FINANCIAL EXCLUSION IN NORTHERN NIGERIA: A LESSON FROM THE DEVELOPED COUNTRIES

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Abstract

The objective of this paper is to assess the causes of financial exclusion in northern Nigeria, including the reason and causes behind the accessibility to banking services at a competitive and affordable prices. The study adopted Confirmatory Factor Analysis under Structural Equation Modeling using vulnerable group theory (Religiosity and Poverty) and financial literacy theory (Awareness). In this study, the survey method was used, additionally, the stratified sampling technique is applied as it provides richness and accuracy of information from respondents from various stratums. The participants comprised senior, middle and lower classes for the study justification. The finding indicates the positive relationship between Vulnerable Group Theory and Financial Exclusion while Financial Literacy Theory has no relationship as indicated. Therefore, the vulnerability which is consists of Religiosity and Poverty drive as the major causes of Financial Exclusion in Nigeria. The research provided insights and developed a model that indicates the causes of financial exclusion and apparent barriers to better financial services and inclusion in the community and society. This study's originality shows that have not used such vulnerable group theory and financial literacy theory for justification.

Keywords: *Financial Literacy Theory; Vulnerable Group Theory*; Causes; Financial Exclusion

1. INTRODUCTION

After Nigeria obtains its independence, the financial system adopted by the government was found to be unsuitable to the Muslim community in Northern Nigeria. Not only the conventional financial system has been inconsistent with their Shariah requirements, also the products and services offered failed to meet the needs of Muslim majority in the Northern region. As a result majority of Muslims in the region has EXCLUDED themselves from the mainstream financial system in the country. However, to some benefits and government resources, the advocates and awareness started by the majority of northerners who feel cheated and single way to be in the financial sector (Kumar and Pathak, 2022). The practice draws much attention of northerners to cooperate with the system and financial activities to fight exclusion (Mani, 2022).

However, the vast number of financial exclusion remains significant while the other regions, including southern and western Nigeria, have almost 85 per cent inclusion. Financial inclusion is an essential program of the Government of Nigeria. The goal is to include those left behind informal financial services. The Central Bank of Nigeria has launched various financial inclusion initiatives (Kumar and Pathak, 2022). After investigatory efforts by the Government of Nigeria in collaboration with the Central Bank of Nigeria, it is indicated that 36.8% of adults are financially excluded from formal and informal sources of funding, and 66.6% of adult's households in Northern Nigeria are suffering financial exclusion in the country (Muhammad and Ngah, 2021). Not accessible (Akpene, et al., 2022). Less access to

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formal financial services for small and marginalized Northerners has been seen as a serious threat to the economic development of developing countries such as Nigeria, as defined by Mohan (2009) for a country cannot determine its economic capacity and potentiality while the majority of the people were financially excluded. A financial exclusion means a lack of basic banking services at affordable prices to vulnerable parts of society (Du et al., 2022). Addressing Financial exclusion barriers is responsible for providing financial inclusion with timely access to financial services and, if necessary, ensuring adequate credit to vulnerable groups, such as vulnerable groups and low-income groups, at an affordable cost. The banking sector of Mohammed, Ibrahim, and Muritala (2022) consists of the Central Bank of Nigeria, commercial banks, and credit unions. Financial Services covers the entire range of Savings, Loans, Insurance, Credits, Payments and more. These services for small homegrown farmers and vulnerable parts of society are to provide help and solutions to them through poverty mitigation.

Furthermore, households need access to credit facilities for livelihoods which people feel comfortable and inclusive that will bring potential growth economically, and wise financial housing, consumption, and emergencies will be an advantage. Therefore, adults and households need financial services to access a wide range of savings and investment products to build wealth, all of which depend on financial literacy and identifying the major cause of financial Exclusion (Muhammad Dauda and Mamman, 2019).

