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Aim & Scope of the Journal

The journal of African and Global Issues Quarterly (AGIQ) would re-engage the multiple lingering challenges within the African discourse with a view to adopting most appropriates means of addressing Africa's growing challenges within regional and global contexts. Hence, the journal would achieve these goals by providing a robust platform for intellectual engagement and stimulation among scholars, academicians, diplomats, security experts, administrators, and even policy makers.

The journal of African and Global Issues Quarterly (AGIQ) is a double -blind review and open access journal with a focus on publishing original research articles, scientific and theoretical research, conceptual and empirical works, case studies, comparative studies, field work reports and review which touches around the thematic field of core African emerging issues within the context of global interaction. The journal would encourage submission of articles across the sub discipline of Political Science, International Relations, Security Studies, Economics, Geography, History and Diplomatic Studies, Sociology, Psychology, Peace and Conflict Studies, and History.

Issues

Manuscript submission would be on a rolling basis, and peer reviewed articles reflecting tabular forms of responses to reviewer comments and resubmitted to AGIQ would be published frequently three times a year (April, August and December). The journal will be abstracted and indexed in well refereed and most authoritative academic databases such as EBSCO, ProQuest and Sabinet and accredited by IBSS and Scopus.

Editorial Note

In contemporary times, most African nations have been confronted with a series of political, economic, and social cultural challenges with no end in sight. Despite a series of efforts to address this dilemma, emerging social problems have resurfaced. It is against this background that this special issue attempts to provide answers or solutions to some of the emerging problems across Africa. For instance, Nwadike Gerald, Chimezie, & Kelechi Johnmary Ani examined financial inclusion and Nigerian economic growth for the period 1980-2022. Specifically, the study considered the following three objectives: to examine the significant impact of financial inclusion on Nigerian economic growth, to evaluate the impact of financial inclusion on poverty reduction in Nigeria, and to ascertain the impact of financial inclusion on savings growth in the Nigerian economy. In the study titled "Igbo Diaspora Susceptibility to Western Cultural Values,"

On their part, Boniface Ifeanyi Orji & Kelechi Johnmary Ani focused on the high level of assimilation into which Westernisation has led to cultural marginalisation, a situation that often presents a real dilemma to Igbo in the Diaspora. In this regard, they sparked some curiosity and paradoxes on why the Igbo, who so much cherished their culture at home, now neglect the same culture abroad. Specifically, their paper examined the challenges that the Igbo Diaspora faces in the face of two conflicting cultures (Igbo culture and Western culture), especially in raising their children born in the Diaspora in traditional Igbo cultural values despite the ubiquity of the Western socialisation process. While Annah Moyo & Wonder Muchabaiwa, in a paper titled "Achieving Gender Equality and Women Leadership in a Selected State University in Zimbabwe: A Feminist Capabilities Approach," explored the lived experiences and perspectives of female leaders and prospective female leaders in Zimbabwean state universities. The study adopted the feminist capability lens to illuminate the complexities and nuances of challenges that obstruct female academics from assuming leadership positions.

Furthermore, in "The Place of Digital Literacy in Resuscitating Nigerian Education Towards Vocational, Entrepreneurial, and Professional Transformation," Ijeoma Genevieve Ani Kelechi deployed qualitative data that were collected from secondary literature and Bandura's theory of social learning in explaining how digital literacy could be applied to vocational and entrepreneurial education to attained transformations in the professional workplace. Lastly, Winniefridah et al., in their article titled "Inequalities, Online Teaching, and Quality Education, "Excluding the Excluded" in Institutions of Higher Learning in Zimbabwe: How To Build Inclusive Institutions?" explores the intersection of gender, socioeconomic status, disability, as well as online learning, and how this impacted vulnerable learners' access to quality education during the pandemic and its aftermath.

Undoubtedly, the various articles in this special issue that have been devoted to addressing these emerging issues would provide critical insights in understanding, comprehending, and acknowledging the best possible ways of addressing future problems and challenges.

Nicholas Idris ERAMEH, PhD

CONTENTS

EFFECTS OF FINANCIAL INCLUSION ON POVERTY REDUCTION, SAVINGS AND NIGERIA ECONOMIC GROWTH: 1980 -2022

Onyebuchi Godwin Ogbonna
Department of Economics
Chukwuemeka Odumegwu Ojukwu University
Igbariam Campus
cheerogb@gmail.com

Nwadike Gerald, Chimezie,
Department Of Economics,
Faculty Of Social Sciences,
Imo State University, Owerri
Nigeria
nwadikegerald@gmail.com,08063289585

Kelechi Johnmary Ani
International Relations and Diplomacy
Division of Humanities and Social Sciences
School of Arts and Sciences\
University of the Gambia
kjani@utg.edu.gm

Abstract

This study examined the financial inclusion and Nigerian economic growth for the period 1980-2022. The study considered the following three objectives; to examine the significant impact of financial inclusion on the Nigerian economic growth, evaluate the impact of financial inclusion on poverty reduction in Nigeria and to ascertain the impact of financial inclusion no savings growth in Nigerian economy. Secondary time series data were used to carry out the empirical analysis. The study employed the aid of vector error correction model (VECM) approach, Augmented Dickey-Fuller (ADF) and Phillips-Perron tests, Co-integration Test and ECM. Based on the above econometric and statistic techniques conducted, it was observed that financial inclusion has significant positive impact on the Nigerian economic growth. Our results indicated that financial inclusion has significant positive impacts on poverty reduction in Nigeria. Furthermore, the result reported that financial inclusion has significant positive impact on the Nigerian savings growth within the study period (1980-2022). These empirical results do support that; One percent decrease in the interest rate (ITR), inflation rate (IFR) and exchange rate (EXR) at lag (-2) will lead to [31% (ITR)-2), 53%(IFR)-2), and 8%(EXR)-2)] increases on the aggregate saving (ASE) Nigeria economy. One percent increase in the financial inclusion proxy by; deposit from the rural areas (DRA), loan to rural areas (LRA), account owners of any type (AA) and electronic money

banking/payment system (EMB) at lag (-2) will lead to [38%(DRA)-2), 29%(LRA)-2), 59%(AA)-2) and 03%(EMB)-2)] increases on Per capita income (PCI) respectively in Nigeria. Based on these findings, the researcher recommends that; Nigeria governments should fund financial inclusion programs preferring financial literacy as a national strategy for financial inclusion because it is relatively cheaper to educate the population about financial management and the benefits of using formal financial services. Stable electricity supply to drive the infrastructural facilities provided by banks, telecommunication companies and other related service providers such availability and affordability of financial services in Nigerian monetary authority (CBN) should increase the number of formal account ownership by building up trust securities in financial institutions operation in Nigeria, remove all obstacles for account ownership such as income and age bracket bias, distance in location and education discrimination in the delivery and use of financial services.

Keywords: financial inclusion, poverty reduction, savings and Nigeria economic growth.

Introduction

The establishment of a financial system has become important in order to enhance the efficient allocation of financial resources, promote capital accumulation, improve investor engagement in the financial market, and ultimately contribute to economic growth (Central Bank of Nigeria, The Nigerian Financial System, 2017). It is widely recognised that the financial system encompasses all financial intermediaries operating within the financial sector of an economy. This is based on the premise that the real economy has three key economic entities: enterprises, households, and other entities involved in the production of goods and services. These commodities and services can be either consumed immediately or utilised to generate additional output in the future. The conceptualization of economic activity as real sectors stems from the use of tangible resources in the production of goods and services that are afterwards consumed by individuals. Conversely, the financial system primarily focuses on facilitating the transfer of funds between entities engaged in surplus and deficit spending, enabling individuals to engage in purchasing activities, and facilitating the exchange of ownership of productive resources. The existing body of economic literature has demonstrated that the financial system plays a crucial role in facilitating economic growth and development, productive activities, financial intermediation, capital formation, and the effective management of the payments system (Sanusi, 2011). Therefore, this prompts us to consider the nature and operations of a comprehensive financial system. Financial inclusion refers to the provision of accessible and cost-effective financial products and services that cater to the need of individuals and enterprises.

Financial inclusion in Nigeria has reached an alarming rate with Nigeria being reputed for being one of the worlds leading financial exclusion examples. A great number of the output of the Nigerian economy is outside the financial system and the economic agents are still struggling to make payments from the financial system. The past forty years has seen several cases of financial exclusion which has attracted a significant concern from the world, most especially the International Monetary Fund and the World Bank (Kama & Adigun, 2013).

The existing body of literature examining the relationship between finance inclusion and poverty has demonstrated that finance plays a crucial role in fostering economic growth. However, it is important to note, as highlighted by Beck, Demirgüç-Kunt and Levine (2007), that the observed positive impact of finance growth does not automatically imply that finance directly alleviates poverty. Instead, it is essential to investigate whether financial inclusion has a significant effect on reducing poverty and positively influencing economic conditions. Economic growth is often accompanied with unequal income distributions, which in turn can lead to poverty. However, it is worth noting that economic growth can also be linked to declining inequality and reduced poverty rates. In the event that financial mechanisms, facilitated by economic growth, result in an augmentation of wealth for affluent individuals while exacerbating income

inequality, it can be concluded that the impoverished demographic will not benefit from such financial activities. On the other hand, the field of finance has the potential to assist individuals in poverty by fostering inclusivity and aiding them in navigating the obstacles related to investment (Awaworyi & Vijaya, 2020).

Recently, the Central Bank of Nigeria has stepped up its efforts to get banks to invest significantly in more cost-effective ways through the granting of operating license to branchless channels, including; Automated Teller Machine (ATM) and Point-of-Service (POS) devices. There were 22,500 installed Automated Teller Machine (ATM) by the end of 2022, or 28 Automated Teller Machine (ATMs) for every 100,000 adults. In contrast, Indonesia had 13 Automated Teller Machine (ATMs) for every 100,000 adults, Argentina had 42 Automated Teller Machine (ATMs)for every 100,000 adults, Brazil had 120 Automated Teller Machine (ATMs)machines for every 100,000 adults, and Malaysia had 56 Automated Teller Machine (ATMs) per 100,000 adults. South Africa had an average of 59 Automated Teller Machine (ATMs) for every 100,000 adults. Nigeria has 4 Automated Teller Machine (ATMs) for every 100,000 adults making it top only to countries like Bangladesh and Pakistan. By the end of 2022, there were 1,115,272 Automated Teller Machine (ATMs) s operational in Nigeria. The CBN Financial Stability Report (2022) noted that the implication of the latest

development is that there are 10 POSs for every 98 individuals in Nigeria, as opposed to an average of 13 for every 100,000 people in Nigeria in 2010. The number of deployed and functional Point of Sale (POS) devices climbed from 5,300 in June 2010 to 54,594 as of September 2020, according to an assessment of the project's progress in Lagos and Abuja. Between the end of 2021 and the end of 2022, this number increased to over 400,000; the number of deployed POS that are regularly used did not increase at the same rate because of its ability to drive economic growth and sustainability (Central Bank of Nigeria (CBN), 2022).

Financial inclusion in Nigeria is characterized by both low levels and significant disparities. Specifically, surveys indicate that approximately 80 percent of the Nigerian population remains unbanked thereby excluded from the realm of financial inclusion. The primary factors contributing to this exclusion are the lack of resources and a stable income, as reported by reputable sources such as the World Bank Group (2021). Another challenge that arises is the absence of sufficient financial literacy. According to a recent survey conducted, a development institution based in the United Kingdom, it was discovered that a significant proportion of adults in Nigeria possess limited financial literacy and capability. This is particularly evident in the area of financial planning, where approximately two-thirds of respondents demonstrate a low-to-medium ability to effectively manage

their spending and mitigate risks.

The Central Bank of Nigeria (CBN) has implemented various measures to promote financial literacy and inclusion in the country. One such measure is the "national peer group programme for financial inclusion of youths," which aims to educate young individuals about financial matters. Additionally, the CBN has focused on enhancing the financial capabilities of consumers and civil servants. In order to reach rural communities and underserved segments of the population, the CBN has embraced digital technology. This approach takes advantage of the widespread availability of mobile phones in Nigeria, with approximately 80 percent of adults owning one. By leveraging this technology, the CBN is able to provide financial services to these communities at a lower cost compared to traditional methods such as physical money transfers. Furthermore, the adoption of digital technology has facilitated economic growth in Nigeria. It has enabled the development of new business models, investment in digital infrastructure, and the expansion of e-commerce. These initiatives are outlined in the (CBN's Monetary Policy Operation for 2022). Additionally, a Mckinsey Global Institute report (2022) revealed that Digital Financial Inclusion could potentially boost Nigeria's GDP by 12.4% by 2025, mobilize new deposits worth about USD 36 million, generate about 3 million new jobs, lower government leakages by USD 2 billion annually, and include an additional 46

million people. In light of this, the researcher sets out to look at how financial inclusion has affected Nigerian aggregate savings, poverty reduction and economic growth from 1980 to 2022 with the following objective; to examine the significant impact of financial inclusion on the Nigerian aggregate savings, to evaluate the impact of financial inclusion on poverty reduction in Nigeria and to ascertain the significant impact of financial inclusion on Nigerian economic growth.

Theoretical literature review
The formal financial system is accessible to all adult individuals throughout the economy. The provision of a financial service to one individual does not have any negative impact on the quality of financial services offered to another person, as the availability of financial services to one person does not affect their availability to others. This perspective argues that the concept of financial inclusion is beneficial for the entire population, ensuring that no individuals are excluded or left behind. All people and small organisations that establish a formal bank account are eligible to receive complimentary debit cards and enjoy the privilege of using ATMs without incurring any fees, aligning with the principle of public benefit. Moreover, it is important to note that financial service providers, such as financial institutions, bear the responsibility of funding the expenses associated with offering financial services, which can be considered as a sunk cost in the

context of sustaining a banking enterprise (Ozili, 2018).

Furthermore, it is possible for the government to offer financial institutions subsidies as a means to assist them in managing any expenses related to the provision of complimentary financial services. Moreover, it is possible for a government to offer a singular monetary deposit into the bank accounts of all its citizens, contingent upon the requirement of possessing a formal account. There are two advantages to this. According to the public good hypothesis, financial inclusion is posited to yield benefits for individuals across all positions and income levels. Hence, financial inclusion confers advantages upon individuals of varying socioeconomic backgrounds, encompassing the privileged and the underprivileged, as well as those who are included inside the system and those who are excluded from it. Furthermore, the pursuit of financial inclusion, which is of utmost importance for the welfare of the general populace, necessitates the use of public money rather than private funding. This preference arises due to the fact that private investors would expect a higher return on their investment, hence rendering the usage of private funds for financial inclusion initiatives prohibitively expensive. Moreover, the concept of public benefit offers an opportunity for governmental entities to take charge of advancing financial inclusion. Finally, as stated by Ozili (2018), the public good theory of financial inclusion fails

to recognise private sector actors as proponents of this endeavour.

There are four notable limitations associated with the public good theory. Firstly, by refraining from examining the fundamental causes of financial exclusion, one can approach financial inclusion as a public good. Furthermore, the allocation of public financing towards financial inclusion as a public good may result in insufficient resources being allocated to other significant public programmes, so impeding their ability to acquire the necessary support. Furthermore, financial inclusion can be considered a "public good" that is provided at no cost to anyone who utilise financial services, aligning with the principles of the public good concept. The long-term sustainability of financial inclusion may be compromised when it is perceived as a public benefit, despite being sponsored by public funds and provided to end users free of charge. Achieving financial inclusion as a public good in developing and emerging economies poses challenges due to the predominant reliance on private investments to finance financial institutions and banks in these regions (Ozili, 2018). Consequently, the applicability of the public benefit idea of financial inclusion may be diminished in these particular places.

Neoclassical theory places the government in a supporting position and concentrates on economic agents. According to this theory, businesses and consumers are the two main economic actors, and they act in a competitive, self-interested, and well-informed manner. With these presumptions, theory assumes that consumer decisions and/or bad government policies are to blame for financial exclusion. According to this view, the market is the only solution to all economic ills. According to the argument made by Boyce (2000), a deregulated economy has the property of heading toward the Pareto optimal whereas government intervention will produce imbalances and obstruct the path of progress. Economic expenses that result in access restrictions may be the reason why consumers choose to use informal financial services instead of mainstream financial services. At this time, there is a contradiction because although deregulation looks to improve financial inclusion, financial exclusion appears to have emerged as an issue that is becoming worse. The claim that financial inclusion rather than financial exclusion should have been the outcome of deregulation is based on the idea that market-driven policies invariably result in the creation of financial goods (Chavan, 2008).

The information asymmetries that are at the foundation of market distortions in the microeconomy are highlighted by new-keynesian analysis. Credit restrictions are discussed in connection to financial inclusion and exclusion. The absence of accurate information on the potential borrower and lender is one factor contributing to financial exclusion. Stiglitz & Weiss (1981) claim that the knowledge asymmetry

in the system allows creditors to act in a way that lowers interest rates and restricts lending in order to steer clear of riskier borrowers. This worrisome issue furthers the disparity in wealth and income. Financial exclusion rises when economic disparities widen because there is no longer a unified loan market; instead, it is fragmented (Dymski, 2005).

The relationship between Financial Inclusion (FI) and poverty is conveyed through both direct and indirect pathways when examined within the context of financial development. Financial Inclusion (FI) plays a pivotal role in poverty reduction by facilitating enhanced accessibility to credit, insurance, and various other financial services. These resources cater to the fulfillment of everyday transactional requirements, including consumption, investment, and overall economic advancement. Scholars have proposed that the augmentation of Financial Inclusion (FI) possesses the potential to raise the entrepreneurial prospects of beneficiaries, hence leading to improvements in their income, consumption patterns, level of autonomy, and involvement in familial and communal decision-making processes. Financial Inclusion (FI) enhances the productive assets of individuals living in poverty by facilitating their ability to allocate resources towards the acquisition of novel technologies, education, and healthcare. Investments made by individuals with limited financial resources have the potential to enhance their ability to attain sustainable livelihoods. The indirect channel functions by employing finance-growth stimulating theories that have their origins in the works of Schumpeter (1934) and McKinnon (1973) (Isaac Koomson, Renato A Villano, & David Hadley, 2020).

Umozurike, Ganiyat and Chiadikobi (2023) examined the effects of financial inclusion on economic growth in Nigeria. Banking services were introduced in rural areas in 1977, with subsequent efforts in the 1990s and early 2000s to support the establishment of community and micro-finance banks. The monetary authorities and government have also implemented policies during this period to enhance financial inclusion. The present study draws conclusions regarding the impact of financial inclusion on economic growth in Nigeria. It has been determined that in the short-term, there exists a positive and statistically significant effect of commercial bank loans on rural areas. Put simply, if there is a rise in commercial bank loans to rural areas, it would result in a 1.4 percent increase in economic growth, assuming all other factors remain constant. The observed outcome exhibits a comparatively higher value at lag one, followed by a decrease in value at lag two. However, over a prolonged period of time, the estimated coefficient exhibits a negative trend, although it does not reach statistical significance. This observation suggests that the impact of commercial bank loans on economic growth in rural areas may have a negative connotation.

Regarding the automated teller machines (ATMs) in rural areas, the estimated coefficient exhibits a positive effect at the current level and a negative effect at the previous time period (lag one). These effects are found to be statistically significant. While the former exhibits a significance level of 10%, the latter demonstrates a significance level of 5%. Over an extended period of time, the coefficient of automated teller machines (ATM) in rural areas exhibits a positive value of 0.591483. However, this positive relationship lacks statistical significance. This implies that the influence of the ATM in the rural is a short-run phenomenon but not robust. The evaluation of the impact of bank branches in rural areas on economic growth in Nigeria reveals a negative relationship at the current level, but a positive relationship at the lagged levels of one and two.

The obtained results exhibit statistical significance at the one percent level for the level variable. Additionally, for the lag one variable, the statistical significance is observed at the five percent level, while for the lag two variable, the statistical significance is observed at the ten percent level. Over an extended period of time, the outcome exhibits a negative trend; however, it does not reach a level of statistical significance. This implies that the impact of rural bank branches on economic growth in Nigeria is characterised by a combination of positive and negative effects. In a study conducted by Onoh and Longtei (2023), an investigation was undertaken to analyse the effects of financial inclusion on the economic growth of Nigeria during the period spanning from 1990 to 2020. The primary aims of this study are to investigate the influence of financial inclusion on the economic growth of Nigeria and to explore the causal relationship between financial inclusion and economic growth in the country. The study utilised the Ordinary Least Square Method (OLS) regression analysis. The variables included in this study encompass the Gross Domestic Product Growth Rate, the ratio of Broad Money to GDP, the ratio of credit to the private sector to GDP, the Deposits of rural branches of deposit money banks, and the Loans of rural branches of deposit money banks. The data utilised in this study was obtained from the statistical bulletin of the Central Bank of Nigeria. The study's findings indicate that there is a notable correlation between financial inclusion and economic growth in Nigeria.

Appah, Tebepah, and Newstyle (2023) conducted a study on the relationship between digital financial services and the economic growth of Nigeria during the period spanning from 2006 to 2021. The study's specific objectives encompass examining the correlation between automated teller machine services and real gross domestic product, assessing the association between point of sales services and real gross domestic product, ascertaining the connection between mobile banking services and real gross domestic product, and investigating

the relationship between web banking services and real gross domestic product in Nigeria from 2006 to 2021. The research was based on the technology acceptance model (TAM) proposed by Davis (1989). The collection of quarterly secondary data from the Central Bank of Nigeria was conducted using purposive sampling technique. The acquired quarterly data underwent analysis through univariate, bivariate, and multivariate methods. The results obtained from the Vector Error Correction Model (VECM) analysis revealed that the impact of automated teller machine (ATM) services on the real gross domestic product (GDP) in Nigeria is positive but statistically insignificant. On the other hand, point of sales (POS) services was found to have a positive and statistically significant influence on the real GDP in Nigeria. Similarly, mobile banking services were found to have a positive but statistically insignificant impact on the real GDP in Nigeria. Lastly, web banking services were found to have a positive and statistically significant influence on the real GDP in Nigeria. Based on the empirical evidence presented, the study reached the conclusion that digital financial services exert a significant impact on the economic growth of Nigeria.

In their study, Chude and Chude (2022) conducted an investigation into the relationship between financial inclusion and economic growth in Nigeria over the period of 1981 to 2021. The primary objectives of the study were to analyse the influence of total bank loans on economic growth, determine the impact of bank branches on economic growth, evaluate the effect of commercial banks' deposits on economic growth, and assess the impact of automated teller machine services on economic growth in Nigeria. The Ordinary Least Squares (OLS) approach of data analysis was chosen due to its desirable qualities of Best Linear Unbiased Estimators (BLUE). The variables utilised in this study were obtained from the Central Bank of Nigeria Statistical Bulletin. The variables employed in the study encompassed total bank loans, bank branches, commercial banks deposit, and gross fixed capital formation. The study employed the unit root test, co-integration technique, and Error Correction Mechanism. The analysis was conducted using E-View software. The research findings indicate that there is a statistically significant negative relationship between the total bank loan and economic growth in Nigeria. This finding suggests that the provision of bank loans by Total has not been conducive to fostering economic growth in Nigeria. Bank branches in Nigeria have a notable and substantial impact on the country's economic progress. This suggests that the presence of Bank branches has made a substantial contribution to the overall economic growth observed in Nigeria. The presence of deposits in commercial banks has been found to have a favourable and statistically significant impact on the overall economic growth of Nigeria. The findings of this study suggest that there is a favourable relationship between

commercial bank deposits and the overall economic performance of the country.

In a recent study, Olalekan and Oladayo (2022) investigated the correlation between financial inclusion and economic growth in Nigeria. The data utilised in this study was sourced from the bulletins published by the Central Bank of Nigeria, encompassing the time span from 1981 to 2020. Statistical analysis encompasses the application of descriptive statistics, The Johansen Co-Integration Test, Phillips-Perron Unit Root Test, Pairwise Granger Causality, and Error Correction Model are all statistical methods commonly employed in academic research. The Error Correction Model was utilised to estimate the hypotheses that were formulated in accordance with the established objectives. The dependent variable in this study was economic growth, which was measured using Gross Domestic Product. The independent variable, financial inclusion, was approximated by the total bank deposit and total credit disbursement. The results of the Error Correction Model indicate a statistically significant positive association between the total bank deposit and gross domestic product. The link between total credit disbursement and gross domestic product is both negative and statistically negligible. The findings of the study provide empirical support for the finance-led growth hypothesis, so confirming that money plays a significant role as a determinant of economic growth in Nigeria.

