between the baseline and immediate post intervention for the control group.

Variable	Control group				*ES (95% CI)	p- value
	Baseline N= 70		Post Intervention N= 70			
	$\bar{x}(SE)$	$\pm SD$	$\bar{x}(SE)$	$\pm SD$		
Mean score	17.99 (0.66)	5.50	17.91 (0.66)	5.49	0.02 (-0.89 to 0.92)	0.17

Table 13: Impact evaluation of participants' level of motivation towards hypertension prevention between the baseline and immediate post intervention for the intervention group.

Variable	Intervention group				*ES (95% CI)	p- value
	Baseline N= 70		Post Intervention N= 69			
	$\bar{x}(SE)$	$\pm SD$	$\bar{x}(SE)$	$\pm SD$		
Mean score	16.06 (0.89)	7.60	27.49 (1.39)	11.51	-1.18 (-2.79 to 0.43)	<0.01

Level of participants' preventive practices towards hypertension prevention

As shown in table 15 below, the participants' preventive practices against hypertension were measured on a 24-points rating scale and categorized into low and high. The participants in both groups had a mean preventive practice score of 12.14 ± 5.60 and 13.83 ± 5.07 . Less than half 64 (45.3%) of the participants had low preventive practices against hypertension. The mean preventive practices of the two groups were compared using an independent sample t-test. There was no statistically significant difference in the mean score of the two groups.

Table 15: Level of participants' preventive practices towards hypertension prevention

Variable	Category	Intervention group		Control group		t-test	P
Preventive practices measured on a 24-points rating scale.		F	%	F	%		
	Low	41	58.6	23	32.9	-1.87	0.06
	High	29	41.4	47	67.1		
Mean score		12.14 $\pm$ 5.60		13.82 $\pm$ 5.07			

4. Discussion of findings

In recent years, there has been a significant prevalence of hypertension, which has been associated to late identification and inadequate obesity management, thus resulting in high morbidity and death among the adult population. Traders have a hectic routine, which limits the time they have for their health. Because this population group lacks adequate access to formal health care, investigating the influence of blood pressure education on hypertension awareness and blood pressure status is important. This study used a non-randomized, quasi experiment design to assess the efficacy of a health education intervention on hypertension knowledge and motivation for prevention practices among market merchants in Lagos State.

The mean age reported in the current study for the intervention group and control group was 44.91 ± 8.82 years and 44.37 ± 8.80 years

respectively. This is in consonance with the mean age reported by Eze, et al., (2020), in their study to investigate the impact of health education intervention on knowledge and prevalence of hypertension among retirees in southeast Nigeria. Ozoemena et al. (2019) observed a substantially higher mean age among their participants. The discrepancy in mean age was attributable to the fact that Ozoemena et al. evaluated the influence of health education on Nigerian retirees. In the current study, there were more females in both groups, this is at variance with the findings of Eze, et al., (2020), and Ozoemena et al. (2019) where they reported more male to female ratio. The difference could be attributed to different geographical settings. The majority of the current study participants were married. This is consistent with the findings of Ozoemena et al. (2019), Eze, et al., (2020), and Naeemi et al., (2022). There were more participants with tertiary education in both groups in the present study. This is co-related with the findings of Ozoemena et al. (2019), however

Eze, et al., (2020), and Al Shatari, et al., (2019) reported that most of their participants had secondary education.

The current study found insufficient level of hypertension related knowledge at the baseline in both the intervention group as well as the control group. Knowledge of specific domains of hypertension like risk factors, complications, and prevention was minimal. This finding is in agreement to similar studies of traders in Nigeria (Osuala et al., 2014; Iyalomhe et al., 2010) and Egypt (Al-wehedy et al., 2014) where they reported low level of knowledge. The poor knowledge may be due to limited access to adequate health information as most informal sectors lack structured occupational health services (Banik 2009).

The current study's findings revealed that the educational intervention had a favorable influence on enhancing traders' hypertension knowledge, as well as any other individual outcome. These findings have added to the scarcity of evidence on the efficacy of health education programs in Sub-Saharan Africa. When compared to the control group, the intervention group's mean hypertension knowledge rose considerably between baselines and immediately after intervention. Appropriate knowledge of hypertension and its prevention has been highlighted as a prerequisite for lifestyle changes, medication adherence, and efficient blood pressure management among hypertensive patients, including market traders (Cohn, et al., 2012; Chotisiri et al., 2016). This finding is similar to a recent study, which found that post-intervention hypertension knowledge, attitude, and practices (KAP) scores were greater than baseline (Roopa et al., 2014). The current results are comparable to those of a quasi-experimental study done in Nigeria (Awosan et al., 2013), which found a substantial gain in knowledge after three months of intervention. Similar studies conducted in China (Yang & Sun 2011) and Canada (Dawes et al., 2010) found that participants in educational programs greatly increased their general knowledge about hypertension. The findings of other research, including the one by Ozoemena et al. (2019), demonstrated that education about a healthy diet and medication adherence greatly increased knowledge of hypertension. Also, the study by Zangiabadi (2019) demonstrated that the degree of individual knowledge has a significant impact in encouraging prevention in non-hypertensive and subsequent drug compliance in hypertension patients. Furthermore, according to Naeemi et al. 2022; Ogban et al. 2021, educational interventions based on the health belief model can be successful in lowering the obstacles to preventive and self-care behaviors. The fact that knowledge of

hypertension has increased shows the importance of health education initiatives, which should be continued. Evidence, however, indicates that not all information results into the desired behavioral change (Fisher et al., 1994).

The present study found low baseline motivation towards hypertension prevention among the intervention group as well as in the control group. This is consistent with the findings of Susiati et al., (2016). However, a study conducted in a rural community in Indonesia revealed positive attitude among most of their hypertension patients at the baseline (Kurnia et al., 2022). The difference could be attributed to the fact that the research studied patients that are already diagnosed with hypertension who are already informed about their condition. However, approximately 60% of hypertensive patients still have a bad attitude towards the treatment of hypertension. The attitude of people with hypertension also affects blood pressure control compliance and adherence to the diet, the more positive attitude of the patient, the better management of hypertension (Tarigan et al., 2018).

The current study found that health educational intervention significantly influences the trader's attitude/motivation towards hypertension prevention. This is consistent with the finding of Kurnia et al., (2022). The provision of health care management and health education interventions can force respondents to learn how to behave healthily and the right processes for the management of hypertension, increasing respondents' understanding of the management of hypertension. The respondent's rising level of knowledge inevitably raises their interest in finding solutions to regulate their blood pressure. According to the study by Ainiyah and Wijayanti (2019), the attitude differences among those who have hypertension are normal because they are influenced by a number of variables, including the respondent's source of information for the study in the mass media (both print and electronic media) and their involvement in health education initiatives. Research likewise supports this. Health education can affect respondents' views, according to Sunarmi & Afrida (2019), if the information is presented in a clear, understandable manner. The management of hypertension is influenced more easily the more often health information is provided. According to study by Nuruddani (2019), health education is one intervention that can help people modify their attitudes toward following daily routines like eating well and taking their medications.

At the start of the trial, individuals' distribution in both the intervention and control groups had low

levels of hypertension prevention activities. The intervention group's preventative habits rose significantly after the intervention, but the control group showed no meaningful improvement. The findings of this study show that a model-based educational intervention can improve market traders' preventative practices.

As a consequence, the study confirms the favorable effects of health-education interventions on changing informal sector lifestyles. The findings are consistent with other research that found an improvement in hypertension self-care habits following a health education intervention (Ozoemena et al. 2019; Awosan et al., 2013; Eze, et al., 2020). However, the result of this finding contradicts a previous study (Babaee et al., 2014). The intervention's post-intervention and follow-up impacts were considerable. The follow-up intervention was designed to reaffirm the study's primary findings in the intervention group. The results of the initial post-intervention evaluation of the key outcomes suggested the necessity for a follow-up. Following the follow-up, the participants' hypertension knowledge grew significantly, as did their hypertension preventive, motivation, behavioural habits. This was shown in the intervention group's considerable effects as compared to the control group. This finding conforms to the findings of Kurnia et al., (2022) and Naeemi et al. (2022)

5. Conclusion and Recommendations

This study discovered that market traders have insufficient knowledge of hypertension and low motivation concerning hypertension prevention practices. The Post-intervention period showed a significant increase in the knowledge of hypertension and its prevention which also translate into positive improvement in the participants' prevention of hypertension

According to the findings of the study, it is hereby recommended that the market leaders should partner with health workers to promote market sensitization efforts, screening programs, non-pharmacological lifestyle adjustments, such as improving physical activity levels and promotion of healthy diets.

There is evidence that the market traders should take their health screening very importantly especially regular blood monitoring and body mass index check in the pursuit of prevention of hypertension. It is equally important to replicate this intervention study on larger participants and there must be continuity and sustained regular health education and blood pressure screening for market traders.

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Part Four

Human Resource Management



Innovativeness and Diversification as Veritable Competitive Strategies for Organisational Performance: Evidence from Nigerian Oil and Gas Sector

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Abstracts. Organizations need to adapt to challenges of today's competitive environment by improving their performance. It is presumed that competitive strategies have impact on general performance. This study evaluated the effect of competitive strategies with respect to innovativeness and diversification on organizational performance of selected oil and gas firms in Lagos State, Nigeria. Survey research design was adopted for the study. The population of this study consisted of the employees (1400) of the four selected oil and gas firms (Capital Oil, ExxonMobil Nig, Cornoil and Total Nigeria Plc) located in Lagos state, Nigeria. The sample size used for the study was 302, using Cochran formula. Findings of the study revealed that diversification strategies dimensions have a significant effect on profitability of the organizations ($\beta = 0.310$, $F_{(1, 304)} = 1.541$, $\text{Adj } R^2 = 0.008$, $p > 0.05$), innovation strategies dimensions have a significant effect on firm growth of the organizations ($\beta = 0.511$, $F_{(1, 304)} = 8.726$, $\text{Adj } R^2 = 0.200$, $p < 0.05$) and finally there was a significant and positive effect of competitive strategies dimensions on organizational performance ($\beta = 0.326$, $F_{(1, 304)} = 6.101$, $\text{Adj } R^2 = 0.109$, $p < 0.05$). The study concluded that competitive strategies contribute immensely towards organizational performance and recommended that the human resource management team of the selected oil and gas firms should necessitate enough competitive strategies towards its beneficiaries as it leads to high level of organizational performance.

Keywords: Innovativeness, profitability, firm growth, diversification and strategies

1. Introduction

The Oil and Gas (O&G) sector is one of the largest industries in the world, with a wide variety of products. The main drivers of 2019 growth are the United States, Brazil, China, the UK, Australia, and Canada. Mexico and Norway are the countries to see the largest declines. Africa has 8% of the

world's oil reserves, and 81% of this production comes from Nigeria, Libya, Algeria, Egypt, and Angola. However, the performance of business organizations internationally has provoked worries due to the dynamic role the oil sector plays in the international economy.

Host communities bear the brunt of environmental degradation and other costs, while they derive little or no benefits from the revenues generated. The oil and gas sector is facing a major obstacle due to the rise of green technologies. Human resource management has a quantifiable impact on organizational profitability, and global competition has made technological changes possible. Competitive strategies are a firm's pursuit of an advantageous competitive position in an industry, which has a direct impact on firm performance. Nigeria's Oil and Gas has been hard hit by a low level of innovation in the local packaging industry, which has had a negative impact on sales and profits.

Poor product packaging has caused goods produced by Nigeria's Oil and Gas firms to not compete well with products from other countries. This has led to limited data on consumer needs and behavior, making it difficult to develop specific consumer insights. This study also examines the effect of Competitive Strategies with respect to innovative and diversification on the organizational Performance of Selected Oil and Gas Firms in Nigeria. The specific objectives were to:

- determine the effect of innovation Strategies on firm growth of selected Oil and Gas Firms in Lagos State, Nigeria and
- evaluate the effect of diversification strategies on the organizational performance of selected oil and gas firms in Lagos State, Nigeria

1.2 Research Questions

- What is the effect of innovation Strategies on firm growth in oil and gas firms in Lagos State, Nigeria?

- In what is the effect of diversification strategies on the profitability of an organization in oil and gas firms in Lagos State, Nigeria?

1.3 Hypotheses

H₀₁: Innovation Strategies has no significant effect on firm growth of the selected Oil and Gas Firms in Lagos State, Nigeria.

H₀₂: Diversification strategies has no significant effect on the profitability of the selected oil and Gas firms in Lagos State, Nigeria

2. Literature Review

Organizational performance is the ability of an organization to fulfill its mission through sound management, strong governance, and persistent rededication to achieving results. Research has focused mostly on financial indicators, but since the late '80s, there has been an increased emphasis on non-financial indicators. Armstrong (2006) suggested that performance is the accomplishment of laid down objectives, Robbins and Mary (2003) defined it as a result of an activity, and firm growth is a company growing faster than its peers or the broader economy. To remain in business, survival and growth should be the primary objective. Profitability is the ability of a business to earn a profit and measure its operational efficiency value. Innovation is the major reason for increased investments and business fluctuations. Organizations pursue a technological push or market pull innovation strategies to achieve a superior innovation performance. Diversification is the entry of a business unit or organization into new lines of activity, either by processes of internal business development or acquisition and mergers.

3. Empirical Review

3.1 Diversification Strategies and Profitability

Eukeria and Favourate (2014) found a positive relationship between diversification and profitability, while Hoskisson and Peng (2005), Wan (2011), Maksimovic & Phillip (2007), Ozbas & Scharefstein (2010), Santalo & Becerra (2004), Stowe and Xing (2006), Daud *et al* (2009), Mackey (2012), and Dimitrov and Tice (2006) found that high levels of diversification increase profitability and shareholder value. Tongli *et al* (2005) found that high levels of diversification are disadvantageous to profitability, while Masulis *et al* (2007) found that the characteristics that make firms diversify can also make them to be discounted.

3.2 Innovation strategies and Firm growth

Stam and Wennberg (2009) used Research and Development (R&D) as a measure for innovation, stating that the effect of R&D spending varies across firms. Benefits from increased R&D expenditure are achieved only by strong growth performers, and it is subject to conditions such as access to an established external network. Demirel & Mazzucato (2012) confirmed that R&D-spending positively affects smaller firms' growth, but particularly those tenacious innovators. Analysis at different heights of aggregation has been done on the effects of innovation on growth and several types of growth variables have equally been used. Herstad and Sandven (2015) found that innovation impact firm growth in two ways, either by direct retort or indirect effects. Harrison *et al* (2014) carried out a survey that distinguished between those having innovations, only process innovations, or only product innovations, and concluded that productivity is higher among the innovating firms, meaning that innovating firms grow. For the product innovators group, demand is seen to drop for older products while the decrease is overtaken by increasing demand for new products.

3.3 Competitive strategies and organizational performance

Deressa and Zeru (2019) applied a qualitative research method to show the effect of competitive strategies on organizational performance. Previous studies have also used interactive and non-interactive approaches to cover issues in-depth. Their findings showed a positive relationship between competitive strategies and organizational performance.

4. Theoretical Review

4.1 Resource-Based View

The importance of resources to a firm's competitive growth was first recognized by Penrose (1959). She argued that a firm's growth depends on the way its resources are used, which can be physical, human, tangible, or intangible. The

Dynamic Capability Approach (RBV) identifies five resources as strategic resources contributing to firms' competitive advantage (performance). Critics of the RBV have criticized it as being conceptually unsubstantiated and tautological, possessing little consideration for market dynamism, and with limited attention to the mechanisms by which resources translates to competitive advantage. To improve the RBV and extend the knowledge on attaining sustainable competitive advantage in a

fast-changing environment, the Dynamic Capability Approach (DCA) has been developed.

Dynamic capabilities theory was developed by Teece *et al* (1997) to address the issues pointed out in the Resource-based view theory. It emphasizes the utilization of existing internal and external firm-specific competencies to address an evolving environment. It is seen as an emerging and potentially integrative approach to understanding the newer sources of competitive advantage. Nonaka (1991) acknowledged that knowledge is the only true lasting competitive advantage and that non-observable factors have an impact on organizational performance. A five-level knowledge hierarchy was proposed by Beckmann (1999) consisting of data, information, knowledge, expertise, and capabilities.

In the RBV School, a firm's competitive advantage depends mainly on the bundle of unique resources it possesses and how it can stretch these to achieve competitive advantage. Wernerfelt (1984) defined resources as those tangible and intangible assets which are tied semi-permanently to the firm.

5. Methodology

This study used a cross-sectional survey research design to evaluate the thoughts, opinions, and feelings of different groups of individuals. Table 1 shows the population for the study was 1400 top and middle-level management of Oil and Gas Firms in Nigeria. The Cochran formula was used to calculate an ideal sample size given a desired level of precision, confidence level, and the estimated proportion of attributes present in the population as shown in Table 2. This formula is considered

especially appropriate in situations with large populations.

$$n_0 = \frac{Z^2 pq}{e^2}$$

e = level of precision

p = estimated proportion of the population (0.5)

q = 1 - p

z = 1.96 (95 % confidence level)

$n_0 = ((1.96)^2(0.5 * 0.5))/(0.05)^2$

$n_0 = (3.8416 * 0.25) / (0.0025)$

$n_0 = 0.9604 / 0.0025$; $n_0 = 384.16$

$n_0 = 384$.

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

n = sample size

N = finite population

n_0 = random sample

$n = 384 / (1 + ((384-1)/1400))$

$n = 384 / (1 + (383/1400))$

$n = 384 / (1 + .2736)$

$n = 384 / (1.2736)$

$n = 301.51$

$n = 302$

Allowing 30% non-respondents

Sample Size = 0.30 x 302 = 90.6

Sample Size = 90.6 + 302 = 392.6, approximately 393

The sample size derived for this study, using the Cochran formula is three hundred and eighty three (393) elements.

A proportionate stratified technique was used to determine the sample of the study, as it increases sampling precision by dividing the population into strata (Kumar, 2005).

Table 1: Table of Population Distribution

Company	Total
Capital Oil.	247
ExxonMobil Nig.	358
Conoil	453
Total Nig. Plc	343
Total	1400

Source: Researchers Survey, 2021

Table 2: Table of Sample Size

S/N	Company	Proportionate Sample Size	Sample %
1	Capital Oil.	67	17%
2	ExxonMobil Nig.	102	26%
3	Conoil	126	32%
4	Total Nig. Plc	98	25%
Total		393	100%

Source: Field Survey, 2021

The sampling unit for this study was top-level and senior management staff of four Oil and Gas firms, from the Education and Training Department, Finance and Accounts Department, Administration and Human Resources Department, Strategic Planning and Documentation Department, Projects Department, and Legal and Secretariat Services Department.

Primary data was adopted for this research. The Primary data was adopted and sourced using the questionnaire in gathering data from the target respondents of the selected Oil and Gas firms in Lagos State, Nigeria.

Table 3: Cronbach's Alfa Co-Efficient Values of Study Variables

Variables	No of Items	Cronbach Alfa Coefficient	Composite Reliability (CR)
Innovation Strategies	4	0.945	0.806
Diversification Strategies	4	0.731	0.893
Firm growth	4	0.721	0.881
Profitability	4	0.942	0.765

Source: Researcher's Analysis, 2021

The data was analyzed using descriptive and inferential statistical methods. Descriptive analysis was done using percentage distribution, mean and standard deviation, while inferential analysis was done using simple linear regression analysis. Diagnostic tests such as Linearity, Normality, and Homoscedasticity were also performed to test the effects of the independent sub variable on corresponding dependable sub-variables. Homoscedasticity is a situation where the error term is the same across all values of the independent variables.

Functional Relationship

OP = f (CS)

PR = f (DS) (i)

FG = f (IS) (ii)

Regression Equation

The regression equation of the research is stated in Eqn 1-5

PR= $\alpha_0 + \beta_1 DS + e_i$ Equation 1

FG= $\alpha_0 + \beta_1 IS + e_i$ Equation 2

6. Result

The researcher distributed 393 copies of questionnaire to the respondents out of which 306 copies were rightly filled and returned and was used for the analysis. This represents a response rate of about 77.9% and a non-response rate of 22.1%. The 77.9% was considered very adequate in this study

Research Objective One: Establish the effect of diversification Strategies on the profitability of selected Oil and Gas Firms in Lagos State, Nigeria.

Research Question One: What is the effect of diversification Strategies on the profitability of an organization in oil and gas firms in Lagos State, Nigeria?

The descriptive analysis of the diversification strategy of the selected oil and gas firms in Lagos State, Nigeria is presented in Table 4. The respondents agreed that the prices for their products are relatively lower than their competitors', and that they offer some products aimed at specific groups of customers. They also agreed that they make conscious efforts to distinguish products from those of competitors by way of improved product quality. Finally, they agreed that customers prefer their products over their competitors even at a premium cost. The average mean score of the item is 5.35 with a standard deviation of 1.3, which indicates that productivity is very high in the media houses.

Table 4: Descriptive Statistics on Diversification Strategies

Items	SA	A	PA	PD	D	SD'	Mean	SD
The prices for our products are relatively lower than our competitors'	155	139	11	1	0	0	5.66	
	50.3%	45.4%	3.6%	0.3%	0.0%	0.0%		3.51
We offer some products that are aimed at specific group of customers	70	208	27	1	0	0	5.13	
	22.9%	68.0%	8.8%	0.3%	0.0%	0.0%		.56
We make conscious effort to distinguish our products from those of competitors by product quality improvement	172	116	18	0	0	0	5.50	
	56.2%	37.9%	5.9%	0.0%	0.0%	0.0%		.61
Customers prefer our products over our competitors even at a premium cost	61	222	22	1	0	0	5.12	
	19.9%	72.5%	7.2%	0.3%	0.0%	0.0%		.52

Average							5.35	1.3
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Source: Field Survey Results, 2021

SA= Strongly Agree; A = Agree; PA = Partially Agree; PD Partially Disagree, D= Disagree; SD' = Strongly Disagree ; SD = Standard Deviation.

The descriptive analysis of profitability of selected oil and gas firms in Lagos State, Nigeria is presented in Table 5. The respondents agreed that their organization exploited their profit potentials each year, exceeded their competitors, met their profit target each year, and sustained substantial increases in their annual profits. The average mean score of the item was 5.45 with a standard deviation of 1.76, which indicates that productivity is high in the media houses.

Diversification strategies could influence profitability of selected oil and gas firms in Lagos.

Table 5: Descriptive Statistics on Profitability

Items	SA	A	PA	PD	D	SD'	Mean	SD
We exploit our profit potentials each year	157	128	22	0	0	0	5.44	
	51.3%	41.5%	7.2%	0.0%	0.0%	0.0%		.63
Our organization's annual profits exceed those of our competitors	101	187	16	1	0	0	5.43	
	33.0%	61.1%	5.2%	0.3%	0.0%	0.0%		2.90
Our organization is able to meet its profit target each year	163	128	14	1	0	0	5.48	
	53.3%	41.8%	4.6%	0.3%	0.0%	0.0%		.60
We sustain substantial increases in our annual profits year after year	77	210	17	1	0	0	5.35	
	25.2%	68.6%	5.6%	0.3%	0.0%	0.0%		2.90
Average							5.45	1.76

Source: Field Survey Results, 2021

SA= Strongly Agree; A = Agree; PA = Partially Agree; PD Partially Disagree, D= Disagree; SD'= Strongly Disagree; SD = Standard Deviation.

Restatement of Hypothesis One

H₀₁: Diversification strategies have no significant effect on the profitability of the selected oil and gas firms in Lagos State, Nigeria.

Profitability was the dependent variable, while diversification strategies were the independent variables.

Table 6 presents the results of a simple linear regression test to establish the effect of diversification strategies on profitability. The R = 0.088 shows a weak positive linear relationship between diversification strategies and profitability of selected oil and gas firms in Lagos State, Nigeria. The R² is given as 0.008, meaning 0.8% of the changes or variation that occurs in profitability can be accounted for by diversification strategies. The regression model can be formulated from the unstandardized coefficients to form the line of best will fit for the analysis. The initial model was given as $y_1 = a_0 + \beta_1 x + e_i$.

The regression model of diversification strategies on profitability is expressed as:

$$PR = 15.099 + 0.310DS \dots \dots \dots \text{Eq. (i)}$$

Where: PR = Profitability and DS = Diversification strategies

The regression equation showed that diversification strategies had a 0.310 unit increase in profitability of selected oil and gas firms in Lagos State, Nigeria. The P value of the estimated result was greater than the conventional P value, so the null hypothesis was not rejected.