Many researchers who investigated financial exclusion indicated previous studies, such as (Muhammad Dauda and Mamman, 2019), emphasized the awareness factor despite other evidence that justified financial exclusion. Therefore, there was no research on the causes of the financial exclusion that tested financial literacy and vulnerable group theories as the reason behind financial exclusion in Northern Nigeria.

2. LITERATURE REVIEW

In essence, microscale globalization leads to the financial inclusion of the privileged and the financial exclusion of the poor or the working group. However, the separation of businesses in terms of efficiency/inefficiency exists in terms of microscale globalization and wealth opportunities. Poor customers are costly and have limited services, as financial institutions focus on attracting the desired high-end customers by offering low or free services. In addition, cross-subsidization between elite customers and other customers. Banks that are small but allowed to provide similar financial services will be deprecated. Banks are now competing globally for elite customers and are no longer subsidizing unbalanced or high-risk customers. The result of all these transitions is an increase in the number of households that do not have a bank account (Bhatia, and Singh, 2019) and households that are financially included and excluded. Njambi, and Kariuki (2018) concludes his insightful analysis by observing that if a financial institution moves "blindly" towards efficiency, it may move further from the point of wealth fairness. Therefore, for those concerned about the working class of today's globalized financial markets and the plight of the poor, it is imperative to "identify and uphold the standards of fairness and fair treatment in financial practices." The question is, who are these people, and how do they uphold the standards of justice and impartiality. After all, we need more than pay attention to the problem, and to developed a solution (Bhatia, and Singh, 2019).

de la Cuesta-González, et. al. (2021) also provided a comprehensive overview of the issue of financial inclusion but focused on Europe. This study investigated financial inclusion's nature, causes, and scope and discussed policy and industry responses. It may have attributed the widespread liberalization of the financial industry in Europe and the resulting "intensifying banking competition" to "very prominent" financial inclusion over the last decade. The authors argue that the roots of regulation and institutions are facing today's financial inclusion, as the problem has been caused or exacerbated by deregulation. The regulatory aspect of the problem arose from competitive activity in the industry following the liberalization of financial institutions. Through these efforts, financial intermediaries have not only subdivided the population and targeted the wealthy but also encouraged the development of loan application screening devices (Balasubramanian, Kuppusamy, and Natarajan, (2018). Like developing countries, Anarfo and Abor (2020) Financial inclusion is "always experienced by the poor of society," despite being in developed countries. For example, the proportion of adults who do not have a bank account in Europe is staggering. It is 22.4 per cent in Italy, 17.9 per cent in Greece, 16.8 per cent in Ireland, 16.7 per cent in Portugal, 13.5 per cent in Ireland, Austria and 10.5 per cent in the United Kingdom. Regarding the consequences of financial inclusion, researchers have found that the problem of financial inclusion is not new, but its implications are becoming more and more serious. For instance, lack of access and bank accounts makes it difficult for poor people to generate, pay, and earn credits desperately to navigate the valleys and mountains of their households. As a result, poor people rely on alternatives to traditional financial institutions such as money lenders, payday loans, and pawn shops that impose very high-interest rates. Another problem faced by the poor due to the exclusion is the inability to obtain insurance coverage. Because they live around society, which they are also affected by social exclusion.

The United Kingdom and the United States have the most deregulated financial markets globally. Deregulation seems to have exacerbated the problem of financial inclusion by encouraging financial institutions to maximize shareholder returns. The product of this climate can be claimed to be the "redlining" of some US markets. However, US politicians are trying to combat financial inclusion in programs such as the 1977 Community Reinvestment Act, which does not exist in Europe. The Community Reinvestment Act was passed to encourage custodians to meet the borrowing needs of the communities in which they operate (Anarfo and Abor (2020). Carbo et al. (2005) concluded that there was a disappointing lack of policy response from the European Commission (EC) on the issue of financial inclusion. The EC response was ad hoc, rather than enacting the US Community Reinvestment Act, and was largely left to individual countries. While various countries such as the United Kingdom are tackling the issue of exclusion by promoting regions including post offices and other entities and social banking, European policymakers say that banks are basic to everyone. You need to consider a law that requires you to open a bank account service. Those who prefer a market-oriented solution may doubt the cautiousness of this proposal, as banks can cost some money, but encourage the public to "bail out" banks due to financial difficulties. After some time, we think there was a door, and it was also open to the public to seek help from banks to involve people who have traditionally been excluded from the mainstream financial markets.