Obi (2022) conducted a study to determine the impact of economic growth in Nigeria. The research employed a time series dataset spanning the years 2004 to 2021. The research encompassed the period prior to the inclusion, extending to the duration of its execution. The Ordinary Least Squares (OLS) technique was employed for the purpose of data estimation. Preliminary and post-estimation tests were additionally performed. Despite the relatively brief duration of the implementation of the financial inclusion plan, the ordinary least squares (OLS) analysis yielded results that confirm its favourable impact on economic growth. The study reached the conclusion that financial inclusion serves as a catalyst for economic growth. The study conducted by Olusegun, Evbuomwan, and Belonwu (2021) investigated the relationship between financial inclusion and financial stability in Nigeria. Panel data for the period from 2014Q1 to 2018Q4 was utilised for the analysis. A composite measure, known as the financial inclusion index, was developed to capture the extent of penetration, availability, and utilisation within the financial sector. The research provides empirical data supporting the notion that financial inclusion has a beneficial effect on financial stability. This suggests that an increase in the degree of financial inclusion would result in a corresponding enhancement in financial stability. Regarding

dimension, it was shown that both penetration and availability exhibited a positive correlation with financial stability, whereas consumption demonstrated a negative correlation.

This suggests that policymakers are confronted with the dilemma of prioritising between implementing changes that would enhance financial inclusion, innovation, and financial access, or directing their efforts towards advancing financial stability. Enueshike and Okpebru (2020) conducted a study to investigate the impact of financial inclusion on the economic growth of Nigeria during the period spanning from 2000 to 2018. The estimation of the variables was conducted using archival data obtained from the Central Bank of Nigeria Statistical Bulletin. The regression analysis aimed to examine the relationship between the dependent variable of financial inclusion, which was measured by the contribution of financial institutions to the gross domestic product, and the explanatory variables of loans to small and medium companies and rural bank deposits. Additionally, the control variable of inflation was included in the analysis. The study employed an ex-post facto research approach and conducted diagnostic tests for unit roots and co-integration. The results indicate a mixed co-integration of the variables and a long-term relationship between them. The statistical estimation of the explained and explanatory variables was conducted using auto-regressive distribution lag. The results obtained from Wald tests indicate that the loan

to small and medium enterprises, rural bank deposits, and inflation have a substantial impact on economic growth in Nigeria.

Soyemi, Olowofela, and Yunusa (2020) conducted an assessment to determine the influence of financial inclusion on sustainable development. The study employed both the Error Correction Model (ECM) and the Fully Modified Ordinary Least Square (FMOLS) to analyze the short-run and long-run relationships between the variables. The data for the Human Development Index (HDI) in Nigeria was limited to the period from 2001 to 2016. The analytical findings suggest that there is a short-term causal relationship between several factors, namely the presence of commercial bank branches, demand deposits from rural areas, loans provided to rural areas, and the Human Development Index (HDI). The findings from the long-term analysis indicate that the independent variables, namely loans to rural regions, the number of commercial bank branches, and demand deposits from rural areas, all exhibit a statistically significant positive influence on the Human Development Index (HDI) in Nigeria. The findings of the study indicate that there is a significant relationship between financial inclusion and sustainable development in Nigeria.

The research conducted by Gbalam and Dumani (2020) examines the determinants of financial inclusion in Nigeria. Estimates were generated for the time period spanning from 2000 to

2018 by employing the ordinary least square and error correction methodologies on time series data. Based on the findings of the study, it has been shown that the presence of commercial bank branches and the level of deposit interest rates exert a modest nevertheless detrimental impact on the state of financial inclusion. Further empirical evidence indicates that variables such as lending interest rate, the ratio of rural deposits to loans, and domestic credit to private sector as a percentage of GDP exhibit a significant and substantial impact on the level of financial inclusion. The findings also suggest that there is a positive but insignificant relationship between gross domestic product per capita and financial inclusion. Ozili (2020), an analysis was undertaken to investigate the factors contributing to financial inclusion in Nigeria, as well as the challenges and achievements associated with this endeavour. Utilising data obtained through the Ordinary Least Squares (OLS) estimation technique and the Global Findex database provided by the World Bank, this study examines the period spanning from 2011 to 2017. Based on his research findings, individuals who have completed at least a secondary education and those who are unemployed exhibit higher levels of ownership in debit cards, various types of accounts, and accounts held in financial institutions.

Furthermore, those who have obtained a minimum of a secondary education tend to acquire higher levels of debt from banks or other financial institutions, while simultaneously exhibiting lower levels of savings inside these same institutions. Conversely, there was a decline in the proportion of women, individuals from low-income backgrounds, and those with only a primary school education or lower who engaged in savings activities through savings clubs or external sources beyond their immediate family. Moreover, there was a decline in credit card ownership among persons who were unemployed, while there was an increase in ownership among those who were employed, the wealthiest individuals, and those who had attained at least a secondary level of education. In both 2011 and 2017, a decrease in borrowing from family and friends was observed across the majority of categories. The econometric analysis ultimately reveals that the influence of borrowing and saving via financial institutions on economic growth is considerably lower compared to borrowing and saving facilitated by familial networks, friends, or savings clubs.

Methodology
Theoretical Framework

One of the earliest attempts to model economic growth is popularly referred to as the 'Harrod-Domar' Model associated with the English economist, Sir Roy Harrod and American Economist, Evsey Domar. The model is an early attempt to show that growth is directly related to savings and indirectly related to the capital/output ratio. According to the model, growth (G) can be written symbolically as: G

= s/k

Where, k is incremental capital-output ratio and s - the average propensity to save. The model indicated that saving affect growth directly, while the incremental capital/output ratio affects growth indirectly or inversely.

However, Solow's (1956) model of economic growth is based on the premise that output in an economy is produced by a combination of labour (L) and capital (K), under constant returns, so that doubling input results in doubling output. Contemporary versions distinguish between physical and human capital. Thus, the quantity of output (*Y*) is also determined by the efficiency (A) with which capital and labour is used. Or mathematically: $Y = A f (L, K)$.

Solow assumed that this production function exhibits constant returns to scale, that is, if all inputs are increased by a certain multiple, output will increase by exactly the same multiple.

To Schumpeter (1912), the presence of a well-developed and operational finance sector is a necessary condition for entrepreneurs to effectively participate in technical innovation. This phenomenon arises due to the presence of expenses that may exceed the financial capacity of the entrepreneurs themselves. The author argues that a proficient financial system possesses the capability to identify and provide assistance to entrepreneurs who have the highest potential for successfully transforming original concepts into marketable goods using new production methods. The aforementioned arguments demonstrate that finance exerts a positive influence on the real economy, indicating that increased accessibility to capital enhances wellbeing, stimulates production, and alleviates poverty. The involvement of a greater number of persons in the formal financial system leads to an increase in their economic agency, enabling them to actively partake in productive endeavours that facilitate their upliftment from poverty and contribute to the overall expansion of the economy. Thus, the economic growth indicators in this study are real gross domestic product, per capital and aggregate savings in the economy.

Nevertheless, in accordance with the principles of equilibrium and fundamental economic theory, it is imperative that investment be equivalent to savings. In the context of economic analysis, it is important to consider the relationship between savings (S), investment (I), the marginal efficiency of capital (MEC), and the interest rate (IR). Hence, we proceed to represent this theoretical association using mathematical notation; $I = S$ and $I = (MEC, IR)$. The assertion presented above illustrates the positive impact of savings on investment, indicating a correlation between increased investment and the accumulation of both human and material capital.

Model Specification

This study adopts the extended Solow growth model for its empirical framework. The model examines long run economic growth by looking at capital, labour/ growth and technical progress (Agenor, (2004). The extended Solow growth model is represented symbolically below;

Q = f (K, L) …3.1
Equation 3.1 above was modified to capture Financial Inclusion and Nigeria Economic growth.

Financial Inclusion and Economic Growth
RGDP = [ITR, OFA, APD, IFR and NCA] ... (1)
Where: RGDP is the aggregate worth of an economy,
Financial Inclusion indicators; ITR is the interest rate, OFA is Number of on boarded (New) Financial service Agent, IFR is the inflation rate and NCA is Number of Credit Accounts.
Labor is of two types, human and machine or artificial intelligent (AI). In this study, our labor is Active POS Deployed, (APD).

Financial Inclusion and Poverty Reduction objective two in equation 2 is expressed as;
PCI = (DRA, LRA, AA, EMB, NCB) … (2)

Per capita income (PCI) as function of [demand deposit from the rural areas (DRA) and loan to rural areas (LRA), AA = account owners of any type (age from 15 year above), EMB = Electronic money banking/payment system (which include; Cheque, ATM,

POS and internet transfer) ownership age from 15 year above), and NCB is number of commercial bank branches in the country.

The reduction of poverty in society is one of the main objectives of financial inclusion. In this approach, the amount of per capita income at any particular moment serves as a proxy for poverty. A reliable predictor of a population's economic well-being in any nation is per capita income (PCI). A high PCI value denotes a higher quality of life, whereas a low or falling PCI value denotes a descent into poverty.

Financial Inclusion and Saving Growth in Nigeria, objective three of this study as;
ASE = (ITR, CPS, AA and EXR) … (3)
Where ASE is aggregate saving in the economy, ITR is interest rate, IFR is the inflation rate, CPS is credit to private sector to GDP (CPS/GDP), AA is account owners of any type (age from 15 year above) and exchange rate (EXR).

Specification of Models by Objectives

Objective One

$$lnRGDP_t = \alpha + \beta_1 lnITR_t + \beta_2 lnOFA_t + \beta_3 lnAPD_t + \beta_4 lnIFR_t + \beta_5 lnNCA_t + \mu_t$$

VECM for Equation .... (1)

$$\Delta RGDP_t = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \alpha_1, s\, \Delta RGDP_{t-s} + \sum_{s=i}^p \alpha_2, s\, \Delta ITR_{t-s} + \sum_{s=i}^p \alpha_3, s\Delta OFA_{t-s} + \sum_{s=i}^p \alpha_4, s\Delta APD_{t-s} + \sum_{s=i}^p \alpha_5, s\Delta IFR_t + \sum_{s=i}^p \alpha_6, s\Delta NCA_t + \zeta_{1,t}$$

$$\Delta NCA_t = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \beta_1, s\, \Delta RGDP_{t-s} + \sum_{s=i}^p \beta_2, s\, \Delta ITR_{t-s} + \sum_{s=i}^p \beta_3, s\Delta OFA_{t-s} + \sum_{s=i}^p \beta_4, s\Delta APD_{t-s} + \sum_{s=i}^p \beta_5, s\Delta IFR_t + \sum_{s=i}^p \beta_6, s\Delta NCA_t\, \zeta_{2,t}$$

$$\Delta ITR_t = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \delta_1, s\, \Delta RGDP_{t-s} + \sum_{s=i}^p \delta_2, s\, \Delta ITR_{t-s} + \sum_{s=i}^p \delta_3, s\Delta OFA_{t-s} + \sum_{s=i}^p \delta_4, s\Delta APD_{t-s} + \sum_{s=i}^p \delta_5, s\Delta IFR_t + \sum_{s=i}^p \delta_6, s\Delta NCA_t + \zeta_{3,t}$$

$$\Delta OFA_t = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \phi_1, s\, \Delta RGDP_{t-s} + \sum_{s=i}^p \phi_2, s\, \Delta ITR_{t-s} + \sum_{s=i}^p \phi_3, s\Delta OFA_{t-s} + \sum_{s=i}^p \phi_4, s\Delta APD_{t-s} + \sum_{s=i}^p \phi_5, s\Delta IFR_t + \sum_{s=i}^p \phi_6, s\Delta NCA_t + \zeta_{4,t}$$

$$\Delta APD_t = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \delta_1, s\, \Delta RGDP_{t-s} + \sum_{s=i}^p \delta_2, s\, \Delta ITR_{t-s} + \sum_{s=i}^p \delta_3, s\Delta OFA_{t-s} + \sum_{s=i}^p \delta_4, s\Delta APD_{t-s} + \sum_{s=i}^p \delta_4, s\Delta IFR_t + \sum_{s=i}^p \delta_6, s\Delta NCA_t + \zeta_{5,t}$$

$$\Delta NCA_t = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \delta_1, s\, \Delta RGDP_{t-s} + \sum_{s=i}^p \delta_2, s\, \Delta ITR_{t-s} + \sum_{s=i}^p \delta_4, s\Delta OFA_{t-s} + \sum_{s=i}^p \delta_5, s\Delta APD_{t-s} + \sum_{s=i}^p \delta_5, s\Delta IFR_t + \sum_{s=i}^p \delta_6, s\Delta NCA_t + \zeta_{5,t}$$

Objective Two

$$lnPCI_t = \beta + \beta_1 LRA_t + \beta_2 DRA_t + \beta_3 AA_t + \beta_4 EMB_t + \beta_5 NCB_t + e \ ......(2)$$

VECM for Equation .... (2

$$\Delta PCI_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \alpha_1, s\, \Delta PCI_{t-s} + \sum_{s=i}^p \alpha_2, s\Delta DRA_{t-s} + \sum_{s=i}^p \alpha_3, s\, \Delta AA_{t-s} + \sum_{s=i}^p \alpha_4, s\Delta LRA_{t-s} + \sum_{s=i}^p \alpha_5, s\Delta EMB_{it} + \sum_{s=i}^p \alpha_{7,s}\Delta NCB_{it} + \zeta_{1,t}$$

$$\Delta DRA_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \alpha_1, s\, \Delta PCI_{t-s} + \sum_{s=i}^p \alpha_2, s\Delta DRA_{t-s} + \sum_{s=i}^p \alpha_3, s\, \Delta AA_{t-s} + \sum_{s=i}^p \alpha_4, s\Delta LRA_{t-s} + \sum_{s=i}^p \alpha_5, s\Delta EMB_{it} + \sum_{s=i}^p \alpha_{7,s}\Delta NCB_{it} + \zeta_{2,t}$$

$$\Delta AA_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \alpha_1, s\, \Delta PCI_{t-s} + \sum_{s=i}^p \alpha_2, s\Delta DRA_{t-s} + \sum_{s=i}^p \alpha_3, s\, \Delta AA_{t-s} + \sum_{s=i}^p \alpha_4, s\Delta LRA_{t-s} + \sum_{s=i}^p \alpha_5, s\Delta EMB_{it} + \sum_{s=i}^p \alpha_{7,s}\Delta NCB_{it} + \zeta_{3,t}$$

$$\Delta LRA_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \alpha_1, s\, \Delta PCI_{t-s} + \sum_{s=i}^p \alpha_2, s\Delta DRA_{t-s} + \sum_{s=i}^p \alpha_3, s\, \Delta AA_{t-s} + \sum_{s=i}^p \alpha_4, s\Delta LRA_{t-s} + \sum_{s=i}^p \alpha_5, s\Delta EMB_{it} + \sum_{s=i}^p \alpha_{7,s}\Delta NCB_{it} + \zeta_{4,t}$$

$$\Delta EMB_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \alpha_1, s\, \Delta PCI_{t-s} + \sum_{s=i}^p \alpha_2, s\Delta DRA_{t-s} + \sum_{s=i}^p \alpha_3, s\, \Delta AA_{t-s} + \sum_{s=i}^p \alpha_4, s\Delta LRA_{t-s} + \sum_{s=i}^p \alpha_5, s\Delta EMB_{it} + \sum_{s=i}^p \alpha_{7,s}\Delta NCB_{it} + \zeta_{5,t}$$

$$\Delta NCB_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \alpha_1, s\, \Delta PCI_{t-s} + \sum_{s=i}^p \alpha_2, s\Delta DRA_{t-s} + \sum_{s=i}^p \alpha_3, s\, \Delta AA_{t-s} + \sum_{s=i}^p \alpha_4, s\Delta LRA_{it} + \sum_{s=i}^p \alpha_5, s\Delta EMB_{it} + \sum_{s=i}^p \alpha_{7,s}\Delta NCB_{it} + \zeta_{t,t}$$

Objective Three

$$ASE_t = \alpha + \alpha_1 ITR_t + \alpha_2 CPS_t + \alpha_3 AA_t + \alpha_4 EXR_t + e \ ......(3)$$

VECM for Equation .... (3)

$$\Delta ASE_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \beta_1, s\, \Delta ASE_{t-s} + \sum_{s=i}^p \beta_2, s\Delta ITR_{t-s} + \sum_{s=i}^p \beta_3, s\, \Delta CPS_{t-s} + \sum_{s=i}^p \beta_4, s\Delta AA_{t-s} + \sum_{s=i}^p \beta_5, s\Delta EXR_{t-s} + \zeta_{1,t}$$

$$\Delta ITR_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \beta_1, s\, \Delta ASE_{t-s} + \sum_{s=i}^p \beta_2, s\Delta ITR_{t-s} + \sum_{s=i}^p \beta_3, s\, \Delta CPS_{t-s} + \sum_{s=i}^p \beta_4, s\Delta AA_{t-s} + \sum_{s=i}^p \beta_5, s\Delta EXR_{t-s} + \zeta_{1,t}$$

$$\Delta CPS_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \beta_1, s\, \Delta ASE_{t-s} + \sum_{s=i}^p \beta_2, s\Delta ITR_{t-s} + \sum_{s=i}^p \beta_3, s\, \Delta CPS_{t-s} + \sum_{s=i}^p \beta_4, s\Delta AA_{t-s} + \sum_{s=i}^p \beta_5, s\Delta EXR_{t-s} + \zeta_{1,t}$$

$$\Delta AA_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \beta_1, s\, \Delta ASE_{t-s} + \sum_{s=i}^p \beta_2, s\Delta ITR_{t-s} + \sum_{s=i}^p \beta_3, s\, \Delta CPS_{t-s} + \sum_{s=i}^p \beta_4, s\Delta AA_{t-s} + \sum_{s=i}^p \beta_5, s\Delta EXR_{t-s} + \zeta_{1,t}$$

$$\Delta EXR_{it} = \sum_k^r \lambda_k v_{kt-1} - \sum_{s=i}^p \beta_1, s\, \Delta ASE_{t-s} + \sum_{s=i}^p \beta_2, s\Delta ITR_{t-s} + \sum_{s=i}^p \beta_3, s\, \Delta CPS_{t-s} + \sum_{s=i}^p \beta_4, s\Delta AA_{t-s} + \sum_{s=i}^p \beta_5, s\Delta EXR_{t-s} + \zeta_{1,t}$$

Where p is the lag length, $\zeta_{1,t}$ are the uncorrelated white noise error terms

often called impulses, or innovations or shocks α_{ji}, β_{ij}, δ_{ij} are dynamic parameters of the model.

A Priori Expectation

Based on economic theory, financial inclusion in relationship with gross domestic product Savings and poverty reduction would have positive relationship. However, the three dependent variables relation expectation is as follows: RGDP as a function of (ITR, OFA, APD, IFR and NCA) is assumed to be positive respectively. While per capital income (PCI) proxy to poverty reduction is a function of (DRA, AA, EMB and NCB) is expected to be positive relationship with the dependent variable, whereas (LRA) is assume to have negative relationship with per capital income (PCI) the dependent variable. The a priori expectation behavior of the relationship between aggregate savings (ASE) and these independent variables (ITR, CPS, AA and EXR) is assumed to be positive.

Estimation Procedures

To investigate how financial inclusion affects economic growth in Nigeria, econometric techniques will be applied. These techniques include the unit root test using the Augmented Dickey-Fuller (ADF) and Phillips-Perron stationarity test, error correction model (ECM), vector error correction model (VECM) models, Co-integration Test, and Granger Causality Test. Meanwhile, annual time series data is used in this inquiry.

Specifically, Central Bank of Nigeria (CBN) statistics bulletin and World Bank global Data Base were the sources of this study data.

Battery Tests

In this section, we discuss the necessary tests that were carried out on the data before and after estimating the models for the study. These tests are; descriptive analysis, unit root test, Serial Correlation LM Test co-integration test and others.

Regression Results, Interpretation and Analyses

Table 1: Descriptive Statistics

	RGDP	ITR	OFA	APD	IFR	NCA	PCI	LRA	DRA	AA	EMB	NCB	ASE	CPS	EXR
Mean															
Median															
Maximum															
Minimum															
Std. Dev.															
Skewness															
Kurtosis															
Jarque-Bera															
Probability															
Sum															
Sum Sq. Dev.															
Observations	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43

Source: Computed by the Researcher using E-views Statistical package.

The descriptive statistics values conducted are; mean median, maximum, minimum, standard deviation, skewness, kurtosis, Jarque-Bera and their Probability with number of observations. Thus, the mean, median, maximum and standard deviation of all the variables have positive average values as we can observe in the table, even and kurtosis

all has positive and significant, we can conclude that our data has a good fit to be used for estimation.

Unit Root Test Results

The results of the Augmented Dickey Fuller (ADF) test are presented in table 2 below. A variable is said to be stationary if the computed ADF is greater than the critical ADF at 5 % chosen level of significance.

Table 2: Unit root test for variables in levels

Series	ADF Statistic at Level	PP Statistic at level	5% Critical Level	ADF Statistic at 1st Difference	PP Statistic at 1st difference	5% Critical Level	Order of Integration
RGDP	-1.794021	-1.798376	-3.520787	-5.881287	-5.877324	0.0000	I(1)
ITR	-2.844649	-3.351523	3.593083	-6.284261	-10.78206	-0.0000	I(1)
OFA	-0.125626	-0.526857	-3.553083	-5.704685	-6.335506	0.0000	I(1)
APD	-2.549837	-2.549837	-3.520787	-4.500620	-7.338882	0.0000	I(1)
IFR	-2.465323	-3.200473	-3.536601	-5.360022	-9.090602	0.0005	I(1)
NCA	3.164809	-3.423387	-3.552973	-6.631887	-11.37665	0.0000	I(1)
PCI	3.789269	1.754596	-3.529623	-7.392795	-7.016760	0.0000	I(1)
LRA	3.164809	-3.323387	-3.552973	-5.811853	-11.37665	0.0001	I(1)
DRA	-2.573369	-3.518279	-3.526609	-9.178197	-7.065599	0.0000	I(1)
AA	3.76260	-0.399861	-3.552973	-4.711006	-4.711006	0.0026	I(1)
EMB	4.830081	6.020136	-3.536601	-9.392017	-9.146192	0.0000	I(1)
NCB	-1.398367	-1.764732	-3.520787	-5.043856	-5.043856	0.0010	I(1)
ASE	-1.002492	-0.623319	-3.540328	-7.715582	-5.118333	0.0000	I(1)
CPS	-1.688866	-1.496253	-3.529623	-4.173128	-4.173128	0.0107	I(1)
EXR	-0.381766	-0.464744	-3.520787	-5.709468	-5.709008	0.0002	I(1)

Source: Researcher's Estimate from Eview 9.0 (2023).

From table 2 above, the Augmented Dickey-Fuller and Phillips-Perron (PP) test (ADF) unit root test statistic results, shows that the working variables [RGDP, ITR, OFA, APD, FR, NCA, PCI, LRA, DRA, AA, EMB, NCB, ASE, CPS and EXR] were not stationary at the normal level of differentiation since their ADF and PP t-statistic value were less than the 5

percent critical value [3.552973] respectively. Meanwhile, ADF and PP result of these variables [PCI, AA and EMB] at level shows greater than the 5 percent critical value [3.552973]. However, viewing it statistically they are not significant, because they appear positive and not negative while other appears negative. Based on the unit root assumption, for a variable to be significant, it must be negative. Therefore, to meet the one of the conditions of vector error correction model, these variables were, subjected to unit root test in first order difference which after the differentiation these variables became stationary at first difference (that is these variables become free from the unit root problem) in the scenes that their ADF and PP t-statistic values were all greater than the 5 percent chosen critical value respectively. The unit root test result of these variables used in this study further revealed that there exists first order of integration I(1) among these variables. Again, it shows that there is already co-integrationship among these variables but the degree of the co-integrating equation is yet unknown. Meanwhile, the existence of first order of integration I(1) among these variables used in the study satisfied and justified the assumption and condition of the Vector Error Correction model estimation.

Co-integration Test for Objective One: impact of financial inclusion on the Nigerian economic growth.

Table 3: Co-integration Test: RGDP, ITR,OFA, APD,FR, NCA,

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.886170	271.4863	95.75366	0.0000
At most 1 *	0.776515	186.7372	69.81889	0.0000
At most 2 *	0.686273	128.2992	47.85613	0.0000
At most 3 *	0.586993	83.08910	29.79707	0.0000
At most 4 *	0.545688	48.60175	15.49471	0.0000
At most 5 *	0.366964	17.83191	3.841466	0.0000

Source: Researcher's Estimate from Eview 9.0 (2023).

Judging by the trace - statistics and its corresponding probability value, there are at least six co-integrating equations in table 3 above. This means that the variables are co-integrated and it can be concluded that a long-run equilibrium relationship exists among the variables since their individual trace statistic were greater than that of 5 percent critical value and probability value indicated statistically significant which addressed model one of the studies.

Table 3.1: Results of Error Correction Model (Model One)

Dependent Variable: RGDP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	21930.80	2616.086	8.383058	0.0000
ITR	292.2466	148.0004	1.974634	0.0562
OFA	1.965340	0.118131	16.63701	0.0000
APD	-0.067033	0.030147	-2.223569	0.0327
IFR	-90.33544	40.86839	-2.210399	0.0337
NCA	-0.003041	0.003603	-0.843918	0.4044
ECM(-1)	-0.886522	0.091769	-9.660318	0.0000
R-squared	0.973066	Mean dependent var		40415.61
Adjusted R-squared	0.968449	S.D. dependent var		22316.02
S.E. of regression	3963.893	Akaike info criterion		19.55885
Sum squared resid	5.50E+08	Schwarz criterion		19.84846
Log likelihood	-403.7359	Hannan-Quinn criter.		19.66501
F-statistic	210.7487	Durbin-Watson stat		2.006440
Prob(F-statistic)	0.000000			

Source: Researcher's Estimate from Eview 9.0 (2023).