Table 6: Regression Result of the Effect of Diversification Strategies on Profitability Coefficients

Model	B	T	Sig.	R	R ²	F (1, 304)	F(Sig.)
(Constant)	15.099	3.515	0.000	0.088	0.008	2.375	0.124 ^b
Diversification Strategy	0.310	1.541	0.000				

Dependent Variable: profitability

Predictors: (Constants), Diversification Strategy

Source: Field Survey Results, 2021

7. Discussion

The study evaluated the effect of diversification strategies on profitability of selected oil and gas firms in Lagos State, Nigeria. The results of the regression analysis for the effect of diversification strategies on profitability of selected firms provided an insignificant view (= 0.310, R = 0.088, R² = 0.008, t = 1.541, p > 0.05).

Diversification refers to the involvement of a firm in industries beyond the industry (or market) boundaries to which it originally belongs. Profitability can also be defined in terms of financial performance, debt management, and asset management. Debt management is measured by total debt to equity and long-term debt to equity.

Profitability is measured by return on equity, return on assets, and return on investment. Asset management is measured by receivable turnover, total asset turnover, and inventory turnover. Profitability is the ability of the company to make a profit concerning sales, total assets, and own capital. A profitability ratio is a ratio that measures a company's capacity to produce a profit. Studies have shown that diversification decreases performance in terms of profitability, while Santalo & Becerra (2004) found that there is no relationship between diversification and firm performance.

Daud *et al* (2009) added that another reason for inconclusive results is due to inconsistent data, different time frames, different performance measures, and moderate variables. Dimitrov and Tice (2006), Kuppuswamy and Villalonga (2010), and Tongli *et al* (2005) found that high levels of diversification increase profitability and shareholder value, while Tongli *et al* (2005) found that high levels of diversification are disadvantageous to profitability. Masulis *et al* (2007) found that the characteristics that make firms diversify can also cause them to be discounted.

Research Objective Two: determine the effect of innovation strategies on firm growth of selected Oil and Gas Firms in Lagos State, Nigeria

Research Question Two: What is the effect of innovation Strategies on firm growth in oil and gas firms in Lagos State, Nigeria?

The table 7 presents the descriptive analysis of the innovation strategy of oil and gas firms in Lagos State, Nigeria. The respondents agreed that their organization has introduced new products, methods of producing goods, new business practices, and significant changes to aesthetic design. The average mean score of the item is 5.35 with a standard deviation of .55, which indicates that productivity is high in the media houses.

Table 7. Descriptive Statistics on Innovation Strategies

Source: Field Survey Results, 2021

Items	SA	A	PA	PD	D	SD'	Mean	SD
During the last five years, my organization has introduced new products	182 59.5%	112 36.6%	12 3.9%	0 0.0%	0 0.0%	0 0.0%	5.56	.57
In the last five years, my organization has introduced new methods of producing goods	72 23.5%	222 72.5%	12 3.9%	0 0.0%	0 0.0%	0 0.0%	5.20	.49
During the last five years we have introduced new business practices to management	184 60.1%	100 32.7%	22 7.2%	0 0.0%	0 0.0%	0 0.0%	5.53	.63
During the last five years, my company has introduced significant changes to the aesthetic design of our products	54 17.6%	228 74.5%	23 7.5%	1 0.3%	0 0.0%	0 0.0%	5.09	.51
Average							5.35	0.55

SA= Strongly Agree; A = Agree; PA = Partially Agree; PD Partially Disagree, D= Disagree; SD'= Strongly Disagree; SD =Standard Deviation.

Table 8: Descriptive Statistics on Firm Growth

Source: Field Survey Results, 2021

SA= Strongly Agree; A = Agree; PA = Partially Agree; PD Partially Disagree, D= Disagree; SD'= Strongly Disagree; SD = Standard Deviation.

Also, the table 8 presents the results of a descriptive analysis of firm growth in Lagos State, Nigeria. The respondents agreed that their organization has increased production capacity, asset base, staff strength, and value long-term growth potentials over short-term growth potentials. The average mean score of the item is 5.32 with a standard deviation of .55, which indicates that productivity is high in the media houses. Innovation strategies have a linkage with firm growth, as evidenced by the pattern of responses and average agreement on all items. This suggests that innovation strategies could influence firm growth of selected oil and gas firms in Lagos State.

Restatement of Hypothesis two

H₀₂: Innovation strategies has no significant effect on firm growth of the selected Oil and Gas Firms in Lagos State, Nigeria.

To test the hypothesis, a simple linear regression was used. In the analysis, the dependent variable was firm growth while the independent variables were Innovation strategies. The regression results are presented.

Table 9: Regression Result of the Effect of Innovation Strategies on Firm Growth Coefficients

Model	B	t	Sig.	R	R ²	F (1,304)	F(Sig.)
(Constant)	10.343	8.257	0.000	0.448	0.200	76.136	0.000 ^b
Innovation strategies	0.511	8.726	0.000				

Dependent Variable: firm growth

Predictors: (Constants), Innovation strategies

Source: Field Survey Results, 2021

The table presents the results of a simple linear regression test to establish the effect of innovation strategies on firm growth. The results show that innovation strategies have a positive and significant effect on firm growth, with the R = 0.448 showing a positive linear relationship. The coefficient of determination is 0.448, meaning 44.8% of firm growth can be accounted for by innovation strategies. The regression model can be formulated from the unstandardized coefficients to form the line of best fit for the analysis. The initial model was given as $y_4 = a_0 + \beta_2 x + e_i$.

The regression model of innovation strategies on profitability is expressed as:

$$FG = 10.343 + 0.511 IS \dots \dots \dots \text{Eq. (ii)}$$

Where: FG = Firm Growth

and IS = Innovation Strategies

The regression equation showed that a unit increase in innovation strategies leads to 0.511 units increase in firm growth of selected oil and gas firms in Lagos State, Nigeria. The P value of the estimated result was 0.000 less than the conventional P value used in the study, rejecting the null hypothesis and concluding that innovation strategies have a significant effect on firm growth.

8. Discussion

This study evaluated the effect of innovation strategies on firm growth. The results of the regression analysis for the effect of innovation strategies on firm growth of selected oil and gas firms in Lagos State, Nigeria provided an overall significant view (= 0.511, R = 0.448, R² = 0.200, t = 8.726, p 0.05). Innovation is the application of ideas that are novel and useful, development of new products, designs, or ideas, and a visible business model perceived as new. Innovation strategies is a plan used by a company to encourage advancements in technology or services, usually by investing money in research and development activities. Profit only comes with the introduction

of innovation in manufacturing techniques and methods of supplying goods.

Firm growth is a company growing faster than its peers or the broader economy, and these firms generally have increased annual revenues by more than the industry average over a sustained period. Firms have a life cycle, which means that they are formed, grow to maturity, and decline if not properly taken care of. To remain in business, survival and growth should be the primary objective. Stam and Wennberg (2009) used Research and Development (R&D) as a measure for innovation, and other studies support the prominent effects R&D has on firms in the category of high-tech sectors. Harrison *et al* (2014) conducted a survey that distinguished between those having innovations, only process innovations, or only product innovations, and concluded that productivity is higher among the innovating firms, meaning that innovating firms grow.

For the product innovators group, demand is seen to drop for older products while the decrease is overtaken by increasing demand for new products. For those involved in process innovation, a little negative effect was noticed on employment.

9. Conclusion

This study examined the effect of competitive strategy on organizational performance in selected Oil and Gas firms in Lagos State, Nigeria. It highlights the need for organisations to take a comprehensive look at their internal and external operations to improve performance.

10. Recommendations

Based on the findings and submissions, this current study proposed the following recommendations:

- Management should focus on increasing innovation, diversification of strategies, and job security to boost performance in the petroleum industry.

- Competitive strategies have a significant impact on oil and gas firms' profitability, requiring human resources management.
- Enforce a competitive strategy policy to increase effectiveness of petroleum marketing companies.

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The Impact of Organisational Stress on The Motivation of The Nigerian Police Personnel

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Abstract. The police force in Nigeria is hindered by the long-standing issue of low motivation caused by insufficient pay, poor working conditions, lack of training and equipment, and high occupational risks. This has led to a demotivated and disengaged police force, resulting in poor performance and cases of violence and corruption. This study investigated the impact of operational and organizational stress on the intrinsic and extrinsic motivation of Nigerian police personnel. The study adopted the ex-post facto design. The participants in the study consisted of officers of 405 personnel of the Nigeria Police, with a mean age of 41.3 years ($SD = 6.9$), comprising 307 males and 89 females. Three instruments were used to measure operational stress, organizational police stress, and work motivation. These include the Operational Police Stress Questionnaire (PSQ-OP), Organisational Police Stress Questionnaire (PSQ-ORG), and the Work Preference Scale (WPS). The Multivariate Analysis of Variance (MANOVA) was used as the statistical analysis tool in the study. Results revealed a significant effect of organizational stress on intrinsic motivation [$F(1, 401) = 8.582, p = .004$]. Organizational stress did not significantly affect extrinsic motivation [$F(1, 401) = 1.377, p = .214$]. The study concluded that organizational stress has a significant impact on intrinsic motivation. The study recommends designing targeted interventions to reduce workplace stress and improve extrinsic motivation.

Keywords: Organizational Stress, Motivation, Personnel, Nigerian Police

1. Background

Although motivation is familiar, employers still need help because employees have different motivations for working at their jobs

(Androniceanu et al., 2019; Edge, 2014). Additionally, people's dedication to their organizations varies. According to Lyons, et al. (2015), several things can motivate people at work. The transformation of an organization depends critically on employee work motivation. In order to better understand what motivates productivity at work, employers and decision-makers must understand the needs and concerns of their employees (Uka & Prendi, 2021). Prior research has demonstrated that highly motivated employees are more content, involved, and performance-oriented in their jobs and organizations (Oman, 2021; AlKahtani et al., 2021).

Studies (Craun et al., 2014; Kula, 2017) claim that because law enforcement is so different from other previously studied office settings, research should focus on this area in particular. Professionals working in law enforcement face unique challenges, such as exposure to tense and traumatic situations, high rates of burnout and turnover, adverse physical and psychological effects, and intense scrutiny (Johnson, 2020).

Police officers work in a hazardous environment, and their physical health could suffer if they do not care for themselves. These physical limitations include decreased eye-hand coordination, heart, and abdominal stress damage, backaches, and restless sleep (Porter & Lee, 2023). Stress exists daily, whether the officer is patrolling a high-crime area or working behind a desk. Bad things happen every day in the environment that police officers work in. This study is critical to understanding how stress affects the motivation of police officers and what can be done to ensure that police officers protect themselves, the community, and their families.

The productiveness, motivation, and health of the Police services are important factors contributing to

a country's stability, economic growth, and development (Rothmann & Van Rensburg, 2002). Healthy Police officers engaged in their work are therefore imperative to furthering these goals. Few occupations require employees to face dangerous situations that police officers may encounter as part of their daily routines. Police organizations have behavioural orientations reflective of dominance, individual achievement, and masculinity. However, challenges in Nigeria, such as developing community-oriented policing and transforming a traditional Police culture that typically emphasized operational efficiencies to one that promotes team collaboration, innovation, and 'effective' processes, suggest the need for improved job performance within the law enforcement agencies (Afolabi et al., 2010).

The most often stated source of police stress is organizational (Acquadro-Maran et al., 2022; Purba & Demou, 2019). Sources of organizational stress range from a lack of two-way communication between administrators and officers to the feeling of being micro-managed. Organizational stressors such as workload, time pressure, inadequate resources, workforce shortage, and management styles are also why most police officers leave their departments and the profession (Purba & Demou, 2019).

Job stress harms both the health and productivity of employees. According to Ejikeme et al. (2018), high anxiety, stress, and work burnout are social psychological problems that can negatively impact police officers' performance. They repeatedly emphasized that stress can occur in various life contexts, such as the workplace, legal systems, and policing environments; hence, the existence of police stress. The level of job stress among police officers was up to 41%, according to Hassan and Wood (2018), cited in Ejikeme et al. (2018). Queiros (2020) added that among police officers in Western countries, job stress is frequently misdiagnosed as a mental health issue.

The field of law enforcement differs significantly from typical office settings that have previously been studied, and it faces difficulties like high rates of burnout, detrimental physical and psychological effects, external judgment and scrutiny, and authority over the general public (El Sayed et al., 2019; Kula, 2017). According to current research, future studies should concentrate on the field of law enforcement because it is one of the most demanding, litigious, and dangerous occupations, as evidenced by the difficulty in attracting and keeping personnel in the field and the extremely high burnout rate (Craun et al., 2014; Kula, 2017). Therefore, the need to examine the impact of

specific stressors on intrinsic and extrinsic motivation among police personnel is apt.

1.1 Statement of Problem

Many jobs place high demands on responsibility, time commitment, and performance, which can be very stressful (Wu et al., 2019). According to Acquadro (2022), several duty-related, organizational, interpersonal, or external factors that impact officers can lead to police stress. Every officer and every department, not just those in the Nigerian Police but everywhere, must deal with the issue of police stress. Although the Police organization's bureaucratic performance has led to more fluid service delivery, one of the effects has been increased employee dissatisfaction. In the worst cases, this led to employee apathy and low morale. As a result, police officers have begun to adopt a civil service mentality wherein giving a task a minimal amount of effort is acceptable.

This employee paradigm within the Nigerian police has negatively impacted employee motivation. The problem of police motivation has long constrained the Nigerian police force's effectiveness and efficiency. Inadequate pay for police officers is one of the main issues, as it lowers their morale and discourages them from working hard. This has rendered the police force disengaged and unable to perform its duties, along with poor working conditions, a lack of tools and training, and a high risk of occupational risks. The lack of motivation within the force has also contributed to police violence and corruption, further undermining public confidence in the organization. Against these backdrops, this study investigates the influence of organizational Police stress on intrinsic and extrinsic motivation among Nigeria Police Personnel.

1.2 Aim and Objectives of the Study

The main aim of this study is to investigate the impact of organizational stress on the intrinsic and extrinsic motivation of Nigerian police personnel. The specific objectives of the study include the following:

- To determine the impact of police organizational stress on the intrinsic job motivation of Nigerian police personnel.
- To examine the impact of organizational police stress on extrinsic job motivation of Nigerian police personnel.

1.3 Research Hypotheses

The following hypotheses were tested in the study:

- Organizational policy stress will have a significant effect on the intrinsic job

motivation of the Nigerian police personnel

- Organizational policy stress will significantly impact the extrinsic job motivation of Nigerian police personnel.

2. Research Methodology

2.1 Research Design

The study adopted the ex-post facto design. This approach implies that the independent variables in the study were not manipulated. The independent variable was organizational police stress, which had two levels (Low and high). The dependent variables for this study were intrinsic and extrinsic work motivation.

2.2 Participants

The population of the study consisted of officers of the Nigeria Police Force from the Plateau State Command. The participants in the study were 405 sampled personnel of the Nigerian police with a mean age of 41.3 years (SD = 6.9), comprising 307 males and 89 females.

2.3 Sample Size Determination

The G power calculator was used to determine a representative sample size for the study (Faul et al., 2009). Using an effect size of 0.25 (low effect size), and a significance value of 0.05 (95% Confidence Interval), the G power calculator determined a minimum sample size of four hundred (400) to be adequate for the study. The minimum sample size for the study's dependent variable was four hundred.

2.4 Sampling Technique

The method of convenience selection for non-probability sampling was used to choose the study participants. Accordingly, the units chosen for the sample are the most convenient to access (Etikan, 2016). The hectic schedule of the men and women

of the Nigerian Police Force serves as justification for this sampling methodology. This ensures that the research's selection criteria and appropriate target were met.

2.5 Instruments for Data Collection

Three instruments were used to measure operational stress, organizational police stress, and work motivation. These include the Operational Police Stress Questionnaire (PSQ-OP), Organisational Police Stress Questionnaire (PSQ-ORG), and the Work Preference Scale (WPS).

2.6 Procedure

Having been granted access to conduct the study at the various police formations and commands, questionnaires were circulated to all members willing to participate voluntarily. Before the questionnaires were administered, respondents were given relevant information relating to the nature and purpose of the research. A guarantee of confidentiality of information was given. The questionnaires were presented to participants in a booklet form with a cover page of general instructions. After completion of the questionnaires, participants were debriefed accordingly.

2.7 Method of Data Analysis

The Multivariate Analysis of Variance (MANOVA) was used as the statistical analysis tool in the study. The choice of MANOVA results from the fact that the study tested for the effect of two independent variables on two dependent variables; and the MANOVA is a statistical test procedure for comparing multivariate (population) means of several groups across two or more independent variables; in order to determine whether the mean differences are statistically significant, the variance-covariance between the variables is used.

3. Results

3.1 Descriptive Results

Mean, Standard Error, and 95% Confidence Interval of Intrinsic and Extrinsic Motivation across Levels of organizational Stress

The mean, standard error, and 95% confidence interval of intrinsic and extrinsic motivation across the study participants' low and high organizational stress levels are indicated in Tables 1 – 2.

Table 1: Mean, Standard Error, and 95% Confidence Interval of Intrinsic Motivation across Levels of Organizational Stress

Organizational stress	Mean motivation	intrinsic	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low	36.94		.41	36.13	37.74
High	39.58		.80	38.00	41.16

Table 1 reveals the mean, standard error, and 95% confidence interval of intrinsic motivation across organizational stress levels. The table indicates that the participants with low organizational stress had intrinsic motivation mean score of 36.94, with 95% of those in this group with intrinsic motivation score ranging between 36.13 – 37.74 (Lower and upper bound), while participants with high levels of organizational stress had intrinsic motivation mean score of 39.58, with 95% of participants in this group with an intrinsic motivation score range between 38.00 – 41.16 (Lower and upper bound). Participants with high organizational stress had higher intrinsic motivation mean scores than those with low organizational stress.

Table 2: Mean, Standard Error, and 95% Confidence Interval of Extrinsic Motivation across Levels of Organizational Stress

Organizational stress	Mean motivation	extrinsic	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low	32.77		.48	31.83	33.71
High	34.01		.94	32.16	35.85

Table 2 reveals the mean, standard error, and 95% confidence interval of extrinsic motivation across organizational stress levels. The table shows that participants with low organizational stress had extrinsic motivation mean score of 32.77, with 95% of those in this group with extrinsic motivation score ranging between 31.83 – 33.71 (Lower and upper bound), while the participants with high levels of organizational stress had extrinsic motivation mean score of 34.01, with 95% of participants in this group with an extrinsic motivation score range between 32.16 – 35.85 (Lower and upper bound). Participants with high organizational stress had higher extrinsic motivation mean scores than those with low organizational stress.

3.2 Inferential Result

Multivariate Test for Intrinsic and Extrinsic Motivation across Levels of Operational and Organizational Stress and Interactions

The multivariate test for intrinsic and extrinsic motivation across levels of organizational stress shows the value, F-ratio, error, significance, and effect size (Partial eta) for **Pillai's Trace**, **Wilks' Lambda**, **Hotelling's Trace**, and **Roy's Largest Root** are indicated below.

Table 3: Multivariate Test for Intrinsic and Extrinsic Motivation across Levels of Operational and Organizational Stress and Interactions

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.958	4593.024	2.000	400.000	.000	.958
	Wilks' Lambda	.042	4593.024	2.000	400.000	.000	.958
	Hotelling's Trace	22.965	4593.024	2.000	400.000	.000	.958
	Roy's Largest Root	22.965	4593.024	2.000	400.000	.000	.958
Organizational stress	Pillai's Trace	.022	4.408	2.000	400.000	.013	.022
	Wilks' Lambda	.978	4.408	2.000	400.000	.013	.022
	Hotelling's Trace	.022	4.408	2.000	400.000	.013	.022
	Roy's Largest Root	.022	4.408	2.000	400.000	.013	.022

Table 3 shows the multivariate test for intrinsic and extrinsic motivation across organizational stress levels. The table reveals statistically significant organizational stress on the combined dependent variables, $F(2, 400) = 3.269, p = .039$; Wilks' $\Lambda = .984$.

Table 4: MANOVA Summary Table for Operational and Organizational Stress on Intrinsic and Extrinsic Motivation

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Effect size
Corrected Model	Intrinsic motivation	521.329	3	173.776	3.555	.015	.026
	Extrinsic motivation	575.915	3	191.972	2.889	.035	.021
Intercept	Intrinsic motivation	351235.716	1	351235.716	7184.369	.000	.947
	Extrinsic motivation	267505.151	1	267505.151	4026.019	.000	.909
Organizational stress	Intrinsic motivation	419.558	1	419.558	8.582	.004	.021
	Extrinsic motivation	91.472	1	91.472	1.377	.241	.003
Error	Intrinsic motivation	19604.439	401	48.889			
	Extrinsic motivation	26644.076	401	66.444			
Total	Intrinsic motivation	591496.000	405				
	Extrinsic motivation	468397.000	405				
Corrected Total	Intrinsic motivation	20125.768	404				
	Extrinsic motivation	27219.990	404				

Table 4 indicated a significant effect of organizational stress on intrinsic motivation, means 36.94, 39.58, $F(1, 401) = 8.582$, $p = .004$. The hypothesis is supported. However, organizational stress does not significantly affect extrinsic motivation, which means 32.77, 34.01, $F(1, 401) = 1.377$, $p = .214$. The hypothesis is not supported.

4. Discussion of the Study Findings

The results of hypothesis one revealed that organizational stress significantly affects intrinsic motivation. Sun et al. (2021) discovered that stress levels could mediate the relationship between psychological resilience and quality of life. As a result, stress can be a great motivator for achieving goals or completing simple tasks. Stress can motivate one to take action. Furthermore, the outcome of this hypothesis is consistent with findings that stress increased intrinsic motivation based on the need to meet basic needs (Taormina & Gao, 2013).

The outcome of hypothesis two showed no significant impact of organizational stress on extrinsic motivation. The findings of Faiza et al. (2021) showed that workplace stress did not correlate with extrinsic motivational factors like salary, support this. This finding can be explained by the mounting evidence that extrinsic motivators significantly affect learning and the development of autonomous, self-sustaining behaviour (Carmen et al., 2019). When incentives and rewards are used to motivate people, it is less likely that genuine interest and self-generated motivation will arise and persist (Legault, 2016).

The police personnel's ability to use coping mechanisms triggered in some cases by intrinsic factors, like asking for help and sharing the problem, and in other cases by external factors, like

substance use, could be used as evidence that organizational stress has little impact on extrinsic motivation. Humour and planning are also effective ways to reduce perceived stress. The stress on the organization could have been reduced by police personnel using internal locus strategies like emotional support more frequently. They report feeling less organizational stress when they use the active coping technique.

Although intrinsic motivation is regarded as the best type and is linked to several advantages, such as persistence and psychological well-being, intrinsic motivators are occasionally considered beneficial to motivate behavior without intrinsic interest. In other words, they were encouraging or pressuring police officers to adhere to proper organizational behavior standards while under pressure can occasionally conflict with safeguarding and fostering individuality and intrinsic motivation.

5. Limitations of the Study

There are several limitations to the study that should be noted. The findings could be more generalizable because the study focuses solely on the Nigerian police force. Compared to other organizations or countries, the specific context and cultural factors within the Nigerian police organization may influence the stress-motivation relationship differently. As a result, extreme

caution should be exercised when applying these findings to different contexts.

Second, the sample may need to accurately reflect the diversity and characteristics of the Nigerian police force, limiting the findings' generalizability. A more diverse and representative sample would improve the study's validity and applicability. Furthermore, using self-report measures to assess organizational stress and motivation introduces bias and may not provide a complete understanding of these constructs. Using multiple methods or incorporating objective measures would improve the study's findings' robustness. Furthermore, the study's ex post facto design makes it difficult to establish causal relationships between organizational stress and motivation, necessitating future longitudinal or experimental research to understand this relationship's directionality and causality better.

6. Implications of findings

By investigating the relationship between organizational stress and motivation, the study adds to the current body of information. It focuses on the effect of stress on intrinsic motivation, demonstrating that higher stress levels can lead to higher intrinsic motivation among Nigerian police officers. This discovery undermines the widely held belief that stress always harms motivation and offers a more nuanced picture of the complex link between stress and motivation. This means that stress may function as a motivator for some members of the Nigerian police force. The study's findings offer policymakers and organizational leaders' practical implications for dealing with organizational stress and increasing motivation among Nigerian police officers. Policymakers can use these findings to create targeted policies, programs, and initiatives that promote a motivated and satisfied police force.

7. Conclusion

Finally, the research offers insight into the complicated relationship between stress and motivation in the Nigerian police force. The findings show the potential positive impact of organizational stress on intrinsic motivation, implying that higher stress levels may be associated with better levels of intrinsic drive among police officers. However, it also demonstrates that organizational stress has little effect on extrinsic motivation. These findings highlight the importance of policymakers and organizational leaders recognizing the different nature of motivation and stress reactions across the police force and developing tailored ways to manage stress while improving motivation successfully.