Drakeford and Sachdev (2001) tested the reasons for financial exclusion within the UK and the authorities' efforts to address the trouble by reviewing the present-day literature and publicly to be had to file authorities' reports. Gardner (1999) who discovered that "the primary concerted strive of any European Government to address the difficulty of monetary exclusion with the aid of using imparting actual selections to excluded people", the authors stated that authorities become sufficiently involved in approximately the trouble and have been visibly taking steps to fight it. However, all of the steps taken to address the trouble to date have been supply-facet answers oriented; that is, in preference to compelling the banks thru regulatory means, the authorities appeal to the good-will of the monetary establishments to take steps to boom access to the excluded. Drakeford and Sachdev (2001) quoted a report from the University of Bristol that found that people classified as Pakistanis were four times less likely to have a bank account than their white peers. Indians can be twice as likely and Bangladeshis three times less (Guardian, 1999). These facts/statistics show that the issue of financial inclusion continues despite government efforts. The authors recommended a two-sided solution in which the government used both demand-side and supply-side approaches to alleviate the problem of financial inclusion. However, what exactly these different approaches mean can confuse anyone looking for "difficult" recommendations. Beckmann, DeLuca, Devlin, and Smith, (2005); Drakeford and Sachdev (2001), investigated the issue of exclusion in the United Kingdom and noted the growing interest in the discussion of financial exclusion in the United Kingdom. He also pointed out that previous studies of financial inclusion in the UK generally focused on a single service, such as a bank account, and excluded all other services. He further noted that while previous studies used different methodologies and models when considering specific problems, different approaches created unique problems.

DeLuca, Devlin, and Smith, (2005) sought to overcome this methodology problem by using a general model to test and compare the impact of a wide range of financial exclusions. A collaborative model of researchers based on literature reviews includes variables such as social class, gender, age, household status, household income, ethnicity, region, educational background and employment status, number of households, and housing placement. The data from the survey was collected using a representative sampling frame created by a commercial market research firm. A face-to-face interview method was used, with participants answering questions in a questionnaire. The first sample of 210 parliamentary members was selected as the primary sampling point. "Two areas of 5,000 households were selected to ensure the representativeness of the population composition of this member." Households were also selected to ensure the representativeness of the variable of interest. Use the quota system randomly. Binary logistic and logit model used for testing any financial service. The results of this study are informative and show that employment status, household income and homeownership are more important determinants of financial inclusion. Marriage history, age and level of education also affect financial inclusion. In a service-by-service analysis, the results show that people in lower social classes are more likely to be excluded from account checks. In terms of age, people over the age of 66 are unlikely to have a checking account, but ethnicity does not seem to be an important factor in having a checking account. This survey found that gender and social class are important factors for savings accounts. We found that women are more likely to use savings accounts than men and that age has a greater impact on exclusion from savings accounts than current accounts. Interestingly, however, ethnicity does not seem to affect the ownership of savings accounts. Gender, marital status, and social class do not affect the exclusion of home insurance, but age and ethnicity play a role. In life insurance, gender, ethnicity, and social class do not affect ownership but age. Single adults are less likely to have life insurance, and those married or living together are more likely to have life insurance. Concerning pension, gender is a significant factor in exclusion, with males less likely to be excluded than females. Devlin (2005) is, no doubt, comprehensive in examining the factors that correlate significantly with a financial exclusion.