The first model examined the impact of financial inclusion on economic growth in Nigeria and the result presented in the table 3.1 depicts positive and significant relationship between the financial inclusion variables and economic growth variables. At 2.006440, the Durbin Watson statistics shows the absence of auto–correlation given its value that is between 1.8 and 2.2. We therefore reject the null hypothesis of the presence of autocorrelation among the disturbance terms in the model and accept the alternative hypothesis that there is no autocorrelation between the error terms. The fitness of the model is confirmed by the Prob F-statistic which is significant at 5 percent given the value of 0.000000, this led to rejection of the null hypothesis that all the explanatory variables introduced in the model are not jointly significant in explaining the variations in gross domestic product which measures economic growth and conclude that they are simultaneously significant.

The error correction term, ECMt-1, was significant at 5% with very high feedback of 88%. It is also negatively signed, showing that the adjustment is in the right direction to restore the long run relationship. This confirms also that any disequilibrium in the short run can be0 fixed back with a speed of 88% in the long run; in subsequent years. Apparently, it will take about 8 years to correct. The coefficient of determination (R2) explains 97% of the variations in the dependent variable which is above 50% and even after taking into consideration the degree of freedom, the adjusted coefficient of determination (adjusted R2) still

explains 96% variation in the dependent variable. The results of the tests suggest that the model is well specified, and hence the results are credible.

Table 4: Vector Error Correction Results for objective one

Dependent variable: RGDP			
	CointEq1	D(lag(-1))	D(lag(-2))
RGDP(-1)	1.000000	0.821918	10.54749
C	-24877.63	(0.18828)	2.92153)
		[3.15930]*	[3.61027]*
ITR(-1)	-59.56909	-0.421838	-1.732734
	(290.088)	(0.10343)	(0.75405)
	[-0.20535]*	[-2.24048]*	[2.29790]*
OFA(-1)	-0.283389	-0.013277	0.852108
	(0.19269)	(0.28302)	(0.14828)
	[-1.47074]*	[0.95418]*	[5.74677]*
APD(-1)	-0.669929	0.433908	-0.912769
	(0.25105)	(0.23079)	(0.38956)
	[-2.66848]*	[1.88010]*	[-2.34308]*
IFR(-1)	-104.1659	0.115663	-0.510436
	(102.057)	(0.16756)	(0.18772)
	[-1.02066]	[0.16756]*	[-2.71915]*
	*		
NCA(-1)	0.074540	-0.004354	-0.484018
	(0.01383)	(0.00150)	(0.30832)
	[5.38821]*	[-2.90119]*	[-1.56987]*

C	-337.6330	0.375929	646.3087	-3948.535	-0.796852	-45409.14	-45409.14
	(691.788)	(1.16671)	(268.663)	(6230.70)	(5.09263)	(55189.0)	(55189.0)
	[-0.48809]	[0.32221]	[2.40565]	[-0.63372]	[-0.15847]	[-0.82279]	[-0.82279]

R-squared	0.665281	0.870593	0.375603	0.512253	0.326499	0.589959
Adj. R-squared	0.523669	0.815844	0.111435	0.268380	-0.010252	0.384938
Sum sq. resids	13705.80	1850687.	1.79E+09	9.05E+09	6048.343	7.10E+11
S.E. equation	22.95966	266.7963	8299.102	18660.65	15.25217	165288.4
F-statistic	4.697921	15.90153	1.421836	2.100487	0.969556	2.877558
Log likelihood	-165.7914	-258.9958	-389.6177	-441.5088	-157.1307	-528.7598
Akaike AIC	0.665281	0.870593	0.375603	22.77544	8.556537	27.13799
Schwarz SC	0.523669	0.815844	0.111435	23.36655	9.147645	27.72910
Mean dependent	13705.80	1850687.	1.79E+09	971.8750	-0.109435	12966.28
S.D. dependent	22.95966	266.7963	8299.102	21816.44	15.17458	210757.4

CointEq1, co-integrating equation one which denotes for the short run result of the VECM, while D(lag(-1)) and D(lag(-2)) are the error correction equation at lag one and two for all the variables. In the table, * denotes t-statistic in parentheses.
Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

The co-integrating equation short run result of the VECM equation showed that the constant is negative valued at [-24877.63]. The implication is that holding all the independent factors [interest rate (ITR), Number of on boarded (New) Financial service Agent (OFA), Active POS Deployed (APD), inflation rate (IFR) and Number of Credit Accounts (NCA)], constant, real gross domestic product (RGDP) will steady at 284 percent at the short run. Meanwhile, the explained variables coefficients under VECM short run result showed that interest rate (ITR), Number of on boarded (New) Financial service Agent (OFA), Active POS Deployed (APD) and inflation rate (IFR) respectively, have negative relationship with the explanatory variable (i.e., real gross domestic product (RGDP) proxy for economic growth). It implies that decreases in these explanatory variables [ITR, OFA, APD and IFR]] will lead to a decline in the Nigerian real gross domestic product (RGDP) proxy for economic growth by [59.5ITR, 0.28OFA, 0.66APD and 104.16IFR] at the short run. Meanwhile, the Number of Credit Accounts (NCA) in Nigeria reported positive relationship with the dependent variable (real gross domestic product (RGDP) proxy for economic growth). In other words, a unit increase in Number of Credit Accounts (NCA) in Nigeria will increase the real gross domestic product (RGDP) proxy for economic growth in Nigeria by [7%]. Thus, the t – statistic APD and NCA given as [2.66848, and 5.38821] of these variables were significant in the short run.

However, the error correction equation at lag one and two Colum's showed that coefficients of ITR and NCA have a negative relationship with the dependent variable (real gross domestic product (RGDP). While the coefficients of OFA at lag one alone and APD at lag two, were reported negative whereas at lag one and two respectively had positive with the dependent variable. The implications of these negative responses of these

financial inclusion variables are as follow; first, shilling increase in the [Number of on boarded (New) Financial service Agent (OFA), Active POS Deployed (APD), in Nigeria will lead to [(0.01 lag $_{(-1)}$,48.3 lag $_{(-2)}$ NCA), (42.5 lag $_{(-1)}$, 71.2 lag $_{(-2)}$ ITR), 0.01lag (-1) AFD and 91.2OFA lag $_{(-2)}$] cents decrease on real gross domestic product (RGDP). Whereas the coefficients of APD at lag two and OFA at lag two coefficients have positive relationship with the constant variable (RGDP). In other words, a unit APD and OFA respectively will lead to [(43 lag $_{(-1)}$, OFA and 85 lag $_{(-2)}$ APD)] percent's increase on Nigerian gross domestic product (RGDP).

The t- statistic of error correction equation for these variables ITR, NCA, APD, OFA at their lag one and two is given as [-2.24048lag (-1), 2.29790lag (-2) ITR],[2.90119lag(-1), 1.56987lag(-2)NCA], [1.88010lag(-1), 2.34308lag (-2)APD], [2.71915lag (-1)IFR], [5.74677lag(-2)OFA]were statistically significant to the study within the observation time. Meanwhile, not all the explanatory variable has their signs both at lag one and two in line with the theoretical assumption. The coefficient of determination adjusted square R^2 (*0.6652*) have a good fit to the study since 52 percent variation on the dependent variable (RGDP) is as a results of influence/impact from these explanatory variables. In the same view, the F-statistic reported [22.95966], which is 22.95 percent total joint influence of the variables implying significant in the model.

Objective Two: impact of financial inclusion on poverty reduction in Nigeria].
Co-integration Test for objective/model Two

Table 5: Co-integration Test for objective/model Two
Series: D(PCI,2) D(DRA,2) D(LRA,2) D(AA,2) D(EMB,2) D(NCB,2)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.876203	219.9123	95.75366	0.0000
At most 1 *	0.776933	148.8825	69.81889	0.0000
At most 2 *	0.694168	97.87293	47.85613	0.0000
At most 3 *	0.518482	57.59244	29.79707	0.0000
At most 4 *	0.441081	32.74487	15.49471	0.0001
At most 5 *	0.317050	12.96535	3.841466	0.0003

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

Judging by the trace - statistics and its corresponding probability value, there are at least six co-integrating equations in table 5 above. This means that the variables are co-integrated and it can be concluded that a long-run equilibrium relationship exists among the variables since their individual trace statistic were greater than that of 5 percent critical value. The probability value indicated statistically significant which addressed model two of the study.

Table 5.1: Results of Error Correction Model (Two)

Dependent Variable: PCI				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-734.8440	117.6759	-6.244642	0.0000
DRA	0.000399	0.000189	2.111381	0.0432
LRA	0.000364	0.000211	1.720145	0.0957
AA	-6.74E-05	3.09E-05	-2.180286	0.0372
EMB	0.023530	0.008603	2.735142	0.0104
NCB	0.555809	0.031103	17.86993	0.0000
ECM(-1)	-0.545922	0.162669	-3.356031	0.0022
R-squared	0.951992	Mean dependent var		1365.050
Adjusted R-squared	0.942390	S.D. dependent var		919.1633
S.E. of regression	220.6176	Akaike info criterion		13.79940
Sum squared resid	1460164.	Schwarz criterion		14.10416
Log likelihood	-248.2888	Hannan-Quinn criter.		13.90684
F-statistic	99.14930	Durbin-Watson stat		2.026445
Prob(F-statistic)	0.000000			

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

The second model examines the determinants of Financial Inclusion in Nigeria and the result presented in table 5.1 depicts positive and significant relationship between the Financial Inclusion variables and poverty reduction in Nigeria. At 2.026445, the Durbin Watson statistics shows the absence of auto–correlation given its value that is between 1.8 and 2.2. We can therefore we reject the null hypothesis of the presence of autocorrelation among the disturbance terms in the model and accept the alternative hypothesis that there is no autocorrelation between the error terms. The fitness of the model is confirmed by the prob F-statistic which is significant at 5 percent given the value of *0.000000* which led to rejection of null hypothesis that all the explanatory variables introduced in the model are not jointly significant in explaining the variations in financial inclusion. The error correction term, ECMt-1, was significant at 5% with a little high feedback of 54%. It is also negatively signed and significant, showing that the adjustment is in the right direction to restore the long run relationship. This confirms also that any disequilibrium in the short run can be fixed back with a speed of 54% in the long run-in subsequent years. Apparently, it will take about 5 years to correct. The coefficient of determination (R^2) explains 95% of the variations in the dependent variable which is above 50% and even after taking into consideration the degree of freedom, the adjusted coefficient of determination (adjusted R^2) still explains 94% variation in the dependent variable. Also, a unit increase in coefficients of demand deposit from the rural areas (DRA) and loan to rural areas (LRA), Electronic money banking/payment system (which include; Cheque, ATM, POS and internet transfer) ownership age from 15 year above) (EMB), and number of commercial bank branches in the country (NCB) will lead to on the average 0.000399, 0.000364, 0.023530and 0.555809 increase in financial inclusion respectively.

Table 6: Vector Error Correction Results for objective Two [impact of financial inclusion on poverty reduction in Nigeria].

Date: 09/24/23 Time: 03:04
Sample (adjusted): 1988 2022
Included observations: 35 after adjustments
Standard errors in ( ) & t-statistics in [ ]

Cointegrating Eq:	CointEq1		
PCI(-1)	1.000000	C	-640.1583
DRA(-1)	1.19E-05		
	(0.00050)		
	[0.02395]		
LRA(-1)	-0.004137		
	(0.00050)		
	[-8.19344]		
AA(-1)	0.000308		
	(5.0E-05)		
	[6.20104]		
EMB(-1)	-0.098130		
	(0.00873)		
	[-11.2435]		
NCB(-1)	-0.455048		
	(0.03165)		
	[-14.3768]		

	D(lag(-1))	D(lag(-2))
D(PCI(-1))	-12.17992	-7.429071
	(4.20546)	(3.52274)
	[-2.89622]	[-2.10889]
D(DRA(-1))	0.744279	2.241385
	(0.11969)	(0.38289)
	[6.21858]	[5.85394]
D(LRA(-1))	-2.467317	- 0.472001
	(0.71772)	(0.18133)
	[-3.43773]	[-2.60293]
D(AA(-1))	0.781990	0.046714
	(0.17017)	(0.05864)
	[4.59536]	[0.79666]
D(EMB(-1))	25.93633	0.258203
	(17.2383)	(0.13898)
	[1.50458]	[1.85787]
D(NCB(-1))	50.12307	2.046865
	(119.435)	(1.71339)
	[0.41967]	[1.19463]
C	-70.18770	-3263.521
	(46.5502)	(46582.9)
	-[1.50778]	[-0.07006]

R-squared	0.600218	0.653451
Adj. R-squared	0.352734	0.438920
Sum sq. resids	689844.4	6.91E+11
S.E. equation	181.2450	181372.2
F-statistic	2.425283	3.045959
Log likelihood	-222.7181	-464.5141
Akaike AIC	13.52675	27.34366
Schwarz SC	14.14889	27.96580
Mean dependent	45.31801	2399.337
S.D. dependent	225.2811	242135.5

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

Table 6 is of two sides. First is the vector error correlation (VECM) co-integrating short run equation denotes CointEq1, the second is the long run VECM result which denote D(lag (-1)) and D(lag (-2)). Examining the co-integrating short run aspect of the table, we observed that coefficients of demand deposit from the rural areas (DRA) and account owners of any type (age from 15 year above) (AA) post a positive relationship with the dependent variable Per capita income (PCI). Meaning that, a unit increase in these variables (DRA and AA) will lead to [0.1, 14] percent's increases on the Per capita income (PCI) levels in Nigerian poverty level in the economy at the short run. Whereas, coefficients of loan to rural areas (LRA), Electronic money banking/payment system (which include; Cheque, ATM, POS and internet transfer) ownership age from 15 year above) (EMB), and number of commercial bank branches in the country (NCB) post a negative relationship with Per capita income (PCI) the dependent variable. It implies that a unit declined inflows of loan to rural areas (LRA), Electronic money banking/payment system (which include; Cheque, ATM, POS and internet transfer) ownership age from 15 year above) (EMB), and number of commercial bank branches in the country (NCB) will lead to [04$_{LRA,}$ 09$_{EMB}$and 48$_{NCB}$] percent's decrease on Per capita income (PCI). Again, VECM equation showed that the constant variable that is (PCI) reported negative valued at [-640.1583]. The implication is that holding all the independent factors of financial inclusion constant, Per capita income (PCI) in the Nigerian poverty level will steady at 64 percent at the short run. Meanwhile, the t – statistic of LRA, AAA, EMB and NCB given as [8.19344LRA, 6.20104AA, 11.2435EMB and 14.3768NCB] of this variable were all significant in the short run.

Error correction equation Colum's showed that coefficients of the rural

areas (DRA), account owners of any type (age from 15 year above) (AA), Electronic money banking/payment system (which include; Cheque, ATM, POS and internet transfer) ownership age from 15 year above) (EMB), and number of commercial bank branches in the country (NCB) at lag one and two, have a positive relationship with the dependent variable (Per capita income (PCI) in the Nigerian economy. This implies that at the long run, a unit increase in these financial inclusion variable (DRA, AA, EMB and NCB), will lead to [(0.744279 lag (-1), 2.241385 lag (-2) DRA), (0.781990 lag (-1), 0.046714 lag (-2) AA), (25.93633 lag (-1) 0.258203 lag (-2) EMB), (50.12307 lag (-1), 2.046865 lag (-2) NCB)] percent respective increases on Per capita income (PCI) in the Nigerian economy. In other words, the three of the financial inclusion variables used in this model and objective two of this study impact positively on poverty reduction while improving the economy as a whole. Whereas coefficient of loan to rural areas (LRA) at both lags one and two post a negative relationship with the dependent variable (i.e., Per capita income (PCI) of Nigerian's. The implications of this negative responses of loan to rural areas (LRA) which is one of the financial inclusion variables are as follow; first, a unit decrease in the (inflows of loan to rural areas (LRA) in the Nigeria economy will lead to [(-2.467317 lag (-1), - 0.472001lag (-2) LRA] percent's increase on Nigerian poverty level, thereby decreasing Per capita income

(PCI) of Nigerian.

The t- statistic of error correction equation for these variables is [(4.59536$_{AA}$ $_{(-1)}$, (6.21858$_{DRA}$ $_{(-1)}$, 5.85394$_{DRA}$ $_{(-2)}$) (3.43773LRA9-1), 2.60293LRA (-2)) 1.50458EMB (-1), 1.85787EMB (-2) and [1.19463$_{NCB (-1)}$] were statistically significant to the study within the observation time. Meanwhile, the explanatory variable all have the signs in line with the theoretical assumption. Whereas the coefficient of determination R^2 (0.600218) have a good fit to the study since 60 percent variation on the dependent variable (PCI) is as results of influence/impact from these financial inclusion explanatory variables. In the same view, the F-statistic reported [2.425283], which is 2.4 percent total joint influence of the variables implying significant in the model.

Objective Three: [To ascertain impact of financial inclusion on savings in Nigeria

Table 7 Co-integration Test for objective/model Three
Series: ASE ITR CPS AA EXR

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.867582	237.8881	69.81889	0.0000
At most 1 *	0.819262	159.0382	47.85613	0.0000
At most 2 *	0.688151	92.32061	29.79707	0.0000
At most 3 *	0.500211	46.87636	15.49471	0.0000
At most 4 *	0.398536	19.82716	3.841466	0.0000

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

Also, the Maximum Eigenvalue of the variables are all proved the same significantly significant since their max-eigen statistic of the variables are (i.e., ASE [237.8881 > 69.81889], ITR [159.0382 > 47.85613] CPS

[92.32061 > 29.79707] AA [46.87636 >15.49471] and EXR [19.82716 > 3.841466] higher when view along with 5 percent critical-value, this could be confirmed with their probability values as it valued [0.0000] respectively. Simply put, there is four indicated co-integrating eqn(s) among the variables in the model estimated.

Table 7.1: Results of Error Correction Model Three

Dependent Variable: ASE				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-301.6965	454.5287	-0.663757	0.5111
ITR	-13.85186	25.25622	-0.548454	0.5868
CPS	0.000803	4.48E-05	17.91405	0.0000
AA	0.001546	0.000139	11.09857	0.0000
EXR	-2.008847	3.044305	-0.659870	0.5135
ECM(-1)	-0.206297	0.165757	-1.244574	0.2213
R-squared	0.991756	Mean dependent var		5097.331
Adjusted R-squared	0.990611	S.D. dependent var		7095.987
S.E. of regression	687.5897	Akaike info criterion		16.03583
Sum squared resid	17020067	Schwarz criterion		16.28406
Log likelihood	-330.7523	Hannan-Quinn criter.		16.12681
F-statistic	866.1346	Durbin-Watson stat		2.006095
Prob(F-statistic)	0.000000			

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

The error correction model estimated result presented in Table 7.1 revealed a positive and significant relationship between the dependent variable Aggregate saving in the economy (ASE) and independent variables ITR, CPS, AA, EXR. At 2.006095, the Durbin Watson statistics does not propose evidence of auto–correlation. This value is between 1.8 and 2.2 which suggests the absence of autocorrelation. Therefore, we reject the null hypothesis of the presence of autocorrelation among the disturbance terms in the model and accept the alternative hypothesis that there is no autocorrelation between the error terms. The fitness of the model is confirmed by the prob F-statistic which is significant at 5 percent given the value of 0.009064 which led to rejection of null hypothesis that all the explanatory variables introduced in the model are not jointly significant in explaining the variations in Aggregate saving in the economy (ASE) level and concluded that they are simultaneously significant. The error correction term, ECMt-1, was significant at 5% with low feedback of *0.20%*. It is also negatively signed, showing that the adjustment is in the right direction to restore the long run relationship. This confirmed also that there is a strong relationship between financial inclusion variables and aggregate saving in the economy (ASE) which implies that a deviation from equilibrium level in the current year will be corrected by 0.20% in subsequent years. Apparently, it will take about 2 years to correct.

Table 8: Vector Error Correction Results for objective Three [To ascertain impact of financial inclusion on savings in Nigeria].

Vector Error Correction Estimates		
Cointegrating Eq:	CointEq1	
ASE(-1)	1.000000	
ITR(-1)	9.104585	
	(16.0616)	
	[0.56686]	
CPS(-1)	-0.000912	
	(3.3E-05)	
	[-27.9460]	
AA(-1)	-0.001078	
	(0.00016)	
	[-6.59344]	
EXR(-1)	-2.936215	
	(2.31758)	
	[-1.26693]	
C	-823.0323	

D(lag(-1))		D(lag(-2))
D(ASE(-1))	0.532249	0.505708
	(0.19654)	(0.19421)
	[2.70813]	[2.60392]
D(ITR(-1))	-4.228637	-0.567944
	(32.5684)	(0.19113)
	[-0.12984]	[-2.97146]
D(CPS(-1))	0.373885	0.264366
	(0.16651)	(0.09257)
	[1.24537]	[2.85596]
D(AA(-1))	-0.776332	-0.919081
	(0.36327)	(0.29059)
	[-2.13707]	[-3.16281]
D(EXR(-1))	17712.35	9933.825
	(6655.86)	(3069.99)

	[2.66117]	[3.23578]				
C	- 313.6117	0.131695	-80233.87	-155036.7	4.869267	
	(173.368)	(1.01744)	(150584.)	(77174.9)	(5.19349)	
	[1.80894]	[0.12944]	[-0.53282]	[-2.00890]	[0.93757]	
R-squared	0.612993	0.299121	0.644837	0.691085	0.232667	
Adj. R-squared	0.460955	0.023776	0.505308	0.569726	-0.068786	
Sum sq. resids	12507492	430.7742	9.44E+12	2.48E+12	11224.13	
S.E. equation	668.3533	3.922345	580518.1	297518.2	20.02153	
F-statistic	4.031831	1.086348	4.621542	5.694542	0.771818	
Log likelihood	-309.8167	-104.2916	-580.4911	-553.7533	-169.4964	
Akaike AIC	16.09084	5.814582	29.62455	28.28766	9.074818	
Schwarz SC	16.59750	6.321246	30.13122	28.79433	9.581482	
Mean dependent	516.1968	0.187218	385964.8	149318.2	10.03280	
S.D. dependent	910.3187	3.969822	825369.5	453566.6	19.36653	
Determinant resid covariance (dof adj.)	2.31E+31					
Determinant resid covariance	3.89E+30					
Log likelihood	-1692.509					
Akaike information criterion	87.87546					
Schwarz criterion	90.61989					

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

Table 8 is of two sides. First is the vector error correlation (VECM) co-integrating short run equation denotes Coint-equation1, the second is the long run VECM result which denote D(lag (-1) and D(lag (-2). Examining the co-integrating short run aspect of the table, we observed that coefficients of credit to private sector (CPS), account owners of any type (age from 15 year above) (AA) and exchange rate (EXR) post a negative relationship with the

dependent variable Aggregate saving in the economy (ASE). Meaning that, a unit increase in these variables (CPS, AA and EXR) will lead to [0.09CPS, 0.01AA, and 2.93EXR] percent decreases respectively on the aggregate saving in the economy (ASE). Whereas, coefficients of interest rate (ITR), post a positive relationship with aggregate saving in the economy (ASE). It implies that a unit increase inflows of this variable in Nigerian will lead to [9.104585 $_{ITR}$] percent decrease on aggregate saving in the economy (ASE). Again, VECM Coin-equation showed that the constant reported negative valued at [-313.6117]. The implication is that holding all the independent factors constant, aggregate saving in the economy (ASE) in the Nigeria will decline by 313 percent at the short run.

Error correction equation Colum's showed that coefficients of credit to private sector (CPS) and exchange rate (EXR) both at lag one and two have a positive relationship with the dependent variable (ASE). This implies that at the long run, a unit increase in these variables (CPS and EXR), will lead to [0.373885(-1), 0.264366(-2) CPS], [17712.35(-1), 9933.825(-2) EXR] percent increase on aggregate saving in Nigerian economy (ASE) within the study period. Whereas the coefficients of interest rate (ITR) and account owners of any type (age from 15 year above) (AA) both at lag one and two, post a negative relationship with the dependent variable (i.e., aggregate savings in Nigerian economy (ASE).

The implications of these negative responses of these variables are as follow; first, shilling increase in the (inflows interest rate (ITR) and account owners of any type (age from 15 year above) (AA)) will lead to [-4.228637(-1), -0.567944(-2) ITR], [-0.776332(-1), -0.919081(-2) AA] percent decrease on aggregate savings in Nigerian economy (ASE). The t-statistic of error correction equation for these variables is [[2.70813(-1), 2.60392(-2) ASE), (2.97146(-2) ITR), (2.24537(-1), 2.85596(-2) CPS), [-2.13707(-1), -3.16281(-2) AA and (2.66117(-1), 3.23578(-2) EXR]] were statistically significant to the study within the observation time.