While the study provides important information, its limits should be considered. The study's specialized context limits the study's generalizability. Methodological constraints, such as self-report measures and the ex post facto design, necessitate additional study to increase the validity and establish causal links. Despite these limitations, the study's implications highlight the importance of implementing stress management practices and personalized support systems, considering individual differences, and creating a supportive work environment to foster motivation and well-being among Nigerian police personnel.

8. Recommendations

Based on the findings of the study:

- Policymakers should consider implementing stress management and coping skills training programs and support systems for police officers. Workshops or seminars on stress reduction techniques, resilience building, and mindfulness practices can be provided. To effectively support intrinsic motivation, policymakers should ensure these programs are accessible, ongoing, and integrated into organizational culture.
- Implement recognition programs to recognize and reward police officers' efforts and achievements. Recognizing their effort and hard work might help them feel accomplished and motivated. Policymakers should create reward schemes consistent with the ideals and aims of the police force while also assuring justice and openness.
- Conduct frequent assessments to examine organizational stress levels and intrinsic motivation in the Nigerian police force. This can be accomplished through surveys, focus groups, or interviews. Policymakers can use this feedback to identify areas for improvement, track progress, and make data-driven decisions about policy implementation and adjustment.

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Psychological Empowerment and Employee Turnover Intention: The Moderating Role of Organisational Diversity Climate

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Abstract. The study explored the relationship between psychological empowerment and employee turnover intention while examining the moderating effects of perceived organizational diversity climate and workplace prejudice. The study adopted the correlational design in line with the positivist research philosophy. The study participants comprised employees of service and manufacturing organizations in the public and private sectors. They comprised four hundred and thirty-one ($N = 431$) with a mean age of 35.8 years ($SD = 9$), comprising 234 male and 197 female employees randomly selected from six organizations. The Work Diversity Inventory (WDI), the Workplace Prejudice/Discrimination Inventory (WPDI), the Measuring Empowerment Questionnaire (MEQ), and the Turnover Intention Scale (TIS-6) were used as measures of the study variables. Four hundred and thirty-one (431) questionnaires were returned valid. Simple linear regression and Multiple Linear Regression (MLR) were used to test the study hypotheses. The results revealed that psychological empowerment has a significant positive relationship with employee turnover intention ($\beta = .028$, $t = 2.070$, $p = .039$). There was a significant moderation effect of perceived organizational diversity climate on the relationship between psychological empowerment and employee turnover intention ($\beta = -.002$, $t = -2.812$, $p = .005$), accounting for a 1.8% variance in employee turnover intention. The study concluded that organizational diversity climate reduces the positive correlation between empowerment and intention to leave. The study recommended strengthening empowerment practices, fostering a positive diversity climate, and routine evaluation of climate diversity among employees.

1. Introduction

Any organization's survival ability largely depends on the people who work there. These employees' emotions, thoughts, attitudes, and behaviors significantly impact whether the organization will meet its goals and objectives. Whether employees stay on board with the organization depends on how they feel about it and how they view it (Kaur et al., 2022; Orshi, 2021). As important as technical expertise is for employees, an organization must have enough other factors to succeed. Employees are typically viewed as the primary source of an organization's quality, productivity, and growth in well-managed organizations (Vickerstaff & Van der Horst, 2021). According to studies, employee turnover is a significant concern for organizations (Kang & Sung, 2019; Aliyu & Nyadzayo, 2018). In many small organizations, the turnover issue is even more critical (Mehrez & Bakri, 2019). High employee turnover drives up the cost of hiring, training, and replacing replacement workers for organizations (Reina et al., 2018; Fisher & Connelly, 2017).

Recent literature on employee turnover intention has generally focused on predisposing factors of employee turnover intention such as structured employee training, leadership styles, organizational commitment, organizational justice, promotion opportunities, salary, organizational culture, job satisfaction, psychological empowerment, and workplace prejudice and discrimination (Akther & Tariq, 2020; Ozturk et al., 2016; Biswakarma, 2016; Haggalla & Jayatilake, 2017; Ibrahim et al., 2017; Fasanmi, 2018; Vickerstaff & Van der

Horst, 2021; Fekedulegn et al., 2019). However, these findings have highlighted the importance of identifying the function of moderating factors that affect the connection between predisposing factors and employee turnover intention.

The best indicator of turnover is turnover intention (Lambert (2006). This is because administrative records frequently need to be completed or made available; Lambert contends that actual turnover is challenging to measure. Turnover intention is frequently seen as the last stage before actual turnover behavior (Udechukwu et al., 2007). Before actually departing, employees have the intention to do so. However, those still working may have plans to quit, which may or may not cause a subsequent turnover.

According to Garino and Martin (2007), the turnover intention is influenced by both internal and external group factors. Psychological empowerment is one internal factor linked to plans for employee turnover (Islam et al., 2015; Meyerson & Kline, 2008). Psychological empowerment is a concept that involves motivation. For employees to feel in control of the tasks they are accountable for, psychological empowerment is required (Spreitzer, 1995). Studies have shown that employees with high psychological empowerment express satisfaction, a desire to stay with the company, and better performance (Islam et al., 2015; Meyerson & Kline, 2008). Employees are more likely to perform well, deliver services civically responsibly, exhibit organizational citizenship behavior, and remain in their jobs when they feel psychologically empowered (Bester et al., 2015). So, lowering turnover intentions may be achieved through psychological empowerment.

Additionally, Jonathan and Levine (2006) noted that several theories contend that isolated workers whose demographic traits place them in the numerical minority will experience higher turnover in diverse workplaces. According to a subset of relational theories, the demographic isolation of an employee may have different effects depending on their race, gender, or age. These theories, however, offer contrasting hypotheses regarding which groups are most impacted by isolation. Only a few studies have looked at how the climate of workplace diversity affects behavioral outcomes like employee turnover in Nigeria, despite the theoretical and practical importance of understanding the circumstances under which employees thrive with diverse co-workers.

In order to be more innovative and adaptable, organizations may adopt a diverse culture. Workplace diversity describes the makeup of work

groups in terms of the cultural or demographic traits that are prominent and symbolically significant in the interactions among group members (DiTomaso et al., 2007). Due to the realization that the workplace is changing, improving workplace diversity has recently emerged as a crucial issue in organizational psychology, industrial psychology, and the management of organizations.

In both public and private organizations, diversity in terms of gender, religion, and ethnicity is prevalent. This diversity is frequently essential in displaying workplace prejudice and discrimination (Orshi, 2021). In recent years, workplace interactions between workers from various cultures and backgrounds have increased due to globalization. Globally, people are becoming more open-minded at work, and competition is coming from everywhere in Africa. According to Dike (2013), diversity can be both a problem and a solution for an organization because it can have a mix of advantages and disadvantages, meaning that it can be advantageous, risky, and productive. The difficulty lies in capturing the essence of diversity and strategically managing it to benefit the workforce and the company.

Organizations must be able to serve everyone's needs realistically. Some employees will eventually leave a company, searching for new opportunities, no matter how great it is. That could be very expensive for the company and impact how productive the stabilized company is. In order to effectively predict and manage employee turnover behaviors, this study investigates the employee turnover intention phenomena by looking at the influencing and moderating factors of employee turnover tendency.

1.1 Statement of the Problem

In Nigeria, businesses invest significantly in their staff members' training, retraining, development, maintenance, and retention. This is demonstrated by the government- and privately-established training centers and programs; huge budgets are frequently given to these training facilities so that their staff members can receive training to advance their knowledge and skills. Nevertheless, there is still a sizable amount of employee turnover in Nigeria's various industries, which frequently results in high costs for the organization because replacing employees who leave requires spending money.

The productivity and retention of an organization's current workforce are crucial issues. Due to voluntary turnover, businesses have continued to lose their knowledgeable and experienced

employees in recent years. Most empirical research studies use explanatory models that must adequately address the moderating processes that lead to turnover intention, despite the fact that several existing studies have identified various factors related to employee turnover behaviors.

Studies have also examined the impact of leadership styles, education, age, sociodemographic traits, organizational justice and commitment, job promotion opportunities, salary, stress, organizational culture, job satisfaction, psychological empowerment, and workplace prejudice and discrimination on employee turnover intention. However, more research is required to look at how the aforementioned explanatory variables on turnover intention are affected by moderators. There is a need for studies on turnover intention to examine moderating factors of organizational diversity climate on the relationship between psychological empowerment and employee turnover intention because diversity management is relevant to the organizational landscape in Nigeria and given the country's multi-ethnic workforce and cultures.

1.2 Aim and Objectives of the Study

The study aims to assess the moderator role of perceived organizational diversity climate on the relationship between employee psychological empowerment and turnover intention among employees in service organizations in Nigeria.

The study has the following specific objectives:

- Evaluate the relationship between psychological empowerment and turnover intention among employees
- Determine the role of perceived organizational diversity climate as a moderator of the relationship between psychological empowerment and employee turnover intention.

1.3 Statement of Hypotheses

The following hypotheses were tested in the study:

H1: Psychological empowerment will have a significant relationship with turnover intention among employees

H2: Perceived organizational diversity climate will significantly moderate the relationship between psychological empowerment and turnover intention among employees

2. Research Methodology

2.1 Design

The study adopted the correlational design in line with the positivist research philosophy (Saunders et al., 2009). The minimum sample size $N = 325$ was determined using the G*Power software application for an F-test family linear multiple regression model, considering a small effect size of .03 and error probability α of .05, and required statistical power of .80 for two predictor variables (Faul et al., 2009).

2.2 Participants

The study participants comprised employees of service and manufacturing organizations in the public and private sectors. They comprised four hundred and thirty-one ($N = 431$) with a mean age of 35.8 years ($SD = 9$), comprising 234 male and 197 female employees randomly selected from six organizations. One hundred ninety-seven indicated junior staff, while 194 stated they were senior staff. Furthermore, 241 participants were employed in private organizations, while 175 were employed in public organizations.

2.3 Instruments for Data Collection

Four psychological scales were used to measure the perceptions of the variables in the study. These include the Work Diversity Inventory (WDI), the Workplace Prejudice/Discrimination Inventory (WPDI), the Measuring Empowerment Questionnaire (MEQ), and the Turnover Intention Scale (TIS-6). These scale measures assess organizational diversity climate, psychological empowerment, and employee turnover intention.

2.4 Procedure

A total of six (6) study sites were used for the study. Employees from organizations in each study site that met the inclusion criteria were selected and administered questionnaires. Verbal consent to participate in the study was obtained after they were assured of confidentiality. Participation was voluntary. Four hundred and thirty-one (431) returned questionnaires were certified valid. The retrieved questionnaires were collated, and the resulting data was appropriately coded and analyzed.

2.5 Method of Data Analysis

Simple Linear Regression and Multiple Linear Regression (MLR) statistics were used to test the study hypotheses.

3. Result

Descriptive Results

The descriptive results showing the mean, standard deviations, and correlations between the independent, dependent, and moderator variables, which include: Perceived organizational diversity climate, psychological empowerment, and employee turnover intention, are presented below.

Table 1: Mean, Standard Deviations, and Correlations between the Independent, Dependent, and Moderator Variables

	1	2	3
1 Organizational diversity climate		.462**	.006
2 Psychological empowerment			.099*
3 Turnover intentions			
Mean	92.10	49.10	21.05
SD	17.24	13.97	3.95

* $p < .05$; ** $p < .01$

Table 1 shows the mean, standard deviation, and correlations between organizational diversity climate, psychological empowerment, and employee turnover intention. Results of correlations revealed that organizational diversity climate ($M = 92.10$) had a significant positive association with psychological empowerment ($M = 49.10$) $r = .462$, $p < .001$; Psychological empowerment ($M = 49.10$) was positively associated with employee turnover intentions ($M = 21.05$, $r = .099$, $p < .001$). This result shows that the predictor and moderator variables were significantly correlated.

Inferential Results

Simple linear regression was used to test hypothesis one (H1), which sought to test the relationship between psychological empowerment and employee turnover intention. Hypothesis two (H2) was tested using Multiple Linear Regression (MLR) to ascertain the moderation effect of organizational diversity climate on the relationship between psychological empowerment and employee turnover intention. The results are presented below.

Hypothesis one (H1)

H1: Psychological empowerment will have a significant relationship with employee turnover intention.

The simple linear regression statistic was used to test whether psychological empowerment significantly correlates with employee turnover intention. The model summary and the regression coefficient are presented in detail in Tables 2 and 3.

Table 2: Regression Summary for the relationship between Psychological Empowerment and Employee Turnover Intention

Model	R	R-Square	Adjusted R Square	Std. Error of the Estimate
1	.099	.010	.008	3.933

Table 2 shows the model summary of the regression for the relationship between psychological empowerment and employee turnover intention. The table indicated that $R^2 = .010$, $F(1, 429) = 4.285$, $p < .05$, which indicates that the model accounted for 10% of the variance in employee turnover intention, which was accounted for by the variation in psychological empowerment.

Table 3: Coefficients of the Relationship between psychological empowerment and employee turnover intention

	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	β	Std. Error	Beta		
(Constant)	19.672	.693		28.398	<.01
Psychological empowerment	.028	.014	.099	2.070	.039

Dependent Variable: Employee turnover intention

The results in Table 3 show the regression coefficients for the relationship between psychological empowerment and employee turnover intention. The result revealed that psychological empowerment has a significant positive

relationship with employee turnover intention ($\beta = .028$, $t = 2.070$, $p = .039$). Therefore, hypothesis one is upheld.

Hypothesis Two (H2)

H2: Perceived organizational diversity climate will significantly moderate the relationship between psychological empowerment and employee turnover intention.

Moderation analysis was used to determine if the perceived organizational diversity climate significantly moderates the relationship between psychological empowerment and employee turnover intention. The summary and coefficients of the regression model are indicated in Tables 4 – 6.

Table 4: Regression summary of moderation analysis for psychological empowerment $\times$ perceived organizational diversity climate

R	R-sq	MSE	F	df1	df2	p
.173	.030	15.225	4.378	3	427	<.001

Table 4 shows the model summary of the moderation analysis for psychological empowerment $\times$ perceived organizational diversity climate. The results showed that the coefficient of determination $R^2 = .030$, $F(3, 427) = 4.378$, $p = <.001$). This result showed that the model accounts for a 30% variance in employee turnover intention.

Table 5: Coefficients of moderated regression analysis predicting employee turnover intention: psychological empowerment $\times$ perceived organizational diversity climate

	Coefficient	SE	t	p	LLCI	ULCI
Constant	21.276	.204	104.137	<.01	20.875	21.678
Psy. empowerment	.030	.015	1.990	.047	.000	.060
PODC	-.010	.012	-.801	.424	-.034	.014
Psy.Emp. $\times$ PODC	-.002	.001	-2.812	.005	-.003	-.001

DV = Employee turnover intention, PODC = Perceived organizational diversity climate, Psy.Emp. = Psychological empowerment

The results in Table 5 show the coefficients of the moderation analysis regression for psychological empowerment and perceived organizational diversity climate. The result revealed that psychological empowerment has a significant positive relationship with employee turnover intention ($\beta = .030$, $t = 1.990$, $p = .047$); there was no significant relationship between perceived organizational diversity climate and turnover intentions ($\beta = -.010$, $t = -.801$, $p = .424$). Perceived organizational diversity climate produced a significant negative moderation effect on the relationship between psychological empowerment and employee turnover intention ($\beta = -.002$, $t = -2.812$, $p = .005$).

Table 6: Summary of R-squared change for psychological empowerment $\times$ perceived organizational diversity climate interactions.

	R ² -change	F	df1	df2	p
Psy.Emp. $\times$ PODC	.018	7.906	1	427	.005

The results in Table 6 show the R-squared (R^2) change for moderator regression model 2. The result revealed a significant 1.8% change in psychological empowerment and perceived organizational diversity climate [$R^2 = .018$, $F(1, 427) = 7.906$, $p = .005$]. This outcome indicates that the moderation effect of perceived organizational diversity climate accounted for a 1.8% variance in the relationship between psychological empowerment and employee turnover intention. Thus, hypothesis two is upheld.

Conditional Effects of the Focal Predictor at Values of the Moderator

Figure 1 shows the conditional effects of the focal predictor at the values of the moderator. At low levels of perceived organizational diversity climate, there was a significant moderator effect on the relationship between psychological empowerment and employee turnover intention. At moderate levels of perceived organizational diversity climate, there was a significant moderator effect on the relationship between psychological empowerment and employee turnover intention. However, there was no significant moderator effect on the relationship between psychological empowerment and employee turnover intention at a high perceived organizational diversity climate level.

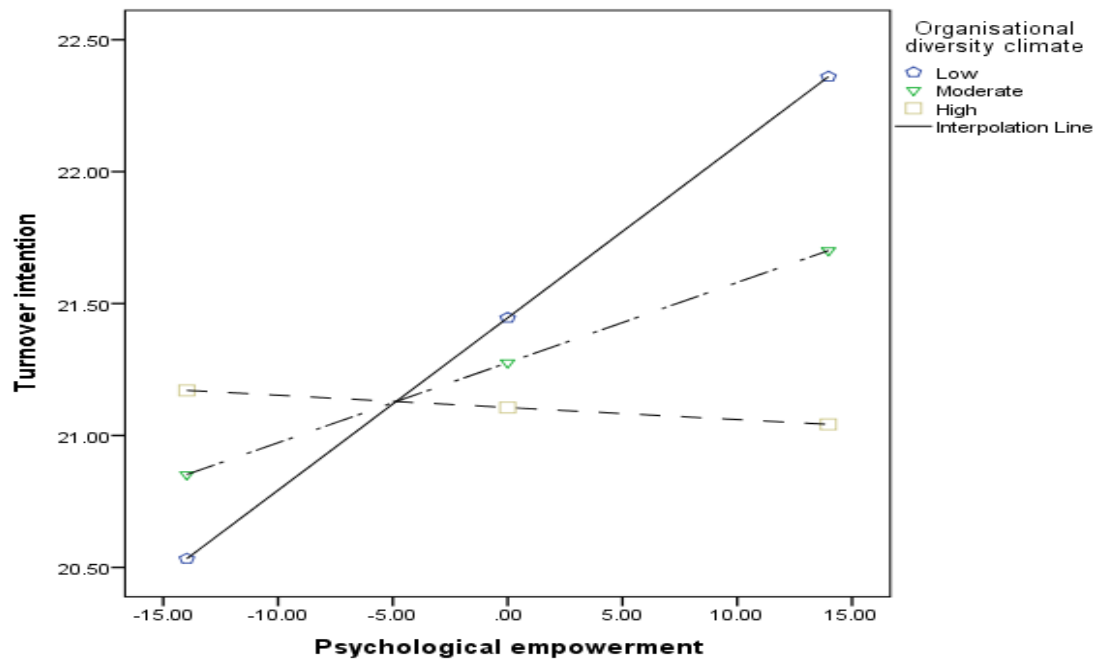


Figure 1: Graph showing the relationship between psychological well-being and employee turnover intention at low, moderate, and high levels of perceived organizational diversity climate.

4. Discussion on the Findings

Results from hypothesis one testing revealed that psychological empowerment significantly positively correlated with employee turnover intention. This outcome of hypothesis one aligns with the works of Morin et al. (2016), Chan et al. (2015), and Malik et al. (2013), which indicated the significant relationship between psychological empowerment and turnover intention among employees. Japie et al. (2011) also revealed that psychological empowerment significantly moderated the relationship between role clarity and turnover intention. The findings of this study also agree with the study of Wilutantri and Etikariena (2017), which found that psychological empowerment had a significant negative correlation to turnover intention; also, Nawawi (2015) showed that employees with high psychological empowerment showed satisfaction and persistence intention in higher organizations.

The results of hypothesis one are attributed to the evidence that attitudinal and behavioral responses of psychologically empowered individuals are believed to influence their commitment and job satisfaction. Furthermore, psychological empowerment distinctly accounted for different variances for normative and affective commitment, but the strengths of both commitment components were approximately the same (Chan et al., 2015). As such, employees who feel more psychologically empowered are more predisposed to exhibit less self-serving behavior. In other words,

psychologically empowered employees tend to have a high normative and affective commitment to their employers. They are likely to feel less of a need for ongoing commitment because they have an emotional bond with their organization and a strong sense of loyalty, leading to a reduced turnover intention, and therefore will want to remain with the respective organization.

The findings of hypothesis two, which stated that perceived organizational diversity climate would significantly moderate the effect of psychological empowerment on employee turnover intention, were not supported. The result of the analysis of hypothesis two is in tandem with the studies of Ward et al. (2021), which found that organizational diversity climate moderated the relationship between trust and turnover intention; Furthermore, Kaur et al. (2022) found that diversity climate significantly predicted turnover intention.

The outcome of hypothesis two can be further argued that ethnicity as a form of diversity climate, for example, is psychologically relevant and approachable because external factors can determine when group boundaries are impermeable (Armenta et al., 2017). As perceived group impermeability rises, people become more aware of their ethnic group memberships and are more likely to categorize themselves and others based on ethnicity. On the other hand, one's membership in a racial group becomes less salient as perceived group impermeability decreases. So, there is less of

a tendency to classify ourselves and other people according to their ethnicity in the organization.

5. Study Limitations

The results of this study should be viewed in the context of a few limitations. First, the study design cannot establish causality to identify a cause and effect; therefore, experimental designs would be more appropriate. Verifying whether the correlations mentioned above are causal will require additional study. Secondly, organizational diversity climate, psychological empowerment, and turnover intentions were assessed using self-report questionnaires, which could have been skewed by respondents' social desirability responses or poor memory, leading to a response bias.

6. Practical Implications of Findings

The study's findings have applications for organizations in managing turnover and fostering employee well-being. Organizations can take proactive steps to address the underlying causes of turnover, such as ineffective empowerment practices or a lack of welcoming diversity climates, by recognizing the potential positive relationship between psychological empowerment and turnover intention. Findings also emphasize how critical it is to promote a positive diversity climate as a workplace culture, as this can act as a safeguard against empowered employees planning to leave.

The study advances our theoretical knowledge of the connections between psychological empowerment, diversity climate, and turnover intention, adding to the existing literature. It increases our understanding of the interactions between these variables and sheds light on the underlying processes that affect employee turnover. This study can be a starting point for future studies, encouraging researchers to look into new variables or environmental factors that might impact these relationships.

7. Conclusion

In conclusion, the study highlighted the need for organizations to empower their employees to reduce turnover by demonstrating a positive relationship between psychological empowerment and turnover intention. The study also emphasizes the organizational diversity climate's moderating function, showing that it can reduce the positive correlation between empowerment and intention to leave.

Concerning managing turnover and enhancing employee well-being, this research offers valuable insights for businesses operating in Nigeria.

Organizations can create a stimulating and welcoming workplace that encourages employee satisfaction and lowers the likelihood of turnover by recognizing the value of empowerment practices and encouraging a positive diversity climate. The study's contributions go beyond Nigeria; they advance the theoretical comprehension of these relationships and encourage future researchers to explore more contextual factors.

8. Recommendations

Based on the findings of the study, the following recommendations can be made:

- **Strengthen Empowerment Practices:** To lower the likelihood of employee turnover, organizations should concentrate on putting effective empowerment practices into place. Employee autonomy, decision-making power, and opportunities for skill development can all help with this. Organizations can lessen the likelihood of turnover by giving employees the freedom to make decisions and by making them feel valued and engaged in their work.
- **Foster a Positive Diversity Climate:** Organisations should prioritize fostering an inclusive environment that makes diverse employees feel respected and valued. This can be accomplished by implementing diversity training programs, creating inclusive policies and practices, and advocating for diversity and inclusion at all organizational levels. A favorable diversity climate mitigates the relationship between psychological empowerment and turnover intention, a protective factor.
- **Conduct Regular Employee Surveys and Assessments:** Organisations should routinely evaluate the levels of psychological empowerment, the climate of diversity, and the likelihood of employee turnover. Surveys and evaluations can be used to collect feedback and pinpoint areas that need improvement. Organizations can improve employee satisfaction and retention by actively monitoring these factors, proactively addressing any issues contributing to turnover intention, and making the necessary adjustments.