Affleck and Mellor (2006) found that financial inclusion is now globally recognized as an important aspect of socio-economic inequality, with poor and poor mainstream, especially in affordable and readily available credit, claimed to be isolated from financial services. The authors said that different approaches to tackling the problem of financial inclusion had been adopted around the world, but these approaches have produced different results. These approaches are pervasive under various names, including social investment programs, microfinance programs, community finance, and community development. The UK Government's current policy initiative is to inspire local businesses and reduce their reliance on government support through financial exclusion. Affleck and Mellor (2006) investigated the former and evaluated its proposed role in community renewal. The authors like Pillai and Williams (2004) and Hutchinson et al. (2002) reviewed studies published by Taylor (2003) expressed scepticism about the success of CDFI in promoting financial inclusion. They also expressed scepticism about the success of CDFI, adding that the government seems to be "confident in the potential economic vitality of the community" and closed the review. The conclusions may be justified, but it is not surprising as the studies mainly reviewed previously conducted studies, most of which were already sceptical of government efforts. McKillop et, al. (2007) also considered financial inclusion in the United Kingdom.

McKillop et al. (2007) used publicly available data on British credit unions at the end of 2001 to determine the effectiveness of government efforts that began in July 1998. They discovered in 2001 that there were 837 credit unions in the United Kingdom. The number has dropped to 779 due to the tendency to transfer exposure from small, weak credit unions to slightly larger credit unions. In addition, the number of credit unions appeared to have declined during the enforcement of the Government's Financial Services and Markets Act of 2000. According to the author, the law includes reforms such as the classification of straight corporate bonds and the removal of the 5,000 membership limit, the extension of the permissible loan period, the permission to borrow from other credit unions and licensed banking institutions, and the permission to claim auxiliary services. We will compare the activities of credit unions with community-level deprivation policies that acted on behalf of financial inclusion and assess the effectiveness of the new guidelines in reaching financial inclusion. According to the survey, government subsidies are designed to promote the development of credit unions "by increasing costs, peer monitoring, voluntary peer monitoring, board self-determination, and self-help. The authors also provide a viable long-term model for credit union development, rather than targeted subsidies, for government and trade association policies that encourage credit union development based on the cross-section of the wealthy population. McKillop et al. (2007) shows that there are some inappropriate peculiarities in the recommendations as a guide for policymakers. Economic exclusion is a social issue, regardless of where it occurs. Unlike previous studies on financial inclusion that attributed the problem to deregulation in the financial industry (Carbo et al. 2007; Devlin and Wright, 1995). Dymski and Li (2003) analyzed financial inclusion problems in the United States by examining the history of urban space, focusing on the more profitable segments (Sahay, et. al, 2020). The logic of the development of the financial sector, especially the commercial banking sector, and the development of urban areas. The authors argue a spatial dimension to financial exclusion since it flowed from banking strategies triggered by global deregulation of financial markets.

By analyzing the historical financial evidence on exclusion and relating financial exclusion to strategic shifts in the banking industry, Dymski and Li (2003) used ideas on the intraregional flow of goods and services, which are rooted in the Sraffian production model. Through this linkage, the authors argued that "spatial conception of financial fragility which shows that urban subareas` wealth accumulation prospects are linked to the locus of financial and goods and services flows within the city." Furthermore, based on insights and analyses gained from this linkage, the authors show that micro and macrostructural causes were also behind the problem of financial exclusion in the USA. In the main, the withdrawal of mainstream banks from unprofitable locations left their former customers unserved and available for fringe banks that charge high fees. Furthermore, the withdrawal of mainstream banks has a spatial dimension clustered and disproportionately in urban subareas, which often have substantial macrostructural problems. Using the two-sector model, the authors showed that the inner core areas from which banks withdrew could sustain their cross-border financial balances only if the residents earned enough income from somewhere else to pay for "imported" goods and services (Dymski and Li, 2003). The authors find that financial exclusion is a problem primarily for low-income households and the minority who do not have access to banks. It states. Loans, opening bank accounts, accumulating capital. In addition, the issue of exclusion is an effort from two sides, both in terms of the macrostructure of economically isolated urban areas and the reexamination of strategic interactions and competitive microeconomic logic within the financial industry. Similar to the study by McKillop et al.