Consequently, the coefficient of determination adjusted square R^2 (0.612993) have a good fit to the study since 61 percent variation on the dependent variable (aggregate savings in Nigerian economy (ASE)) is as a result of influence/impact from these explanatory variables. In the same view, the F-statistic reported [4.031831], which shows total joint influence of the variables in the model.

Table 9: Autocorrelation VECM test Result

Lags	LM Stat	Probability Value
1	42.03374	0.0178
2	36.67254	0.0620
3	51.37399	0.0014
4	59.99453	0.0001
5	29.68818	0.2362
6	33.09174	0.1288
7	48.16701	0.0036
8	32.28121	0.1500
9	34.91747	0.0897
10	53.34109	0.0008
11	41.76302	0.0191
12	39.91965	0.0297

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

This test is condition to test if they exist auto or serial correlation problem to this VECM equation two employed. However, viewing table 4.1 above, we observed that the LM-statistic values were examined using ten lags, and almost the lags of LM-statistic value were statistically significant as is proven by the pro-value in the table. We therefore conclude that there is no presence of serial correlation in the model.

Heteroskedasticity Test

Table 10 VECM Residual Heteroskedasticity

Joint test: No Cross Terms (Only Levels and Squares)		
Chi-sq	df	Prob.
427.8655	330	0.0002

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

Viewing the VECM Residual Heteroskedasticity results in table 10, we concluded that there is no occurrence of Heteroskedasticity of constant variance in the model since the p-value [0.0002] of the Chi-square statistic value [427.8655] showed statistically significant within 330 degrees of freedom at 5 percent level of significance.

Granger Causality Test Results

Table 11: Pairwise Granger Causality Tests for Objective One

Null Hypothesis:	Obs	F-Statistic	Prob.
RGDP does not Granger Cause ITR	41	0.16787	0.8461
ITR does not Granger Cause RGDP		0.30919	0.7360
RGDP does not Granger Cause OFA	41	0.25964	0.7728
OFA does not Granger Cause RGDP		12.7698	0.0075
RGDP does not Granger Cause APD	41	6.63897	0.0035
APD does not Granger Cause RGDP		9.10788	0.0006
RGDP does not Granger Cause IFR	41	0.38791	0.6813
IFR does not Granger Cause RGDP		1.49761	0.2373
RGDP does not Granger Cause NCA	41	0.21826	0.8050
NCA does not Granger Cause RGDP		8.07537	0.0013

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

The result in the table 11 revealed as follows; that we should reject the null hypotheses that said; RGDP does not Granger Cause OFA, APD does not Granger Cause RGDP, RGDP does not Granger Cause APD and RGDP does not Granger Cause NCA are rejected. Reason is that their computed F^x – values [12.7698RGDP, (6.63897APD, 9.10788RGDP), and 3.91918NCA] and p-values; [0.0075RGDP, 0.0035APD, 0.0006RGDP, 0.0013NCA] were respectively significant at 5% level. In other words, the past value of these financial inclusion indicators namely, Number of on boarded (New) Financial service Agent (OFA), Active POS Deployed (APD), and Number of Credit Accounts (NCA) in the Nigeria does granger causes the present value of gross domestic product (RGDP). Whereas, the past value of gross domestic product (RGDP) does not granger causes the present value of Number of on boarded (New) Financial service Agent (OFA), and Number of Credit Accounts (NCA) since their f- and p-value [(0.25964OFA), 0.7728p and (0.21826NCA) 0.8050p] computed shows statistically insignificant which implies per directional or partial causal relationship between these variables [RGDP, OFA, NCA] in the model.

On the same view, the results revealed that there exists a bidirectional causal relationship between Active POS Deployed (APD) and gross domestic product (RGDP) Nigeria within the period of the study. Thus, these variable's f- values computed [6.63897RGDP, 9.10788APD) and P-value (0.0035RGDP, 0.0006APD) were statistically significant respectively at 5% level of significance. The implication is that the past value of Active POS Deployed (APD) and gross domestic product (RGDP) in Nigeria does in granger causes the present values of each other in the model.

Table 11.1: Pairwise Granger Causality Tests for Objective Two

Null Hypothesis:	Obs	F-Statistic	Prob.
PCI does not Granger Cause LRA	41	2.84828	0.0711
LRA does not Granger Cause PCI		4.39029	0.0197
PCI does not Granger Cause DRA	41	2.62549	0.0862
DRA does not Granger Cause PCI		1.74672	0.0888
PCI does not Granger Cause AA	41	1.06057	0.3568
AA does not Granger Cause PCI		0.47971	0.6229
PCI does not Granger Cause EMB	36	0.23152	0.7947
EMB does not Granger Cause PCI		0.37710	0.6889
PCI does not Granger Cause NCB	41	11.8874	0.0001
NCB does not Granger Cause PCI		0.82208	0.4476

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

Table 11.1 revealed that null hypotheses that said; PCI does not Granger Cause LRA, LRA does not Granger Cause PCI, PCI does not Granger Cause DRA, DRA does not Granger Cause PCI and PCI does not Granger Cause NCB should be rejected as their f- value [2.84828PCI, (4.39029LRA, 2.62549PCI, 1.74672DRA and 11.8874NCB)] and p- value [0.0711PCI, 0.0197LRA, 0.0862PCI, 0.0888DRA and 0.0001NCB] computed respectively, were significant at 5% level. This implies that the past value of these financial inclusion indicators namely, demand deposit from the rural areas (DRA), loan to rural areas (LRA), and number of commercial bank branches in the country (NCB) in the Nigeria does granger causes the present value of Per capita income (PCI) within the period

of this study. Whereas, per capita income (PCI) past value does not granger causes the present value of these financial inclusion indicators epact the demand deposit from the rural areas (DRA). We conclude that there exists partial causal relationship between these variables [PCI, LRA, DRA and NCB] in the model.

The results also revealed that there exists no positive causal relationship between account owners of any type (age from 15 year above) (AA), Electronic money banking/payment system (which include; Cheque, ATM, POS and internet transfer) EMB and Per capita income (PCI), since their f-value [1.06057AA, 0.47971PCI, 0.37710EMB and 0.23152PCI] and p-value [0.3568AA, 0.6229PCI, 0.6889EMB, and 0.7947PCI] computed respectively, were insignificant at 5% level. In other words, the past value of account owners of any type (age from 15 year above) (AA), Electronic money banking/payment system (which include; Cheque, ATM, POS and internet transfer) EMB and Per capita income (PCI) computed does not statistically granger causes the present value of each other [i.e. (AA and PCI), (EMB and PCI) in the model.

These results suggested that; AA does not Granger Cause ASE, ASE does not Granger Cause AA, EXR does not Granger Cause ASE and ASE does not Granger Cause EXR null hypotheses should be rejected, since their f- value [(5.54321ASE, 9.31795AA), (2.93030ASE, 2.80335EXR)] and p-value [(0.0080ASE, 0.0005AA), (0.0662ASE, 0.0739EXR)] computed respectively, were significant at 5% level. This implies that the past value of these financial inclusion indicators namely, credit to private sector (CPS), account owners of any type (age from 15 year above) (AA) and exchange rate (EXR) in Nigeria does granger causes the present value of Aggregate saving (ASE) in Nigerian economy and at the same time, the past value of Aggregate saving (ASE) does granger causes the present value of [ASE, AA and EXR] within period of this study. We then conclude that there exists a bidirectional causal relationship among the variables. The table further revealed that ASE does not Granger Cause ITR and at the same time, ITR does not Granger Cause ASE. However, the result shows that ASE does Granger Cause CPS, whereas CPS does not Granger Cause ASE. This is confirmed with their f-values [(0.11848ASE, 0.11037ITR), (11.1069ASE, 0.41719CPS)] and p-value [(0.8886ASE, 0.8958ITR), (0.0002ASE 0.6620CPS) at 5% significance level. We then conclude that there exists a partial causal relationship among the [ITR, CPS and ASE] variables in the model tested.

Table 11.2: Pairwise Granger Causality Tests for Objective Three

Null Hypothesis:	Obs	F-Statistic	Prob.
ASE does not Granger Cause ITR	41	0.11848	0.8886
ITR does not Granger Cause ASE		0.11037	0.8958
ASE does not Granger Cause CPS	41	11.1069	0.0002
CPS does not Granger Cause ASE		0.41719	0.6620
ASE does not Granger Cause AA	41	5.54321	0.0080
AA does not Granger Cause ASE.		9.31795	0.0005
ASE does not Granger Cause EXR	41	2.93030	0.0662
EXE does not Granger Cause ASE		2.80335	0.0739

Source: Researchers' Extract from E-view 9.0 Estimation output (2023).

Evaluation of working hypotheses

Null Hypothesis 1: There is no significant impact of financial inclusion on Nigeria's economic growth.

From the VEC table 4 we examine the hypothesis one of the studies by considering the size and signs of the coefficients used in the model and as well their significance as we compare the t-statistic both calculated and tabulated critical value at 5% level of significance. First, we reject the null hypothesis one of this study and accept the alternative hypothesis with the following observations: **T-test**: In short run equation, all the coefficients variable employed in the model were all statistically significant at 5% level of significance using the calculated t-value of the model. In other words, from the long run regression estimate of the variables2.24048lag (-1), 2.29790lag (-2) ITR], [2.90119lag (-1), 1.56987lag (-2) NCA], [1.88010lag (-1), 2.34308lag (-2) APD], [2.71915lag (-1) IFR], [5.74677lag (-2) OFA]. were respectively greater than the tabulated t-value is 1.569. We observed that: One percent decrease in financial inclusion proxy by these variables; [ITR, NCA, APD, and OFA] will leads to 2% to 5% increase on economic growth (i.e., Real Gross Domestic Product (RGDP) respectively at the long run in Nigeria during the periods of the study.

Again, looking at the Granger causality test carried out, we observed that there exists per directional or partial causal relationship between these variables [RGDP, OFA, NCA] in the model, whereas there exists a bidirectional causal relationship between Active POS Deployed (APD) and gross domestic product (RGDP) only Nigeria within the period of the study. Based on this, we therefore reject the null hypothesis one of this study and accept the alternative hypothesis one that said, "Financial inclusion has significant impact on the Nigerian economic growth" during the period of the study 1980-2022.

Null Hypothesis II: Financial inclusions have no significant impact on poverty reduction in Nigeria.

We employed results of VECM table 6 to examine the hypothesis two of the study by considering the size and signs of the coefficients used in the model and as well their significance as we compare the t-statistic at 5% level of significance. First, we reject the null hypothesis two of this study and accept the alternative hypothesis with the following observations:

- **T-test**: In short run equation from table 6, four of the variables employed in the model were all statistically significant at 5% level of significance using the calculated t-value of the model. In other words, from the short run regression estimate the t-statistic of these variables $[8.19344(-1)_{LRA}, 6.20104_{AA}, 11.2435_{EMB}$ and $14.3768_{NCB}]$ were respectively greater than the tabulated t-critical value 1.569. While at the long run, the t-statistic of the variables were, $[(4.59536_{AA\ (-1)}, (6.21858_{DRA\ (-1)}, 5.85394_{DRA\ (-2)}) (3.43773_{LRA\ (-1)}, 2.60293_{LRA\ (-2)}$

1.50458_{EMB} (-1), 1.85787_{EMB} (-2) and $[1.19463_{NCB\ (-1)}]$ respectively, greater than the tabulated t- value is 1.569.

- One percent increases in the financial inclusion variables; deposit from the rural areas (DRA), loan to rural areas (LRA), at lag one (-1) and lag two, will leads to [6%(DRA)-1), 5%(DRA)-2), 8%(LRA)-1)), increases on Per capita income (PCI) respectively, in the long run in Nigeria during the periods of the study.

- One percent increases in the financial inclusion variables; account owners of any type (AA) and electronic money banking/payment system (EMB) at lag one (-1) and two (-2) will leads to [1.5% $_{(AA)-1)}$, 1.8%$_{(AA)-2)}$, 26%($_{EMB}$)-1) 03%($_{EMB)-2}$)] increase on the Per capita income (PCI) respectively, in the long run in Nigeria during the periods of the study.

- Whereas one percent increase in the financial inclusion variable; number of commercial bank branches in the country (NCB) at lag one (-1) will leads to by 1.9% increase on the Per capita income (PCI) respectively, in the long run in Nigeria during the periods of the study.

Meanwhile, viewing at the Granger causality test carried out, we observed that there exists partial causal relationship between these variables [PCI, LRA, DRA and NCB] which implies that [LRA, DRA and NCB] does granger causes the present value of per capital income whereas per capital income does granger causes these financial inclusion indicators [LRA, DRA and NCB] in the model. Based on this, we concluded, "financial inclusion has significant impact on poverty reduction in Nigeria" during the period of the study 1980-2022.

Null Hypothesis III: Financial inclusion has no impact on the Nigerian savings growth.
Results of VECM table 8 was employed in examining the hypothesis three of the study by considering the size and signs of the coefficients used in the model and as well their significance as we compare the t-statistic both calculated and tabulated critical value at 5% level of significance with the following observations:

The variables t- statistic of error correction equation for these variables is [[2.70813(-1), 2.60392(-2) $_{ASE)}$, (2.97146(-2) $_{ITR)}$, (2.24537(-1), 2.85596(-2) $_{CPS)}$, [-2.13707(-1), -3.16281(-2) $_{AA}$ and (2.66117(-1), 3.23578(-2) $_{EXR}$] were statistically greater than the 5% critical value 1.569.

We also observe that one percent increase in the financial inclusion variables such as account owners of any type (AA) and credit to private sector (CPS) at lag (-1) and (-2), leads to [35%($_{CPS)-1)}$, 42.8%($_{CPS)-2)}$ and 3.1%($_{AA)-2)}$ increases on aggregate saving (ASE) which is quall to investment in the economy

respectively during the periods of the study. On the other hand, One percent decrease in the interest rate (IR) at lag one (-1) will leads to 56% (IR)(-1), increase on the aggregate saving (ASE) in the Nigerian economy respectively, in the long run during the periods of the study. Whereas one unit decrease in at lag (-1) and (-2) will leads to 17% $_{(EXCR)-1)}$, 99% $_{(EXCR)-2}$ increase on the aggregate saving (ASE) in the Nigerian economy respectively, in the long run during the periods of the study.

Meanwhile, viewing at the Granger causality test carried out, we observed that there exists a bidirectional causal relationship between these variables [ASE, AA and EXR] and in the same model reported partial causal relationship between the dependent variable [ASE] and [CPS and ITR] financial inclusion indicators in the model tested. Based on this, we conclude that, "financial inclusion has significant positive impact on the Nigerian savings and investment growth" during the period of the study 1980-2022.

Conclusion.
This study sought to examine the impact of Financial Inclusion on the Nigerian Economic growth 1980 to 2022. There is the expectation that financial inclusion in Nigeria will contribute to economic growth by possible positive in greater savings, broad money, credit to private sector, Ratio of loan to deposit interest rate, and increase number of commercial bank branches in the country, loan to rural areas and number of account owners of any type.

Having analysed the state of financial inclusion in Nigeria, and based on the results obtained and interpreted the null hypotheses that stated, "Financial inclusion has no significant impact on the Nigerian economic growth." (2) "Financial inclusion has no significant impact on poverty reduction in Nigeria" and (3) financial inclusion has no significant positive impact on the Nigerian savings and investment growths in Nigeria were rejected. Thus, given the prevailing policy environment in Nigeria, these explanatory variables, has significantly impacted and did improve the growth of the Nigerian economy. Savings behaviour in average showing 51%, number of account owners of any type having 59%, and electronic money banking/payment system showing 26% influences to economic growth and poverty reduction in Nigeria. Finally, the econometric estimation shows that borrowings and loans from financial institutions are having 8% and 3.2% significantly contributed to economic growth. This implies that borrowing and savings through outside financial institutions (using family, friends or saving clubs) still pave way to reduce influences to people in the Nigerian economy. From the foregoing, therefore, we conclude that level of financial inclusion in Nigeria is high which significantly affected positively on the Nigerian economic growth, poverty reduction in Nigeria

and Nigerian savings and investment growths during the period of this study.

Policy Recommendations

1   Given that financial inclusion has significant impact on the Nigerian economic growth, the study recommends that "Nigeria governments that have limited public funds, or limited tax revenue, to fund financial inclusion programs should prefer to use financial literacy as a national strategy for financial inclusion because it is relatively cheaper to educate the population about financial management and the benefits of using formal financial services".

2   Since financial inclusion has significant impact on poverty reduction in Nigeria, the study then recommends that "stable electricity supply to drive the infrastructural facilities provided by banks, telecommunication companies and other related service providers such availability and affordability of financial services in Nigeria; however, there is a need to ensure stress-free accessibility to financial services which will be reflected on the deposits by private individuals.

3   The study established that financial inclusion has significant impact on the Nigerian savings growth, the study recommends that "Nigerian monetary authority (CBN) should increase the number of formal account ownership by building up trust securities in financial institutions operation in Nigeria, remove all obstacles for account ownership such as income and age bracket bias, distance in location and education discrimination in the delivery and use of financial services

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IGBO DIASPORA SUSCEPTIBILITY TO WESTERN CULTURAL VALUES

Boniface Ifeanyi Orji
History and International Studies
Joel Awoniyi School of Education and Humanities
Babcock University
Llishan-Remo, Ogun State
orjibonifacesly@gmail.com

Kelechi Johnmary Ani
International Relations and Diplomacy
Division of Humanities and Social Sciences
School of Arts and Sciences
University of the Gambia
kjani@utg.edu.gm

Abstract
Migration had always been integral to Igbo history during the Pre-Colonial, Colonial and Post-Colonial eras. However, the aftermath of the Nigerian Civil War had maximally influenced the rate of International migratory behaviour among the Igbo orchestrated by the desire for greener pastures. The susceptible nature of the Igbo diaspora to Westernization has enormous economic, social, and cultural implications for Igbo society, such that Western civilization has taken precedence over Igbo values and culture. The high level of assimilation into Westernization has led to cultural marginalization, a situation that often presents a real dilemma to Igbo in the Diaspora. In this regard, curiosity comes to mind and raises some apparent paradoxes on why the Igbo, who so much cherished their culture at home, now neglect the same culture abroad. The objective of this paper is to examine the challenges that the Igbo Diaspora faces in the face of two conflicting cultures (Igbo culture and Western culture), especially in raising their children born in the Diaspora in traditional Igbo cultural values despite the ubiquity of the Western socialization process. The methodology adopted by the paper is a historical approach and qualitative approach comprising oral sources and semi-structured interviews gotten from the experiences of Igbo Diasporas who usually come home for one function or the other. The paper found that Western practices are fast gripping into the lives of many Igbo Diasporas. Based on this, the paper concludes by urging that the Igbo Diaspora should evolve a viable option and measures to retain their traditional culture while still living in the Western culture.

Keywords: Migration, Diaspora, Igbo, Culture, Westernization, Socialization, Nigeria

Introduction

Uncertainty and risk perceptions have

always been important elements in the decision-making process about migration. Migration has always been an integral part of mankind, beginning from the treks of nomad tribes to the mobility of individuals. Migration is usually triggered by the pull and push factor which has to do with the search for a new geographic location to satisfy the sustenance needs of individuals, families and in some cases, a whole tribe/clan. The migration decision is a decision taken in the context of uncertainty and risk. Information about the future is incomplete, and whether migration turns out to be a success or a failure for individuals depends very much on circumstances that are *ex ante* unknown.

Individuals with migration intentions continuously assess general economic prospects, including the labour market situation, at home and abroad in order to form reference points and updates for their migration-related expectations. According to Braunvan, (2004), people tend to be pulled to the areas of prosperity and pushed from areas of decline. Migrants are usually concerned with the benefits they hope to gain by moving and usually give less thought to the problems that they will incur as a result of the process.

The migration of Igbo people in the diaspora was propelled by the assumptions that average Igbo migrants are generally risk-takers, however, Igbo migrants consider risk and uncertainty inter-temporally, e.g., by trading medium-level risks for

immediate higher risks, and therefore contribute to a risk-diversification of earnings among family members. The Igbo travelled out of Nigeria to look for a greener pasture and settle down at their host country for either on long-term, or short-term bases. Travelling out of their homeland the Igbo people took a different dimension after the Nigerian civil war in the 1970s. There were identifiable factors such as the economic, political, as well as social pushes and pull factors that made them migrate to the Western countries of the USA, UK, Germany, Canada, Australia, and in recent times China and other Asian tiger countries (Gordon: 1998). Following the menace of the Nigeria civil war, hundreds of Igbo professional teachers, doctors and engineers left Nigeria in search of better opportunities outside Nigeria. This new trend coincided with worsening economic conditions, political and social instability and the emergence of unruly political tussles that limited the expression of basic human and civil freedoms.

In the traditional viewpoint, people migrate when they are both pushed by a lack of opportunities at home and pulled by the hope of economic gains elsewhere. Thus, the hope that migration will help individual migrants more closely with available economic opportunities, employment and services elsewhere is a major incentive for migration. (Zeleza: 2002). Arguably, migration is necessarily a part of a family strategy to raise income, obtain new funds for investment, and insure against risks. It

is not surprising therefore that thousands of Igbo workers with relevant skill endowments leave Nigeria yearly to pursue better economic prospects within or outside Africa (Alawiye: 2012).

Migrants who leave Nigeria arrive at their countries of destination with broad plans, defined intentions, and hopes and are faced with personality fully socialized in a society with limited options or unsatisfactory and unfair social and economic regimes. The process of migration involves cultural contact resulting in cultural diffusion, assimilation and adaptation among different groups, especially in countries where social interaction is more complex and dynamic. In many instances, certain cultural values of the host countries are assimilated while some aspects of the Diasporas' culture are lost over time and the younger generation may be ignorant about the existence of such cultural values and beliefs (Okwuchi, 1992).

Given this, there is a high probability of loss of certain elements of the Diaspora cultural values due to their susceptibility to Western cultures. The retention of some aspects of culture could engender stronger evidence of cultural identity among the migrants. Wusu and Isiugo (2006) indicated that migration poses a threat to the continued existence of indigenous cultures of migrants in their host communities, there is concern about the ability of the diaspora to retain their cultural identity while simultaneously adapting to the host communities'

norms and values.

The Igbo had been adjudged to be ubiquitous. This is because it is very difficult to travel across Nigeria, Africa and the globe without seeing the Igbo in those places carrying out one transaction or the other (Orji: 2020). There is a popular saying in the local palace that *"anywhere you go and you do not see any Igbo person there, you should leave the environment"*. The Igbo people in their nature are susceptible to adapting to whatever environment they find themselves in. In other to achieve their aims of 'making it abroad' which is one of the pull factors that motivated them to leave their country of origin, the Igbo diaspora often rewrites their identities and belonging by adopting Western values. With that, the Igbo cultural values are threatened by the unstoppable influence of Westernisation on Igbo in the diaspora. Indeed, the disparity gap in cultural values and norms which Igbo immigrants have assimilated into the host culture is always in contrast to their traditional cultural values, which may have detrimental effects on the Igbo families in the Diaspora. This is so because within such a new environment, new cultural values emerge and new personalities are formed, thus impeding on Igbo cultural values and norms.

This paper examines the susceptibility of the Igbo to cultural changes and challenges that the Igbo Diaspora community in the Western countries (with the US in focus) are confronted

with in the face of Western cultural values, as well as the difficulty of inculcating on young Igbo people in Diaspora the Igbo cultural values. Whilst it is a great idea for Igbo immigrants to emulate decent and appropriate Western cultural values it will also be wrong to abandon Igbo's rich cultural practices.

Understanding the Evolution of Igbo Diaspora

The history or evolution of the Igbo Diaspora just like other Diaspora communities had evolved in three stages. The first stage had to do with the Trans-Atlantic Slave Trade, which took place between the 16th and late 19th centuries. Most Igbo slaves were taken from the Bight of Biafra. Afigbo (1982) stated that the Igbo slaves who were captured during the slave trade era were dispersed to colonies such as Jamaica, Cuba, Haiti, the United States and Trinidad and Tobago, among others.

After the first stage of the Igbo Diaspora evolution which came to an end shortly before colonialism in Nigeria, came the second stage when the European missionaries that came to Igbo land introduced education. Some of the brilliant students then were taken abroad to go and further their education to come back and help the white missionaries in the propagation of the Christian faith. Among the Igbo that benefited from the missionary gesture were Cardinal Francis Arinze, the late Rev. Fr. Iwene Tansi, Isaac Iwekanuno, and Pita Nwana among others. (Oraka: 1983). This stage lasted

till the outbreak of the Nigerian Civil War. During this period, migration became historically a way of life and Igbo people always exhibited a keen tendency to migrate in search of education rather than economic activities.