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Health Shock and Labour Market Outcomes in Nigeria

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Abstract. This study investigated the effect of health shock on labour market outcomes in Nigeria between 1980 and 2021. The data used were total mortality rate, employment rate, per capita GDP, primary school enrollment and urbanization. The Autoregressive Distributive Lagged (ARDL) estimation techniques was used. The findings revealed that a long run relationship exists among the variable from the outcome of the Bound test. health shock measured by mortality impacted negatively on labour market outcomes measured by employment rate both in the short run and in the long run. The result was significant in the long run. Also, urbanization, per capita GDP and primary school enrollment increases employment in Nigeria. The study recommended that efforts to improve the employment rate should take into account the effect of mortality rate on employment, and vice versa. This could involve policies to improve healthcare, reduce mortality rates, and increase access to education and employment opportunities. Additionally, policies that promote economic growth and urbanization could also have a positive effect on employment rates.

Keywords: Health Shock, Labour Market Outcomes, Mortality, Employment Rate, Urbanization.

1. Introduction

The United Nations Sustainable Development Goals (SDGs) are a set of 17 goals aimed at achieving sustainable development globally by 2030. Goal 3 aims to ensure healthy lives and promote well-being for all ages, including reducing maternal and child mortality, ending communicable diseases, and addressing non-communicable diseases. The goal also aims to strengthen the capacity of all countries for early warning, risk reduction, and management of health risks. Goal 8 aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. It calls for improving access to financial services, enhancing resource efficiency and sustainable infrastructure, and supporting entrepreneurship, innovation, and

creativity. The goal also calls for improving the policies and practices related to decent work, including occupational safety and health, social protection, and workers' rights (Mambu, 2023, United Nation, 2015).

The link between health and labour market outcomes is evident, as poor health can lead to decreased labour productivity, reduced income, and lower job security (Hupkau, Ruiz-Valenzuela, Isphording, & Machin, 2023). As such, achieving both Goal 3 and Goal 8 is essential for ensuring a healthy and productive workforce that can contribute to sustainable economic growth and development. Health shock and labour market outcomes are two important indicators of the overall economic well-being of individuals and societies. Health shocks, such as illness or injury, can have significant negative effects on individuals' ability to participate in the labor market. In turn, poor labour market outcomes, such as unemployment or underemployment, can have negative effects on individuals' health outcomes.

In Nigeria, both health and labour market outcomes are major challenges (Azar, Berry & Marinescu, 2022). According to the World Health Organization (WHO), Nigeria has a high burden of infectious and communicable diseases such as malaria, HIV/AIDS, and tuberculosis. Additionally, the country has a high prevalence of non-communicable diseases such as diabetes, hypertension, and cancer. These health challenges have significant implications for labour market outcomes, as workers who are sick or unable to work due to illness may experience reduced wages, job loss, and difficulty finding new employment opportunities. Furthermore, the labour market in Nigeria faces several challenges. The unemployment rate in Nigeria was 33.3% as of Q4 2020, with youth unemployment at 42.5%. The country also has a high prevalence of informal employment, with many workers lacking job security, social protection, and adequate wages. These challenges are compounded by the COVID-19 pandemic, which has had significant negative effects on labour market outcomes globally (World Bank, 2022).

To address these challenges, the Nigerian government has implemented several health policies aimed at improving health outcomes and reducing health shocks. These include the National Health Policy, the National Strategic Health Development Plan, and the National Health Insurance Scheme. In terms of labour market policies, the government has implemented several initiatives aimed at improving job creation and enhancing job quality. These include the National Social Investment Program, the Youth Employment and Social Support Operation, and the National Employment Policy. Despite these policies, the relationship between health shock and labour market outcomes in Nigeria remains poorly understood.

This study aims to fill this gap by examining the relationship between health shock and labour market outcomes in Nigeria, with a focus on understanding the mechanisms through which poor health outcomes affect labour market outcomes, and vice versa. Apart

2. Literature Review

Labor market outcomes refer to the economic results of the interaction between supply and demand for labor. In other words, they reflect the outcomes of labor market activities such as hiring, firing, job creation, and job loss. Labor market outcomes can be measured in various ways, including employment rates, unemployment rates, wages, job satisfaction, and job security. These outcomes are influenced by a variety of factors, including macroeconomic conditions, government policies, and individual skills and education. Analyzing labor market outcomes can provide insights into the health and performance of an economy, as well as the well-being of individuals

and families. There are several measures that can be used to measure labor market outcomes such as employment rate, unemployment rate, labor force participation rate, average hourly earnings, underemployment rate as well as job vacancy rate.

A health shock refers to an unexpected and significant change in an individual's health status (Della Giusta, Di Tommaso, Jewell & Oczkowski, 2021). It can be an acute event, such as a heart attack or stroke, or a chronic condition that develops over time, such as cancer or diabetes. Health shocks can have a profound impact on an individual's physical, emotional, and financial well-being, as well as their ability to perform daily activities (Canetti, Kogan, & Rozenal-Iluz, 2021).

Stylize Fact

Figure 1 shows the trend of each of the variables over time. The figure presents line graph for employment rate, mortality rate, per capita GDP, education level and urbanization rate in Nigeria from 1980 to 2021. The figure shows that Nigeria has made improvement over the period in concern as to the reduction of mortalities. The figure shows the trend in the variable to be downward sloping over the years. The decline in the variable was almost constant at the beginning but later became sharp. In the same vein, Nigeria has recorded poor employment rate with the trend over the years been downward. Urbanization rate over the years has been increasing as shown in the figure were it sloped upward throughout. GDP per capita which is a measure of income per individual is also seen to be on the rise over the years but its increase slowed down towards the end of the period. This may be evident from the last recession witnessed in the country. The same situation was found in the course of the education level in the country.

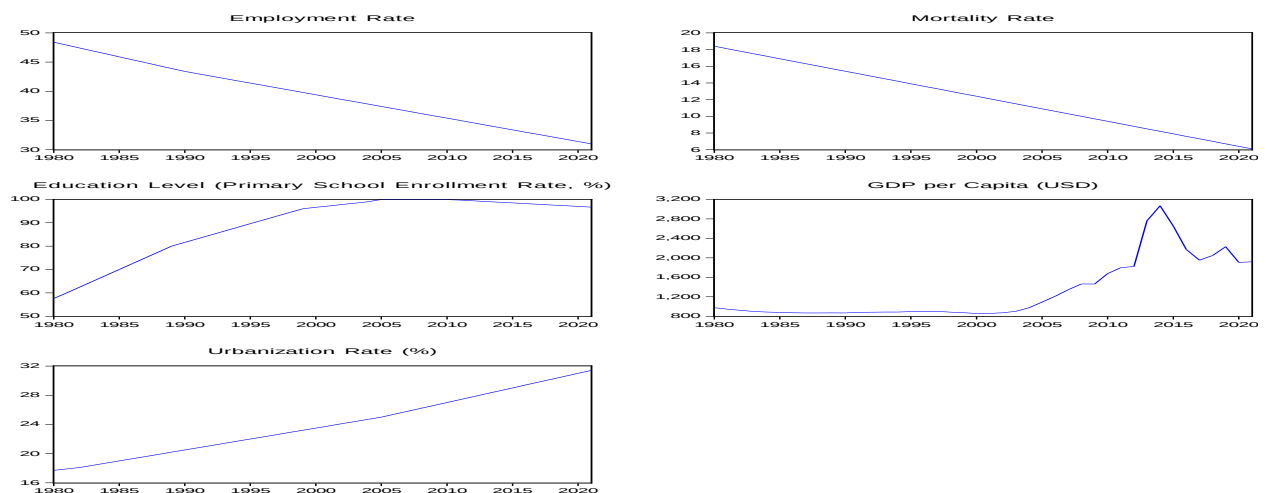


Figure 1: Trend of variables

3. Theoretical Framework

The theoretical framework for this study is based on the human capital theory. Human capital theory posits that investments in education, health, and training contribute to an individual's productivity and earnings potential in the labor market. In this case, mortality rate and education level could be seen as indicators of human capital, which in turn may influence employment rates. Additionally, GDP per capita may reflect the overall economic conditions that influence employment, while urbanization rate may reflect the location of employment opportunities and the availability of jobs.

In the context of this study, the theory suggests that health shocks can negatively impact an individual's productivity and earnings potential by reducing their human capital.

Mathematically, human capital theory can be represented by the following equation:

$$Y = f(H, K, L) \quad (1)$$

Where Y represents an individual's output or earnings, H represents their human capital (education, health, and training), K represents physical capital (equipment, infrastructure, etc.), and L represents labor. In the case of this study, the focus is on the impact of health shocks on labor market outcomes, so the equation can be modified to:

$$Y = f(H, HS, K, L) \quad (2)$$

Where HS represents the health shock variable.

4. Empirical Review

Gupta et al (2023) examines the effect of COVID-19 and related closure policies on the labor market in the United States. Specifically, the study analyzes whether workers receiving unemployment benefits were more likely to experience job loss during the pandemic than workers who did not receive such benefits. The study found that the labor market responded mostly on the extensive margin, with a significant decrease in employment rates by 12 percentage points for outright job loss. The study also found that there was little effect on hours worked or earnings among those who remained employed. Additionally, the study found that 40% of the unemployment was due to a nationwide shock, while the rest was due to social-distancing policies, particularly among "non-essential" workers. The study used a difference-in-differences (DiD) design to estimate the effect of state stay-at-home orders (SAH), exploiting timing variations between March 12 and April 12, 2020.

The findings of this study suggest that the benefits incentives of the unemployment system may have contributed to the extensive margin labor market response during the pandemic.

Jolly and Theodoropoulos, (2023), analyzes the impact of spousal health shocks on own labor supply decisions using data from the Survey of Health, Ageing, and Retirement in Europe. The study found that spousal health shocks have a minimal effect on the probability of work and the intensity of work for both husbands and wives of disabled spouses. However, there was an increase in the probability of retirement for wives after their husbands experienced a work-limiting health shock. The increase in probability was due to the desire to consume joint leisure. The study also found significant cross-regional heterogeneity in the effects that spousal health shocks have on the various labor market outcomes examined. The findings suggest that country-specific factors play a crucial role in the estimates provided in the earlier literature. The methodology employed in the study was a regression analysis. The results of the study have important implications for policymakers seeking to understand how spousal health shocks affect labor market outcomes and for individuals planning their own retirement.

Higa, Ospino and Aragon (2023) examines the impact of COVID-19 on labor outcomes in Lima, Peru, using monthly data from January 2019 up to June 2021. The study found that the early impact of the pandemic on labor outcomes was severe and corroborates findings from other countries. While the initial effects of the pandemic attenuated over time, they persisted and remained significant. By mid-2021, there was a reduction of almost 20% in hours worked and labor income. The study's findings suggest that policy changes and societal adaptations have been limited in their ability to ameliorate the economic impact of COVID-19. The methodology employed in the study was a regression analysis. The results of this study have important implications for policymakers seeking to mitigate the long-term effects of COVID-19 on the labor market and for individuals who have experienced adverse labor market outcomes during the pandemic.

Gannon and Kelly (2020), investigated the relationship between health shocks and labour market outcomes in Ireland. The study uses data from the Quarterly National Household Survey (QNHS) for the period 2005-2017. Data collected were analysed using a difference-in-differences methodology. They find that experiencing a health shock leads to a decrease in employment probabilities and working hours. Additionally, they observe a higher likelihood of being on disability

benefits or unemployed. The authors recommend the implementation of policies that provide support for individuals facing health shocks, such as vocational rehabilitation programs and disability accommodation measures.

Karimi and Nguyen, (2020) assess the effects of health shocks on labor market outcomes in Vietnam. The study uses panel data from the Vietnam Household Living Standards Survey (VHLSS) for the period 2010-2016. They utilize panel data and estimate fixed-effects models. The findings suggest that experiencing a health shock leads to a decline in employment probability and an increase in the likelihood of being self-employed. The authors recommend the provision of adequate social insurance programs and targeted interventions to support individuals facing health shocks.

Klein, Lambertz, and Stuhler (2020) using from administrative data on mortality investigated the impact of health shocks on the labor market in Germany. The study uses administrative data on mortality in Germany for the period 2007-2016. Data collected in the study were utilizes using a regression discontinuity design. The findings indicate that the death of a spouse leads to a decline in labor force participation, particularly for older individuals. The authors emphasize the importance of social support systems and policies that facilitate labor market re-entry after experiencing health shocks.

Nguyen, et al, (2021) investigated the link between health shocks and labor market outcomes in Vietnam. he study uses data from the Vietnam Household Living Standards Survey (VHLSS) for the period 2010-2018. They employ instrumental variable regression models using data from the Vietnam Household Living Standards Survey. The findings reveal that health shocks, particularly severe ones, negatively impact employment and earnings. The authors recommend enhancing access to healthcare services, improving health insurance coverage, and implementing job retraining programs to mitigate the adverse effects of health shocks.

Palumbo and Meijers, (2021) examined the impact of health shocks on employment and income: Evidence from matched administrative data Their study includes the Netherlands and employs a difference-in-differences approach. The study uses matched administrative data in the Netherlands for the period 2014-2017. The findings indicate a negative effect of health shocks on employment probabilities and income. The authors suggest the provision of targeted job reintegration programs and financial support mechanisms to alleviate the labor market consequences of health shocks.

Salm and Wübker, (2020). "Health shocks and the labor market: Evidence from administrative data on heart attacks. The study uses administrative data on heart attacks in Germany for the period 2009-2015. Their study covers Germany and utilizes a regression discontinuity design. The findings reveal that heart attacks significantly reduce employment probabilities, particularly for individuals aged 50 and older. The authors suggest the implementation of workplace adaptations, rehabilitation programs, and policies promoting work-life balance to support individuals affected by health shocks.

5. Methodology

5.1 Data and Source

This study is carried out in Nigeria. in line with extant studies in the literature, the variables used include employment rate, mortality rate, per capita GDP, urbanization rate, and primary school enrollment. The data covers a period from 1980 to 2021. All the data were sourced World Bank's World Development Indicators dataset.

Model Specification

The study adopts the model by Gannon and Kelly (2020) to examine the long run effect of health shock on labour market outcomes in Nigeria The functional form of the model is specified as:

$$EMR = f(MR, GDPK, EDL, URBR)$$

1

Where:

EMR : Employment rate measured by the percentage of the labor force that is currently employed.

MR : Mortality rate measured by the number of deaths per 1,000 people.

GDPK : GDP per capita measured by the total economic output divided by the number of people in the population.

EDL : Education level measured as percentage of the population with at least a secondary education.

URBR : Urbanization rate measured by percentage of the population living in urban areas.

The functional form of the model is specified in mathematical form as

$$EMR_t = \beta_0 + \beta_1 MR_t + \beta_2 GDPK_t + \beta_3 EDL_t + \beta_4 URBR_t + \varepsilon_t$$

2

Where β_0 represent the constant, $\beta_1 - \beta_4$ are the coefficients of the independent variables while is the error term. Although, the paper seeks to examine the effect of conflicts on maternal mortality. per capita GDP, access to healthcare and public health expenditure are included in the model as control variables in line with (Gannon & Kelly, 2020)

6. Results and Discussions

Descriptive Statistics

Table 1 shows the descriptive statistics of all the variables used in the model. The employment rate in Nigeria, as represented by this data, has a mean of 42.6% and a median of 42.2%. The mean employment rate of 41.5% suggests that less than half of the population is employed, which could be a cause for concern. The standard deviation is 4.7%, indicating that the data is somewhat spread out from the mean. The minimum employment rate is 31%, and the maximum is 48.4%. The negative skewness value of -0.01 suggests that the tail of the distribution is slightly skewed to the left, indicating that there are more observations on the right side of the mean. The mortality rate in Nigeria, has a mean of 13.9 deaths per 1,000 people and a median of 13.6. The standard deviation is 3.2, indicating that the data is somewhat spread out from the mean. The minimum mortality rate is 8.2 and the maximum is 18.4. The positive skewness value of 0.46 indicates that the tail of the distribution is slightly skewed to the right, indicating that there are more observations on the left side of the mean. As regard the GDP per capita in Nigeria, the result shows a mean of 1,256 USD and a median of 886

USD. The standard deviation is 644, indicating that the data is quite spread out from the mean. The minimum GDP per capita is 857 USD and the maximum is 3,070 USD. The positive skewness value of 2.63 indicates that the tail of the distribution is heavily skewed to the right, indicating that there are very few observations on the right side of the mean and many on the left side. The education level in Nigeria, as represented by this data, has a mean of 92.4% primary school enrollment rate and a median of 96%. The standard deviation is 9.1%, indicating that the data is somewhat spread out from the mean. The minimum primary school enrollment rate is 57.6% and the maximum is 100%. The negative skewness value of -0.71 indicates that the tail of the distribution is skewed to the left, indicating that there are more observations on the right side of the mean. The urbanization rate in Nigeria, as shown from the table, has a mean of 23.9% and a median of 23.5%. The standard deviation is 2.8%, indicating that the data is somewhat spread out from the mean. The minimum urbanization rate is 17.7% and the maximum is 31%. The positive skewness value of 0.84 indicates that the tail of the distribution is skewed to the right, indicating that there are more observations on the left side of the mean.

Table 1: Descriptive Statistics

Variable	Mean	Median	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
Employment Rate	42.9	42.6	4.251	31	48.4	0.02	-1.182
Mortality Rate	12.9	12.7	3.8	7.9	18.4	0.732	-0.258
GDP per Capita (USD)	1205	902	598.5	857	3440	2.569	9.587
Education Level (Primary School Enrollment Rate, %)	89.7	97.6	13.96	57.6	100	-1.811	3.051
Urbanization Rate (%)	22.4	22.3	2.908	17.7	31.4	0.438	-0.985

Source: Author computation 2023

Correlation

Table 2 and 3 display the correlation coefficients and the correlation pairs of the variable. The correlation coefficient between Employment Rate and Mortality Rate is negative and moderately strong, with a value of -0.772. This suggests that as the employment rate in Nigeria increases, the mortality rate tends to decrease. This relationship is statistically significant. The correlation coefficient between Employment Rate and GDP per Capita is positive and moderately strong, with a value of 0.745. This suggests that as the employment rate in Nigeria increases, so does the country's GDP per capita. This relationship is statistically significant. The correlation coefficient between Employment Rate and Education Level is positive and moderately strong, with a value of 0.778. This suggests that as the employment rate in Nigeria increases, so does the education level of the population, as measured by primary school enrollment rate. This relationship is statistically significant. The correlation coefficient between Employment Rate and Urbanization Rate is positive and moderately strong, with a value of 0.730. This suggests that as the employment rate in Nigeria increases, so does the country's level of urbanization. This relationship is statistically significant. The correlation coefficient between Mortality Rate and GDP per Capita is negative and moderately strong, with a value of -0.747. This suggests that as the country's GDP per capita increases, the mortality rate tends to decrease. This relationship is statistically significant. The correlation coefficient between Mortality Rate and Education Level is negative and moderately strong, with a value of -0.802. This suggests that as the education level of the population in Nigeria increases, the mortality rate tends to decrease. This relationship is statistically significant. The correlation coefficient between Mortality

Rate and Urbanization Rate is positive and moderately strong, with a value of 0.776. This suggests that as the level of urbanization in Nigeria increases, the mortality rate tends to increase as well. This relationship is statistically significant. The correlation coefficient between GDP per Capita and Education Level is positive and moderately strong, with a value of 0.733. This suggests that as Nigeria's GDP per capita increases, so does the education level of the population, as measured by primary school enrollment rate. This relationship is statistically significant. The correlation coefficient between GDP per Capita and Urbanization Rate is positive and moderately strong, with a value of 0.702. This suggests that as Nigeria's GDP per capita increases, so does the country's level of urbanization. This relationship is statistically significant. The correlation coefficient between Education Level and Urbanization Rate is positive and moderately strong, with a value of 0.751. This suggests that as the education level of the population in Nigeria increases, so does the level of urbanization. This relationship is statistically significant.

Table 2: Correlation result

	Employment Rate	Mortality Rate	GDP per Capita (USD)	Education Level	Urbanization Rate
Employment Rate	1.000				
Mortality Rate	-0.722	1.000			
GDP per Capita (USD)	0.745	-0.747	1.000		
Education Level	0.778	-0.802	0.733	1.000	
Urbanization Rate	0.730	0.766	0.702	0.751	1.000

Source: Author computation 2023

Table 3: Correlation pair

Variable Pair	Correlation Coefficient	p-value
Employment Rate vs. Mortality Rate	-0.722	<0.001
Employment Rate vs. GDP per Capita	0.745	<0.001
Employment Rate vs. Education Level	0.778	<0.001
Employment Rate vs. Urbanization Rate	0.730	<0.001
Mortality Rate vs. GDP per Capita	-0.747	<0.001
Mortality Rate vs. Education Level	-0.802	<0.001
Mortality Rate vs. Urbanization Rate	0.766	<0.001
GDP per Capita vs. Education Level	0.733	<0.001
GDP per Capita vs. Urbanization Rate	0.702	<0.001
Education Level vs. Urbanization Rate	0.751	<0.001

Source: Authors' computation 2023

Unit Root Test

The Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests are used to determine whether a time series is stationary or non-stationary. Stationarity means that the statistical properties of a time series do not change over time, such as constant mean, variance, and autocorrelation. In the ADF and PP tests, the null hypothesis is that the time series has a unit root, which means that it is non-stationary. The alternative hypothesis is that the time series is stationary. The significance level used in the tests is 0.05.

From the table of ADF and PP test results in levels and first differences, we can see that all variables have p-values greater than 0.05 in levels, which means we fail to reject the null hypothesis of the presence of a unit root, indicating that the variables are non-stationary. However, in first differences, all variables have p-values less than 0.05, which means we can reject the null hypothesis and conclude that the variables are stationary.

Table 4: Unit Root Test

Variable	ADF (levels)	ADF (first diff)	PP (levels)	PP (first diff)
Employment Rate	-1.565	-5.301**	-1.473	-8.265***
Mortality Rate	-1.686	-5.502**	-1.389	-8.030***
GDP per Capita (USD)	-1.434	-6.964***	-1.152	-7.997***
Education Level	-1.987	-6.466***	-1.778	-6.940***
Urbanization Rate	-2.279	-5.551**	-1.843	-6.435***

Source: Authors computation, 2023.

Note: ADF stands for Augmented Dickey-Fuller test, and PP stands for Phillips-Perron test. The asterisks denote the level of significance of the test: *** indicates significance at the 1% level, ** at the 5% level, and * at the 10% level.

Long Run Relationship

One major objective of the paper is to test for the existence of long run relationship in the variables. In this case, the critical values for the 10%, 5%, 2.5%, and 1% significance levels are presented in the table. The I0 bound represents the critical value for the null hypothesis that there is no long-run relationship, while the I1 bound represents the critical value for the alternative hypothesis that there is at least one long-run relationship. The Bound Test result indicates that the null hypothesis of no long-run relationships existing between the variables can be rejected at a significance level of 5% or lower, since the F-statistic (8.582) exceeds the critical values of the test at all significance levels tested. Therefore, we can conclude that there is evidence of a long-run relationship between the variables.

Table 5: Bound Test result

Test Statistic	Value	k
F-statistic	8.582***	4
Critical Value Bounds	I0 Bound	I1 Bound
Significance Level: 10%	2.45	3.52
Significance Level: 5%	2.86	4.01
Significance Level: 2.5%	3.25	4.49
Significance Level: 1%	3.74	5.06

Source: Authors computation 2023

Short Run and Long Run Result

Table 5 presents the short run and long run impact of health shock on labour supply outcome with the moderating variables impact. In the short run, a positive relationship exists between difference in employment rate by one and the employment rate and was significant in the short run. As regard mortality rate, both the short – run and long run coefficient was negative implying that mortality reduces employment both in the short run and in the long run. As presented, a percentage increase in mortality reduces employment rate by 0.283% in the short – run and 0.469% in the long run. The impact on the long run is higher than the effect in the short run. This suggests that improving healthcare infrastructure, disease prevention, and access to healthcare services may help reduce mortality rates and boost employment rates in the long run. This may involve policies such as increasing healthcare spending, promoting disease prevention programs, and improving healthcare accessibility, particularly in rural areas. The findings supported the outcome by (Zheng, Tumin, Qian, & Brooks, 2021; Regidor, et al, 2020).

The finding that a 1% increase in urbanization increases employment rate by 0.108% in the short run and 1.316% in the long run suggests that policies that focus on improving urban planning and infrastructure, reducing congestion, and promoting sustainable development may help mitigate any the negative impacts of urbanization on employment in the short run. This may involve policies such as investing in public transportation, promoting green spaces, and encouraging mixed-use development. Ding, Li, Lu, and Wang, (2020); Faridi and Katouzian, (2021) as well as Ong, and Diao (2021) studies in the area of urbanization and employment also found that urbanization impacted positively on employment in the countries used.