(2007), Dymski and Li (2003) also proposed specific means by which policymakers can tackle the long-standing problem of financial inclusion.

Joassart-Marcelli and Stephens (2010) also focused on the United States, previous studies of financial exclusion in the United States examined the relationship between exclusion and individual characteristics such as culture, religion, education, and ability to speak English. (Orozco, 2004), Income, Law, and Status (Marcelli and Lowell, 2005) investigated with little attention to the geographical aspects of banks. Therefore, the author sought to build on the ecology of financial inclusion literature and used it to study the spatial relationships between immigrant settlement patterns. The survey focused on the Boston area in 2000. The data used in the survey on immigrant groups included poverty rate, income, unemployment, English speaking ability, homeownership, family type, race, religion and ethnicity. These variables have been identified in the literature as being related to the use of financial services by migrants (Moser and Park, 2004). By studying immigrant agreement styles in a census tract data, the authors confirmed that substantial geographic variations in awareness and clustering exist in step with the United States of America as starting place of the immigrant. Further evaluation of the usage of multivariate regression and using controlling for socio-financial elements along with ethno-racial and land use traits indicates a greater complex photograph of the trouble of financial exclusion as seen below:

- Accessibility to monetary establishment's in particular financial institution branches consisting of ATMs correlates with the percentage of immigrants and minorities within the community.
- As the share of minorities in tracts in which foreign-born families stay increases, they get the right of entry to the conventional monetary establishment decreases.
- Particular immigrant businesses often reveal extra limitations due to which they stay.

For example, immigrants from the Dominican Republic, San Salvador, and Haitians revel in better limitations relative to Vietnamese; Immigrants within side the Greater Boston region live in Census tracts which have constrained get right of entry to formal financial establishments, however with disproportionately excessive publicity to much less formal financial establishments.

Solo (2008) directed her interest to the trouble of financial exclusion in Latin America. It asserted that despite numerous research on the subject, only some tested how monetary exclusion impacts financial improvement, particularly the improvement of city groups in which it's far felt maximum severely. To fill this gap, the researcher investigates the catch 22 situations of the unbanked in predominant towns in Latin America – Bogota, Colombia, Mexico City, Mexico, and lots of towns in Brazil. This survey collected data from a representative sample of 1,500 households in the census group. The survey was the primary means of collecting data but was supplemented by a focus group survey conducted in Mexico City. The survey indicates about 80% of households did not have access to formal financial institutions. These excluded households generally have lower incomes and educational backgrounds than the average population. In addition, the excluded households consisted primarily of minorities and immigrants who were dependent on the informal sector and often lived in informal settlements. Another salient feature of those who do not have a bank account in the area is that they are primarily self-employed. Overall, 65% of respondents who do not have a bank account in Colombia and 70% in Mexico use a formal banking system for fees, high minimum balance requirements, and/or high initial deposits. Interestingly, unlike in the United States and the United Kingdom, most people without a bank account owned their own home (66% in Colombia, 63% in Mexico). Solo (2008) shows the homeownership may indicate that the lack of access to formal financial institutions is due to costs, not poverty itself. Therefore, the authors say that financial inclusion in these parts of the world may be primarily due to psychological barriers and the general sentiment among the poor that mainstream financial institutions do not welcome them. Further analysis of the data collected by Solo (2008) sheds light on the macroeconomic aspects of the issue of financial inclusion. It has been found that the underdeveloped financial sector can impede access to financial services at the household level, which can limit economic growth and poverty reduction. According to data analysis, the costs of paying, saving and borrowing for the poor are higher than for fellow citizens tied up in banks. For example, in Mexico, cash transactions can be up to 5 times more expensive than paying by check and 15 times more expensive than electronic payments.