The third stage of the evolution started in the late 1970s. Following the menace of the Nigeria civil war, hundreds of Igbo professional teachers, doctors and engineers left Nigeria in search of better opportunities outside Nigeria. This new trend coincided with worsening economic conditions, political and social instability and the emergence of an unruly military dictatorship that limited the expression of basic human and civil freedoms. It was during this time that many Igbo professionals moved to America, Europe, Asia UAE and other parts of Africa and the phenomenon known today as brain drain began.

Speaking it was a period when living either in the US or abroad, was the desire of most Nigerians. It was a period when girls jilted their lovers for unknown Nigerian males from the USA or when families mortgaged their homes to send their kids overseas (Orji: 2020) Igbo and many other Africans see the Western countries as the lands of immense economic opportunity, liberty, and freedom. This has created "a going abroad" syndrome in all levels of Igbo society, particularly among youths, urbanites, and educated people. The picture of life created by returnees is that

overseas is a place where it is possible to survive on minimum wages and where the monthly minimum wage is more than the average African worker makes in a year (Arthur, 2000:24). This has made it possible for Igbo immigrants abroad to share their relative prosperity by making remittances annually back to their families and friends (Roberts: 2005).

Despite all these mentioned above it is pertinent to note that the susceptibility of the Igbo people in the diaspora to Western culture may have had a negative influence on the cultural values of the Igbo people. Its effect may be detrimental to the young people in the diaspora, who may have little knowledge or none about the Igbo cultural values thereby hurting their relationships, attitudes, values and expectations, clothing, food, religion and music, among others.

Cultural Conflicts faced by Igbo Diaspora

Cultural identity is important among the Igbo, and they attach particular importance to retaining their culture. Wherever the Igbo migrate to, they do not leave their values, beliefs or culture behind, no matter the circumstances surrounding their migration. However, when two cultures come in contact, then several events may occur, part of which is acculturation. According to Berry (2002), the process of acculturation is akin to the psychological models of moving towards, moving against and moving away from a stimulus. The process of acculturation requires two cultures to come into contact and both cultures may experience some change. In reality, however, one cultural group will often dominate the other group. Acculturation has been defined as a 'phenomenon' which results when groups of individuals from different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either one or both groups (Redfield: 1936).

The indigenous cultural components which have been in conflict as faced by the Igbo Diaspora in their host country can be classified under, marriage, attitudes, values and expectations, clothing, food, religion and music, among others.

Marriage:

Among the Igbo, marriage is considered to be a lifelong commitment by two peoples to each other and is signified by a contract sanctioned by the community. Marriage is understood as a union of families, instead of a union of just two individuals (Enwereji: 2008). This is what makes marital breakdown very difficult because domestic squabble between spouses that threaten the marriage being on the verge of collapse will bring together a small group of immediate/extended family members of the spouse concerned, and acting in an advisory capacity, they seek to reduce the level of violence after which they will then attempt to resolve the actual dispute through mediation (Stevens, 2000). This explains why marriages are hardly abruptly broken in Igboland. Indeed,

many Igbo women endure their marriages for the sake of their children's future and to avoid the negative publicity such dissolution will bring to them and their families (Egodi, 2006).

However, Cultural re-adaptation in the US has introduced new dimensions that challenge the patriarchal nature of Igbo men in some Igbo marriages in the diaspora. Some Igbo women when they arrive in the U.S. are exposed to a society that gives every individual (irrespective of sex), equal opportunities and freedom to create more egalitarian relationships, than what is obtainable in the Igbo society in Nigeria (Djamba 1999). These men with their patriarchal mentality sometimes feel threatened because working outside the home has left their wives with a sense of strong identity, and reasonable financial independence which was inconceivable in some Igbo societies back home, where some mean husbands would not have allowed their wives to own a bank account, buy a house and above all will always expect their wife to seek approval from the man on when and how she spends her money, all in the name of been submissive. With this newfound changing gender role in the US, some patriarchal Igbo men feel threatened by their men's hegemonic masculinity centred on being the main provider and decision-maker in the family. The changing gender relations and roles have resulted in some marital issues, some men sharing roles in the family, and for some, the re-adjustment of gender relations and roles (Chima: 2020). However, other Igbo couples who have come to understand the Western idea of marriage are taking advantage of the egalitarian relationship obtainable in the US to enjoy their marriage (Agbali 2012).

Some Igbo men in the Diaspora who still operate with the patriarchal and men hegemony mentality in marriage are finding it problematic to adjust in the host country, and as a result, some of the Igbo marriages are having issues (Ndulo: 2001) because some of the Igbo women who had overcoming some of the challenges women are faced in the diaspora such as underprivileged in gendered; racial and perhaps class categories; the struggles that transcend gender; including processes of violence, systematic inequality, structural racism and corporate globalisation, sometimes demand public affections from their husbands like kissing in public as most American spouses do, which Igbo men in the traditional Igbo society do not necessarily do. Emphasis is placed on responsibility and respect for one another, attention to the moral upbringing of children, attention to the education of the children, fidelity in monogamous couples, and caring for the needs of extended families (Falola, 2001: 120).

Expectations and Norms:
Expectations and Norms from couples differ between traditional Igbo society and the US. Someone who grew up in

Igboland where it is the norm and expectation for women to cook, do household chores, raise the kids and serve the husband, will have a cultural shock when exposed to the American society, where women share family responsibilities with their spouses. Some women can hold important non-domestic jobs and are financially strong in the US and in that regard can have an equal say on issues in the home, and can financially contribute to the upkeep of the family (Nyang: 2015). Since women can contribute to the family upkeep, it is then expected that household chores like cooking, doing dishes, sweeping and doing laundry as well as picking the kids up from day-care and raising them should be shared with the men.

However, Some Igbo men see these changes as challenges to their masculinity. In some situations, the men's reactions lead to friction, which in some cases has caused marital problems that have sometimes led to divorce (Nnanna: 2020). The incidence of divorce, which has witnessed a rise in the number of lone-parent households, has been found to have social, psychological and educational effects on children differently, depending on their gender, age and stage of development. Such impacts transcend beyond the children of divorced parents to the spouses themselves.

Young Igbo Marriages
For some Igbo parents, the idea of a child determining his/her wishes when contemplating marriage against their

parent's wishes is culturally inappropriate as it undermines values of respect for elders. (Burke: 1998). This perhaps undermines their children's marital wishes and love connections. In the traditional Igbo society, parental consent is important and has to be guaranteed before any progress is made in marriage; however, some parents encounter role strain as they attempt to shape the cultural identity of their children through marriage. This practice that is obtainable in Igboland has sometimes led to conflicts between parents and their children when the parents try to replicate the practice in the diaspora, over the choice of their children's marriages (Chima: 2020). Some of the Igbo young diasporas will prefer to marry men or women of their choice irrespective of their nationality, colour or religion, and the conflicts usually arise when their Igbo parents insist that they must marry an Igbo person, or some parents are even specific – "it must be someone from their immediate community" (Chikelue: 2020).

Most Igbo parents in an attempt to make their dreams come true have resorted to planning summer vacations especially for the girls to travel back to Nigeria to connect them with the Igbo cultural values and way of life. Disagreement between parents and their kids on who they choose to marry has resulted in parents alienating or holding out their approval because their daughter or son chooses a man or woman who is a Westerner. This problem which is becoming endemic among many parents can

systematically ruin the lives of these kids (at least those who chose to obey) or they are not on talking terms with those who went ahead and marry a non-Igbo person (Awodele: 2013).

Culture Conflicts and the Igbo Child in the Diaspora:

Several African immigrants are confronted by many challenges in the U.S. most especially when it comes to culture. However, many of such cultural challenges are not peculiar to Africans. Most immigrants contend with them. For many Igbo parents raising their children in the U.S is a very daunting and challenging task. (Arthur, 2000). The diaspora is usually torn between two cultures, (Awodele: 2013), and Igbo parents in the Diaspora are not exemption. They are sometimes in a dilemma as to where to raise their children because some of them often display behaviours that, under normal circumstances, would not be tolerated or accepted in an Igbo society. (Orji: 2017) In the United States, for instance, young Igbo immigrants are faced with the challenge of maintaining Igbo values and adopting American cultural identities. Some of them are resisting the wholesome adoption of Igbo culture by claiming their right to define and interpret the world from their perspective and the new choices that America offers. (Arthur, 2000). Among young immigrants, the expression of identity in the immigrant community is seen in clothing, hairstyle, and language patterns.

Discipline

In Igbo society, corporal punishment in the home is often used by parents to correct and enforce moral behaviour in the child. However, the case is different in the Western world where it is believed that corporal punishment is tantamount to a violation of children's rights. This has presented a difficult situation for Igbo parents in the diaspora who resist the temptation of applying any form of discipline on their children for fear of running into trouble with child protective services and being branded a child abuser (Chikelue 2020). In the United States, the children's access to/threats to call the police (911) has added to the frustrations of some Igbo parents because this condition is detrimental to family cohesion as well as to the mental growth and moral development of the child. Some of the children have joined gangs, doing drugs, steal and killing, sexual precocity, rising teenage pregnancy and prostitution, and cutting classes or dropping out of school and other self-destructive behaviours (Dike, 2004**).**

For Igbo immigrant families, who are fiercely traditional and deeply committed to the Igbo cultural values and ideals, the behavioural acting-out of their children can be devastating and humiliating when they find themselves hard-pressed to deal with their children's often severe and unfamiliar emotional and behavioural problems, particularly without the support of extended family and the greater Igbo community. Consequently, there is a growing trend among some immigrants to send their children home

to be raised by maternal or paternal relatives to expose the children to proven methods of family socialization and child-rearing in Africa (Chima 2020). The biological parents in the United States send remittances home to support the child (ren). The children do not come back to the United States until they have completed the rigorous secondary school curriculum to attend college (Arthur, 2000:119). This gives the child the opportunity to know immediate and extended family members and to grow up in an environment where morality and good character education are relatively regarded (Arthur, 2000:119).

Language

The Igbo language remains the symbol of the people's ethnic identity. The language gives their speakers a positive self-image. Parents of Igbo children face special challenges in terms of helping their children maintain a positive cultural identity through the language used in communicating. Most Igbo people use English as their primary medium of communication with colleagues and Americans formally and informally at work and social events, at home they tend to communicate in their mother tongue. Therefore, while raising children in the Diaspora, some insist that their child speak only the home language at home and save English for school and other public domains. Home language for such parents remains a symbol of cultural survival, while school language is perceived as a means to an end–material survival (Yenika-Agbaw, 2009).

However, the transition between the home and school languages can be tenuous as well, as gradually some Igbo children begin to regard the language spoken at home as inferior simply because many of their mainstream peers are unfamiliar with it. It is as a result of this negligence that there is a rising body of young Igbo who do not speak Igbo languages. Many thought that these languages would be acquired, as if by osmosis, through the child's interaction with members of the family (Nyang 2015). Given these challenges, it is appropriate to raise the question of socialization and the need for social and moral agency in the education of Igbo immigrant children (Lamba 2000). The gradual extinction of this language is, therefore, a sign of the disintegration of the unity of the Igbo people. Once languages which bind the people together die, the basis of their unity and group identity will be undermined. Arguably, as it stands now Igbo languages are experiencing language contraction because the host culture has subsumed the Igbo language in the States, as a result, the precious cultural practices of the people are also shrinking (Ijeoma: 2019).

Food:

Food is a major source of intergenerational conflicts among Igbo immigrants and their children in the Diaspora because, in reality, a lot of Igbo men and women have their preferences for traditional recipes based on their customs, religions, and available food resources. In the

southeast, among the coastal communities, the choice meals are seafood and yam stew. Among the Igbo, yam and *gari* dumplings are the favourites, while soups such as *onugbo* (Bitter leave), *egusi* (melon) *ofe owerri*, *Ugu* (pumpkin leaves) and *okazi* vegetables are added to beef, fish crayfish, and spices are most preferred. (Falola, 2001: 103).

The preference for Igbo dishes explains why the Igbo have exported some of their foods and cooking techniques abroad. Ironically, this is not the case with young immigrants who cannot hide their dislike for Igbo dishes which many of them claim smell and taste nasty. (Okemo 2006). Their dislike may be attributable to the type of meals immigrant children are accustomed to in the school cafeteria and fast-food restaurants – MacDonald's, Burger King, KFC, and Subway among others. It, therefore, behoves parents to carefully introduce Igbo food culture to their kids when they are young rather than try to force it on them when they are old to decide for themselves.

Traditional Dress:
Dress fulfils the essential need to protect the body. It is also associated with the desire to appear good and "civilized". But dress does more than that. The majority of Igbo wear traditional dress or a modified version on a routine basis. Even the elite who wear Western attire in the workplace prefer traditional garments for ceremonies and special occasions. (Falola, 2001: 106 -115)

Traditionally, the Igbo, especially Igbo women, believed in and valued decorating their bodies for a variety of reasons including aesthetics. Body decorations for women included various styles of hairdos and also involved painting the body with temporary traditional cosmetic makeup, using *nzu* (white chalk), *uri* or *uli* (the black dye used by women to draw ornamental patterns on each other's body), *edo* (yellow dye), and *ufie* or *uhie* (carmine). Later, during this period, women started wearing loose natural black eye powder (*tanjele*) on the eyelids (Ukwu, 2000).

Among the young diaspora is the growing trend to ditch African dress style for "American celebrity style" which includes wearing "designer dress" and sagging pants with "underwear exposed. Fashion trends for most young girls which include thongs and spaghetti hand clothes are provocative and amount to a near total abandonment of modesty which is un-African for Nigerian girls to be clad in dresses that reveal the essentials: boobs, buttocks, backs and hips. With the changing emphasis on dress style among young boys and girls, and updating their look and style to meet the standard of the younger American population, there is no doubt that African culture in the Diaspora is at a crossroads (Nwora: 2008).

Mystery of Home Return
Meanwhile, some Igbo migrants are been confronted with the "mystery of home return". All immigrants always have the notion of leaving their home

countries for countries of settlement, striking it rich, and then returning home with enough resources to live well in their countries of origin (Nyang 2015). More often than not, they don't actualize these lofty dreams. On several occasions, single immigrants obtain their "Green cards" and integrate into American society, marry American citizens (US Homeland: 2007) and end up with a family and children. The Igbo immigrant who finds himself in this kind of situation may be constrained to stay longer than was anticipated to ensure his children's education and autonomy before going back (Adbullah: 1999). In some cases, the children that they were waiting for before relocating back home, end up starting their own families and what was originally meant to be short-term migration becomes permanent. As a result of the uncertainty of returning home among the Igbo diaspora, there is a serious gap between ideals and realities. Most have grand ideas about what they would like to contribute to the transformation of their home countries. Because of their procrastination and ambivalence, they focus on their host countries, while neglecting to socialize their children to cope with life in their countries of origin.

Conclusion

The pervasive influence of American cultural values on Igbos in the Diaspora has stripped Igbo people of their values and culture. Indeed, the Western methods of diffusion have easily helped to supplant traditional ideas and values which stand in sharp contrast to Igbo cultural values and their way of life. This "Fatal Attraction" best explains the challenges that Igbos in the Diaspora face in inculcating Igbo cultural values in their children. This unfortunate development is examined alongside the dilemma Diaspora face in their marriages essentially because the society in which they live do not subscribe to the African traditional values they cherish. Although this is frustrating, to say the least, in this age of globalization, there is a need to bridge the gaps between African traditional values and those of the West

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ACHIEVING GENDER EQUALITY AND WOMEN LEADERSHIP IN A SELECTED STATE UNIVERSITY IN ZIMBABWE: A FEMINIST CAPABILITIES APPROACH

Annah Moyo
Department of Educational Policy Studies and Leadership
Midlands State University, Zimbabwe
moyoan@staff.msu.ac.zw

Wonder Muchabaiwa
Department of Educational Policy Studies and Leadership
Midlands State University, Zimbabwe
muchabaiwaw@staff.msu.ac.zw

Abstract
Despite international efforts towards gender equality, universities in developing countries including Zimbabwe continue to grapple with underrepresentation of women in leadership positions. The glass ceiling remains an impediment for women in universities in developing countries. This study explores the lived experiences and perspectives of female leaders and prospective female leaders in Zimbabwean state universities. The study adopts the feminist capability lens to illuminate the complexities and nuances of challenges that obstruct female academics to assume leadership positions. This qualitative study adopted a sequential exploratory design and collected data through in-depth interviews, focus group discussions and document reviews selected state universities. The findings highlight the deeply entrenched cultural values gender stereotypes that continue to disproportionally disadvantage prospective female leaders in universities. Such stereotypes include belief in mancho masculine attributes for leaders, women's domestic responsibilities and lack of support and role models. The findings highlight the need for targeted interventions, including policy changes, leadership development programs, and initiatives to address work-life balance and support prospective female leaders. This study thus contributes to the ongoing discourse on gender equality in higher education, offering valuable insights for policymakers, university administrators, and scholars working towards a more inclusive future for African universities.

Introduction

Gender inequality in higher education particularly with reference to leadership positions has remained elusive in developing countries despite several efforts to redress the historical imbalances. While national policies and international conventions promote

equal opportunities, women continue to face significant barriers to achieving leadership positions within universities (Chanda & Ngulube, 2024). Over the years, feminist discourse has been projected as a conceptual framework to redress the perceived historical social and gender injustices. Zimbabwe has not only enacted laws that promote gender equality (Equal opportunities Act, 2002; Domestic Violence Act, 2007) but also ratified regional and international legal frameworks (The SADC protocol on gender, Convention on the Elimination of all forms Discrimination Against Women, CEDAW) that advocate gender equality in all social, economic and political spheres. In African universities, it would seem the varied feminist discourses and subsequent legal reforms have not achieved the intended objectives as positions of authority have remained largely male dominated. In the context of Zimbabwe, literature suggests that despite gender policies aimed at fulfilling national goals, such as the National Gender Policy of 2013 and international conventions advocating for 50:50 representation across sectors including education, gender disparities persist (Chanda & Ngulube, 2024; Lyons & Zhang, 2023). Despite an increasing presence of women in faculty roles, leadership positions in Zimbabwe' state universities remain male dominated. This study aims to shed light on the nuanced lived experiences of prospective female leaders and female leaders in Zimbabwean universities. Further, we employ a feminist capability lens to illuminate the agency and capabilities women aspiring leadership roles. Since women are not a homogenous group, we consider intersectionality as factors like background, race, class and academic discipline tend to intersect with gender shaping women's realities and opportunities to assume leadership roles in the higher education.

Background

The challenges experienced by female academics seem to take a global trend. Globally, women hold just 28.2 per cent of management positions in the workplace (UN Women, 2023). This gender disparity in leadership positions permeates institutions in higher education in both developed and developing countries. Gender disparity refers to the differences women and men face particularly in their ability to access resources, advancement and professional statuses (Baker & Osanloo, 2022). In higher education gender disparity is demonstrated by the differences in which women are represented in leadership positions, their ability to experience career advancement (O'Connor, 2011). According to Meza-Mejia, Villarreal-Garcia and Ortega-Barba (2023), 18% of university rectors are women in nine Latin America countries, while only 15% are women in 48 European countries of which 20 did not have any female leaders. A systematic review on the barriers and facilitators to success for female academics in UK Higher Education by Westoby, Dyson, Cowdell and Buescher (2021) revealed a

disquieting narrative of continued biases, barriers, double-standards, and unsupportive work environments for women academics.

Meanwhile female researchers at higher education institutions represent 39, 7% of the world' total. For female prospective leaders in higher education there seems to be a glass ceiling to leadership positions. The glass ceiling refers to the seemingly invisible barriers women are faced with that prevent their advancement and achieving leadership positions (Coetzee & Moosa, 2020). In many countries the representation of women tends to decrease as academic ranks progress and few women reach senior and leadership positions within higher education institutions (Galán-Muros, Bouckaert &Roser, 2023). However, in the global north there seems to be a shift to be a shift as more and more women are assuming leadership roles in higher education. For example, in Austria, regulation was introduced in 2009 to require university bodies such as the senate and other commissions to meet a quota of 40% female members. The quota was raised to 50% in 2014. By 2016 all but one of the university councils had fulfilled this quota (UNESCO IESALC, 2022).

Yahya, Anwar & Zaki (2024) confirm that immediate and effective measures are being taken in the West to promote women's academic leadership, whereas Eastern countries appear to be in dire need of realising the importance of women's active contributions to decision-making, as indicated by fewer studies coming from Asian contexts grappling with a wider gender gap. The dilemma seems persistent in developing where policies are failing to enhance gender equality in higher education. Change in higher education across the globe is taking place at an unprecedented pace. Various groups, especially women, are impacted differently by these changes. Women remain underrepresented in leadership at universities across the globe, and South African higher education is no different (Schreiber & Zinn, 2023). For women to take up senior leadership roles more potently in universities, particularly in the Global South, it is essential that they not only cope with and compete in the patriarchal systems that characterize this sector but are also emboldened to contribute to changing patriarchal hegemony. Cultural norms and attitudes remain a major barrier for women advancing into leadership positions (Joshi & Misangyi, 2018). Cultural and structural conditions and practices impact on GE leadership in HEIs.

A study conducted in Sub-Saharan Africa by Semela, Bekele and Abraham (2020) showed that women's entry into, and success in academia is impacted by a complex set of factors ranging from hegemonic gender beliefs that trigger the use of double standards disfavouring women to deliberate exclusion during selection, employment, promotion, and appointment in leadership positions. In cultures that emphasize women's roles as subservient, these values may

discourage women from working or seeking leadership positions to begin with (Kiamba, 2009).

In cases where women seek to advance in the workplace, they are often faced with an organizational culture that subjects' women in the workplace to sexual harassment, relegates women to secretarial duties and leadership only in certain roles, like human resources, and undervalues their expertise (Haile et al., 2016; Joshi, 2014; Joshi & Misangyi, 2018). Another study by Moodly (2015) in South Africa reveals that gender equity (GE) in relation to the representation of women forms part of policy within South African legislature, as part of a democratic society. Despite GE policy, leadership within Higher Education (HE) is still male dominated. Her findings reveal that gender equity is not practiced within HE leadership and suggest that HE leadership is male dominated; with the glass ceiling a reality for women. Wheeler and Wiese (2024) observe that some male colleagues prefer to work solely with other male colleagues, resulting in women being sidelined and feeling voiceless. Female employees reported being harassed by students and having difficulty managing professional and family life. TA discussion based on a literature review is presented, reflecting that cultural and structural conditions and practices impact on GE leadership in HEIs

Report by the Zimbabwe Women's University Network (ZWUN) (2018) confirm that women are underrepresented in senior leadership positions in Zimbabwean universities. Although women constitute a larger proportion of academic staff, they occupy limited posts of Vice-Chancellor, Dean, Head of Department (UNESCO, 2021). In the same vein, report on the First National State of Gender Equality in Zimbabwe (2016), underscores that women remain underrepresented in leadership. More so, UNESCO data (2014-2016) Global Gender Gap Report 2022 ranked Zimbabwe 129th out of 146 countries overall gender parity score. According to Muchabaiwa and Chauraya (2022), in Zimbabwean higher education, the Education 5.0 framework is gender blind and tends to diminish female academics' prospects for promotion into leadership positions. This study thus interrogates why women continue to be underrepresented leadership despite efforts by feminist movements and the state to institute legal reforms that promote gender equality. We explore the missing link that continues to precipitate gender inequalities in leadership in higher education. Women remain significantly underrepresented in leadership positions within Zimbabwean state universities. There seems to be a gap between existing gender policies and their effective implementation in higher education. This study explores the lived experiences of prospective female leaders and female leaders in a Zimbabwean state university to understand the obstacles they face and identify opportunities for promoting gender equality

To understand the nuances of contextual cultural practices, as well as structural norms and values obstructing female academics' career progression, the study applies the feminist capability approach.

Conceptual Framework: The Feminist Capabilities Approach and Power Dynamics
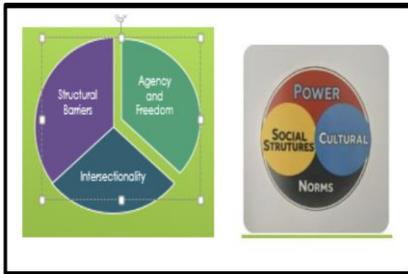
The framework offers a valuable lens for analysing power dynamics and gender inequalities within Zimbabwean state universities. According to Sen (1999), the capability approach includes key elements of capabilities (or opportunities), the *functioning's* (or outcomes) that flow from them along with the *conversion factors* that influence the capability set and the *adaptive preferences* that inform choices. The feminist capability approach (FCA) provides insights into how structural barriers, social norms, and institutional practices shape women's capabilities and choices within academia. It further provides a better understanding of the interplay between cultural norms and power dynamics that influences the real opportunities (capabilities) of the female academics to access leadership opportunities of their choice. Intersectionality within the FCA framework acknowledges the complex interplay of gender with other social categories, such as race, class, and ethnicity. By extension, FCA creates a robust framework that illuminates the nuances and complexities of gender intersectionality, gender dynamics and patriarchal tendencies that obstruct women's career pathways. It enriches our understanding of women's experiences in higher education. Generally, Zimbabwe is a patriarchal society hence male dominance in higher education is a reflection of the social and cultural milieu.