The finding that a 1% increase in primary school enrollment increases employment by 0.798% in the long run and was significant suggests that policies that focus on improving access to education, reducing gender and income disparities in educational attainment, and promoting lifelong learning may help increase employment rates in the long run. This may involve policies such as increasing education spending, promoting education access for disadvantaged populations, and increasing funding for adult education and training programs. This result is in line with apriori expectation. The findings supported studies by (Adeleke & Adedokun, 2021; Lapid, 2021)

The studies also show that for both the short run and long run coefficient, a 1% increase in per capita GDP leads to 0.034% increase in employment in the short run and by 0.960% increase in the long run. This finding suggests that policies that focus on promoting sustainable economic growth, reducing income inequality, and increasing investment in infrastructure and human capital may help boost employment rates in the long run. This may involve policies such as promoting foreign investment, reducing barriers to entrepreneurship, and increasing investment in education and infrastructure.

Table 3: Regression Result Dep Var: EMR

Short Run Coefficient				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EMR(-1))	0.464	0.121	3.829	0.001
D(MR)	-0.283	0.107	-2.644	0.001
D(GDPK)	0.034	0.001	0.429	0.671
D(EDL)	0.001	0.020	0.053	0.958
D(EDL(-1))	0.069	0.023	2.983	0.006
D(URBR)	0.054	0.066	0.807	0.426
D(URBR(-1))	0.108	0.055	1.952	0.061
CointEq(-1)	-0.081	0.076	-1.074	0.292
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
MR	-0.460	0.110	4.182	0.000
GDPK	0.960	0.206	4.660	0.000
EDL	0.798	0.335	2.382	0.044
URBR	1.316	0.508	2.591	0.013
C	0.598	1.236	0.484	0.633

Source: Author's computation, 2023

7. Conclusion and Recommendations

This study investigated the effect of health shock on labour market outcome in Nigeria for the period covering 1980 to 2021. In conclusion, this study found that health shocks measured by mortality rate negatively impacted the employment rate in Nigeria both in the short and long run. On the other hand, urbanization, per capita GDP, and primary school enrollment were positively related to employment rates. Therefore, efforts to improve employment rates should consider the impact of health shocks and address the underlying causes of mortality such as improving healthcare infrastructure, disease prevention, and access to healthcare. Furthermore, policies that promote economic growth and urbanization could also enhance employment opportunities in Nigeria.

To achieve these goals, the Nigerian government should prioritize investment in healthcare infrastructure and disease prevention programs to improve health outcomes and reduce the impact of health shocks on employment rates. The government could also implement policies to increase access to education and skills training programs to improve the human capital of the workforce. Additionally, policies that promote economic growth, such as investment in infrastructure and support for small and medium-sized enterprises, could stimulate job creation and reduce unemployment rates. Furthermore, policies that incentivize urbanization in a sustainable and inclusive manner could create more employment

opportunities, particularly in urban areas where employment rates tend to be higher. Overall, a comprehensive and multi-faceted approach is necessary to address the complex issue of employment in Nigeria.

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Perceived Influence of Load on the Health of Head Porters in North Senatorial District of Kaduna State, Nigeria

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Abstract. This paper assesses the perceived influence of load on the health of head porters in North Senatorial District of Kaduna State, Nigeria. Survey research design was used. Three (3) research questions and hypotheses were formulated for this study. Two hundred (200) porters around three (3) federal tertiary institution in North Senatorial District local government, Kaduna state. A questionnaire with four-point modified Likert scale of Strongly Agreed (4), Agreed (3), Disagreed (2) and Strongly Disagreed (1) was developed and used for gathering information from the respondents. With a Cronbach Alpha Reliability index of 0.82 which showed that the instrument was reliable. The result of one sample t test analysis showed that there is significant influence of load on the physical health of head porters in North Senatorial District of Kaduna State, there is significant influence of load on social health of head porters in North Senatorial District of Kaduna State and also there is significant influence of load on mental health of head porters in North Senatorial District of Kaduna State. It can be concluded that there is influence of load on the health of porters physically, mentally and socially. It was recommended that load carriers should be using head load carrier support gadgets to support the weight of the load.

Keywords: Load, Health, Porters, Head Porters, Perceived Influence.

1. Introduction

Human adaptability and flexibility led to the early use of humans for transporting load from one point to another. Porters were commonly used as beasts of burden in the past, when labour was generally cheap and slavery widespread. A porter, also called a load

carrier, is a person who carries objects or load for others. The range of services conducted by porters is extensive these include shuttling luggage's to bearing heavy burdens at attitude in inclement weather on multi-month mountaineering expeditions. It is a common sight in the North Senatorial zone area of Kaduna State to see porters moving goods for the owners in motor parks, market place, station and they porters help in carrying load using their head. Porter, Hampshire, Abane, Munthali, Robson, & Mashiri, (2012) asserted that the porters due to the weight, size of the load they carry and the distance they walk, experience different types of challenges that relate to their physical health which may affect their posture, way of movement, social health which affects how they relate with friends and how people relate with them as well as mental health which affect their brain and thinking.

It is thus important to explore the nature, processes and mechanisms of risk exposure, control and consequences on the porters in order to comprehensively explore their existences. The major risks the porters are exposed to are health risks (body pain, head ache, back ache, etc.). There is also the misperception that they are worthless people by the society. The job involves crossing the roads with load on their heads which slows the speed of crossing the road there by exposing them to risk of bury knocked down as a result they sustain, involving in road accidents, on-the-job injuries and sometimes are faced with the responsibility for product damage. In most instances, the consequences of such risks are borne by the porters, even when sometimes it is not their fault. There are no systems to prevent them from such exposure or mechanisms to help them bear the consequences (Akanle and Chioma, 2013).

Porters seem to have poor living conditions in terms of nutrition, healthcare, education, sanitation and accommodation as well as suffer from diverse risks including verbal, physical and sexual abuse (Kwankye, Anarfi, Tagoe & Castaldo, 2009). However, there is relatively little empirical research on the meaning and social context of porters' movement for work, the potential contributions that their livelihoods may have for local economic development and how such livelihoods influence positively on their living conditions and that of their left- behind families. Agyei, Kumi, and Yeboah (2016) for instance have cautioned the sweeping generalizations being made about the lives of young migrants including those who migrate to engage in the occupation of head portering. The authors argue that the social context of the vulnerabilities and the effects of their migration will depend inter alia on several issues. These include the kind of work that they find to do in their destinations, the factors triggering their movement, the kind of living situation they find themselves, dangers and hazards posed by intermediaries, bad employers as well as the supportive mechanisms available for them. This prompted the researcher to assess influence of load on the health of head porters in North Senatorial District of Kaduna State. Specifically, this study assess:

- the influence of load on physical health of head porters in North Senatorial District of Kaduna State.
- the influence of load on social health of head porters in North Senatorial District of Kaduna State.
- the influence of load on mental health of head porters in North Senatorial District of Kaduna State.

1.1 Research Questions

- What is the influence of load on physical health of head porters in North Senatorial District of Kaduna State?
- What is the influence of load on social health of head porters in North Senatorial District of Kaduna State?
- What is the influence of load on mental health of head porters in North Senatorial District of Kaduna State?

1.2 Hypotheses

There is no significant influence of load on physical health of head porters in North Senatorial District of Kaduna State.

There is no significant influence of load on social health of head porters in North Senatorial District of Kaduna State.

There is no significant influence of load on mental health of head porters in North Senatorial District of Kaduna State.

2. Research Methodology

A survey research design was adopted for the study. This study was made up of porters in North Senatorial District, Kaduna state. Simple percentage was used to select two hundred porters in North Senatorial District, Kaduna State.

The instrument employed in this study was questionnaire. The questionnaire items were formulated based on the research questions. The instrument comprised of two sections. Section A comprised of the demographic data of the respondents such as gender and age while section B comprised of the statement related to the research questions with yes or no option because of the level of illiteracy and in order to make the respondents understand the study. Yes (2) and No (1) statements were developed and used for gathering information from the respondents. Hence, mean score of any response is considered positive, if it is 1.5 and above and mean score of any response less than 1.5 is regarded as negative.

The instrument was validated by three experts in the field of Health Education who were lectures in Ahmadu Bello University, Zaria and University of Maiduguri, Borno State. To determine the reliability of the instrument, twenty (20) porters from Kwangila area of Sabon Gari Local Government, Kaduna State was used as a pilot test that did not form part of the sample. Cronbach Alpha Reliability index was used to determine the internal consistency of the instrument on data obtained. The analyzed data yielded a coefficient of .82 which showed that the instrument was reliable.

Two hundred (200) copies of the questionnaire were administered to the respondents. All the 200 copies of the questionnaire were completed and retrieved. The researchers sorted and collated the collected questionnaire for data analysis. Simple percentage was used to answer the demographic data of the respondents, descriptive statistics of mean and standard deviation was used to test the research question while one sample t test analysis was used to analyzed the stated hypotheses at 0.05 level of significance.

3. Results

Table 1: Demographic Data of the Respondents

Variables		Frequency	Percentage
Gender	Male	199	99.5
	Female	1	0.5
	Total	200	100.0
Age	Less than 10 years	21	10.5
	11 – 15 years	121	60.5
	15 years and above	58	29
	Total	200	100.0

Table 1 above showed the demographic data of the respondents, 199 (99.5%) of the respondents were male while 1 (0.5%) of the respondents were female. According to their age, the table showed that 21 (10.5%) of the respondents fell between the age bracket less than 10 years, 121 (60.5%) of the respondents fell between the age bracket of 11 – 15 years while 58 (29.0%) of the respondents fell between the age bracket 15 years and above. Therefore, majority of the respondents were male while majority of the respondents fell between the age bracket of 11 – 15 years.

Table 2: Mean and Standard deviation on the influence of load on physical health of head porters

S/N	Statement	Mean	Standard Deviation
1	Do you always feel headache and body pain?	1.43	.37
2	Do you look dirty then ever you are on the work?	1.17	.21
3	Is your walking posture good?	1.35	.33
4	Did your work affect your physical appearance?	1.41	.31
5	Did you find time to take care of your body?	1.37	.27
	Aggregate Mean	1.35	

Table 2 shows the mean score of the responses on the influence of load on physical health of head porters. The aggregate mean score of the items is 1.35 which was found to be less than benchmark score of 1.5. This implies that there is negative influence of load on physical health of head porters.

Table 3: Mean and Standard deviation on the influence of load on social health of head porters

S/N	Statement	Mean	Standard Deviation
1	If you greet people, do they answer you?	1.28	.31
2	Do people like to greet you?	1.03	.07
3	Do people give you respect of helping them?	1.08	.13
4	Did you feel happy doing this work?	1.21	.27
5	Did people interact to you in a good way?	1.07	.12
	Aggregate Mean	1.13	

Table 3 shows the mean score of the responses on the influence of load on social health of head porters. The aggregate mean score of the items is 1.13 which was found to be less than benchmark score of 1.5. This implies that there is negative influence of load on social health of head porters.

Table 4: Mean and Standard deviation on the influence of load on mental health of head porters

S/N	Statement	Mean	Standard Deviation
1	Do you feel internal pain in your head?	1.38	.31
2	Do you sleep very well in the night?	1.43	.07
3	Did your hair grow very well?	1.04	.12
4	Do you feel anxious of things easily?	1.28	.19
5	Do you always feel stress and sick everyday?	1.03	.10
	Aggregate Mean	1.23	

Table 2 shows the mean score of the responses on the influence of load on mental health of head porters. The aggregate mean score of the items is 1.23 which was found to be less than benchmark score of 1.5. This implies that there is negative influence of load on mental health of head porters.

Hypothesis One: There is no significant influence of load on the physical health of the porters in North Senatorial District of Kaduna State

Table 5: One sample t-test analysis of perceived influence of load on the physical health of the porters in North Senatorial District of Kaduna State.

	Mean	Std. Deviation	Df	t-value	P-value
Actual mean	6.73	1.49	199	5.76	0.0013
Constant mean	1.00	0.00			

The result showed that the t value of 5.760 is greater than t critical 1.96 at 199 degree of freedom (df) and p value of 0.0013 is less than 0.05 level of significance with this observation the null hypothesis which states that there is no significant influence of load on the physical health of the porters in North Senatorial District of Kaduna State, is rejected. Therefore, there is significant influence of load on the physical health of porters.

Hypothesis Two: There is no significant influence of load on social health of head porters in North Senatorial District of Kaduna State.

Table 6: One sample t-test analysis of perceived influence of load on the social health of the porters in North Senatorial District of Kaduna State

	Mean	Std. Deviation	Df	t-value	P-value
Actual mean	5.67	0.90	199	4.36	0.002
Constant mean	1.00	0.00			

The result showed that the t value of 4.360 is greater than the t critical 1.96 at 199 degree of freedom (df) and p value of 0.002 is less than 0.05 level of significance with this observation the null hypothesis which states that there is no significant influence of load on social health of head porters in North Senatorial District of Kaduna State, is rejected. Therefore, there is significant perceived influence of load on the social health of the porters.

Hypothesis Three: There is no significant influence of load on the mental health of head porters in North Senatorial District of Kaduna State.

Table 7: One sample t-test analysis of perceived influence load on the mental health of head porters in North Senatorial District of Kaduna State.

	Mean	Std. Deviation	Df	t-value	P-value
Actual mean	6.16	0.79	199	3.15	0.007
Constant mean	1.00	0.00			

The result showed the t value of 3.15 is greater than t critical 1.96 at 199 degree of freedom (df) and p value of 0.007 is less than 0.05 level of significance with this observation the null hypothesis which states that there is no significant influence of load on mental health of head porters in North Senatorial District of Kaduna State, is rejected. Therefore, there is significant perceived influence of waste management on the mental health of porters.

4. Discussions on the findings

The results of this study showed that majority of the head porters were male and their fell between the ages of 11 – 15 years. Also, there is much influence of load on their physical health where it gives them body pains, wrong walking posture, affect their physical appearance, headache and body pains. Socially, the results of this study revealed that people don't associate with them very well, people do not care about them. Mentally, they feel internal pains in

their head, they do not sleep very well in the night, they feel anxious and feel stress and sick most of the times. Furthermore, the result of hypotheses testing revealed that there is influence of load on physical health of head porters in North Senatorial District of Kaduna State, there is significant influence of load on social health of head porters in North Senatorial District of Kaduna State and there is significant influence of load on mental health of head porters in North Senatorial District of Kaduna State. This is in agreement with Porter, Hampshire, Abane, Munthali, Robson, & Mashiri (2012) that porters experience different types of health challenges such as physical health which affect their posture, way of movement, social health which affect how they relate with friend and how people relate with them and mental health which affect their brain.

5. Conclusion

Based on the results, this study concluded that there is influence of load on physical, social and mental health of head porters in North Senatorial District of Kaduna State.

6. Recommendations

Based on the findings of the study, it was recommended that:

- load carriers should be using supporting object such as folding cloth on their head in carrying load.
- load carriers should look neat and responsible in other to communicate and associate socially.
- load carriers should make use of load carrier object such as wheelbarrow in other to support the weight of the load.

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Investigating French Teachers' Professional Pedagogical Skills for Quality Basic Education in Edo State, Nigeria

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Abstract. The French language is the second foreign language in Nigeria and its curriculum is core at the basic school level. Teachers' professional pedagogical skills are important for quality basic education at this level; hence, this study was carried out. Two research questions were formulated with one hypothesis to guide this study. Descriptive survey research design was adopted. The research population comprised all the 36 French teachers in the public basic schools in Edo State as at the 2022 school year. All the 36 French teachers were used for the study rated by their French language head teacher. A questionnaire titled: "French Teachers' Professional Pedagogical Skills for Quality Basic Education Questionnaire (FTPPSQBEQ)" was designed and validated. The reliability coefficient was established using Cronbach Alpha Statistics and a coefficient of 0.83 was obtained for the instrument and the hypothesis was tested using ANOVA statistics at 0.05 level of significance. The researcher personally administered the instrument to the respondents and data collected was analyzed using means and standard deviation. Findings revealed a high level of French teachers' professional pedagogical skills for quality basic education in Edo State. In the same vein, the level of French teachers' professional pedagogical skills for quality basic education in Edo State did not vary by teachers' academic qualification. It was found that quality basic education is a function of teachers' professional pedagogical skills and therefore recommended that language teacher's education programme should emphasis pedagogical skills competence.

Keywords: French Teachers, Professional Pedagogic and Quality Basic Education.

1. Introduction / Background of the Study

Basic education refers to the whole range of educational activities taking place in various settings, which aim to meet basic learning needs. According to the International Standard Classification of Education, basic education comprises primary education and lower secondary education. In some countries like Nigeria, Basic Education also includes pre-primary education and/or adult literacy programmes. The Universal Basic Education (UBE) is regarded as a priority for developing countries and it is the focus of Education for All, programme of the UNESCO. The UBE programme is therefore part of Nigeria's effort to uphold and renew the commitment to the provision of basic education for all as required by a number of covenants and protocols to which Nigeria is signatory. The Jomtien (1999), declaration, the New Delhi (1991) declaration of the E-9 countries with the largest concentration of illiterates, including Nigeria, the OAU (1997-2006) Decade of Education in Africa and Darker world Education forum (2000) all combined to set an agenda for education in the 21st century, Obede cited in Ivowi (2021).

The Universal Basic Education (UBE) Programme was introduced in 1999 by the Federal Government of Nigeria as a reform programme aimed at providing greater access to, and ensuring quality basic education throughout Nigeria. The UBE Programme objectives include ensuring an uninterrupted access to a 9-year formal education by providing free and compulsory basic education for every child of school-going age. It comprises six years of primary education, three years of Junior Secondary Education, providing Early Childhood Care Development and Education (ECCDE) among others.

However, in-service training is crucial to the long-term development of teachers as well as the long term success of the programme in which they work

According to Richards (2011), “the context for language programmes is diverse and the particular variables that come into play in a specific situation are often the determinants of the success of a programme”. The Nigerian Language Policy which encourages the teaching of the three major Nigerian languages in the basic schools in Nigeria has also encouraged the teaching of French in Nigeria by upgrading French to the status of core curriculum from its elective position. The revised National Policy on Education stated that French should be a core subject at the senior primary and junior secondary school levels (FRN, 2004, 2913). Obede (2021) points out that “the core, which is compulsory, comprises the fundamental concepts, principles and applications of the subject matter which every student needs to know”. The essence of this innovation was to facilitate communication between Nigerians, her francophone neighbors and other French speaking nations of the world, because Nigeria does not exist in isolation but part of the cooperate world.

Battye and Hintze (1992), noted that, the largest potential francophone populations outside Europe are concentrated on the African continent. Magnan & Tochon (2001), say that “French language means business, jobs, world travel, and global communication.” Borodo (2014) asserts that “French language is a significant factor in international unity, and that most of the scientific literature are written in French language”. French is a language of science, technology, large industrial and commercial enterprise. Omonigho states that Nigerians who can speak at least two international languages such as English and French have many advantages in the present globalized setting and that this can create job opportunities for people in professions that require bilinguals. These professions would suggest a much broader goals for our classrooms.

Organisation Internationale Française (OIF 2014) pointed out that, “French is one of the most useful and studied language, especially in the professional environment as determined by their diffusion around the world.” French language education draws a special attention to Nigeria due to the country’s historical background, geographical location as well as its heterogeneous nature. Today, in our educational system, these features make the teaching and learning of English and French languages possible alongside national or local languages like Yoruba, Hausa, Igbo,

Fulfulde, and Kanuri, Benin among others. Thus, the 9-year Basic curriculum in French has been developed and introduced in schools for implementation. The curriculum is very rich and if the contents are well implemented, most Nigerians would be bilingual in English and French.

The French language teaching is a profession in Nigeria, it is a career in a field of educational specialization and it also requires a specialized knowledge base through both academic study and practical experience. The professionalism of French language teaching provides French language teachers with professional training and qualifications on a continuous attempt to develop standards for French language teaching and for French language teachers’ quality. To ensure quality basic education, professional teaching is imperative. Richards (2011) also asserts that, “good teaching is viewed as the mastery of skills or competences”. He continued by saying that, experiencing teaching in a variety of different situations with different kinds of learners and teaching different kinds of contents, is how a repertoire of basic teaching skills is acquired. Guerreiro (2017), views teachers as professionals in their field. Teachers can be expected to research new and essential knowledge relevant for contemporary professional practice and to consistently refine their knowledge base to help their practice meet contemporary demands in teaching. In language teaching, Professional development and teacher preparation research also support the importance of teachers’ quality and further identify content specific pedagogy as a key ingredient in quality teaching.

The quality of instruction is dependent on pedagogy, a term that refers to the method of how teachers teach. It is a discipline that deals with the theory and practice of education. According to Ogungbeye (2011), pedagogy is the science of teaching instruction and training while Pedagogical Knowledge is the generic knowledge about pedagogy, teaching approaches, how students learn, and method of assessment and knowledge of different theories about learning. Thus, professional pedagogical skill implies demonstrating an accurate, deep, and current knowledge of the subject matter. It is for these reasons that this article has set out to: Investigate French teacher pedagogical skills for quality basic education in Edo State and to investigate the extent to which teachers’ academic qualifications vary in their professional pedagogical skills for quality basic education in Edo State.

1.1 Statement of the Problem

French language teaching in Nigeria has waded through many challenges since its introduction in the Nigerian school system. Today some progress has been made by recognizing the language as Nigeria's second foreign language and promoting it from an optional to a core curriculum position at the basic school levels. To achieve this, government set the minimum teaching qualification for primary and Junior Secondary School teachers according to the National Policy on Education as National Certificate in Education (NCE). In spite of these steps, there is shortage of French language teachers. Available literatures indicate that there is severe shortage of French language teachers in Edo State. The government seems to have a challenge in recruiting professionally competent French language teachers to feed all the arms of the UBE. For instance, for some years in Edo State, (2015 to 2022) en.m.wikipedia.org (2023). Colleges of Education where French teachers are trained to teach French in the basic schools were closed down. The Edo State government was not able to decide what to do with the colleges. These prevailing events have significantly stalled progress towards professionalism and adequacy of French teachers in the basic schools in Edo State. No regular professional seminars and conferences for French teachers both in the public and private schools since then.

Meanwhile, the basic schools are foundation years of future leaders of Nigeria and we cannot afford to toy with their education especially in the area of language most especially French, where faulty pronunciations tend to become a persistent problem, very difficult to eradicate in later years. Also, the learning outcomes of French education seem to be poor in the basic schools as displayed by students in the basic schools' inability to communicate fluently in French. Richards & Farrell (2005), opine that, the insistence for a steady renewal of professional skills and knowledge is not necessarily a reflection of inadequate training, but a timely response to the fact that it is not everything teachers need to know that can be adequately provided at the pre-service level because the knowledge base of teaching constantly changes. It is against this background knowledge that this study seeks to investigate the level of French teachers' professional pedagogical skill for quality basic education in Edo State.

1.2 Research Questions

To guide this study, two research questions were formulated:

- What is the level of French teachers' professional pedagogical skills for quality basic education in the basic school (Junior Secondary Schools) in Edo State?
- Does the level of French teachers' professional pedagogical skill for quality basic education in the junior secondary schools in Edo State vary by teachers' academic qualification?

1.3 Hypothesis

Research question two was turned into a hypothesis and tested at an alpha level of 0.05.

Ho: The extent of French teachers' professional pedagogical skills for quality basic education in Edo State will not significantly vary by teachers' academic qualification.

2. The Current Status of French Language Teaching in Nigeria

French language education was officially introduced into the secondary school curriculum in Nigeria in 1956. King's College, Lagos and Government College, Ibadan pioneered the teaching and learning of French as a foreign language, Timothy-Asobe, (1999). Researches in French language in Nigeria, pointed out that, in the seventies and eighties, expatriates were employed to teach the language in the secondary schools throughout the country. During these years, emphasis was placed on the training of French teachers. For instance, in the defunct Bendel State, now, Delta and Edo states, there were five Colleges of Education, one Polytechnic, and an Institute of Continuing Education with branches in all the headquarters of the Local Governments. In all these institutions, there was a Department of French. Consequently, courses offered by students in all these institutions were all geared towards helping to develop French language teaching. In addition, there were 630 secondary schools in the state and 275 of this number offered French. The Ministry of Education placed high priority on the teaching of French. Also, French teachers from all these institutions were motivated by the then Ministry of Education to attend conferences, workshops at both Local, national, and even international levels. The establishment of the French Language Village in Badagry in 1991 further boost the development of French Language Teachers. (Momoh 1984, Olayiwola 2015, Adebisi 2015, Faniran 2017).