The situation in Colombia is not always good. Commercial banks accept payments for public services such as water and electricity from non-account holders. Still, this responsibility is delegated to only one cashier and takes only a few hours a day. Other findings from Solo (2008) on the macroeconomic impact of financial inclusion are consistent with those from Dymski and Li (2003) argued that restricting access to financial institutions could reduce overall savings and cause a continued decline in domestic credit to GDP. She also says that public funds are being used to bail out financial institutions in the face of financial difficulties is a disproportionate burden on poor people who do not enjoy the benefits of those institutions, pointed out that it suggests. Regarding the steps taken by Mexico, Colombo, and Brazil governments to improve financial inclusion, Solo (2008) found that they were moving in the right direction. For example, government-funded insurance programs with limited savings can help reduce the resistance and fear of using a bank that people without banks experience. This is the main cause of self-exclusion. Like the US federal government, all civilians must pay by electronic remittance, and the Bolivian government has begun paying checks to employees. This payment method achieves two goals. One is to protect the nation. Second, it offers the opportunity to run a bank without a bank.

The government is addressing the issue of financial inclusion by creating 30,000 "service points" for debit, credit and store cards. This project aims to promote and encourage debit cards and more savings accounts. While the use of microfinance by NGOs continues to help non-bankers access credit and capital, some Latin American commercial banks now offer secured loans and "joint guarantees". In addition, the Colombian government has opened branches and ATMs for banks, similar to the "Bank Development District" created in the United States from a partnership between the US government and banks to serve "poorly serviced areas

Main Courses of Financial Exclusion

Distance Barriers

Distance is a major obstacle for rural people due to the long distance to the nearest bank branch. Rural people cannot afford to travel long distances due to the expenses involved in financial spending when travelling long distances, which is one of the reasons for withdrawing interest from informal financial services. It was one of the significant barriers scientifically justified by some literature and also supports this idea, and its removal may prevent individuals from using it. Global findex survey Irfan et al. (2022) described that 20% of adults in developing countries cite distance as a reason for not having a bank account. Saha and Dutta (2022) stated that financial inclusion is a lack of outreach and coverage. Language barrier: one significant barrier for rural areas is language barriers (Karliner et al., 2011). Rural people use their language to communicate with each other, and they do not know other languages, which prevents them from using formal financial services. Dinçer, Eichengreen, & Geraats (2019) described the Central Bank of Nigeria's guidance for banks to provide all materials related to account opening, disclosure, etc., in local languages to improve financial inclusion.

Timing and Working Hours Barrier

The timing of bank deposits is also a reason for financial exclusion (Wilson, 2012). During the Day time, the workers are at their working duties on their daily earners; after the working hours, no financial institution provides services to such individuals use banking facilities during non-business hours, and no public or private financial institution provides facilities during non-business hours, which is an obstacle for rural people. Damodaran (2013) has defined one of the supply-side reasons for the financial exclusion of business hours.

Literacy Barriers

Literacy barriers are considered a significant constraint that refers to ignorance of financial activities and formal financial services (Yoong, 2011). People are less aware of the financial services that governments provide for rural development, and because of this barrier, as Malnight, Buche, and Dhanaraj (2019) found in their study, the main reason for finance in rural areas. People couldn't benefit from financial services. The Exclusion is a lack of knowledge about the financial system. Schuetz and Venkatesh (2020 also supported this barrier, stating that many people are unaware of the banking situation.

Documentation Barrier

Banks require many identities, and the rural communities do have not any records or some identities that become issues and difficult to get if they want people to appear with it for justification rural adults will prefer staying without having an account in the financial institution to people living in rural areas. Schuetz and Venkatesh (2020) define many challenges; one of the challenges is to access formal financial services needs different documents, but vulnerable people lack these documents and avoid these services during their increase. Shih, Chen, Syu, & Deng, (2019). the main opening of the bank account is the certification of identity and witness. In many cases, people in rural areas gave their dominant card and voters' card information, which is considered illegible for proof justification.

Earning Barrier

Revenue is a major threat to financial inclusion. However, the financial income sometimes becomes an issue less income. Allen and Farber (2019) said that income levels determine economic access and low-income people generally think that they are only rich through bank savings.