Research questions
What are the lived experiences of prospective female leaders and female leaders within Zimbabwean state universities?

How have gender norms and power dynamics contributed to the obstruction of women's capabilities and agency in leadership roles?

What are the prospects and opportunities for promoting gender justice and fostering women's empowerment in universities?

What actionable policies, practices can be proposed address gender disparities and empower women in leadership roles in universities?

Research Methodology
The qualitative study adopted a sequential exploratory research design where in-depth interviews with key

informants were preceded by focused group discussions with prospective female leaders in universities, and document reviews showing female academics in leadership positions. The qualitative research approach guided the process of collecting, presenting and analysing data on the lived experiences of prospective female leaders and female leaders in state universities. The approach allowed an in-depth exploration of the experiences, attitudes, feelings and perceptions of the research participants on the nuances and complexities in gender and power dynamics in state universities (Neuman 2014:51). It allowed deep insights into cultural and structural barriers to women' promotion to positions of authority and leadership in universities. Document reviews, focused group discussions and in-depth interviews allowed multiple voices to be heard, provided a more holistic picture of the research issue being investigated and allowed for triangulation of data for reliability and trustworthiness as data from different sources that can be compared and any inconsistencies followed up on. Data from multiple sources provide means to develop defendable conclusions on challenges obstacles obstructing female academics to assume leadership positions. The combination of multiple methodological practices, empirical materials, perspectives and observers in a single study is a strategy to add rigor, breadth, complexity, richness and depth to the inquiry.

Sampling

Participants for this study were identified mostly through purposive and snowball sampling. Snowball sampling has several other names-chain referrals, reputational or network sampling (Neuman, 2014) or rhizome sampling (Schutt, 2007). Snowball sampling is used with difficult-to-reach participants, particularly prospective female students who participated in focus group discussions. One of the strengths of snowball sampling is its efficiency in finding sites or persons whose attributes are central to the research problem (Creswell, 2017). In order to avoid the weakness of bias (identification by respondents of people similar to them in circumstances) inherent in this method several snowballs were used. Thus, three focus groups with 10 prospective female leaders in state universities were identified through snowballing. The study also purposively sampled six female leaders in state universities. Although the thrust of the study was on prospective and incumbent female leaders in state universities, we also sought perceptions of four male leaders in state universities on the research issue. This served as a leverage against bias by female participants. The sample thus comprised 40 research participants.

Data Collection Methods
In-depth Key Informant Interviews (KIIs)
In-depth interviews were held with six female leaders and four male leaders in state universities. The purpose of the key informant interviews was to get a

more in-depth discussion on the lived experiences of female academic in state universities especially obstacles and prospects for women's promotion to leadership positions in higher education. The discussions followed up on some issues raised in focus group discussions which needed further clarification by the female academics already in positions of leadership. In-depth interviews delved in detail into cultural norms and power dynamics that influence allocation of positions of leadership in state universities. We also sought insights into possible strategies and prospects for women's promotion to leadership positions in state universities.

Participatory Focus Group Discussion

Focus group discussions were conducted with three groups of prospective female leaders in state universities. The discussion focused on students' perceptions on the lived experiences of the prospective female leaders, particularly the challenges that have kept them away from assuming positions of leadership. We also sought insights into possible prospects for breaking the glass ceiling, allowing prospective female leaders to assume leadership positions on an equal footing with their male counterparts.

More data were collected through document reviews to establish the existing statistics on female academics in leadership positions in state universities.

Data Analysis

The study adopted an interpretive analysis model which helped in establishing emerging patterns or themes from the collected data. Gall et al (2007:466) and Cohen et al (2007:86) describe interpretive analysis as the process of examining a case study closely in order to find constructs, themes and patterns that can be used to describe and explain the phenomenon being studied. Braun and Clarke (2006) elaborate that a theme captures something important about the data in relation to the research question. We thus analysed the data set collected through focus group discussions, in-depth interviews, and document reviews and then coded the data which addressed specific research questions or emerging themes.

Ethical consideration

The study took cognisant of the sensitive nature of the phenomenon under study and thus observed a number of research ethics. The study sought informed consent from research participants and the informed consent form was completed by the participants. In this regard before every interview, we explained to the participant the purpose of the study, its benefits to higher education and how long each interview would take. We also explained that participating in the interviews was entirely voluntary and that participants had the right to withdraw at any stage. Since some of the reasons given by participants pointed to negative attitude by senior leadership, it was very important to maintain confidentiality and privacy of the participants. Participants wanted

convincing assurance of the confidentiality of the information given and those who declined to participate in the interviews did so because they suspected that they could be reported to university authorities. To protect the anonymity of research participants, we generalised responses by the participants and used data aggregates.

Findings

The study sought to solicit the lived experiences of prospective female leaders and female leaders in Zimbabwean state universities. Although several legal frameworks and gender policies in state universities have been instituted, there seems to be a disjuncture between policy and practice. Leadership and management in most state universities have remained largely male dominated demonstrating the deeply entrenched masculine hegemonic power dynamics. From a feminist capabilities approach, prospective female leaders and incumbent female leaders tend to be denied opportunities to explore career pathways of their choice. According to Sen (1999), the capability approach includes key elements of capabilities (or opportunities), the *functioning's* (or outcomes) that flow from them along with the *conversion factors* that influence the capability set and the *adaptive preferences* that inform choices. Denying female academics opportunities to demonstrate their capabilities and agency in leadership roles works against the spirit of sustainable development goal 5:

gender equality and women empowerment.

The Mismatch between Policy and Practice

Data from in-depth interviews with key informants (female leaders in state universities) and focus group discussions with prospective female leaders in state universities reveals that there is a mismatch between police and practice. Female academics continue to be elbowed in leadership positions. An interview with one senior manager in one state university reveals:

The issue of gender equality in state universities' leadership remains a myth. In Zimbabwe, there are 14 state universities and seven private universities. For these institutions, only two have female Vice Chancellors, one at a state university and the other at a private university. The rest have male Vice Chancellors. That alone shows that power dynamics favour a masculine trajectory.

In another interview, one female middle manager shared her sentiments;

As a country we have done very well in putting in place legal frameworks and policies that propagate the gender equality narrative. From experience, I know that every state university has a gender policy. The objective of the gender policy is to ensure gender balance in recruitment, promotion and retention of staff. Unfortunately, the policies and practices do not match. Very few academics have made it to leadership positions.

When asked how she managed to secure a leadership post as a dean, she had this to say;

If you are a woman and you aspire to be in leadership or management, you have to work extra hard. You put double the effort put by men in every aspect. This despite as women we have other domestic responsibilities that interfere with paid work. For example, if they demand 15 publications, you need to ensure that you 20 or more. You need to ensure that that they are left without any excuse to deny you.

Sentiments on existing policies in state universities by female leaders came out as follows;

It is true that we policies that guide the recruitment and promotion process but these are not usually adhered to. The recruitment and promotion policies actually give preferential treatment to female candidates. Some policies like the Education 5.0 and faculty ordinances are silent on issues of gender equality. More so, the gender policies in universities are not applied to the letter and spirit of the policy. It's the reason we have female leaders in universities.

One participant in focus group discussion shared her sentiments:

I have a lot of university experience and have the requisite qualifications but I have tried in vain applying for the post of the department chair. In some cases, they allow members to vote for a candidate to the position of the chairperson and many times it has been a male candidate voted for. The reason is that there are more male faculty members.

Another participant weighed in;

In our faculty, there are five departments and only one chairperson is female. This is despite the fact that the gender policy stipulates that at least 50% of decision makers at all levels should female.

The mismatch between policy and practice has been consistently noted from the sentiments by female leaders. Generally, gender policies in different state universities have clearly stated objectives which promote gender equality in recruitment and promotion processes (Zembere, 2022). Obstacles to women's promotion point to the existence of a glass ceiling in state universities that obstruct female' academics' career progression. According to Coetzee & Moosa (2020) the glass ceiling refers to the seemingly invisible barriers women are faced with that prevent their advancement and achieving leadership positions. When looked at from a feminist capabilities approach, the glass ceiling obstructs women's capabilities and agency in assuming leadership positions of their choice in state universities. It demonstrates power dynamics entrenched in gender norms where a masculine identity is perceived to be appropriate for leadership positions. However further analysis reveals that contemporary leadership is synonymous with feminine attributes. Franklin (2014) contends that there is a shift in gender relations organisations with feminine attributes perceived as appropriate for effective leadership and development.

Gender Stereotyped Leadership Positions in State Universities

Perception from the research participants demonstrate the existence of a patriarchal hegemony in state universities. Unlike institutions of higher education in the developed world, where female candidates are

gradually assuming positions of leadership (Bothwell, 2020; Meza-Mejia et al, 2023; Bowen, 2024), universities in Africa have remained stuck in the male dominated structures in universities. In traditional African societies leadership positions are a preserve for men (Batool & Sajid, 2013). Such gender stereotypes tend to be replicated in higher education institutions in Zimbabwe. The following interview excerpts with male leaders in state universities are revealing:

Women do not make good leaders because they are too empathetic, less assertive, less commanding, and less aggressive and can easily panic. Many of them can hardly forecast into the future and plan accordingly. For the few female leaders that I have worked with, I have found them to be inconsistent in decision making.

Leadership is a critical role that should not be left to women who are sluggish and less adaptive to the ever-changing world. Their motherly approach may not steer progress and development in higher education. Many of them confidence and tend to consult subordinates too much. Leadership entails incisive and insightful decisions, attributes which tend to lack in many women. Generally, male academics resent taking orders from women, making female leaders' situation difficult.

One major weakness I have observed with female leaders is that they tend to be too patient with struggling subordinates. They can't make bold decisions like firing incompetent subordinates. Many of them use emotions and the brain and yet leadership is about making objective and unattached decisions guided by statutory instruments.

Contrary to the perceptions and sentiments shared by male leaders in state universities, feminine attributes have been perceived to be synonymous with effective leadership. According to Frankel (2014), masculine mancho personalities are more likely to be less effective in leadership as they tend to create resentment and resistance by subordinates. Frankel further observes that contemporary societies now envisage leaders who are inclusive, empathetic, listen, reward rather than punish, encourage rather than disparage; leaders who specifically exhibit more stereotypically feminine characteristics. By extension, such observations call for rethinking masculinity and presuppose that the future is feminine. Leadership based on the aforementioned feminine qualities is more likely to be effective as it draws its mandate from the subordinates. In the contemporary society, the traditional masculine mancho personalities which rely on intimidation, coercion and aggression (toxic masculinities) are likely to precipitate resentment and resistance in subordinates. From this perspective, the assumption that the future is feminine is sustainable. By extension, men are put to disadvantage by cultural gender stereotypes (Frankel, 2014) which require them to exude mancho like personalities which are incongruent with expectations of the modern society where the mandate of leadership is drawn from people. Women are likely to be effective leaders because they consult, they are empathetic, and considerate, hence they draw their mandate from the subordinates. However, several studies

show that women are kept away from leadership positions by hegemonic patriarchal power dynamics (Elmuti, Jia & Davis, 2009; Batool & Sajid, 20013; Howe-Walsh & Turnbull, 2016). From a feminist capabilities approach, one can argue that women's capabilities and choices are marginalised by gender norms that accord men preferential access to leadership positions. Inadvertently state universities miss out on utilising feminine leadership attributes to steer change and development in their institutions.

Family-Work Conflict as a barrier to Leadership roles

In developing countries, women continue to bear the burden of domestic chores alone. In the developed countries, shifts in gender relations are noticeable as more and more men are now willing to assist their spouses with domestic work (Voicu, Voicu & Strapcova, 2006; Sani, 2014). Female academics in Zimbabwean state universities are complaining that domestic chores continue to obstruct opportunities to assume leadership roles. When looked at from a feminist capabilities approach (Sen, 1999), domestic chores tend to compromise women's leadership capabilities and freedom to choose career pathways. One participant in a focus group discussion shared her sentiments:

Like anyone else, as female academics we aspire leadership and decision-making positions. However, due to the demands of domestic chores, we don't have ample time to pursue studies and acquire higher qualifications. We are always juggling home and work activities trying to balance them.

Another participant weighed in and added:

Domestic chores stand in the way of women' career progression. There is just too much work for one person in the home. We need a helper but unfortunately, we can't afford her wage. The burden becomes worse when you are pregnant or nursing a baby. The most unfortunate part is that my husband like many African husbands does not want to help with domestic chores.

Similar sentiments were shared by another participant in a focus group discussion:

My situation is much worse because my husband is no longer employed. It's unimaginable that after work I have to engage in another shift on domestic chores while my husband is just seated waiting to be served with food. I think it's time we have shifts in gender relations so that men can work in the kitchen as well.

From a feminist capabilities approach, domestic chores tend to stand in the way of women's capabilities and agency obstructing their freedom to assume leadership positions (Sen, 1999). According to Awung and Dorasamy (2015), African men are not yet prepared to share domestic chores, despite the fact that women have penetrated the work place. For African men, working in the kitchen is perceived as a taboo (Cerrato, 2018) and men who attempt to do so are derided as feminine. Juxtaposing African culture and western culture we see that in the western there been a

significant shift in gender relations where many men now cooperate working in the kitchen. From this standpoint, Leadership positions for female academics in state universities become elusive as they struggle to balance domestic chores with demanding leadership roles. As argued earlier, feminine attributes are becoming more congruent with effective leadership (Frankel, 2014). Thus, state university tend to lose out on a pool of talented women to steer progress and development in academia.

Another female leader aspirant observed:

In this university, there is a certain group of women afford to grab every leadership opportunity that emerges. They are found across faculties and have advantages over other women. The same group of women have many leadership responsibilities while the rest of struggle to break the glass ceiling.

The sentiments above draw our attention to the notion of gender intersectionality. Women are not a homogenous group, they have varied socio-economic backgrounds, races and ethnic identities (Shields, 2008; Christoffersen, 2021). When gender intersects with class, those coming from poor socio-economic backgrounds are doubly affected. Elsewhere in Norway and New Zealand, they have developed the term 'golden skirts' referring to women who have access to every leadership opportunity, especially as board directors ((Grab et al, 2020; ILO, 2020; Grima, 2022). However, the

term 'golden skirts' in itself is derogatory, insinuating sexual harassment. From a gender intersectionality perspective, female academic from a poor socio-economic background struggle to secure leadership positions first because they are women and that they come from a low economic class.

Prospects and opportunities for aspirant female leaders

Aspirant female leaders in state universities proposed several strategies to ensure gender equality in distributing leadership roles. During engagement in focus group discussions one of them proposed:

The affirmative action policy may be revamped to emphasise preferential access to leadership positions by female academics with requisite qualifications. The current policy focuses on preferential access to disciplines of study by female students. Voting people to offices of leadership has always worked against aspiring female leaders.

Another participant weighed in:
The first step is to conduct gender audits and implement gender mainstreaming strategies. However, men's attitudes towards women's capabilities should be dealt with and ensure they have a buy-in to gender mainstreaming strategies. A shift in mind-set for male academics is critical for successful implementation of any strategy to increase women's access to leadership positions.

My thinking is that we have quite robust gender policies at national level. What is lacking is the implementation. I propose that a female minister of higher education would be ideal to steer the gender equality in universities. For example, the gender quota system is very clear, what is

lacking is the political will.

Zimbabwe as a country should align with global trends where shifts in gender relations have become a reality. In contemporary society, opening opportunities for women to access leadership positions is inevitable and desirable if we are to achieve the development goals by 2030. Frankel (2014) demonstrated that feminine like being empathetic, consultative, and collaborative and being patient have become congruent with leadership styles. Masculine mancho characteristics that rely on intimidation, commanding, authoritarian and coercion may precipitate resentment and resistance by subordinates. Thus, from a feminist capabilities approach, women's capabilities are being obstructed the deeply entrenched patriarchal hegemony in Zimbabwe's state universities.

Conclusions

From a feminist capabilities approach, women's potential and capabilities in leadership role tend to be stifled by a glass ceiling informed by a patriarchal hegemony. This explains why we have very few female academics in leadership positions in state universities. However, from a gender intersectionality view point, women are not a homogenous group, hence they are differentially affected by the glass ceiling. The study observed that there is a certain privileged group of women who have access to leadership role. The same women chaired several committees in different capacities confirming that gender intersectionality is a critical aspect for gender equality analysis in state universities. Elsewhere in Europe, these privileged women have been labelled 'golden skirts' depicting a special class of women who chair several boards (Grab et al, 2020; ILO, 2020; Grima, 2022). The study concludes that in contemporary society, feminine attributes are congruent with effective modern leadership styles. By implication, state universities lose out as they remain stuck in the traditional masculine mancho leadership styles.

Recommendations

On the basis of the findings above, the study makes the following recommendations:

Affirmative action policy and other gender policies should emphasise the importance of gender inclusivity in distributing leadership positions in state universities. Implementation should be made compulsory by the ministry of higher education. n the same vein periodic gender audits should be enforced to reflect 50-50 representation policy.

There is need to make men part of the processes of gender mainstreaming leadership positions in state universities. Dismantling the patriarchal hegemony by university authorities becomes imminent, inevitable and desirable. A shift in men's mind-set to embrace women as leaders should be emphasised through seminars and workshops. Above all, the aspect of gender intersectionality

should be infused in all gender mainstreaming strategies. The feminist capabilities approach should be applied to illuminate appointment procedures in state universities. The approach acknowledges women's capabilities as leaders and enlighten that feminine attributes are more congruent with contemporary leadership styles.

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THE PLACE OF DIGITAL LITERACY IN RESUSCITATING NIGERIAN EDUCATION TOWARDS VOCATIONAL, ENTREPRENEURAL AND PROFESSIONAL TRANSFORMATION

Ijeoma Genevieve Ani Kelechi
Department of Science Education
Nnamdi Azikiwe University,
Awka, Nigeria.
ijeomakc@gmail.com

Abstract
Education for national development and transformation has become fundamental in the process of nation building across different societies. In Nigeria, the education sector is largely faced with multiple problems that have undermined it from pre-colonial to contemporary times. This study used qualitative data that were collected from secondary literature and Bandura's theory of social learning to develop the content of the study. The study found that the professional workplace in the Nigerian setting have become fundamentally undermined by the multiple effects of the challenges faced in the Nigerian education. The study therefore explained how digital literacy could be applied to vocational and entrepreneurial education in other to attained transformations in the professional workplace.

Keywords: digital literacy, education, professionalism & Nigeria

Introduction

The Nigerian environment traditionally witnessed different levels of informal education before the incursion of the white men. When the white men landed Nigeria in their quest to colonise the country, with their superior firearm, they intimidated and suppressed the different Nigerian peoples with their gunboat diplomacy. That quickly created room for them to coarse the leadership of these independent societies in Nigeria into signing treaties of protectionism leading to the rise of Nigerian protectorates and colonies. Consequently, the missionaries that came earlier than the colonial administrators had earlier introduced catechetical education that was meant to keep the mind of the Nigerian people perpetually caged to the bible and religious slavery in order to favour the white men and their idea of Christianity. Nevertheless, the then catechetical schools were not largely accepted by the people and those colonial schools produced warrant chiefs and others that helped to deepen Christianity and colonial administration of the Nigeria. Today, catechesis is growing in church-owned schools (Okpaleke, 2019). However, at independence, Nigerians began to clamor for a new form of education that will lead to the skill empowerment

of the masses and not just the mere certification of the citizenry to work for the colonial government.

Unfortunately, the culture of certification from Nigerian schools without properly inculcating the requisite skills and vocational crafts gradually grew in the post-independence years across (Akanbi & Jekakayinfa, 2019) Nigerian societies. Every Nigerian began to see the acquisition of university degree as the perfect way to go in order to ensure sustainable good life for the future. Truthfully, and at that time of the oil boom era in the Nigerian state, the fact that there were few Nigerians with adequate university certificates created massive employment opportunities. These opportunities allowed the certified graduate to make a career choice that gave the greatest advantage and had the best of prospects for him. By extension, the period witnessed the rise of a working-class group, whose certificates created opportunities for them to get two to three classy jobs at the same time with charming and wonderful conditions of work. Hence, the craze for university certificates by the early educated Nigerian intellectual elite started. Both the rich and poor families began to send their children to acquire the highly revered university certificates in the bid to eke out the best of life for the future.

Unfortunately, by the turn of the century, the value of the certificates from Nigerian universities became largely depreciated in value due to the number of those possessing it and the economic crisis that is growing in the country. There were millions of Nigerians that have gone to acquire tertiary education and they had all manners of advanced certificates aimed at preparing them to take professional positions in different areas. Unfortunately, there were and currently no commensurate jobs to employ these millions of graduate Nigerians and the crisis of unemployment have actually taken over the country. The matter was made worse considering the fact that many of the university or tertiary degrees were awarded without adequate vocational or skill development. This vocational skill whether formal or informal has over the years, shown the ability and opportunity to transform peoples' lives, especially when it is backed with creativity and hard work.

The point of departure in this paper remains that the Nigerian education is in 'coma' and needs to be urgently resuscitated. This resuscitation will need both the transformation of formal and informal vocational and technical education culture of the people. For instance, the informal Igbo vocational and entrepreneurial economy that grew from non-formal education have produced more millionaires and by extension those that have practically built developmental structures than the economic or developmental outputs produced by the same number of graduates from the formal education sector. Hence, it becomes imperative that there should be strong interrogation on how to advance vocation and entrepreneurial education

using the contemporary culture of digitalization of the work place. Digital literacy has come to stay in the contemporary world hence the need for both the formal and informal learners to key into it in the quest to transform and perfect their career or professional output. The knowledge and use of digital literacy is therefore a tool that can transform all existing professions and career of men on earth.

Aim and Structure of the Study

This study therefore focuses on the place of digital literacy in the promotion of vocational and entrepreneurial education that would go a long way in transforming professionals in both the formal and the informal sectors of the Nigerian creative workplace. The study is divided into number of sections. The first section is the introduction, which gives the background of the study. The second section is the aim and the structure of the article. This is followed by the conceptual clarification of the ideas of vocational and entrepreneurial education. That explanation is subsequently followed by the methodology and the theoretical framework of the study. That section gave way for a discussion on the challenges facing the current Nigerian education sector and findings on factors undermining professionalism in Nigeria before the section where digital literacy was strongly recommended and finally, the conclusion and recommendations.

Conceptual Clarification

Vocational education, here is a form of education that encourages the learner to develop his or her abilities as well as skills within the confines of a given craft (Adefunke & Olaitan, 2020). It is a form of education that focuses on the development of a defined skill. It helps the learner or apprentice to engage in guided learning as well as experimentation in a given craft aimed at sound mastering of the craft. Within the period of guided experimentation, during vocational training and education; the learner also used in this study to cover for the apprentice, will engage in some trials and errors that will create room for mistakes and corrections by the master/ mistress/ instructor or teacher. Thus, as the learner continues the learning process, he or she grows the capacity to engage in a defined vocational craft which will create room for non-guided trials and experimentation on the act of doing a particular craft. When this craft is properly developed, and the learner becomes independent, he or she may likely go into the production of goods or services for targeted customers and consumers, who will in return pay for their knowledge of the craft.

When the craft begins to expand, the need for entrepreneurial culture comes in as a necessary requirement for the management of the human resources that the creative vocational knowledge generates. This then leads to the necessity of entrepreneurial education, especially at the informal sector of the Nigerian economy. Entrepreneurship education is a form of training designed to develop entrepreneurship skills and success that is connected

with entrepreneurial transformation. This is the form of education that could be either formal or informal but makes the entrepreneur an expert manager of the factors of production available at his or her disposition. The entrepreneur has this passion to manage capital (money), land, human resources, etc in order to create wealth and not just limited to interest on investment. He or she engages in entrepreneurial education within a specific field in order to study the nitty gritty of amassing wealth through the proper combination of skills, talents and other available factors of production.

Methodology and Theoretical Framework

The paper adopted a qualitative research approach. Data were randomly collected from existing secondary research materials covering journals and book chapters. These data were thematically sort and used for the descriptive interpretation of the study.

The study is anchored on Bandura's theory of social learning. The theory is centred on reflections from the learner, observed behaviours and modelling (Bandura, 1977). The theory therefore advances the place of attention, retention, reproduction and motivation as fundamental in the dynamics of learning (Bandura & Schunk, 1981). This factor explains the place of personal behaviour in performing an existing task (Wasam & Aslam, 2021).

The paper maintains that from vocational to entrepreneurial education, the learner needs a lot of social learning through consistent observations. The observation of the teacher and instructor as well as guide is fundamental for the learner to pick necessary skills, especially in vocational education. Furthermore, the place of attention and retention will lead to the act of practicing specific skills or experimentation in skill acquisition. This is also needed in digital literacy and professionalism. The entrepreneur in reality survives mostly by ensuring that the workers around him or her are highly motivated to deliver effectively and efficiently within specified time frame.