In 1996, late General Sani Abacha declared French as the second official language in Nigeria. According to

Igonor (2011), says this declaration was also reaffirmed by the Nigerian Government with a policy decision in 2002, making French second official language. This was again confirmed by the National Policy on Education (2004, 2013) Iteogu (2016), analyzed the three stages of facilitating its implementation:

Stage	Duration	Regulation
First	September 1998	1. French to be made compulsory from Primary 5-6 2. French must be taken at common entrance before one is accepted into JSS 1. A pass in French is a criterion for acquiring JSS 3 certificate
Second	September 2001-October 2004	1. French to be made a compulsory core subject from JSS 1-3 2. A pass in French as a criterion for promotion from JSS3- SS1 3. Credit or pass in French as a requirement into the university.
Third	2004-October 200	1. Basic knowledge in French is required for recruitment 2. Basic knowledge in French is required for the promotion of civil servants.

Today French language is taught as a foreign language in the basic schools. Faniran (2017), describes it as a language learnt in the four walls of the classroom and spoken by both the French language teachers and the students because most educated Nigerians do not speak it and all uneducated Nigerians know nothing about it.

Although for quite some decades, much has been done by various experts in the field of French language education in Nigeria. It's still faced with a number of challenges which include French teachers' professional pedagogical skills for quality basic education. French teachers' professional pedagogical skills in relation to knowledge of teaching, assessment, monitoring, strategies, selection of teaching learning resources and evaluation of learning are key to quality education at large.

3. Concept of Professional Pedagogical skills and Quality Basic Education

The concept of quality cuts across all levels of education. Quality in education implies standard of education. Akpan & Ita (2015) define quality basic education as education that empowers the learners with relevant skills, knowledge, ideas, values, and attitudes needed for the person to make informed decisions and live a self-sustaining life. According to Dickson (2017), quality instruction is key to educational process, it highlights achievement of set objectives, aims and goals. The Teacher Registration

Council of Nigeria (TRCN 2019) has established professional standards for the teaching profession in Nigeria, namely: Knowledge of Teaching, Assessment and Monitoring Strategies, Selection and Use of Teaching Learning Resource (TLR) and Evaluation of Learning.

The French language teacher is in principle a professional because he or she cannot only speak the language, but can also describe why it works the way it does and what different bits of it means, know how to teach it to learners in a form they can understand and learn. The language teacher also know how to manage classroom and relationships. Ur in Richards and Renandya (2002) say that, these are not just unthinking skills but thoughtfully evolved and flexible sets of professional behaviors. The combination of these kinds of knowledge enable the experienced French language teacher in Edo state to make informed and appropriate decisions in his classroom professional practices.

According to Pettis in Richards and Renandya (2002), to be "knowledgeable without appropriate skills necessary to apply this knowledge is limiting. The language teacher must be particularly knowledgeable and skillful so that the necessary range of topics is appropriately taught. Richards (2011) shows an example of language teachers' pedagogical reasoning skills, the special skills that enable language teachers to do the following:

- Analyze potential lesson content (e.g. a text, an advertisement, a poem, a photo etc.) and identify ways in which it could be used as a teaching resource.
- Identify specific linguistics goals (e.g. in the area of speaking, vocabulary, reading, writing etc.) that could be developed from the chosen content.
- Anticipate any problem that might occur and find ways of resolving them.
- Make appropriate decision about time, spacing, and grouping arrangements.

Shulman in Richards (2011) described this ability as a process of transformation in which the teacher turns the subject matter of instruction into form that are pedagogically relevant and that are appropriate to the level and ability of the students. Tachie (2021) says that being equipped with such skills enable teachers to be more effective, flexible fluent thinkers and confident in their use and application of knowledge and processes. Experienced French teachers use these skills when they plan their lessons, decide how to adopt textbooks, and when they search the internet and other sources for materials they can use in their classrooms. Tsiu in Gatbonton (2008) points out that

one is likely to find in experienced teachers, some manifestation of expertise. (Tsui 2009, Borg 2006,) in Richards (2011), affirm that over time, experience is said to lead to the development of routines that enable these kinds of skills to be performed fluently, automatically and with less conscious thought and attention to focus on other dimensions of the lesson. It is important to know that on-going knowledge is enhanced through professional development in any discipline, especially the French language, continuous education courses, reading current journals and research, and participating in professional organization activities.

This article is based on the Consensus Model. A model of teacher professional knowledge and skills including Pedagogical Content Knowledge (PCK). This model emerged from a meeting of researchers studying Pedagogical Content Knowledge in 2012. (Gess-Newsome 2013). Richards (2011) “asserts that PCK refers to knowledge that provides the bases for language teaching and language learning which can be applied in different ways to the resolutions of practical issues in language teaching. It could include assessment, reflective teaching, and classroom management and so on.” According to Filgona et al. (2020), PCK is the knowledge needed to make the subject matter accessible to students. Content knowledge is what is being taught, pedagogical knowledge is how it is being taught.

The researchers in this summit assert that PCK varies greatly with different topics and therefore indicates that different PCK is required when teaching both within and beyond specialization. The concept of Pedagogical Content Knowledge (PCK) was first introduced by Lee Shulman (1986). Shulman (1987), introduced the notion of Pedagogical Knowledge. Evens et al. (2016), say that many terms are used as synonyms for PCK in the foreign language and second language context. For instance: Pedagogical knowledge (Gatbonton 1999), knowledge about language (Borg 2001), Borg (2003) also use the term Teacher Cognition and so on. Pedagogical Reasoning Skills (Richards 2011) and so on.

(Golomek 2009) in Richards (2011) “claim that cognition entered second language teaching from the field of general education. Construct such as teachers’ practical knowledge, Pedagogical content knowledge and personal theories of teaching are now established in the components of understanding teacher’s cognition.” According to Gerriero (2017) pedagogical knowledge is the specialized knowledge of teachers for creating effective teaching and learning environment for all students.

Amosun and Kolawole (2015) did a research at Ibadan metropolis in Oyo State on pre-school teachers’ pedagogical knowledge and skill competences. The study comprised 50 pre-school teachers who were randomly selected from the pre-primary section of public primary schools in the five local government areas within Ibadan. The result shows that the level of pedagogical knowledge and skill competences displayed by the pre-school teachers was low. They suggested that teachers should be trained and retrained to develop the professional knowledge and skills in handling preschoolers in all the primary sections of the basic school. Akpan and Ita (2015), carried out a study on teachers’ professional development and quality Universal Basic Education in Lagos state. The findings of the study reveal that teachers’ participation in induction program, Information and Communication Technology (ICT) training and seminars significantly relate to quality Basic Education. They recommended that the government and relevant agencies should provide more opportunities for UBE teachers to attend ICT training programmes as this will enhance their instructional delivery effectiveness.

Akbari, Dadvand, Samar & Kiany (2012) did research on pedagogical knowledge based on English language teaching (ELT) in Iran. They used a mixed method research design to offer a tentative framework for pedagogical knowledge. Stimulated recall interviews were used with six practicing English as a Foreign Language (EFL) teachers to map out the categories and units of pedagogical knowledge they drew upon in their teaching practices. The overall findings pointed out a 7-component model of pedagogical knowledge in ELT. The components include: knowledge of language, of teaching, of learning, of classroom management, of students, of culture and of context. They also noticed that teachers develop their knowledge of pedagogy over time. Freeman (1993), in Borg (2003), conducted a longitudinal study of changes in the practices of four foreign language teachers doing an in-service Masters’ degree. One of its specific aims was the development of teachers’ understanding of the professional discourse of education. The results show some behavioral change and there were also patterns in some teachers work which remain unmodified and this had a clear impact on teachers’ cognition.

4. Research Methodology

A descriptive survey research design which describes French teachers’ professional pedagogical skills for

quality basic education in basic schools in Edo State was adopted. The research population comprised all the 36 French teachers in the public junior secondary basic schools in Edo State as at the 2022 school year. All the 36 French teachers were used for the study. A questionnaire titled: “French Teachers’ Professional Pedagogical skills for Quality Basic Education Questionnaire (FTPPSQBEQ)” was designed and validated. The reliability coefficient was established using Cronbach Alpha Statistics and a coefficient of 0.83 was obtained for the instrument. The researcher personally administered the instrument to the respondents (the subject head). Section “A” of the questionnaire requested for the demographic information of French teachers such as academic

qualification of while section “B” contained 12-items on French teachers’ professional pedagogical skills for the teaching of French language in the basic schools in Edo State with which the respondents were requested to rate the French teachers on a modified four-point Likert rating scale of: Strongly Agree 4, Agree 3, Disagree 2 and Strongly Disagree 1. Data collected were analyzed using means and standard deviation with critical mean set at 2.5 in line with the rating scale. If the calculated mean is below the critical mean of 2.5, it implies that the level of French teachers’ professional pedagogical skills for quality basic education is low and vice versa. The hypothesis was tested using ANOVA statistics at 0.05 level of significance.

5. Presentation of Result

Research Question 1: What is the level of French teachers’ professional pedagogic for quality basic education in Edo State?

To answer Question 1, data collected were collated and analyzed with mean and standard deviation and the results are shown in Table 1.

Table 1: French Teachers’ Professional Pedagogic for Quality Basic Education

Indices of French Teachers’ Professional Pedagogic	Score	Mean	Std. Deviation	Remark
Knowledge of Teaching, Assessment and Monitoring Strategies	88	3.52	.510	High
Selection and use of Teaching Learning Resource	79	3.16	.374	High
Evaluating Learning	80	3.20	.577	High
Grand Mean	80	3.20	.408	High

Data in Table 1 shows that all the indices of French teachers’ professional pedagogic were high. Detail analysis shows that the indices of Knowledge of Teaching, Assessment and Monitoring Strategies was highest (3.52), followed by the indices of Evaluating Learning (3.20) and then the indices of Selection and use of Teaching Learning Resource (3.16). Analysis further revealed that the level of French teachers’ professional pedagogic for quality basic education in Edo State was high with a mean value of 3.20. The result is illustrated in Figure 1.

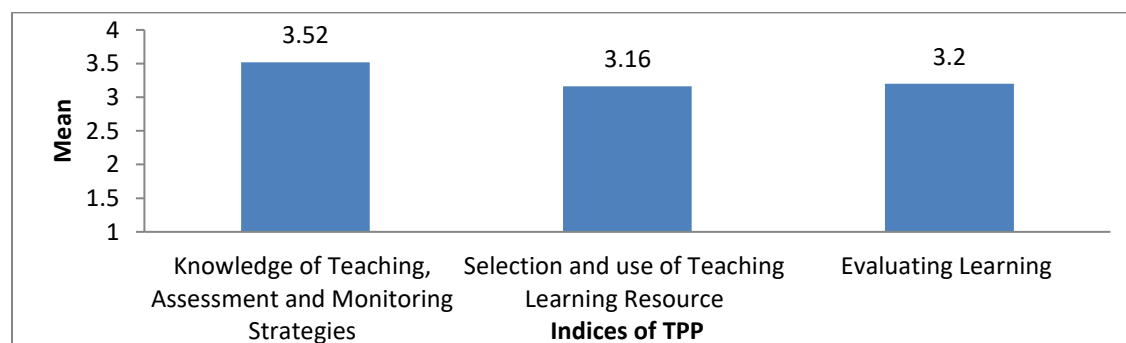


Figure 1: Level of French Teachers’ Professional Pedagogic

H₀₁: The level of French teachers’ professional pedagogical skills for quality basic education in Edo State will not significantly vary by teachers’ academic qualification.

This hypothesis was tested with ANOVA statistics at an alpha level of .05 and the result is presented in Table 2.

Table 2: French Teachers' Professional Pedagogical skills for Quality basic Education will not Significantly Vary by Teachers' Academic Qualification

	Sum of Squares	df	Mean Square	F	Sig.	Remark
Between Groups	.389	2	.194	1.185	.325	Not Significant (Ho ₁ : Accepted)
Within Groups	3.611	22	.164			
Total	4.000	24				

Data in Table 2 revealed an ANOVA value of 1.105 with a p-value of .33 tested at an alpha value of .05. The p-value of .335 is greater than the alpha value of .05, thus, the hypothesis is accepted. Conclusively, the study found that the level of French teachers' professional pedagogical skills for quality basic education in Edo State did not significantly vary by teachers' academic qualification.

6. Discussion of findings

Finding with regard to the level of French teachers' professional pedagogical skills for quality basic education in Edo State was high. This finding is supportive of the finding of Akbari et al. (2012). Who pointed out in their research a 7-component model of pedagogical knowledge and that teachers develop their knowledge of pedagogy over time. This finding also aligned with Amosun and Kolawole (2015), who suggested that teachers should be trained and retrained to develop their professional knowledge and skills in handling preschoolers in all the primary sections of the basic schools.

Finding from the hypothesis tested revealed that the extent of French teachers' professional pedagogical skills for quality basic education in Edo State did not vary significantly by teachers' academic qualification. This implies that irrespective of academic qualification of teachers, NCE, B.Ed., M.Ed. or Ph.D., professional pedagogical skills for quality basic education remains the same. This implied that irrespective of the level of category of educational qualification, they are nevertheless all professionals in their own right. Additionally, NCE is the minimum qualification to teach at the basic level of education as stipulated by the NPE.

7. Conclusion

It was therefore concluded in this study that quality basic education is a function of teachers' professional pedagogical skills which is common knowledge that no nation can rise above the quality of its human resources. It was further concluded that there is no significant difference in the level of French teachers' professional pedagogical skills for quality basic education based on academic qualifications.

8. Recommendations

Based on the findings of this study, it was therefore recommended that teachers should maintain and also improve on their professional pedagogical skills most especially in the area of selection +and use of Teaching Learning Resources (TLR) and Evaluating Learning for quality basic education. Teacher education programme should lay emphasis on these pedagogical skills at all levels. It is also important for language teachers to always not only upgrade their knowledge of subject matter but their knowledge of pedagogical skills.

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The Philological and Morpho-Semantic Analysis of “Òranyàn”, “Àjèsára” and “Òmólúàbí”

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Abstract. Studies have shown that a lots of modifications and changes occurring in the Yorùbá language in the course of history. Some of the basic needed linguistics information have therefore lost in transition in diachronic overview of Yorùbá Studies. This paper uses grammaticalization theory and descriptive analysis to highlight the basic morpho-syntactic decomposition of three derived nouns viz: “Òranyàn, Àjèsára” and “Òmólúàbí”. Adopting the four major parameters proposed by Bernd and Heiko (2012) as in: Extension, Desemanticization, Decategorialization and Erosion, the study argued that the basic intuitive knowledge in the memory of many Yoruba speakers seems erroneous. Our findings revealed that the three (3) words under the study –“Òranyàn, Àjèsára” and “Òmólúàbí” have the basic morpho-syntactic formation in the following sequences as in: (i) oranyàn “òran yíyàn”, (ii) “Àjèsára – À-je-sé-ara” and (iii) “Òmólúàbí – Òmò-o-ní-ìwà ìbílẹ̀”. Also, “oran yíyàn” which basically means “something one has an option for” has been accorded a new meaning as in: “obligatory matter”. The paper therefore aimed at correcting the age-longed misconception and misinterpretation of the three words. We believe further studies could be done to challenge some erroneous intuitive knowhow of the basic formation of some other Yorùbá words in the contemporary usage.

Keywords: Psycho-linguistic intuition, etymo-semantics, grammaticalisation, desemanticization, decategorisation, erosion.

1. Introduction

It is evident that a lot of modifications and changes do occur to language in the course of history. This, of course, affects all the linguistic tiers in the

contemporary usage of Yorùbá language. Yorùbá linguists do not attempt to match the morpho-semantic analysis of the literary established positions on the “Òranyàn, Àjèsára” and “Òmólúàbí” in the underlying formation with the contemporary semantic interpretation in the phonetic level. This paper tries to look into the basic morphological formation of the aforesaid words and identifies the need to pronounce them correctly. For example, many scholars in Yorùbá decompose “Òmólúàbí” as “Òmò ti Olú iwà bí” (the child that Olú iwà “the creator” gives birth to) – tracing the source of their morphological decomposition to Ifá text. However, there are enough evidence to debunk such an agedlonged morphological misconception, as will be fully explained hereunder in this paper. The cases of “Òranyàn” and “Àjèsára” emerged on the course of my Ph.D. Thesis writing Adékúnlé, (2018) when I tried to intimate my supervisor of the need to correct the wrong established morphological decomposition positions. I was therefore advised to present a paper on the new morpho-semantic analysis of “Àjèsára and Òranyàn” after the completion of my Ph.D. in 2018. Guided by the expansive explanations that are needed to drive home our position convincingly, we decide to adopt descriptive grammar of Chomskyan theories, which allows the impact of the intuitive knowledge of the native speakers of any language in explaining some linguistic puzzlings via the basic knowledge of the grammar of the language. The native speaker competence has caused many changes in the presentation and analysis of Chomskyan theories right from the generative model to the minimalist programme. This intuitive knowhow of the native speakers allows psycho-linguistic modeling of different transformations in Chomskyan theories. Also, the paper uses grammaticalisation theory as proposed and expanded by Traugott (2012)

and Bernd and Heiko (2012) to discuss the lexico-semantic interpretation of the three words – “Òranyàn, Àjèsára” and Òmólúàbí”. Adoption of descriptive grammar in this paper, allows us to delve into philology and etymology of these words: “Òranyàn, Àjèsára and Òmólúàbí” distinctively and sequentially in this study. We shall like to follow this order in our explanations for certain reasons and clarity purpose.

2. Analysis

2.1 Òranyàn

This word entered into the Yorùbá lexicon sometimes around late 1960's. According to Elder Àrẹ̀mú Fólórúnṣọ (during interview on 4th of May, 2017), the word basically was “Òràn yíyàn”. The word at its inception was a comic noun phrase from a sentence: “Dandan ni owó orí, òràn yíyàn ní asọ ìbora” (Tax payment is obligatory; having or possessing cloth to cover oneself in the night is optional). The contextual implication of such a psychological thought is that the Yorùbá believes and tradition eulogies the significance of “Asọ Ìbora” (the covering cloth at night), the issue of tax payment during the colonial period in our big cities, most especially, Ìbàdàn, becomes much more important than any other things in which “Asọ Ìbora” is inclusive. Based on this social notion around “Òjà-Òba, Bẹ̀rẹ̀, Mòlété” areas in Ìbàdàn at that time, people jokingly warned their friends and relations to avoid passing by along Mápó axis to avoid being detained by “Òyínbó Ajélẹ̀” (British Tax Officer). Hence, they use to make such a statement as in:

Òrẹ̀, o jẹ́ má gba àdúgbò Mápó kojá. Àwọn ajélẹ̀ n bẹ́ nìbẹ̀ tí yòò sọkọ́ fún ọ. Dandan ni owó orí nìlẹ̀ Ìbàdàn bá yí, òràn yíyàn mò lasọ ìbora.

(Friend, you should try to avoid passing along Mápó. The British Tax Officers are there hunting to detain you. Payment of Tax is obligatory in Ìbàdàn community presently, even, much more important than procuring covering cloth at night).

At that time, the headquarters of the British Tax Officers in Ìbàdàn was at Mápó. No defaulter of tax payment can pass through the Mápó axis without being apprehended and convicted by the British Tax Collector Officers in Mápó Area. The British Tax Collector Officers used to inflict dehumanized punishments for any culprit against tax payment. They can be delayed for hours, brutalized thorough beating and flogging as well imprisoned for few days. The inferences we deduce from the latest except is that the basic meaning of “òràn yíyàn” which eventually grammaticalised into “Òranyàn” through a

lots of transformation and modification, as in. “Òràn yíyàn → Òràn – í – yàn → Òràn – án – yàn → Òranyàn”, have been forgotten. Yule (2010: 67) attributes lexical modification to the occurrence of phonological processes, such as: deletion, assimilation, vowel epenthesis and vowel harmony. The etymosemantic interpretation of “Òranyàn” in the diachronic study of Yorùbá language is optionality – something that is not obligatory, it depends on man's choice. Therefore, the word “Òranyàn” should be used to remind man of opportunity to make a choice of an action between or among two or more options

However, the semantic interpretation in the contemporary usage of “Òranyàn” means that man has to observe certain thing obligatorily as reflected in the following contemporary excerpts:

1 i. “Òranyàn” ni fún àwọn ọdọ láti se igbéyàwó (it is compulsory for the youths to marry)

ii. “Òranyàn”ni ó jẹ́ fún àwọn ọ̀bí láti ran àwọn ọmọ wọn lọ sí ilé-ìwé nítorí ọjọ ọ̀lẹ́ (it is compulsory for the parents to send their children to school to incur better future).

Evidence abound that “Òranyàn” is even more productive in usage as “obligatory than ‘Dandan’ “which has the basic interpretation” in the contemporary statements among the Yorùbá. “Òranyàn” is mostly use by the Yorùbá literary writers or authors. Our major concern on “Òranyàn” in this paper is that a different meaning has been assigned or designated to “Òranyàn” in the contemporary literature. Traugott (2012: 20) hints that language change serves as the basis for grammaticalization theory. She summarizes her submissions on grammaticalization in the following definition of the term as thus:

Grammaticalization theory is concerned with regularities in language use as they can be observed in spoken and written linguistic discourse on the one hand and in language change on the other.

Guided by this observation, it is evident that irregularity has set in via the contemporary usage of “Òranyàn” in the contemporary conversations. It is also apparent that the four major parameters listed in the works of Bernd and Heiko (2012 : 401 – 423) convincingly account for the process of grammaticalization of “Òranyàn” as a lexicon in Yorùbá language as follow:

2. i. Extension i.e. the rise of new grammatical meanings; when linguistic expressions are extended to new contexts (context – induced reinterpretation) “Òranyàn” has rise to obtain new grammatical meaning (that is from being “optional to obligatory”.

ii. Desemanticization (or semantic bleaching) i.e. loss (or generalization) in meaning content. The basic meaning of “*Òranyàn*” is completely eroding. The basic meaning has been twisted to another connotation entirely in usage.

iii. Decategorialization i.e. loss in morphosyntactic properties. “*Òràn yiyàn*” which was the basic formation is noun phrase with “*òràn*” as the head but “*Òranyàn*” stands for Noun phrase as well as the head of the phrase.

iv. Erosion (phonetic reduction) i.e. loss in phonetic substance.

Phonologically “*Òràn yiyàn*” which have four basic syllabic structure is phonetically is hereby reduced to three syllables. The four latest parameters vividly describe the transformational process which through “*Òràn yiyàn*” changes to “*Òranyàn*” in the contemporary usage. Some phonological processes (phono-morphological processes) were duly involved in the transformational processes that grammaticalized into “*Òranyàn*” in the contemporary usage. Based on the foregoing explanations via grammaticalization theory in the works of Traugott (2012), and Bernd and Heiko (2012), it is evident that “*Òranyàn*” enters into Yorùbá lexicology through grammaticalization in the diachronic overview.

2.2 Àjẹsára

“*Àjẹsára*” is one of the basic lexicon in Yorùbá language which has turned to be expanded in usage during colonial and post-colonial era most especially in the health sector. It was a word frequent among the herbalists (Babalówo) and traditional medicine man (Oniṣẹgùn). Without minding the morphological decomposition, the aforementioned professional people used the word “*Àjẹsára*” for medical incisions, herbal substance, herbs and concoctions meant to prevent the body against any bad occurrence that may be inflicted on the person by enemies. It serves as personal traditional immunization for people that took it. So that when enemies attempt to inflict evil, the immunization will protect the people that have “*Àjẹsára*”.

Ordinarily, to the best of our knowledge, scholars have not attempted to decompose “*Àjẹsára*” morphologically, despite being known that it is polymorphemic word. The only established claim of many Yorùbá linguists is that “*Àjẹsára*” is a polymorphemic word derive from a simple sentence – “*Àjẹ sí ára*” simply translates as “something we eat into the body or something that enters into our body”. It should be noted however that every items of food and drinks are expected to be entering into the body

for nutrition and body edification. That is, every food or drink that are taken should be tagged as “*Àjẹsára*”.

However, “*Àjẹsára*”, in its contextual meaning, in the present use, (mostly in health section), connotes something that enters into our body for prevention against specific malnutrition ailment. “*Àjẹsára*” is meant to prevent some diseases or infection from entering into our body system. Guided by this psycho-linguistic intuition, the word “*Àjẹsára*” ought to be decomposed morphologically as “*Àjẹ sé ara*”. That is, the verbal element in the basic statement should be “*sé*” (prevent or protect) not “*sí*” (enter or inject) as previously connotes in the native intuition. Adéwólé (2014 : 69) defines *sé* as

3 “*Sé*” (i) to block; “*wón sé fẹrèsè nàà*”

(They locked the window)...