Religious Barrier

Religious barriers decrease inclusion level and become a strong barrier to household income. It has been explained that it will establish a rural household saving habit. It was a big problem in front of the Nigerian government when citizens decided to keep their money in the house. Most people are willing to hide money indoors due to the interest-bearing system going in the financial institution (Nessen, 2018). Muhammad and Khalil (2021) pointed out the religious barriers in their study, and older people experienced difficulties using an interest-based system, as most convention banking service operates. Muhammad and Ngah (2020) also described religiously motivated financial Exclusion. They said people are withdrawing even though they have access to the service and can afford it. Mair, Marti, and Ventresca (2012) also found that people's traditions and social practices discourage access to formal financial services.

3. RESEARCH METHODOLOGY

This study uses SEM (Structural Equation Model) as a hypothesis testing tool to investigate the impact of regulations based on two respective theories (vulnerable group theory and financial theory cognitive roles on implementing Northern Nigeria's financial exclusion program. In this study, the survey method was used as it is designed to deal more directly with participants' thoughts, feelings, and opinions, especially when collecting data about attitudes and beliefs (Neuman and Dickinson, 2003). Additionally, the stratified sampling technique was applied as it provides richness and accuracy of information from respondents from various stratums. The study area includes several states such as North-East, North-West and North-Central. The study used a sample of 300 respondents. Each region has an equal representation in the three regions of Northern Nigeria. This study examines age, gender, employment, education level, region type, and wage or income level categories, which are considered part of some of the criteria used to determine poverty. The study distributed the 380 questionnaires to three regions in Northern Nigeria which consist of North-East, North-West and North-Central. However, 300 respondents received and analysed based on the Structure Equation Modeling for justification.

Management researchers widely use dummy variables to understand the effects of categorical variables. In particular, strategic researchers often use dummy variables to study strategic reactions and directions. For example, Basheer et. al. (2019) discuss how an organization changes in the face of change pressure. They argue that it is worth considering whether the response is route-independent or route-dependent rather than considering how companies respond to constraints. A dummy variable can represent each of these two types of responses. Another example is the typology of Devlin (2005) this approach was successfully applied with positive feedback from practitioners regarding the ability to identify good performers while being insensitive to extreme values. Adeyemi, Pramanik and Meera (2012) used structural equation modelling to build financial exclusion models and some multiple variables (indicators) associated with them. Given the mathematical equivalence of the approach, hypothesis testing is based on similar test statistics in each case, however, the different functional forms of the model look different between the two tests. The corresponding hypothesis tests between the two approaches are also different and easy to implement. ***See the credibility of theories tested based on regression in appendix 1.***

4. RESULT AND DISCUSSION

Demographic information

The sample's characteristics supply information about Gender, Age, work status, Educational and monthly income. Results were obtained by analyzing respondents' demographic variables. Table 1 below details the respondents' profiles.

Table 1 Demographic information

VARIABLE DESCRIPTION	Frequencies	Percentage %
GENDER		
Male	190	63.2
Female	110	36.8
AGE(S)		
18-30	90	30

VARIABLE DESCRIPTION	Frequencies	Percentage %
31-50	150	50
51-above	60	20
EDUCATION		
Primary	30	10
Secondary	75	25
Degree	120	40
Postgraduate	75	25
WORK STATUS		
Employed	96	32
Self-employed	135	45
Unemployed	69	23
MONTHLY INCOME RANGE		
50,000 -100,000	60	10
101,000-500,000	105	35
501,000-1,000,000	135	45
1,000,000 – above	60	10

Source: Authors

The demographic analysis results indicate that out of **300** samples, 63.2% were men, and 36.8% were women; which dominant of the respondent were male gender compared to the female gender. In terms of education, it is dominated by degree level is 40% and the education. The employment status of self-employed got 45%, while employed by government has only 32% and 23% for unemployed representation. The average population of three regions in rural areas where they make a living is based on geographically stand. Result details of the above table 1 indicate the descriptive statistics of the respondents.