Discussing the Challenges Facing Nigerian Education Sector

The reality of the contemporary education dynamics in Nigeria is nothing to write home about. There is a very low level of government funding in the education sector (UNESCO). This is because the Nigerian government is still underfunding the education sector. The money allocated for the education sector is far lesser than the UNESCO benchmark that 26% of national budget, hence creating room for gross underfunding of the sector at all levels (Dada, 2022). Secondly, the little fund that has been allocated for the education sector face the challenge of institutional embezzlement. The idea of institutional embezzlement manifests in Nigeria in the form of executing contracts in relations to building the school or university structures that is non-existent or that is built with sub-standard materials

thereby creating room for easy collapse. Again, it also covers the complete embezzlement of the money meant for the education structures by the elite within the political and education constituency where the educational institution is meant to be built.

There is also the problem of lack of necessary and qualified manpower to work in the Nigerian education sector (Birabil & Ogeh, & 2020). It should be noted that the Nigerian education sector is a huge industry that can employ millions or billions of unemployed Nigerians from the basic education sector to the tertiary sector. However, the challenge remains that the Government at all levels in the Nigerian system lack the moral and political will to employ people into the education sector. The Nigerian ruling elite behaves as if they derive joy in watching the education sector collapse or dilapidate, including the schools they attended in the past from primary to tertiary level. While this could easily be understood from the point of intellectual disempowerment in order to create a dependent society, one will not be completely wrong to argue that the Nigerian politicians neglect the education sector at all levels in order to create an army of political thugs, who will always sing yes-songs to their actions and inactions.

Furthermore, the transformation of the education sector by extension will likely transform the culture of voter education, which will in turn create the opportunity for credible elections and

that will retire many of the Nigerian politicians, who find their way to power through the manipulation of electoral violence as well as the manipulation of the machinery of the state like the Independent Electoral Commission (INEC) and the state electoral commissions. Thus, the above could be an ideological posture taken by many of the political actors in Nigeria to keep education at the lowest level where there will be complete lack of government funding for infrastructure and human capital that is necessary for the transformation of that sector.

Similarly, the private education sector in Nigeria produces paradoxical realities and results. There are very few standardized educational institutions that are managed by the private actors. They have the equipment and the manpower and they charge exorbitantly that the children of the poor cannot easily find their way to such schools both at the basic and tertiary levels. It is the collection of these few good schools that are managed by committed private actors that millions of Nigerians stake their neck to have their children therein, irrespective of the heavy burden of cost implication in a largely consumer-economy like Nigeria. However, the majority of the private educational establishments lack both the qualified manpower as well as the necessary learning materials and resources. Some of these private universities in Nigeria were floated without sustainable structures, class rooms, libraries nor staff to produce the necessary

intellectual economy.

Ironically, many of the private universities depend on the teaching staff from the government or public universities for make-shift accreditation appointment that last for hours. The secondary and primary schools is the worst hit by this lack of sound human resources as they employ any available unqualified persons to teach learners, while promoting specialized brands that will create a make-believe consciousness on the part of the parents and sponsors or guardians. The worst is that many of these schools are run purely on the basis of extreme capitalism hence, there is no plan to pay the employees well. The employees are given the minimal token that will tie them to progressively keep coming to school.

Unfortunately, Nigerians are terribly crazy for academic certificates and qualifications. This is a reality due to the poor culture of certifying skilled and vocational workers and national madness for certificates as fundamental requirements for employment. The implication is that people go to the education sector from primary to the university level with the wrong believe that the certificate they will acquire will be the near-end of their existential problems. But in reality, the value of the certificate cannot be complete without the personal efforts of the owner of the certificate through positive attitude to advance the worth of the certificate. This explains why many first-class graduates in Nigerian university across

different fields remain at home languishing due to unemployment, while others are found frustrated and doing unimaginable levels of menial jobs, thereby putting to question where lies the same creative ability that landed them to first class honours?

There are other problems with the Nigerian education system ranging from strikes by workers which takes a dangerous dimension at state and federal university levels. Many universities lack basic access to energy, laboratories, libraries, offices and water resources, which makes it difficult for functional scholarship to take place (Okorosaye, 2019). The price of accommodation across Nigerian government universities and the quality of household resources within the campuses remains below basic standard. The laboratories across most Nigerian universities lack the basic equipment needed for scientific research (Birabil & Ogeh, 2020). The problem of controlling the undergraduates of private universities excessively limits their quest for existential independence.

Findings on Factors Undermining Professionalism in Nigeria

The fundamental problem undermining professionalism in the Nigerian setting is the problem of low motivation due to poor wages for vocational and entrepreneurship career. This motivation manifest mainly in the form of wages (Joseph, Anikelechi, & Phemelo 2019). The Nigerian workers need all the sustainable payment and allowances

that would enlarge their morale. Unfortunately, the morale of Nigerian worker is generally low due to poor wages. And that cries for attention by both the private and public sector.

There is also the argument of job satisfaction versus economic empowerment, which remains a continuous debate in the Nigerian work place. This is because the Nigerian worker desire more wealth at the long run to survive the hard economic realities than the temporary passion for job satisfaction, which brings the best out of the worker in the professional environment. Again, the issue of management style by the leadership of every professional establishment calls to mind the need for sustainable managerial abilities that can sustain professionalism in the work place. Unfortunately, there is the radicalization of the work place leadership in Nigeria towards authoritarianism and exploitation in line with the popular culture of the Nigerian state political leadership. Some leaders of professional establishment behave as if they do not care about their subordinates because the Nigerian political elite do not care about those under their watch, thereby extending the same leadership negligence to other leaders in professional organizations and places.

There is need to note that the biggest problem with professional output in Nigeria is the challenge of attitude. Many of the workers in Nigerian environment do not exhibit the necessary passionate attitude for efficiency and sustainable outputs. The attitude that is popular in Nigeria is that one has graduated or grown to the level of working and hence goes out to look for any available job. He or she accepts the vocational, entrepreneurial or professional job but immediately the majority resumes, they begin to complain of poor remuneration and poor working conditions, thereby putting minimal energy towards the creative actualization of the cooperate goals of the establishment.

Terrorism and insecurity are also big threats undermining professionalism in the Nigerian state. The education sector in Northern Nigeria has been undermined by terrorism (Anikelechi, Ojakorotu & Ani, 2018) while the Southern part of Nigeria remains under the threat of kidnapping and other forms of armed crisis. From Borno State to Yobe and Bauchi states of North eastern Nigeria, the learners both in the formal and informal education sectors were prevented from going to school for days, weeks and months because of both the onslaught of the Boko Haram sect as well as the counter-terror activities of the Nigerian government, especially in 2019. That experience has strong negative implication for the education sector. Unfortunately, the lack of digitalization of the learning process prevented the learners from receiving their teaching very remotely using digital platforms.

Discussing the place of Digital Literacy
The period of covid 19 revealed the

low practice of digital literacy in the Nigerian state. People were working from home in many parts of the world but it was largely difficult in Nigeria due to the low level of digital infrastructure in Nigerian professional sector. The education sector was badly affected by the covid 19 experience (Anyika, Anikelechi, & Thobejane 2021; Ani, Chapanyi, Ihuoma & Ani, 2022). The illiterate of tomorrow will not be a man or woman who cannot read or write, he or she will be the man or woman that has poor knowledge or zero knowledge of digital literacy and artificial intelligence. It is widely known that mass literacy is fundamental for nation building in any country. However, the place of digital literacy in societal transformation cannot be over emphasized. The idea of digital literacy puts ICT on the center stage. Digital literacy created a new form of literacy that is not driven by books but replaced with different forms of screens. It is a form of literacy driven by multimedia technological interaction (Allen 2016).

The place of digital divide in influencing the status of workers, professionals, entrepreneurs etc. have continued to grow from what is known as the digital world. The digital world harbours extensive knowledge production, transference of skills etc to human society. Digitalization provides technological structures and create near-life conditions like the chat rooms. Teachers use digitalization to reach learners beyond defined geographies. t serves as a strong motivation to teachers (Hobbs, &Tuzel, 2015). It also creates digital networks that transforms all human initiatives (Aydogen 2014).

The place of digital literacy is fundamental for the survival in the professional environment, especially as it relates to vocational and entrepreneurial education. The attitude towards digital literacy is necessary in the quest to adopt it and include it in the people's work ethics. There is a general believe that digital literacy is difficult to acquire. This attitude and posture are very popular amongst many Nigerians in the informal vocational and entrepreneurial sector. Even in the formal professional sector, there are still many people that have phobia for digital literacy. This is because they do keep themselves glued to the traditional working tenets of the vocational and entrepreneurial workplace. Unfortunately, the professional vocational and entrepreneurial workplace in many parts of the globe is increasingly following the digital path to transformation. This quest for digitalization has become the norm for professional transformation. It creates boundless opportunities across the length and breadth of all professions. This is because digitalization kills immediate geographical boundaries and create boundless opportunities for all professions.

Every profession currently has strong online visibility. This visibility creates a new world of opportunities, where people advertise and expands the horizons of their activities. It creates

room for sourcing of grants and aids which naturally empowers vocations and entrepreneurships across the globe. There are many grants for vocational and entrepreneurial empowerment, which non-digital Nigerian professionals cannot access let alone applying for them. The truth remains that foreign grants promote vocational, entrepreneurial and professional ability and working environments in an extraordinary way.

Conclusion

This study has traced the origin of formal education in Nigeria to the catechetical education and colonial education that promoted dependency. It maintained that the post-independence Nigerian society did not work towards the sustainable educational transformation of the country rather there remained a mad-race for certification, which continued to undermine the Nigerian professional output and nation building process. It created the rise of millions of graduates who do not think critically on how to carve a niche in their real world due to the fake value for their university certificates. This could be perceived as the most serious challenge undermining the culture of professionalism, irrespective of the career. Consequently, the study maintained that digitalization is fundamental for the transformation of the level of efficiency and output level in both the formal and informal professional sector of the Nigerian state.

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INEQUALIRY, ONLINE TEACHING AND QUALITY EDUCATION, "EXCLUDING THE EXCLUDED" IN INSTITUTIONS OF HIGHER LEANING IN ZIMBABWE: HOW TO BUILD INCLUSIVE INSTITUTIONS?

Matsa Winniefridah
Midlands State University Research fellow
Gender Institute
winniematsa@gmail.com/matsaw@staff.msu.ac.zw

Matsa Lesley
Institute of Sustainable Project Planning Monitoring and Evaluation
ICT networker in the Academic Affairs Department
matsalesley12@gmail.com

Songile Mhlanga
Department of Applied Psychology
Lecturer
mhlangasongile@staff.msu.ac.zw

Mariko Itayi
Midlands State University
Director Disability Resource Centre
marikoi@staff.msu.ac.zw

Abstract

The covid pandemic has been marked by negative outcomes locally, regionally and globally. The sudden closure of institutions of learning, copious teaching and learning dynamics emerged giving rise to dire demand for blended learning. The study explores the intersection of gender, socio-economic status, disability as well as online learning and how this impacted on vulnerable learners' access to quality education during the pandemic and its aftermath. The paper was framed within the exclusion and social justice theoretical frameworks. The design was phenomenological, focusing on the lived experiences of vulnerable female, orphans, those living with disabilities and learners from low socio-economic status. Midlands State University and the vulnerable groups were purposively sampled. Key university informants were officers from information and technology services, the library, Quality Assurance and Professional Development, Disability Resource Centre, student affairs division respectively giving a total of 5 key informants. Focus group discussions were held with 6 orphans from child headed households, 5 male and 7 female students from low socio-economic status from both rural and urban areas and 14 students living with differing disabilities, giving a total of 32 participants. Selection from other vulnerable students beside those living with disabilities was based on voluntariness and the need for a gender matrix. Online

teaching and learning created a digital access gap with the most vulnerable experiencing various types of exclusions. To achieve effective teaching and learning, the paper recommends inclusive pedagogies and sustainable learning frameworks that allow the achievement of SDG 4on equitable and inclusive education.

Keywords: Equitable education, exclusion, home schooling, inclusive education, irresponsive environment, vulnerable

Introduction

At the 2030 Agenda for Sustainable Development (SD) at UN in 2015, Quality Education (QE) was viewed as a primary driver of the progress across all the 17 Sustainable Development Goals (SDGs). Quality Education is also key in achieving peaceful, prosperous, productive and development-oriented societies that meet the needs of the current generation without compromising the ability of future generations to meet their own needs (Krywult-Albanska & Albanski, 2021). There is a close relationship between quality education (goal 4) and reduction of inequality (goal 5) and (goal 10). All forms of inequality and quality education are very much dependent on all types of poverty; environmental, educational, systematic and economic poverty. All these determine the quality of education in any country (Parker, 2013).

Beside quality education, Goal 4.7 seeks to achieve inclusive and equitable education promoting lifelong learning opportunities for all. This is because education is a fundamental human right according to the 1948 Universal Declaration of Human Rights (Marios, Marios & Aaron, 2016). End of extreme poverty (goal 2)

is linked to the achievement of goal 4 because quality education depends on learners who are healthy, well-fed (nourished) and ready to participate. Quality education also depends on support by safe learning environments with adequate facilities and resources and well-trained staff on various alternative pedagogies (Adams, 1993).

In 2019, the covid 19 pandemic dragged educational institutions and organizations into online learning and tele-working. Educators were forced to put aside the pedagogy that they had known, trusted and used over time. Lecturers became learners as they were confronted with new ways of doing things (Kilgour, & Nortcote, 2018). The covid pandemic became the driver to justify the growth of online learning. Krywult-Albanska & Albanski(2021) advances that one of the largest disruptions created by covid 19 pandemics occurred is the education system. About 1.6 million students were affected worldwide. Schools closed early in 2020 around the world forcing educational institutions to engage in virtual learning. The pandemic and its total lockdown also disrupted the economic activities worsening poverty. The online learning and poverty exacerbated the existing educational disparities and

reduced opportunities for most vulnerable groups, like females, orphans and the rural poor as well as those living with disabilities. The pandemic deepened social inequalities in the world aggravating gender discrimination, a setback in the progress of gender equality, yet gender equality is an important factor in development. The UN Secretary General described the pandemic 'crisis as having the woman's face with sky rocketing forms of violence and discrimination against women (Ibid: 2021). The pandemic compromised SDGs 4, on inclusive and equitable education, 5 and 10 on reducing inequalities adopted by UN General Assembly in 2015.

Discriminated by online learning were 460 million students across the globe. These did not have internet access, electricity, computers and mobile devices to participate in virtual learning while their schools were closed (Krywult-Albanska & Albanski, 2021). The affected were mostly poverty-stricken learners from rural areas. The learning outcomes of learners from disadvantaged families were worsened. The virtual realm and remote instruction were a compromised substitute for in person schooling. The challenges resulted in declining learning time, low levels of engagement resulting in what is termed 'lost learning' by Krywult-Albanska & Albanski, 2021. After the pandemic, only well-off families were far more likely to send their children back to school potentially worsening educational inequality and disparities

even among those learners with access to internet.

Generally, in developing countries, there is lack of access to high-speed internet and access to internet enabled devices. There are alarming gaps between different countries and within the same country. Some educational institutions are lagging behind in digitalization, putting learners in a disadvantaged position. There were new inequalities in digital skills gap resulting in initial rejection of e-learning by many African students and organizations arguing that e-learning was unaffordable, impractical and elitist. The Zimbabwe National Student Union (ZINASU) spoke person, Mawaya totally rejected the e-learning proposal in 2020 citing that the majority of students had no reliable electricity and network connectivity (Mukeredzi, Kokutse & Dell, 2020). The Zimbabwe Electricity Transmission and Distribution Company (ZETDC) had stated that only 41% people had access to electricity in Zimbabwe. The majority of the people live in rural localities and are not connected to the electricity grid.

Mukeredzi et al (2020) further highlighted that very few people had access to mobile networks and smart phones for e-learning. A dispute sprang up in one of the Universities when students were asked to register online or risk exclusion from accessing the e-learning platforms of the University. The e-learning platform was reported to be beyond reach to

many. The expenses together with shortage of electricity and poor internet connectivity would result in marginalization of those with outstanding tuition fees. Learning should be accessible and affordable to students in line with the policy of Education for All (EFA) and the Zimbabwe National Development Strategy 1 (NDS1) of 'leaving no place and no one behind' mantra thus advocating for equal opportunities for everyone. ZINASU estimated that in 2020, 8000 students deferred their studies as a result of economic hardships worsened by covid 19 and the online learning that caught people unaware and unprepared.

In Ghana, the National Union of Ghana Students called the government to stop online learning until a resolution was made between the University authorities and students. The University was to refrain from conducting examinations or assessments during this period. Students demanded financial waivers, free online data and bursaries. There were physical and non-physical challenges that worsened the digital gap among students. Those on Trust Loan Funds suffered the most (Mukeredzi et al, 2020).

South African students called for a boycott of online classes arguing that it is not equally available to all students. The Forum for Women Educationists (FAWE) who also reiterated that the alternative e-learning platforms deepened inequalities among institutions and students. Matsilele

(2021) cited how digitalization negatively impacted on institutions 'capacity to deliver during the pandemics as a result of skills gap, access to digital connection and affordability of digital tools. He further points out that the rate of adoption of online teaching during and in the aftermath of the corona virus is largely dependent on the above. The historical imbalance became apparent during covid-19 in particular, inequality in online teaching and learning.

The historic inequalities persist even in the aftermath affecting the vulnerable groups who are already suffering from historic exclusions by poverty, gender, rurality and living with disabilities. Shumba, Muntanga & Macha (2020) colluded that covid 19 had caused multiple crisis to the already stretched Zimbabwean education system that was trying to recover from cyclone Idai thereby increasing the burden of learners in serious need, the orphans, children living with disabilities and many other vulnerable children whose participation in learning was affected by closure of schools.

In Poland, parents considered online learning as of lesser quality taking into consideration the above circumstances. Unequal access to learning technologies resulted in unequal access to quality education by the disadvantaged groups thus they were excluded from quality education. The vulnerable learners then experienced various forms of exclusion resulting from deep rooted

marginality. Gender gaps and inequalities persist in the face of startling social and economic transformations (Ridgeway, 2013). There seem to be processes that continue to recreate or deepen gender inequalities. Online or digital space is one of the areas where exclusion of women is being firmly entrenched.

Globally and nationally, statistical data on digital inclusion is scarce and is usually not disaggregated. According to the Global Systems for Mobile Communication, social-cultural norms fuel gender stereotypes on use of technologies which are reinforced at family level (GSMA, 2019). Parents directly or indirectly discourage girls from using technology during early socialization thus shaping girls' future in science and technology. It is estimated that gender divide in internet usage in Africa is over 25% (GSMA, 2019). In terms of access to computers, findings reveal that from ECD to polytechnic colleges, 59.9% male students have access to computers, against 40.1% of female students. In terms of mobile subscriber database, Econet Wireless Zimbabwe recorded 8.5 million in March 2019. About 5.2 million of those were males against 3.3 million females and yet Zimbabwe's population consists of more females than males. Gender inequality in terms of access, ownership of digital devices, use, as well as digital fluency in Zimbabwe still exists. Statistics, though not so detailed are a reminder that women and girls continue to fall behind in opportunities to effectively access, own and use ICTs, to improve

their livelihoods (Mariwo-Mbanje, 2020). If not addressed, the digital gender divide can lead to inequalities in other areas thereby stalling the achievements of SDGs by 2030 especially goal 4 on quality, inclusive and equitable education.

It is against this background that this paper seeks to determine the demands of online learning and quality education in the context of inequalities. It also seeks to explore the challenges experienced by the orphaned learners from child headed households, rural learners, those living with disabilities and woman as well as the intersection of inequality, exclusion and quality education in order to develop methodologies and pedagogical frameworks to include the excluded vulnerable groups in quality education.

Theoretical Framework

The paper is informed by the digital exclusion and social justice theories. Digital exclusion theory explains technological exclusion of vulnerable groups. Exclusion from use of technology both direct and indirect impacts access of information and services. This has ripple effects to denying access to active living by way of use of internet, discussion forums, communication, networking, mobile shopping, digital learning as well as opportunities to full participation as a citizen (Martin et al, 2016). Social justice theory in this paper explains the role of technology in exclusion (digital divide) and inclusion (that is, mitigating social exclusion) by

ensuring that the disadvantaged have access to it (Molala and Makhubela, 2021). Exclusion also deprives the disadvantaged of opportunities because of multiple structural challenges such as gender, living with disabilities, living in poor rural backgrounds, and being an orphan from a child headed household. The paper pushes for the latter where online learning serves to include the disadvantaged groups.

Literature Review
General Demands and Expectations of Online Learning Mode

Online learning requires each University to have sufficient resources and infrastructure for it to be effective from the laboratories, knowledgeable human resources, to the internet service providers. A university cannot successfully implement e-learning without proper attributes of its infrastructure (Chitanana, Madzima & Makaza, 2017). This is entirely true because at some Universities the laboratories are too small and cannot accommodate many students thereby making internet access difficult. In addition, not every computer in the laboratories can be used for educational purposes. In relation to internet connectivity, with an increase in bandwidth there is an increase in costs which undoubtedly affects the finances of State Universities taking into consideration the current hyperinflation environment in Zimbabwe. Logging into google classroom and attending virtual lectures can be very expensive for the university and the students.

In May 2020, Econet introduced an e-learning data bundle that was priced cheaper than the normal data bundle as a way of trying to promote online learning.

That bundle is still being used even today but students still have challenges with poor connectivity. The service is slow, such that a student can spend hours trying to log into the learning management system but still fail. When it comes to virtual classes, the lecturer and students fail to make presentations because of poor connectivity as they are constantly booted out from the platform. Learning becomes compromised and in some cases the lecture will have to be cancelled but the students still sit for exams at the end of the semester (Chitanana, Madzima & Makaza, 2017).

As time progressed, state universities introduced the Learning Management System (LMS), a software that helps create, manage, organize and deliver online materials to learners. This system was introduced as a means of trying to curb the demerits of using WhatsApp and it was deemed to be more effective. Before the Covid-19 era, the LMS had been in use by most State Universities but was not mandatory because of reliance on face-to-face learning. For instance, National University of Science and Technology (NUST) first introduced their learning management system called SAKAI in 2012 while Zimbabwe Open University (ZOU) had theirs in 2016 called My Vista. These LMSs are still

being used up to this date although more improvements need to be made for Zimbabwean learners to realise the full benefits of online learning (Fry, 2022).

Research from four institutions in Zimbabwe, namely University of Zimbabwe, NUST, ZOU and the University of Zimbabwe show that from the 86 lecturers interviewed, 22% lacked interest in teaching online (Chitanana, Madzima and Makaza, 2017). This lack of interest by lecturers was evident by the absence of lecturers on the platform during their teaching period. According to Tanyanyiwa and Madobi (2012), from a sample of 20 ZOU students, half of them highlighted the issue of absenteeism elucidating that there was low attendance at tutorial sessions by part-time tutors wasting the resources of the students who would've travelled a long way just to get to where there is internet access.

For the success and effectiveness of online learning, the government has to create an enabling environment that guarantees equal access to education for all. This includes investing in infrastructural development, alternative learning methods for orphans and other vulnerable children (OVCs) to ensure 'No one is left behind (Parliament of Zimbabwe, 2021). Online learning left vulnerable students exposed resulting in the regression by all VCSs in terms of quality education(Parliament of Zimbabwe, 2021). Rural schools reported an increased dropout in 2020,

perpetuating a cycle of intergeneration transmission of poverty and inequality. Remote learning demands appropriate hardware, software and high-speed internet connection which is currently a major challenge in Zimbabwe. (UN 2020) noted that online or distance learning disadvantaged most students including the disabled in terms of necessary equipment, internet access, material and technical support, audio narrations, simplified text, sign language and brailed content.

There is also a demand of supporting learning environment with digital infrastructure with appropriate facilities for online learning including the training of lecturers and teachers in online teaching and learning. Kumar (2021) asserted that digital transformation also calls for shift to digital inclusive pedagogies – what he calls re-imaging pedagogical approaches to teaching and learning. The learning activities should be made accessible to all students for effective experiential learning. This involves making video conferencing, TEAMS, forums, google meet assistive devices accessible to them. This is possible if right policies, investments, procedures and protocols are implemented by educational institutions. UN (2020) also concur that technology alone does not guarantee good learning outcomes, to support digital learning, there should also be training of students and lecturers in inclusive assistive technologies.

Mobilization of alternative pedagogical resources from national

and international platforms is key, in addition to the above, Zimbabwe has a policy and legislative framework for the learning environment. It is a signatory of Unilateral Declaration of Human Rights, in which education is a basic right and has clauses on non-discrimination.

It has also signed the Declaration of International convention on social, economic and cultural convention on the Right of the Child (CRC). The Constitution of Zimbabwe amendment number 20/ 2013 where the Education Amendment Act of 2020 expounded that children have a right to State Funded Education. The Government introduced Basic Education Assistance Module (BEAM) to support financially disadvantaged learners in primary school. These are policies on inclusive education and a Disability Act and recently Harmonized Social Cash Transfer (HSCT) to the vulnerable households all in a bid to achieve EFA and quality education. Despite the above, vulnerable learnerscontinue to experience exclusion of various forms.