There are few examples of noun that are formed from “*sé*” as reflected in Adékúnlé (2018 and 2020a) as in:

- 4 (i) {*è-*} + *sé* → *èsé* (blocking in the hole of rabbit to prevent external incursion).
- (ii) {*à-*} + *sé* → *àsé* (unintelligible word).
- (iii) {*ò-*} + *sé* → *òsé* (sign of regret / hiss).
- (iv) {*i-*} + *sé* + *ilé* → *ìsélé* (act of reduction of freedom).

The derived nouns in examples 4i – iv occur in sequence order in the following sentences;

5 (i) *Esé pò nínú ihò òkété nàà* (Many blockings were inside the hole of the rabbit).

(ii) *Asé pò nínú òrò òkúnrin yì* (This man speech is full of unintelligible words).

(iii) *Òsé ni yóò gbẹ̀yìn òrò nàà* (The matter will turn to regret).

(iv) *Aṣẹ ìsélé tí ijọba pa yóò parí ní òla* (The restrictional order which government ordered will end tomorrow).

Based on the aforestated examples, “*sé*” has a basic negative semantic interpretation. This claim is self-evident when the nouns that contain “*sé*”, as enumerated in examples 4^{i-iv}, are used with negator in simple sentences as follow:

6 (i) *Emi “kì í” sọ àsé* (I always speak intelligible word)

(ii) *Òsé “kò” ni gbẹ̀yìn igbẹ̀sẹ nàà* (Our action will be prosperous)

(iii) “*Kò*” *sí ìsélé fún àwa ní ilú yì* (We have freedom of movement in this town).

(iv) “*kò*” *sí àṣẹ ìsélé mó* (the restrictional order has stooped)

The inferences we are trying to make from the latest statements is that the negator (*kò*/*kì* *i*) does not make those statement to be negated. Adékúnlé (2020b) identifies this criterion as one of the features of Nouns with negative verb basic formation. Bamgbose (1990) informs that when a negator is inserted into

the structure of simple sentence, it usually change the meaning of the sentence to negative sentence as reflected in the following examples;

7 (i) Olú “kò” wá (Olu didn’t come)

(ii) Kẹmi “kì í” sùn ní alẹ (Kẹmi do not sleep in the night)

(iii) Aláso “kò” gba owó (The cloth seller did not accept money or price)

(iv) Ògá wa kì í gba àbètélẹ (Our boss do not take bribe)

(v) Òsẹ “kò” tí í parí (The week has not end)

The foregoing sentences in examples 7^{i-v} are negative statements. Arising from all these aforestated explanations therefore, it is evident that “Àjẹsára” should be morphologically decomposed as “Àjẹ sé ara” not “Àjẹ sí ara”.

2.2.1 Theoretical Explanation of “Àjẹsára”

Arising from examples 6ⁱ⁻ⁱⁱⁱ and 7^{i-iv}, it is evident that “Àjẹsára” should be morphologically decomposed as “À jẹ sé ara” not “À jẹ sí ara”. The parameters of Grammaticalization as enumerated in Bernd and Heiko (2012: 401 – 423) can be summarise as follow:

- i. Extension i.e. the rise of new grammatical meanings; when linguistic expressions are extended to form or create new context. (Context – induced reinterpretation).
- ii. Desemanticization (or semantic bleaching) i.e. loss (or generalization) in meaning of content.
- iii. Decategorialization i.e. loss in morphosyntactic properties.
- iv. Erosion (phonetic reduction) i.e. loss in phonetic substance.

The first two aforestated parameters are duly involved in the psycho-linguistic transformational explanations that guided the misrepresentation of the basic intuition of “À jẹ sé ara” which turns to be “À jẹ sí ara” in the modern contemporary usage. That is “À jẹ sé ara” has turned to be misconstrued as “À jẹ sí ara”. “À jẹ sí ara” therefore becomes the new grammatical meaning. Only psycholinguistics intuition can help to retrace the basic morphological properties of the compound word “Àjẹsára” in the Yorùbá lexicography. This of course, serves as “context-induced reinterpretation” as enumerated in Bernd and Heiko (2012).

Furthermore, there is verb desemanticization in the process of formation of “Àjẹsára”. The semantic bleaching (as noted by Bernd and Heiko [Ibid]) has changed “sé” to “sí” in the contemporary basic intuition of many speakers of Yoruba language. That is “sé” which means “blocking” is misinterpreted as “sí” which literally means “enter into”. Although,

“sé” and “sí” are basic verbs, but semantically different from each other. The difference between them can only be noted due to morphological decomposition of “Àjẹsára”. Decategorialization and Erosion do not occur on the psycholinguistic clarifications as explained in this sub-section. The two parameters remain literarily inactive in the transformation process of “Àjẹsára”.

Now we wish to expand upon the ambiguities that surround the established position on the basic morphological formation of “Òmọlúàbí”.

2.3. The Morpho-Semantic Analysis of the Concept of “Òmọlúàbí”

Ajibade, G. O. (2013) discusses the concept of “Òmọlúàbí” using the literary perspection of every Yorùbá child who behaves himself or herself in line with the acceptable norms of Yorùbá culture. His discussion supports the age longed perception that “Òmọlúàbí” means “Òmọ-tí-olú-ìwà-bí”. He cited many examples of good character as portray in *Qdunjo’s Àkójopò Ewì Aládùn*. He argued that “Òmọlúàbí” is any child that God endows with good virtues. To our own assessment, the piece is good and literarily acceptable. However, this study looks into the basic morpho-semantic analysis of “Òmọlúàbí” against the backdrop of the agelong established position of “Òmọ-tí-olú-ìwà-bí”. This paper tries to consider the etymology and culture of “Òmọlúàbí” as one of the two principal aspects of language functions as informs in Ogunwale (2016:19) as in:

...that every language has two aspects:

One, its role as an agent that enables us to communicate with one another in our struggle to establish different factors for our existence and struggles. The other aspect of language function is its role as a carrier of history and culture built into the process of communication over the ages.

Also Ogunwale (2013) hints on the highlights of dynamics that have effect on Yorùbá Personal Names. He highlight some evidence of language change which have affected the pronunciation of Yorùbá Personal Names. Taking cognizance of these aforestated psycho-linguistic claims, this paper expresses some elements of incoherence in the assumption that “Òmọ-tí-olú-ìwà-bí” (literarily the child that is born by ‘Olú-ìwà’) is the “Òmọlúàbí”. The Yorùbá refer to God as ‘Olú-ìwà’, Metaphorically, “Òmọ-tí-olú-ìwà-bí” means – a child that is well created by God. Such a child is blessed to behave very well in the society.

2.3.1 Reasons for our Skepticism with the Age-Longed Basic Morphological Intuition on “Qmólúàbí”

The under listed reasons weakened the age-longed basic morphological intuition that “Qmọ-tí-olú-ìwà-bí” is the basic formation of “Qmólúàbí” as in:

- i. God creates every child either bad or good behaved.
- ii. Differs attitude of the concept of “Qmólúàbí” prevail in different ethnics or tribal groups.
- ii. The concept “Qmólúàbí” is dynamic in the course of history and cultural development. Our arguments and discussions would be centred towards the three (3) aforestated reasons.

2.3.2 Argument and Discussions on “Qmólúàbí”

First and foremost, since it is generally accepted that God creates everybody, it is therefore seems improper to attribute special creativity status to few people we designate as “Qmólúàbí”. Also, if the attribute of “Qmólúàbí” is basically ascribes to some few well-behaved people then, there would have been generally acceptable norms in the universe to qualify people as “Qmólúàbí” without minding different ethnic or country. Our findings have shown that the acceptable norms that qualify people to be “Qmólúàbí” differ from one ethnic group to another in the same country. For instance, a tribe called Irigire speaking Regime language from Jos, Plateau State, Nigeria in the Bassa Local Government in the Western Part of Jos practice polyandry. Based on this, a woman can decide to marry many husbands and procure children for each man as she wants. Although, this practice was abolished in 1968 by their Leasing Council but before 1968, it was accepted as an acceptable norms for their “Qmólúàbí” woman.

Also, the Mandi tribe in Bangladesh, in the olden days allow bestowment of daughter to her biological father in marriage from the tender age of 2 – 3 years. At that particular period, the Mandi tribe did not consider it wrong for father to marry his daughter. Any father that marries his daughter may be called an “Qmólúàbí”. The aforestated examples were never accepted as approved norms for “Qmólúàbí” in the course of history among the Yorùbá people (just to mentioned few examples).

Based on the foregoing examples, it is evident that the acceptable virtues that make an “Qmólúàbí” are dynamic in the course of history and cultural development. Each ethnic has its acceptable virtues embedded in their customs and traditions. Customs and traditions of each tribe group shapes an

individual’s way of life to the acceptable virtues that qualify individual to become “Qmólúàbí”. For instance, an “Qmólúàbí” young boy in eastern part of Nigeria “Igbo” do not need to prostrate as a sign of respect, to greet his parent or elderly one. However, the Yorùbá in the south west will expect an “Qmólúàbí” boy to greet his parents or elderly person with prostration. Sequel to these explanations, “Qmólúàbí” as a nomendature is design for any child or person that adhere strictly to the acceptable norms of the culture and tradition of its immediate society or tribe. The Yorùbá refers to ethnic group as “ìbílẹ̀”. Therefore, we would succinctly conclude that “Qmólúàbí” is a coined name from “Qmọ-ó-ní-ùwà/ìwà-ìbílẹ̀”.

“Qmọ-o-ní-ùwà-ìbílẹ̀” could be proved as the basic formation of “Qmólúàbí” through grammaticalisation process as exemplified in the works of Trangott (2012), and Bernd and Heiko (2012).

2.3.3 Theoretical Explanation of Grammaticalization of Qmọ-ó-ní-ùwà-ìbílẹ̀ (the child that has approved virtues of tis immediate environment).

The four parameters of grammaticalisation as expanded by Bernd and Heiko (2012:401-423) reiteratively metioned in this study, as in; extension, desemanticization, decategorilisation and erosion were duly involved in the transformation processes that produce “qmólúwàbí”. First and foremost, desemanticization occurs when “qmólúwàbí” was translated to be (qmọ-tí-olú-ìwà-bí). ‘Olú iwà’ that is ‘God’, creates every human being, how could we erroneously narrowed the tag “qmọ-tí-olú-ìwà-bí” to only good virtue people in the society; that results into desemanticization-semantic bleaching, which is one of the four main parameters in grammaticalization theory.

Furthermore, the occurrence of semantic bleaching is advently leads to extension,-the rise of new grammatical meaning; The basic interpretation has been twisted and restricted. The word “qmólúwàbí” surfers “context induced reinterpretation”. Evidently, decategorilization-loss in morphosyntatic properties permeates in the process. That is qmọ-o-ní-ùwà-ìbílẹ̀ qmọ-ní-ùwà-ìbílẹ̀. Which means is ‘o’ is deleted. The next step is compounding; through compounding which initially produces “omo-ni-iwa-ibile (see Owolabi 2011), the word changes to “qmólúwà-ìbílẹ̀”, “ìbílẹ̀” is chipping to “bí” (Yule 2010:56). The compounding of “qmólúwà + bí” produces “qmólúàbí/qmólúwàbí”. Notice that, Bamgbose (1990:68) hints that some Yorùbá dialects use ‘uwa’

(character) while standard Yorùbá uses “iwà” (character). Guided by the latest explanation, it shows that “erosion”-phonetic reduction, occur in the transformation processes. For instance ‘o’ is deleted, while ‘omọ-o-ní-iwà-ibílẹ̀’ which basically contains nine (09) syllables is reduced to “omọ̀lúàbí/omọ̀lúwàbí” which has five (05) syllables.

3. Summary and Conclusions

This paper tries to look into the basic formation of three derived Norms “Òranyàn, Àṣẹsára and Omọ̀lúàbí” in Yorùbá language. These three words are derived through a lots of transformational processes. The paper explained the transformational processes that permeate in the process through grammaticalisation theory as proposed in the works of Trangoth (2012) and Bernd and Heiko (2012). Most especially, we adopted the four parameters listed in Bernd and Heiko (2012) as in: Extension, Desemanticization, Decategorisation and Erotion to expand upon the basic morpho syntactic processes through which “Oranyàn, Àṣẹsára” and “Omọ̀lúàbí” emerged. The study also uses psycho-linguistics intuitive knowledge to reject the wrong basic intuitive notion about the three lexical items; Our findings revealed that “À-jẹ-sé-ara” seems more appropriate to be the basic formation of “Àṣẹsára” not “À-jẹ-sí-ara” as it is erroneously established in the mind of some Yorùbá native speaker. Also, it is claimed in this paper that “Òran yíyàn” (Noun phrase) grammaticalises into “Òranyàn” and that the basic semantic intuition which means “a matter of choice” has turned to be interpreted as “an obligatory”. Desemanticization has affected the basic interpretation. The paper rejects the age-longed basic decomposition of “Omọ̀lúàbí” as “Omọ-tí-olú-iwà-bí”, instead, we present “Omọ-o-ní-ùwà-ibílẹ̀” as the basic morpho-syntactic component of “Omọ̀lúàbí”. We believe this paper has contributed in no means to the linguistic overview Yorùbá studies.

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Contextualizing Ingratitude in Luke 17:12 – 18 Among the Members of Pentecostal Churches in Ika Land

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Abstract. There is no gainsaying the fact that appreciating good deeds done is a critical attribute of a civilized person. It boosts the morale of people to do more good to others and as a result, it promotes the culture of harmony and goodwill. Expressing thanks has the power in creating a deeper and stronger relationship among people. Sadly, we live in a society that is bedeviled with Ingratitude. There is a constant display of this vice. This attitude of Ingratitude is becoming progressively evident in these last days among some members of Pentecostal Churches in Ika land of Delta North Senatorial District of Delta State. It is against this backdrop that the study aims to Contextualize the story of the nine ungrateful Lepers in Luke 17:12 – 18 among one of the Pentecostal Churches in Ika land, Ministry of Reconciliation Evangelism Explosion. Historical-critical approach was employed in the work. The study shows that Ingratitude is a state of not feeling or showing that you are grateful for something like the nine lepers that did not come to thank Jesus. The Paper further reveals the characteristics of Ingratitude which include pride, feeling of entitlement, and taking God's blessings for granted and not being thoughtful. The findings include lack of regular emphasis on the importance of gratitude based on biblical teachings, which implies potential gap in spiritual education of gratitude among the church members. It reflects a missed opportunity to utilize gratitude as a powerful tool for sharing the Christian faith and attracting others to the church. The Study therefore recommends that biblical teaching on the unhealthy display of Ingratitude in Pentecostal Churches in Ika Land in particular and the Christian communities in general should be deemphasized.

Keywords: Ingratitude, Pentecostal, Churches, Lepers, Contextualize

1. Introduction

12. And as he entered a village, he was met by ten lepers, who stood at a distance 13. and lifted up their voices, and said, "Jesus, Master, have mercy on us". 14 When he saw them, he said to them, "Go and show yourselves to the Priests". And as they went, they were cleansed. Then one of them, when he saw that he was healed, turned back, praising God with a loud voice, 16 and he fell on his face at Jesus' feet, giving him thanks. Now he was a Samaritan. 17. Then said Jesus, "were not ten cleansed? Where are the nine? 18. Was no one found to return and give praise to God except this foreigner?

The story of the ten lepers in Luke 17:12-18 is one filled with emotions. In it, lessons on gratitude and Ingratitude are inter-woven. Ten lepers were healed but only one came to express thanks to Jesus. He expected the ten lepers to express gratitude to him. He therefore noticed lack of gratitude on the part of the nine lepers. We live in a culture that is obsessed with ingratitude. The church, which is the body of Christ, is not spared from this. Most members of Pentecostal churches are not appreciative of good deeds done, either by God or their fellow human beings. Why are humans ungrateful? It is tantamount to a display of Ingratitude to a friend who in a boundless exhibition of compassionate brotherhood decides to help us in time of need only for us to mock, and blackmail him. This attitude of Ingratitude has stopped most people from doing good deeds and this has increased an attitude of nonchalance to neighbours who are in need of help.

The failure of the church members in their practice of gratitude as expected despite Jesus Christ's injunction is a serious cause for concern, particularly among the Pentecostal churches in Ika Land. Sparks

of Ingratitude in churches have continued to result in breakup of churches, conflicts, hatred, misunderstanding, poor social relationship, health related issues and even death in some cases. It is against this backdrop that this study seeks to examine Luke 17:12 – 18 and Ingratitude and what obtains among the members of Pentecostal Churches in Ika land with the aim of stemming the increasing trend of Ingratitude among Christians in general. The Paper employed the exegetical, hermeneutical, historical and phenomenological approaches to achieve the objectives.

2. The Meaning and Impact of Ingratitude

Ingratitude is synonymous with un-thankfulness. It is the act of being ungrateful to anyone that has shown you kindness. It is a vice that dries up all the fountain of goodness. Ingratitude is lack of appreciation for something that has been done to you. Barclay (2019) avows that ingratitude is a rejection of God as creator and owner of all things. For him, Paul the apostle points to ingratitude as the main cause of the plethora of problems in the Corinthian church. As 1Corinthians 4:7 puts it, “For who sees anything different in you”? What have you that you did not receive? If then you received it, why do you boast as if it were not a gift?” The Church at Corinth failed to acknowledge that everything they had was not of their own making but a gift from God. Okpalaunegbu (2022), remarks that the society is infected with ingratitude.

Ingratitude can ignite dissatisfaction. When we do not show gratitude, we provide opportunity for discontentment to thrive. This can lead to a distortion in mental well-being. Delgado (2023) asserts that Ingratitude does not only condemn a person to bitterness but also has negative effect on his physical health. According to her, it has been proven that gratitude reduces the level of stress, anxiety and stress. A study carried out at the University of Michigan revealed that ungrateful people usually report increased levels of stress, and a higher number of physical symptoms (Delgado, 2023). People that are not grateful provide access for others not to be kind to them. When they do not receive anything again, they think that the society is a hostile place without goodness. An investigation carried out at the University of Manchester showed that unthankful people are more dependent and less autonomous. As a result, they are in deep need of others. They have challenge of self-acceptance and majorly lack purpose in life (Delgado, 2023). She added that unthankfulness creates an unhealthy psychological state pictured by cycles of impossible expectations and

disappointments in which the person is unable to appreciate in a fair state the positive that has taken place. A study conducted at Hope College in Michigan demonstrated that gratitude is an excellent predictor of the level of happiness, well-being and fulfillment in life. On the other hand, Ingratitude leads to a loop of chronic unhappiness and ungrateful people are more likely to feel perpetually dissatisfied. People that are not grateful are likely to be negative, judgmental, always finding faults with others. They tend to be pessimists who do not see good with others (Delgado, 2023).

Ingratitude has become an integral part of the society we live in. This vice is entrenched in the lives of some people, that they find it hard to admit that they are ungrateful. There is nothing so distressing and painful than to go out of your way to assist someone and receiving no appreciation at the end. It can be defined as not showing gratitude of what we have or have been given. Adults and children are becoming more ungrateful each passing moment. Paul the Apostle wrote,

But understand this that in the last days, there will come times of stress. For men will be lovers of self, lover of money, proud, arrogant, abusive, disobedient to their parents, ungrateful, unholy, inhuman, implacable, slanderers, profligates, fierce, haters of good, treacherous, reckless, swollen with conceit, lovers of pleasure rather than lovers of God, holding the form of religion but denying the power of it (2Tim:3:1-5, RSV).

This attitude of Ingratitude is becoming progressively evident in these last days among some members of Pentecostal churches in Ika land. It is a characteristic of the apostasy in the last days. It is a deep character flaw that does not promote human relationship. It sticks out like a sore thumb. For Chuck (2018), Ingratitude reflects a heart that has been turned away from God toward something else. Luther (2019) opines that if there is one sin that is most common today, it is the sin of Ingratitude. God does so much for us, our indebtedness to Him is enormous and yet we rarely offer thanks for what He has done. An act of Ingratitude is an act of rejection of God as creator and owner of the world. Ingratitude is a key index that demonstrates why people are self-centered, self-sufficient, greedy, undisciplined, insincere, and dishonest. Gbinije (2018) supports this by stating that Ingratitude is a gross impotence to show appreciation, gratefulness and thanks in the face of apparent and clear assistance.

3. The Interpretation of Luke 17:12 – 18

Greek Text:

12. Καὶ εἰσερχομένου αὐτοῦ εἰς τινα κώμην, ἀπήντησαν [αὐτῷ] δέκα λεπροὶ ἄνδρες, οἱ ἕστησαν πόρρωθεν. 13 Καὶ αὐτοὶ ἤραν φωνὴν λέγοντες, Ἰησοῦ ἐπιστάτα, ἐλέησον ἡμᾶς. 14 καὶ ἰδὼν, εἶπεν αὐτοῖς, Πορευθέντες ἐπιδείξατε ἑαυτοὺς τοῖς ἱερεῦσιν, καὶ ἐγένετο ἐν τῷ ὑπάγειν αὐτοὺς, ἐκαθαρίσθησαν. 15 εἷς δὲ ἐξ αὐτῶν, ἰδὼν ὅτι ἰάθη, ὑπέστρεψεν μετὰ φωνῆς μεγάλης δοξάζων τὸν θεόν, 16 Καὶ ἔπεσεν ἐπὶ πρόσωπον παρὰ τοὺς πόδας αὐτοῦ εὐχαριστῶν αὐτῷ· καὶ αὐτὸς ἦν Σαμαρίτης. 17-18 ἀποκριθεὶς δὲ ὁ Ἰησοῦς εἶπεν, Οὐχὶ οἱ δέκα ἐκαθαρίσθησαν; οἱ δὲ ἐννέα ποῦ; οὐχ εὗρέθησαν ὑποστρέψαντες δοῦναι δόξαν τῷ θεῷ εἰ μὴ ὁ ἄλλογενὴς οὗτος;

English Translation

12. And as he entered a village, he was met by ten lepers, who stood at a distance 13. and lifted up their voices, and said, “Jesus, Master, have mercy on us”. 14 When he saw them, he said to them, “Go and show yourselves to the Priests”. And as they went, they were cleansed. Then one of them, when he saw that he was healed, turned back, praising God with a loud voice, 16 and he fell on his face at Jesus’ feet, giving him thanks. Now he was a Samaritan. 17. Then said Jesus, “were not ten cleansed? Where are the nine? 18. Was no one found to return and give praise to God except this foreigner?

According to Luke 17: 12, Jesus was going to Jerusalem when he entered a certain village. Ellicott (2023) opines that the unnamed village laid on the border land of two provinces, Samaria and Galilee. A leprous Samaritan was in company of nine Jewish lepers. These men were socially unfit being kept away from the normal flow of society. This was in line with the Law of Moses in Leviticus 15:40 which says “He is unclean, he shall dwell alone; without the camp shall his habitation be”. According to Lowe (2017), Luke seems to be the only gospel writer who reported on the healing of the ten lepers by Jesus. He added that leprosy was a disease which the Jewish people thought to have been brought by God as a result of punishment for some peculiar sin. The word εἰσερχομένου (eiserchomenou) is derived from the word εἰσερχομαι (eiserchomai), which literally means to enter or come into. It can be metaphorically used as entrance into any condition, a house or a city (Strong, 2006). The word with an implication of place appears majorly in the gospels and Acts.

The lepers in their predicament made a common plea. Their suffering has brought them to a common level, making them to ignore their racial hatred. Brown

(2023) supports this by stating that the lepers who were regarded as outcast forgot the fierce national antipathy of Jews and Samaritan and came together as a result of their common misery: ἤραν φωνὴν (eran phone) “lifted up their voices”, ἤραν (eran) is derived from αἶρω (airo) meaning to lift up or raise up (Strong, 2006). The ten lepers lifted up their voices in order to express their dire need of being cured by Jesus of leprosy. Adam (2023) argues that as the ten lepers were companions in their suffering, so also they were companions in lifting up their voices to cry for help. Luke 17:12: οἱ ἕστησαν πόρρωθεν, ‘they stood at a distance’ also rendered as “those in the distance”. It is also possible to say πόρρωθεν in Heb. 11:13 means “from afar” or “from a great distance” (Strong, 2006).

Luke 17:13; προς τινά, Acts 4:24; φωνὴν, ἐπαίρειν, Luke 11:27. φωνή (phone) occurs more than six hundred times in the LXX and one hundred and thirty-nine times in the New Testament (Thayer, 2006). According to Blight (2008), the ten lepers referring to Jesus as Master, meant submission, instead of the close relationship of being disciples. Master was equivalent to Rabbi and it was a term of great respect for a person. Ellicott (2023) remarks that the Greek word of “Master” is again that which has been discovered as Luke’s normal equivalent for “Rabbi”. ἐπιστάτα is peculiar to Luke which suggests editorial revision of the story. For kohler (2003), the word master is derived from the Greek word διδάσκαλος (didaskalos), which means “master”, Teacher, Rabbi, Rabboni. The word ἐλεάν can be interpreted to mean have pity, help, be merciful is found in the Synoptic Gospels in narratives where it implies the coming of the divine mercy into the world of human misfortune as in Mark 5:19.