Intersection of Inequality, Exclusion and Quality Education

It is worthy to study the impact of digital exclusion on vulnerable groups to examine the relationship between social inequalities and digital exclusion (Jackson (2006). This paper takes it further to assess the impact of digital exclusion on quality education in the context of existing inequalities being experienced by orphaned learners, child-headed households, women, poor rural learners and those living with disabilities. There is a strong relationship between inequality, digital social exclusion, vulnerability and quality education. Jackson (2006) identified an interlock between digital exclusion and educational attainment. He further cited that digital exclusion has the potential to exacerbate social inequalities in the era of technology enhanced learning.

Van Dijk (2005) discovered that there is a sequential relationship between social inequality and unequal access to digital technologies. ICT exclusion follows from other social dimensions of exclusion which in many cases are structural. Since the 1970s, use of ICT has spread unevenly and many still remain digitally excluded (Dutton et al. 2014). Digital participation is linked to overall participation in culture of internet use. Royal Society of Edinburg in (2016) described the digital participation as a right with a 'virtuous cycle' of benefits in other areas like employment, health well-being and in education. Internet use has benefits in education, training, field work, healthcare and increase social interaction through access to information services. Inequality and social exclusion are multi-dimensional involving lack of economic, social and cultural capabilities; access to resources that enable one to take part is a social system (Helsper, 2012).

Molala and Makhubela (2021) noted that technology or digitalization has unintended consequences of increasing disparities. Disproportional access

give rise to a phenomenon referred to as digital divide among people, countries and regions (Turiansky, 2020). It also involves disproportional digital skills and competencies between people and the majority who bear the brunt of this digital divide are those who are in areas without ICT infrastructure devices, rural and under-resourced. Social inequalities cause the digital divide and the same digital divide is fertile ground breeding and perpetuating social exclusion (Molala and Makhubeka, 2021). They further highlight that social exclusion is a major human right issue globally and manifest in abject poverty. Their findings reveal that digital divide (social exclusion) has adverse effects on health, social services, education and general socio-economic development of individuals or communities.

OE is a multifaceted concept involving all aspects of the child and the educational institution, its surrounding community the rights of the whole child, survival, protection, development and participation (Adams, 1993:5). It depends on the quality of the child's environment and the quality of educational resources. For quality of education to be achieved, the learners must be healthy, well-nourished, with supportive learning environment (family, education, institution, surrounding community and nation). Issues of lack of access due to poverty affect attendance, retention, resource capacity, access to digital devices among others.

Only 20% of aid goes to education in low-income countries according to the global partnership for education (GPE) in (Rueckert, 2019). The average cost of funding for education in developing countries is $1.25 per day per child. There is currently $39 billion gap to providing quality education to all children by 2030. Despite free primary education, learning still remains too expensive and families remain locked in a cycle of poverty that goes on for generations excluding the poor from quality education. Rueckert (2019) further posits that, in many developing continents like Africa education remains theoretically free. There are formal and informal fees, compulsory materials (items) extra lessons which are unaffordable to many poor families.

UN (2020) proposed that the definition of education should be expanded to include the right to connectivity to remove barriers affecting the marginalized groups. The most vulnerable were those who have poor digital skills and the least access to hardware connectivity required for distance learning solutions. Those in lower socio-economic backgrounds were half as likely to have access to internet as their more advantaged peers. Even those who could access content, some were not fluent in the language of digital instruction hence did not benefit from the new learning support. The crisis had unequal effects depending on existing vulnerabilities.

The pandemic exposed the inequality of the education sector especially in the vulnerable communities exacerbating exclusion that has been haunting the sector for years particularly in developing countries. It is estimated that about 89% of learners in sub-Saharan Africa do not have access to household computers, while 82% lack access to the internet as well as the traditional tools like the radio and television. Learners from poor families and vulnerable positions suffer, given that poverty and education are inextricably linked (Parliament of Zimbabwe, 2020).

Challenges Experienced by Vulnerable Groups in Online Learning during Covid-19 and Its Aftermath

ICTs are a pre-requisite to equal and full participation in society as cited by Scheiter et al (2015), yet there has been relative lack of research into the social impact of digital exclusion as well as the social role of ICT use as a dimension of social exclusion. According to Martin et al (2016:4) 'social exclusion is a complex and multi-dimensional process involving lack or denial of resources, rights and services resulting in inability to participate fully in the normal activities available to the majority of people in a society". The exclusion is in the economic, social, cultural and political arenas.

Krywult-Albanska and Albanski (2021) reveal that vulnerable learners, women, rural and learners with disabilities suffered the most in Poland. There was no high-speed internet in rural areas. The usage was low even when available because of low skills among rural learners. Epstein and Yuthas (2013) observed that access of electricity in rural and urban poor was another hindrance. Improving access would not solve the problem if the scarce pool of other resources remained inadequate. EFA report 2008 noted that 40% of teachers in poor rural Africa have no subject guides and learning materials are scarce. About 70% of learners are rarely allowed to take books home. Online learning forrural students lacking access to electricity and internet was non-existent. Kilgour and Northcote (2018) cited that students acknowledged the importance of online learning to those who have access but viewed it as an inconvenience to the poor, rural and orphaned.

Due to poverty, education remains a social institution that reflects and reproduces the socio-economic and cultural disadvantages that prevail in society (Bourdeau & Passeron, 1977). Students from economically disadvantaged families are more likely to attend schools characterized by worse infrastructure and outdated pedagogical practices compared to those from more affluent backgrounds. Poverty also forces families to choose which gender goes to school and girls end up lacking provision for schooling. Rueckert (2019) emphasized that failure to educate girls is 'catastrophic'. A generation of young women has been left out due to

economic and cultural reasons by the current online pedagogical methods.

Approximately 93 to 150 million children with disabilities are out of school or lack access to special provisions (Rueckert, 2019). Currently, there are no special provisions relating to online learning methodologies and devices for people living with disabilities. Teachers in one of the special needs schools in Bulawayo pointed out that 'A one size fit all approach to covid 19 response, means children with disabilities are often excluded' (Mutizwa, 2021:1). Social distancing and sanitizing interfered with assistive devices. Face masks were a barrier to the education of those who depended on lip-reading and facial expressions. Transparent protective cover shields would have been of help if made available. Online devices, were simply not accessible to students with hearing disabilities.

UNICEF produced 100 copies of story books that were transcribed into braille but these did not account for those living in poverty out of special schools. The low-tech-solutions for Radio Education programs were not practical for children with intellectual disabilities and those hard of hearing. Special needs learners are also excluded from home-based learning and online testing. The above issues are a tip of the iceberg (Mutizwa, 2021). Not all educational programs and activities can be successfully implemented online. Every proposed solution had its own challenges

emanating from existing structural causes.

Methodology

The paper was framed within the exclusion and social justice theoretical frameworks. The design was phenomenological, focusing on the lived experiences of vulnerable females, orphans, those living with disabilities and learners from low socio-economic status. The vulnerable groups were purposively sampled from one state University. The sample consisted of 15 students living with disabilities, 6 (2 females and 4 males) orphaned living in child headed households, 13 (8 females and 5 males) from low economic status and 7 (4 females and 3 males) purposively selected from rural and urban areas respectively. Each group was subjected to a focus group discussion. Vulnerable students were drawn from the population of 288 under-privileged students registered under university Student Affairs who were on a work for fees program which is a university run internal scholarship fund targeting the disadvantaged.

The program allows students to be employed on part-time bases and the university pays their tuition fees, provides meals and accommodation. Students apply for the scholarship and qualification for recruitment is through background check to ascertain the disadvantage and the nature of vulnerability in-order to offer holistic assistance. The 5 key informants who

responded to in-depth interviews were staff representatives from the library, e-learning office, educational technology specialist, Quality Assurance and professional Development officer, an officer from the University Disability Resource Centre and a Student Affairs Practitioner giving a total sample of 40 respondents. The sampling of individuals from each of these vulnerable groups was based on voluntariness. Some of the students were quoted verbatim.

Findings And Discussion
Demands of online teaching and learning
In-depth interviews with ITS specialists for e-learning revealed that for online learning to be successful, institutions need secure relevant soft and hardware tools. Both hardware and software were expensive resulting in inadequate investment in the infrastructure. Online learning was introduced against the backdrop of unsupportive and inadequate infrastructure. Educational technology specialist highlighted that there should be alternative technologies adapted to rural areas which use alternative sources of power for example, power banks, solar powered equipment, televisions and radios. Alternative, assistive and adaptive computer hardware devices are needed to suit different kinds of disability for example, head gear for those without hands together with talking boards. These should be available as digital technology for use in learning. Screen readers with audio can interact with the

computer, use of voice search for research can also be used but they were found to be expensive to license. The university had one such computer for all the three computer screen readers had software licensed by the donor and this had since expired.

The Educational technology specialist also echoed that for the benefit of vulnerable groups, there should be a shift to offline teaching tools of lower costs that are an imitation of google classroom learning management system. These were more economic interms of connectivity or use other sources of energy. The librarian cited that candle readers are one of such provided by the library for use without the internet because it uses a battery. The library can load as many as hundred core tests on the candle reader however they had very few to cater for those living with disabilities, in the rural and urban, the poor and orphans in child headed families who cannot afford internet gadgets. The use of flexible devices like discs, flash drive for downloading to read offline should be continued as some computers cannot download.

The ITS specialist highlighted that in addition to high-speed internet, middle to high specifications, cloud servers and accessories for online gadgets are needed to enable simultaneous corrections. Some of the gadgets used had no capacity to download and save large documents, had low memory hence the need for middle -range gadgets with big discs space or memory cards to download content off

line or online. Many institutions, MSU included, have inadequate virtual learning environments. Students need new laptops with durable batteries, power-banks and adapters among others. The vulnerable cannot afford these. WIFI is unreliable at university and non-existent in most homes. The interactive boards are useful and inadequately used by technologically unskilled educators and students.

The Quality Assurance and Professional Development (QAPD) colluded that inequalities and digital divide impact negatively on vulnerable groups. To start with, the educators are not trained on inclusive pedagogies. The University has a post-graduate diploma in tertiary education but it offers a general pedagogy training. The QAPD also carries out training workshops on general and online pedagogies as well as assessment and project/dissertation supervision but the skills are far from the pedagogies for the excluded. Lecturers are not trained on the use of assistive devices for those living with disabilities. Some applications in google classroom need interpretation and demonstrations using sign language. Students need assistance on downloading tests and doing them offline on time.

Professor Nzvimbo, the head of ZIMCHE, in one of his visits to the University reiterated that quality education is driven by educators' skills of general pedagogy, andragogy and heutagogy. Interviews with specialists on online pedagogy revealed that digital content is lacking so is the

personnel that can create such content. Universities have embarked on a heritage-based education curriculum (5.0) but educators have not yet or are unable to generate and design digital content and multi-media presentation for such content. The skills for such are lacking in universities. Universities rely on online digital content which contradicts with local content contextualized to heritage-based education and the environments. Training is needed for online communication, graphic skills for content creation and packaging, that is, pedagogy of diversity (inclusion) and online research skills.

The educators have no skills for creating technological content for learning especially interactive material such as videos, graphic material as well as cameras for demonstration. Graphic engineers are needed to work with educators to create interactive content and package it according to the course outlines. Educators need to be trained on the use of various online learning platforms such as COURSERA, UDEMY, EDX and MOODY in addition to the google classroom.

Challenges and experiences of vulnerable groups in online learning and teaching during covid 19 lockdown and its aftermath
Challenges and experiences of online learning by students living with disabilities
What emerged as common to all students with disabilities is that the majority come mainly from

impoverished backgrounds, which goes to support the common adage that disability and poverty are intertwined entities. This background further disadvantages them in that their families fail to offer adequate support systems for them to participate effectively in online learning. Firstly, most of them did not have the required assistive devices to enable them to participate well. Some assistive devices such as book readers, recorders, computers with screen reader software and magnifiers which are available at the university, were not available at home. For example, only 5 of the 20 students with disabilities have laptops and 15 have smart phones that they can use for learning. Some have phones that cannot access internet and cannot be used for learning.

The research through the DRC key informant established that students living with disabilities were faced with lack of online gadgets as most of them came from poor socio-economic backgrounds. The lack of financial capacity and moral support from their home environment, as most parents do not regard education to be an important tool to those living with disabilities compounded the challenges. It was also noted that financial challenges were rampant, and also attitudes where parents and guardians do not prioritise the needs of the student with disability. Students with disabilities were further disadvantaged as their fellow students could engage in menial jobs to get money for data bundles, they mainly solely rely on parents and guardians for financial support.

The visually impaired still used traditional braille instead of the perkinsbrailles, stillus and stencils during examinations. They also lacked recording tools to record online lectures, as braille writing was slow and noisy. Book readers on printed material were either non-existent or very few. Computers could be used if the screen reader software had been installed. Magnifiers were non-existent. The Covid-19 pandemic and online learning forced students to be away from campus for longer periods than face-to-face learning. This worsened 'lack of access' issues. If the visually challenged students were off campus, they could not access the braille and reading gadgets. Being home meant laptops, phones, internet, braille and reading gadgets were inaccessible and even assistance by DRC personnel. To some, especially those in rural areas, electricity was also a challenge. Lecturers and DRC officials had to send them braille material to be collected from the nearest place but travelling was also a challenge resulting in them failing to collect the material or accessing them late causing ill preparedness for texts and examinations. Most students living with disabilities had their fees paid by social welfare which normally delayed fees payment resulting in late registration resulting in them failing to access google classroom lessons.

Students with low vision complained about straining their eyes in trying to access material online, for example seeing and reading and following up

power point lecture presentations through google classroom. The visually impaired highlighted that at times during online lectures, diagrams may be used to show information and they missed such information. If a lecturer increase pace during lecture presentation it would be difficult to keep up and to take down notes as they use braille to write. They would need to record the lecture proceedings so that they can take down notes afterwards thereby spending more time on a task. The same goes for the students who have quadriplegic conditions or those whose hands are affected and may have challenges in writing fast. These students also lamented of lacking the technological knowhow to access online learning and to use the necessary gadgets if they gain access to them. The visually impaired require gadgets that have screen reader software on computers/ talkback on their phones and magnifiers to use when reading.

Online tests were also a challenge to the visually impaired and those whose hands are affected. They pointed out that their tests are timed and, in most cases, they did not complete the task because of speed. In face-to-face scenarios, they were usually given more time to write but the timed tasks are a real challenge. To make it worse, lecturers were not knowledgeable on the pedagogics of inclusion. Students with physical disabilities, especially those with challenges in walking and those who use wheelchairs, highlighted that network instability was a challenge and they were forced

to move to areas where network was available so that they could attend online lectures, send assignments or access learning material posted on the learning platforms. Movement to such areas would imply seeking assistance from someone to take them there.

This created a more pronounced challenge in rural areas where network challenges are more evident. Areas with uneven terrain were also difficult to manoeuvre for someone using wheelchair, crutches orhas difficulties in walking. Another challenge closely related to this was the unavailability of electricity in rural areas where most of the students with disabilities stay. This means they have to send people to shops, schools and areas where they can have their gadgets charged or they have to go there so that they can attend lectures without fear of running out of battery during lectures. Such challenges in most cases prevent students with disabilities from effective learning, as they tend to miss some lectures.

Students with psychological disability indicated that online learning caused them a lot of anxiety, confusion and depression especially when they are failing to keep up with proceedings or understand material sent to them. They would be more comfortable with face-to-face interactions with their lecturers and classmates when they needed assistance.

Those in rural areas, from poverty-stricken families did not have cell phones or some do not afford data bundles. To some, electricity and

internet connectivity was scarce and unreliable. Sometimes the University would give them access to campus facilities during vacation to access online resources. However, this has financial implications on them too. The result has been largely neglecting and exclusion of the already excluded vulnerable students.

Challenges of online learning experienced by orphans from Child headed families

Most orphans from child headed families are riddled with poverty and students indicated that they could not afford to buy laptops and smartphones to facilitate on-line learning. Student 'A' elaborated that; *"I don't have a laptop or smart phone and I always register late every semester due to lack of funds. Without registration I don't have access to the library to use desktop computers in the library".* This situation may lead to lagging behind in school work, feelings of inferiority as they compare themselves with other more affording students and in some cases, students may dropout from school.

Students reported on the lack of financial resources to purchase data to access internet for online learning while at home. The issue of not having access to reliable electricity also posed a challenge to as they would miss scheduled lectures due to electricity blackouts. To some, access to online gadgets like SMART phones was a challenge. They only have *"zvimbudzi"* simple phones for communication and not for internet use.

Challenges experienced by female students

Female students from low socio-economic backgrounds indicated that the problem of balancing household chores, doing menial jobs to fend for their families and attending to their school work was of major concern in their daily lives. One student stated, *"My learning environment at home is not conducive as I sometimes fail to read due to other chores and noise from the children. When I am at home, I am expected to do the chores then study at night but I will be so tired, there is a lot to do at home".* This places the female student at a disadvantaged position, as they are likely to lag behind in their school work or under-perform as their study time is spent on household chores. With feminisation of poverty, few females have access to internet gadgets. Mbanje-Muriwo (2020) revealed that out of 8,5 million recorded users of Econet wireless, in 2019, 5,2 million (59.9%) were males while 3,3 million (41.1%) were females with access to internet. In addition, females were less technological savvy due to socialisation that excludes them from use of technology.

This was also worsened by stereotypical and cultural beliefs that restrict women to household responsibilities. Females have no freedom of movement to internet cafes

or computer centres in town or to visit other male or female colleagues for assistance. In addition to the above, the universities have inexperienced personnel on gender responsive pedagogies. It is even worse for female students from poor backgrounds living in rural areas. Online is a night-mare for orphans from child-headed, rural and poor backgrounds. Pedagogy of inclusion is needed yet it is lacking. The Educational technology specialist and the e-learning manager colluded that the University lacks trained people for diverse pedagogies.

Challenges faced by students coming from rural areas

Students reported that network in the rural areas was generally poor, 75% of the sampled students indicated that they had no electricity at their rural homes. Another student highlighted that *"I have to walk 12km to the nearest shopping centre where l can get electricity and better network coverage so that I can join my online class and sometimes I will be very tired when I get there as it is always very hot".* These scenarios inevitably make access to online learning a challenge.

Students coming from poor families indicated that they had no financial resources to purchase suitable gadgets for online lecturers. Another student stated that *"in my case data is a luxury especially getting myself a smartphone because of the responsibilities of my siblings".*

Learning environments, online learning and quality education

The learning environments were described as unfavourable by more than half of the respondents due to disturbances such as noise and being compelled to attend to household chores. The majority of students reported that blended learning does not afford them access to quality education. One of the students elaborates that, *"I can barely afford to buy data bundles so I get updates from friends who would have attended the online lecture so I can't ask questions if I don't understand what they learnt".* This revelation indicates that students get learning materials offline from their peers after the online lecture, a situation that immensely compromises the quality of learning.

Blended learning was appreciated by a few students who felt that online learning complemented face to face learning and was cheaper in some ways. One student reported that *"blended learning makes it easier to do group work and discussions and it was less expensive than being at school physically as accommodation and food were very expensive".* Blended learning was ideal to students who had access to the gadgets, electricity, internet and data. Although learning was blended, vulnerable groups tended to lag behind during online learning compared to face to face learning.

Existing Strategies for The Vulnerable Groups

The research established that the library was making endeavours to reach students of all walks of life. They lend candle readers to the

disadvantaged students. They had also introduced a mobile/Physical library with mobile books to lend to students off-campus, however, one has to be at any of the MSU campuses to access the service. The library had a WhatsApp number which was open till midnight in addition to the widget electronic research guide manual by faculty librarians. In fact, every faculty had a dedicated librarian who ran a live chat with students and staff through the internet. There was a team of 5 library officials who train students and staff on the use of electronic resources and offer research consultancy. The library has an electronic resource centre at DRC; however, students lack access to gadgets and proper training. There were 15 candle readers, 50 laptops,5 desktops, 7 machines with permanent software for screen readers for a total of 62 disadvantaged students with special needs.

These gadgets were distributed across 3 campuses. The University expects students to provide themselves with gadgets and assistive devices including those manufactured at MSU for example, MSU hearing aids were available for sale. The library also had an information desk to assist both students and staff on use of library e-resources, however, students could only access the library resources after registering and those coming from low socio-economic backgrounds tended to register late. In addition to the lack of access to internet resources affordable to vulnerable students, the university lacked to a greater extent the online inclusive pedagogies of diversity.

Proposed Strategies
The University should ensure that all students benefit from blended learning. The respondents felt that the University should resort to the old roadmap where all students attended physical lectures to enable equal access to quality education. Students suggested that *"the Universities should officially continue with full semesters since COVID – 19 restrictions have been lifted so that all students have access to lecturers and learning resources".* Some felt the university should provide data bundles for students that allow for internet connectivity and online learning. *"The University should offer data bundles to learners or better go back to traditional learning of face-to-face lectures".* However, online learning can be very useful if disadvantaged students had access to required devices since globally, education is now technologically driven. Reverting to traditional mode of delivery will still mean lagging behind in technology driven education and economy. Lecturers should be trained on the needs of students with disabilities so that they use inclusive approaches in their teaching, for example, explaining diagrams for the benefit of students with visual challenges.

Tertiary institutions can offer training to students on how to use technological gadgets for online learning and how to manoeuvre online learning platforms like Google classroom and moody among others. Lecturers can also record lectures so that those who need

them can access them at their convenience. Lecturers are also encouraged to use the English language as a mode of instruction as screen reader software distorts other languages in reading. Network service providers should increase accessibility, network speed and reduce costs to ensure no one is left behind. There was need to source for funding to purchase gadgets for students with disabilities to use for online learning. Advocacy on the rights of persons with disabilities, especially in accessing education should be done so that communities, parents/ guardians, educational institutions and government are supportive towards, SDG 4 on quality education. The Government can also offer subsidy for data bundles to enable institutions to purchase data for students.

Conclusion

Inequalities emanating from gender differences, low socio-economic status, living with disabilities, orphanhood and living in child headed families are delving online learning in the education sector. Although the situation was worse during the Covid-19 pandemic lockdown without face-to-face sessions, students continue to be saddled with the challenges because online learning has remained a significant mode of instruction. The University, students and staff had not adequately prepared required resources such as of gadgets, internet connectivity, reliable power supply, skills training and content preparation. The University ICT policies of

technology driven learning and 'bring own device' by students do not address issues of inequality in technology-based learning. The policy of 'bring own device' assumes that every student can afford gadgets for use in online learning.

The government also has a policy of duty-free online gadgets but the foreign currency to buy those remain out of reach for vulnerable groups. The University does not have ICT specialists for the pedagogy of those living with disabilities. The University also does not have ICT personnel experienced in inclusive pedagogy for students with diverse classroom needs. The internet does not reach most rural areas in the country creating a digital divide between rural and urban, between the rich and the poor students as well as between genders. There was lack of both digital content and personnel to support online learning. Content originally designed for face-to-face learning was being used for online learning using traditional delivery strategies.

The educators were unable to design multi-media and graphic academic material and package it for online learning. Universities have not started working on online content or employing personnel with skills for production of material for technology driven education. Although the library is doing its best in assisting various students to access e-resources, all efforts depend on whether the students have electronic gadgets for use. The candle readers, research support, live

chats, widget electronic research guide are effective if issues of inequality and access by students together with technical pedagogical skills by educators have been addressed. Otherwise, inequality, poverty and gender remain as challenges impacting negatively on the quality education received by the affore-mentioned vulnerable groups in Zimbabwe.

Way forward
The paper recommends:
- Training of educators and other support staff on pedagogy of diversity (render responsive andragogy, heutagogy and general special needs, pedagogy to appeal to various vulnerable groups.
- Use of high tech, low tech and offline services for accessibility by all student groups in society
- Deliberate efforts should be made by the government and the institutions to procure technological infrastructure and gadgets with inequalities and issues of vulnerability in mind
- A gradual shift to online teaching with sessions for face-to-face as in the modularization mode of teaching (3-4 weeks face-to-face then teaching online for the remainder of the semester)
- Training of lecturers and other support staff on production of online-content for use in online learning
- Educators produce and upload e-learning module guides with online content for use by students

- QA directorate to produce a handbook to assist in online teaching and learning.
- The Universities improve e-learning infrastructure, reliable energy support and internet connectivity
- Institutions ensure adequate bandwidth, data bundles for lecturers and other e-learning support staff
- The e-learning manager consider having staff knowledgeable in production of graphic content for heritage-based education for use to reduce over-reliance on downloaded material which is not contextual to our situation
- The university employ in DRC an ICT e-learning specialist to assist students with various forms of disability
- The University expand the DRC to have all forms of assistive technologies and desks for assistance and support for each group in the DRC.
- The library establishes a DRC library to cater for various groups to access the content for learning through the use of various devices in addition to the existing efforts.
- The government and institutions deal with known vulnerable students as a separate category when it comes to registration and access to e-learning facilities for example, access to the library uploaded, e-learning materials, assignments and the library e-resources.

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