In this verse 14, the turning point of the story is being introduced. The Greek word ἰδὼν is derived from εἶδω (eido), a primary verb, solely used in some past tenses. It means to see, behold, look on or perceive (Strong, 2006). It could also mean to notice, discern or discover. Jesus saw the ten lepers which means that he responded to their plea favourably. Πορευθέντες (poreuthentes) is aorist passive participle. It is derived from the Greek word Πορεύω (poreuo) meaning to cause to go, pass from one place to the other, to go away or depart. It is a verb. According to Thayer (2006), it is in line with the oriental way of describing an action circumstantially. The participle Πορευθέντες is placed before a finite verb which implies some other actions. Collins (2015) avows that Jesus responded to the request of the ten lepers in the form of a command, “Go, show yourselves to the Priests. He commanded them to

go". Lazar (2019) added that the command to "Go" would have come as a disappointment to the lepers that needed healing. In commanding them to "go", Jesus was invariably telling them to observe the Mosaic Law. On the other hand, Ellicott (2023) opines that the meaning of the command "Go" had no accompanying touch as a sign of healing, it therefore means that the command was in a greater degree than it had been before, a trial and test of their faith. It did not however mean a journey, perhaps to Jerusalem.

Jesus said to the ten lepers, "Go and show yourselves to the Priests". ἐπιδείξατε is derived from the word ἐπιδείκνυμι (epideiknumi) meaning to exhibit physically or mentally (Strong, 2006). It could also signify to prove or bring forth to limelight, or to acknowledge. The significance of the word can be seen in the action of the ten lepers in setting forth themselves before the Priests for examination. The visit to a Priest was important after being cleansed in order for the leper to be readmitted to society and also as clear evidence that the leper was cured. Jesus told the ten lepers to go and show themselves to the Priest and to perform the required sacrifices, so that they could be accepted into the society again. This is supported by Muggi (2022) who said that the cleansing of lepers by Jesus is informal. Leprosy was a social position as well as a skin blemish. To deal with the status and restore them to good standing, they had to show themselves to the Priest and be pronounced formally clean. This is further buttressed by Cook (2014) who notes that the local Priest apart from conducting worship on each Sabbath, also performs the role of a health officer. If the person was miraculously healed of leprosy, it was up to the Priest to inspect the body, to test for a complete removal of the disease and to declare the person cured. With that, the person could be reunited to the family and community.

In verse 15, the Greek word ἰδὼν (idon) is derived from Greek word εἶδω (eido) meaning "having seen". It is a primary verb that is used in particular past tenses. It is translated as "be aware", "behold", "perceive" in KJV. As soon as one of the lepers realized that he was perfectly sound and has been restored to his health and saw with his eyes that the dreaded illness, leprosy was gone from his body, he came to Jesus to thank him. The word translated 'Praising' is Greek doxazon. Δοξάζων (doxazon) is derived from δοξάζω, meaning to render esteem glory. It is rendered in KJV as "glorify" "full of glory", "magnify". Δοξάζων means glorified.

Jesus was marvelled at the nine healed lepers that did not return to give God thanks. He noticed the lack of

gratitude. He asked questions here as to prove the significance of gratitude. The Greek word ἀποκριθεῖς (apokritheis) is derived from the Greek word ἀποκριομαι (apokrinomai) meaning having answered. It is a verb – to answer, reply or take up a discussion. In the New Testament, the aorist middle ἀποκρινάο (apekrinato) is found only in Matthew 27:12; Mark 14:61; Luke 3:16; 23:9; John 5:17; 12:23 and Acts 3:12 (Thayer, 2006). The root word of the Greek term is κρινω (krino), which is informative in relationship with "answer" as a considered reaction to a statement. Apokrinomai is found majorly in the gospels and Acts with a total number of two hundred and thirty appearances. Seventy eight occurrences in John which show slight prevalence, followed by Luke with Acts and Matthew. Nevertheless, the verb is found only in Col. 4:6 in a persuasive context and Rev. 7:13. The usage is divergent and itself revealing of a number of possible meanings. In each of the instances, the type and manner of the answer is informative of its context and purpose. According to Luke in particular, Jesus expresses himself as disappointed (17:17) that out of the ten lepers cleansed, only one came back to express gratitude to him. In Mark, Jesus answers restrictively (3:33), commandingly (6:37), questioningly (10:3).

The various examples and diverse usages display the principal emphases for apokrinomai, a term that belongs to the colloquial speech of Jesus, as an expression of his self-consciousness and his knowledge of his having been sent, less regularly in miracle pericope. The word usually attains a decidedly more intense meaning whenever "critical" points are at stake which require a deliberate and careful response, whether on the part of Jesus or other people (Balz and Schneider, 1990). "Were not ten cleansed" indicates that Jesus was expecting gratitude from the ten lepers. ἐκαθαρίσθησαν (ekatharisthesan) is a Greek word derived from the word καθαρίζω (katharizo), which literally means to cleanse, purify, make clean from physical stains. Reiling and Swellengreble (1971) argue that oil δέκα (oi deka), "the ten" is being viewed as a class in its entirety, οἱ δὲ ἐννέα τοῦ; (oi de enneapjou?). "Where are the nine? When introducing a question, such as "Is that truly true?", the weight of the question might be highlighted. "Can it really be true that.....?" It is obvious according to Brizo (2022) that Jesus was not happy because only one of the ten cleansed lepers came back to express gratitude. He further stated that there must have been an argument because it is hard to understand that without revealing his purposes, the Samaritan had suddenly left the group to come back to Jesus. The possibility is that he must have asked the nine to return with

him, but they did not agree. Unhappiness seems to have been the controlling emotion as Jesus contemplated the lack of gratitude of the rest nine lepers or it be that they waited for their healings to be real before coming to show gratitude (Coffman, 1999).

ἐκαθαρίσθησαν (Ekatharisthesan) means “were cleansed”. It is a verb, aorist passive indicative, third person plural. Nicoll (2023) asserts that Jesus was asking a question that needed an affirmative answer. He ordinarily desired explanation of the lack of expression of gratitude from the nine lepers, ten of them were cleansed. Οὐχ (ouch) εὐρέθησαν (Eurethesan) is verb aorist passive indicative, third person plural, meaning “they were not found”. This is best taken as another question – that the rest nine were nowhere to be found. Lack of gratitude was the crux of the matter with regard to the nine lepers. According to Blight (2008), the phrase “was no found to return” is meant, were there not found, having turned back, “were not any of them found to return” were no one found who would return”, cannot be that none has been found to come back. This is best seen as a question, but the structure is better taken as a statement, ‘they have not been found returning’. The verb does not refer to a search rather, it is a substitution for “to be”.

ὁ ἄλλογενής: Foreigner in classics, it means an alien. Myallis (2022) opines that this term is used only once in New Testament, which literally means “other genes”. It means a non – Israelite. This foreigner is especially grateful. Hembekides (2020) remarks that Luke, the writer of this gospel was also a foreigner, from a Gentile environment. The fountain of the gratitude that welled up from him was the flame that kindled this story. They were not all Jews, one of them was a Samaritan and the disease broke the hostility and chauvinism. Jesus therefore singled out this grateful Samaritan. It was not his ethnicity, class or race, his aim was to draw attention on the need for gratitude (Hembekides, 2020). The lack of gratitude by the other healed lepers was a clear demonstration of the rejection of Jesus’ ministry by the Jewish nation. He expected thanks from the nine lepers who were Jews.

4. Characteristics of Ingratitude

Not Being Thoughtful: The nine cleansed lepers that refused to thank God were not thoughtful. For Hastings (2022), it did not occur to them that they owed everything to Jesus. They had the feeling that God had been kind to them. If any of them was asked to recall how they were healed of leprosy, he would

have said that they were walking along the way when suddenly they realized that they were healed. They might have told the story that it was as a result of their own good fortune that they were cured. Or possibly as an instance of God's inherent kindness working in people's lives. They did not think to give God thanks. Walton (2022) buttresses that sadness seemed to have taken charge over the emotion of Jesus when he considered the ingratitude of man. To him, why would the nine be so thoughtless and not grateful of God's favours? What could have made the nine not to come back to thank God? Could it be because they wanted to wait and the result of their going to see the Priests? They begged Jesus to heal them; he did, but did not return to thank him. This ingratitude by the nine cleansed lepers was a slight to God.

Pride: This is another possible reason why the nine cleansed lepers were ungrateful. They were haughty, but the Samaritan returned to worship God because he humbled and regarded himself as a stranger. He was not ashamed to express gratitude because his heart had been humbled. The other nine probably Jews were proud. This finding agreed with numerous other accusations against the Jews during the ministry of Jesus. As a proof, Jesus pointed this out in the parable of the tenants in John 20:9 – 19, how the people of God have rejected his choice son, Jesus. It is also reflected in John 1:11 – 12 “He came to his own home, and his own people received him not”. Spurgeon (2022) argues that Jesus came to his own people, the Jews but they did not accept him. Even though he kept on performing miracles in their midst which no other prophets have done. This was a serious act of ingratitude as a result of their pride. Gratitude requires humility to operate. The Jewish were chosen people among other nations of the earth. And when Jesus appeared among them, they were much better regarded. On this premise, they ought to have received him with great honour. Instead they did not accept him. This was a high level of national ingratitude. The nine lepers were recipients of his healing power, yet they refused to express gratitude to him.

Feeling of Entitlement: The Jewish people during Jesus’ days were ready to receive anything that came their way as a matter of right, not privilege. They sometimes marveled that they did not get more being the special people of God as descendants of Abraham. Any blessing a Jew received was considered as one of the “sure mercies of David”. If Jesus was the Messiah, the Jews had every reason to expect the demonstration of his power, even to heal lepers. The Samaritan leper felt a sense of

undeserving; hence he showed a profound sense of gratitude. Shenalyn (2023) supports this by stating that right from their patriarch Abraham, the Jewish nation had been the object of God's treasured possession. His special care for them led Him to protect and made them to flourish. Their ingratitude to God made His heart to break. They were filled with religious pride. The nine lepers who were not grateful like their fellow Jews allowed spiritual pride to take hold of them, and therefore robbed them of their valuable gifts.

Urijah (2011) opines that the nine may have thought within themselves that they merited the healing. Therefore why should they be grateful for what they rightfully deserved? Their feeling of entitlement made them not to come back to give praise to God. The root of gratitude is humility and it is one of the principles of gratitude. This feelings leads to self-importance, self-admiration, self-righteousness, not having regard to authority. The nine cleansed lepers found their hearts rooted in pride because they felt that they were entitled to the healing, the reason being that they were Jews. Ferris (2018) argues that the disciples frequently engaged in feeling of entitlement-based conflict, noting that on one occasion they were debating who was the greatest. They had extreme importance that they began to ask Jesus the question.

Taking God's Blessings for granted: The nine cleansed lepers may have taken God's healing for granted. It was so easy for them that they refused to come back to express gratitude. Because of this attitude displayed by the nine cleansed lepers, they wanted to take the credit for the very mercy of God they encountered. For Emmons (2013), gratitude is the acknowledgement that life owes us nothing and all the good we have are as a result of God's favour and they are gifts. Realizing that everything good in this world is totally a gift is a fundamental truth of reality. Ungrateful persons have the tendency of taking things for granted. They tend to be critical and judgmental. Being in this condition can be detrimental on the person well – being. Probably, the nine were asking for more from Jesus, hence they were not interested for the healing they had. Because they took the healing for granted, they were not interested in the feelings of Jesus who made them to be healed. May be, they were not ready to interact with Jesus again. Though Jesus did not deny them his healing, even though they were not grateful to him, but he made it a point of duty of noticing their lack of gratitude. The Ingratitude of the other nine lepers attracted severe rebuke in the face of God's mercy.

Thus verses 17 and 18 reflect a picture of prevalent ingratitude in our contemporary society.

Unbelief: Ingratitude is a mark of unbelief. Paul the Apostles brought this out clearly in Romans 1:21 "For though they knew God they did not honour him as God or give thanks to him, but they became futile in their thinking and their senseless minds were darkened". Ingratitude enables people not to believe and obey God. The Israelites murmured against God in the wilderness. They did not believe in God, therefore they refused to express gratitude to him. God delivered them from bondage in Egypt, divided the Red Sea for them to pass on dry ground. Still, in the wake of this overwhelming benevolence of God, they still complained against God, refusing to enter the Promised Land. "And the LORD said to Moses, How long will this people despise me? And how long will they not believe in me, in spite of all the signs which I have wrought among them? (Numbers 14:11, RSV). Unbelief shut the people of Israel out of the Promised Land. They were not ready to trust God (Camarin, 2010).

5. Pentecostalism in Ika Land

Ika is one of the ethnic groups in Delta State of Nigeria. They occupy an area of approximately 564 square kilometres. The Ika live in thirteen separate clans in North East and South Areas of Delta North Senatorial District. They are Akumazi, Idumuesah, Igbo, Mbiri, Otolokpo, Umunede, Owerre - Olubor, Oza -Nogogo, Ute - Ogbeje, Ute - Okpu, Abavo and Agbor clans. The Igbo and Edo people had a great influence in the culture of Ika people. The Igbo influence is clear, which may be as a result of strong missionary and commercial role of Igbo people whose presence and impact were seriously and deeply felt among Ndiowa (part of Ika people). The Edo influence had to do with the language and culture. For example, Idumu (Owa), Idumwun (Bini). Edo influence is also quite pronounced in the area of festivals (Iguen) and titles such as Iyase, Adolor and also with the use of certain concepts with important social and metaphysical connotations (Echenim, 2009). According to Mokwuye (2017), the Ika community is a location with a homogenous population that strongly shares or respects core values connected to place, customs, and ethics.

Pentecostalism came into Ika land as a result of the activities of the Scripture Union. According to Okobia (2022), the Scripture Union group that came from Ibadan organized a crusade that heralded great revival in Ika Land 1970. Those that gave their lives to Jesus in that crusade started a Bible study group at Anglican Primary School, now Orogodo Primary

School, Agbor. As people came, they were engaged in Bible Study and prayers. The revival broke off from Scripture Union and gave birth to other Pentecostal Churches in Ika land. The modern Pentecostal Churches in Nigeria, and especially those in Ika, took their cues from American Pentecostalism. The Ministry of Reconciliation Evangelism Explosion is one of such Pentecostal Churches.

The Church was founded by Revd. Emmanuel Mgbejume in 1993 from Owa – Alizomor in Ika Land. The Church is situated at 121, Tete Street, Boji Boji Owa in Ika North East Local Government Area of Delta State. Revd. Mgbejume heard the call to leave the Baptist Church; he was a resident Pastor with the Nigerian Baptist Convention in Owa Alizomor. He had the first service at his sitting room in a cool evening on 9th of October, 1993. From there, the Church moved to a Bamboo booth. Revd. Mgbejume had his first crusade in 1994 at Ngala Primary School, Boji Boji Owa where many people gave their lives to Jesus.

Prophet Baba Moses held a colorful foundation-laying ceremony in 1996 to begin construction of a church building. In 1997, the Church moved from the founder's house to the permanent site where it is presently. Two branches of the Church were given birth to in 1997, Abavo and Alibuba respectively. In 1998, the church had its ordination service where Pastor Uche Meniwan and Pastor Jude Owabor were ordained. The church continued with more branches being opened (Interview with Elvis Mgbejume).

On the 28th of November, 2019, Revd. Mgbejume handed over the church to Pastor Elvis Chukumeke Mgbejume, one of his sons to continue with the vision, which is winning souls for Jesus Christ. The church has an Executive Committee, which is composed of the President, Vice President, Board of Trustees, the General Secretary, the Treasurer, the Financial Secretary, the Auditors, the Missionary Advisers and Welfare Committee.

6. Ingratitude in the Ministry of Reconciliation Evangelism Explosion

Reverend Lucky Agbotin (interview), a clergy man with the above named church defines Ingratitude as lack of appreciation or thanks for something done or helpful act. It is also forgetfulness for kindness received. For him, when we forget to express gratitude for all the blessings in our lives, we became weighted down by our problems. He went further to explain that Ingratitude causes anxiety and promotes unhealthy relationships. The impact of ingratitude in

the church includes conflicts among members, disloyalty in the congregation and disunity. He opined that greed, seeking personal interest and failure to acknowledge someone as provider are some of the factors that can promote ingratitude in the church. He observed that ingratitude hinders evangelical work of the church in the sense that they will not be unity in the church. Lack of co-operation thrives in an atmosphere of ingratitude. He tried in his interview to proffer ways that un-thankfulness in the church can be handled. These include not taking things for granted, not to murmur or complain and refusing to be thoughtless.

Lucky Okoh (Interview) corroborated the above explanation by stating that ingratitude is lack of thanks. She mentioned pride and envy as factors that promote ingratitude in the church. For her, the way to overcome this is for us to count our blessings and shun complaint. Goodluck (Interview, 2023) avowed that Ingratitude is linked to human will and self-worship. He added that ingratitude can hinder evangelistic mission of the church because ingratitude is ultimately a rejection of God, a denunciation of his sovereignty and also a denial of his goodness. To overcome ingratitude, the golden rule must be put in place which says "So whatever you wish that men would do to you, do so to them, for this is the law and the prophets" (Matt. 7:12, RSV). He added that ingratitude takes the centre stage in church when there is bitterness, complaint, discontentment and envy. As a result of all these, the church can no longer fulfill her mandate of winning souls to Christ.

Victoria Kaliku (Interview) opined that ingratitude hinders evangelistic mission in the church. We can overcome ingratitude by being appreciative for what we have received from God and people, no matter how little it is. Victory Kaliku (Interview) further argued that Ingratitude can hinder our relationship with God and one another. In overcoming ingratitude in the church in particular and the society in general, Christians should always practice thanksgiving and be grateful, even in little things. Rev. Felix Ijeamaka (Interview), remarks that ingratitude has adverse effect on human relationship and also causes a crack in the strength of love amongst members of the church. He therefore proffered solution that ingratitude can be overcome by deliberately living a lifestyle of appreciation

Apostle Elvis Mgbejume, the General Overseer (Interview), remarked that ingratitude is the inability to reciprocate gesture done to you as a result of pride, or self-gratification. He therefore encouraged that

Christians should always speak of good done towards them no matter how little it may be. Humility and simplicity can foster gratitude among members in the church, he added. According to him ingratitude can hinder evangelistic mission and growth of the church.

Mgbejume (Interview) shared his experience of a display of ingratitude to him and his church he pastors. He taught a particular boy who used to be a member of his church how to play musical instruments. The ones he could not teach him, he employed the services of a professional in that area to teach him. The boy was now skilled in keyboard, drums, violin, saxophone and voice training. He used the church instrument to learn them. At the time the boy was able to operate the musical instruments, he left the church on the grounds that another church, and very close to the church he learnt the musical instrument has invited him to become their music director. The church promised to put him on a monthly stipend. The painful part of the experience of the General Overseer was that he left the church on the week of their Annual Thanksgiving service without notifying the pastor that he was leaving so that arrangement could be made for another person to play the keyboard for the Annual Thanksgiving. As a result, more than half of the choir members refused to attend the service because nobody to play the musical instruments. The attitude of ingratitude exhibited by this young man negatively affected the church.

Ijebor (Interview) avowed that ingratitude brings discouragement in doing God's work. He added that when an individual, family or church is not grateful to God, his presence cannot be evident in such a life. He gave a practical experience that anytime he is not grateful for any gesture done to him, he sees himself operating under a closed heaven.

Egun (Interview) noted that ingratitude is the unwillingness to pay back good done to someone. He opined that the Bible records that ten lepers were healed by Jesus, but only one came back to appreciate the good deeds. He added that an ingrate cannot relate well with people, he lives in negativity. He gave an experience he witnessed in the church. People were prayed for by the founder of the Rev. E. O. C Mgbejume who had different challenges. They were delivered after the prayers but did not come back to express gratitude to God.

Ihiator (Interview) observed that there is interaction between ingratitude and human relationship, in the senses that ingratitude exposes the basic vices inherent in people which include pride, blackmail, hatred, feeling of entitlement and self-centeredness.

Ingratitude further brings out the individual differences in man across geographical boundaries. He shared his personal experience of ingratitude displayed to him. According to him, in 1992, he was a Government Establishment in Asaba, when he was the officer in charge of recruitment in the State Civil Service. There was this young man who was a graduate looking for job. After the screening interview, the man was not appointed. He therefore decided to help the young man through a commissioner. When the supplementary list was released, he was still not appointed. He went further to meet his immediate boss, who now assisted him and eventually the young graduate was employed as Administrative Officer II, grade level 08. He rose to the rank of a Director, grade level 17 and retired.

This same officer that was helped refused to assist the man that gave him helping hand to employ another person of lower cadre. He kept telling him that it was different to render assistance. This was a high level of ingratitude, using evil to pay good.

7. Contextualizing Lessons from Luke 17:12-18

Ingratitude is a human malady, even among members in Pentecostal churches. It is a basic fact of life in human interactions which cannot be totally eliminated. This is against the backdrop that in human relationships there are diversities of behaviours with different opinions. Ingratitude has the propensity to fuel dissatisfaction and negatively impact our relationships in the sense that it can sever our interactions with families, friends and colleagues. It aids in promoting an attitude of entitlement. Without the habit of showing thankfulness, it then follows that whatever we get in life, we are entitled to it.

Ingratitude has negative consequences as revealed in the story of the nine lepers (Luke 17:17 – 18). They displayed the attitude of ingratitude to Jesus which he vehemently frowned at. As a result of this, they were only healed bodily but not saved. Jesus established the church with the intention of using thankfulness to bring people and God together. The church was established with the intention of expressing thanks to God. Therefore, it is important for the church, which serves as a symbol of what Christ stood for by giving thanks to God, to be receptive and proactive in expressing thankfulness. This will help to stem the tide of ingratitude in our churches in particular and the society at large. It is imperative therefore, for church leaders to confront any act of ingratitude in their congregations. People that are appreciated are

more goals oriented, socially engaged and perform better in life.

8. Findings

The Christians in this church fail to embody gratitude fully. It implies a lack of consistent joy, love and happiness among the members, which is attributed to a deficiency in expressing gratitude.

They fall short in regularly emphasizing the importance of gratitude based on biblical teachings. It implies potential gap in spiritual education of gratitude among the church members.

It reveals a missed opportunity to utilize gratitude as a powerful tool for sharing the Christian faith and attracting others to the church.

It shows that ingratitude can affect the growth of any organization negatively.

9. Conclusion and Recommendations

The study concludes by affirming the importance of gratitude in the lives of Christians. Jesus Christ condemned the ingratitude of the nine Jewish lepers. It is clear that Jesus expected gratitude from anyone who receives favors from fellow human beings. From the study of the role of ingratitude in the lives of the members of The Ministry of Reconciliation Evangelism Explosion, it is clear that the spirit of ingratitude among Christians is a retarding factor in the evangelistic mission of the church.

The conclusion, the paper recommends the following:

- Biblical teaching on the unhealthy application of ingratitude to the Pentecostal churches in Ika in particular and the Christian communities in general should be emphasized.
- Negative attitudes of ingratitude should be discouraged in the society.
- Church leaders and members should be made to understand that gratitude is a moral cardinal principle in the teaching of Jesus Christ.
- The Church and the Nigerian society should be made to know that ingratitude inhibits positive inter-personal and community relationships.

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Interviews

Name	Age	Sex	Place	Occupation	Date
Mgbejume Elvis	35	M	Owa, Ika	Clergy	15/5/23
Nkechi Okoh	23	F	Owa, Ika	Schooling	15/5/23
Ifeoma Kaliku	43	F	Owa, Ika	Trading	15/5/23
Rev. Lucky Agbatia M.	34	M	Owa, Ika	Clergy	15/5/23
Pastor Goodluck Samuel	37	M	Owa, Ika	Clergy	15/5/23
Victory Kaliku	23	F	Owa, Ika	Schooling	15/5/23
Rev. Felix Ijeamaka	41	M	Owa, Ika	Clergy	15/5/23
Ijebor Favour	45	M	Owa, Ika	Business	15/8/23
Egun Ephraim	76	M	Owa, Ika	Pensioner	15/8/23
Ihator. D. S.	65	M	Owa, Ika	Rtd. Public Officer	15/8/23