The validity and reliability test were conducted through Cronbach's alpha, Composite reliability and Average variance Extracted. As shown in Table 2.

Table 2: Validity and reliability

Constructs	Factor Loadings	Cronbach's Alpha	Composite reliability	AVE	Decision
LIT		**0.845**	**0.890**	**0.732**	**Reliable**
LIT1	0.695				
LIT2	0.808				
LIT3	0.741				
LIT4	0.750				
LIT5	0.728				

LIT6	0.707				
LIT7	0.699				
VGT		**0.897**	**0.845**	**0.714**	**Reliable**
VGT1	0.889				
VGT2	0.900				
VGT3	0.572				
VGT4	0.585				
VGT5	0.627				
FE		**0.863**	**0.849**	**0.726**	**Reliable**
FE1	0.640				
FE2	0.834				
FE3	0.716				
FE5	0.704				
FE6	0.738				

Source: Authors

The standard factor loadings met the minimum loading of above 0.5, indicating positive loadings. The low loading indicates were removed and enhanced the other loading defined by Bryne (2010). The validity and reliability were above the threshold of 0.7 as Composite Reliability (CR) and Cronbach's Alpha and Average Variance Extracted (AVE) were considered significant and good loadings and are above the cut-off point. Therefore, all the constructs have met the required loading with the same reliability and validity assessment.

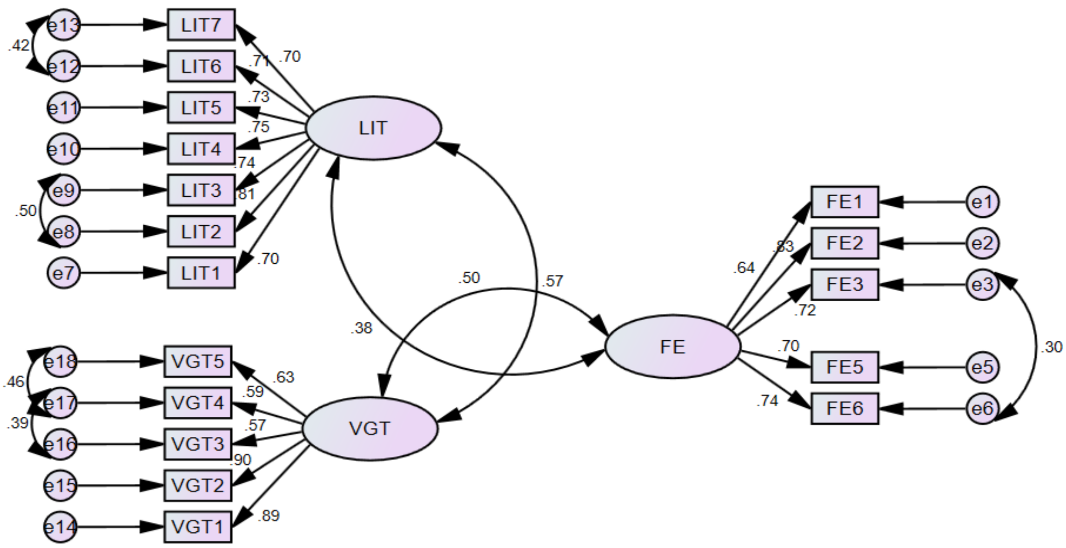

Figure 1. Variable Correlation

Table 3: Correlation of the variables

Variables	(1)	(2)
LIT	1	
VGT	0.568	1
FE	0.379	0.502

Source: Authors

The statistical relationship between the three variables, which two are considered Independent Variable (IV), consists of Financial Literacy Theory and Vulnerable Group

Theory and Financial Exclusion. Previous results indicate that Financial Literacy Theory and Financial exclusion are not correlated with 0.379, while Vulnerable Group Theory (VGT) and financial exclusion are significantly correlated with 0.502.

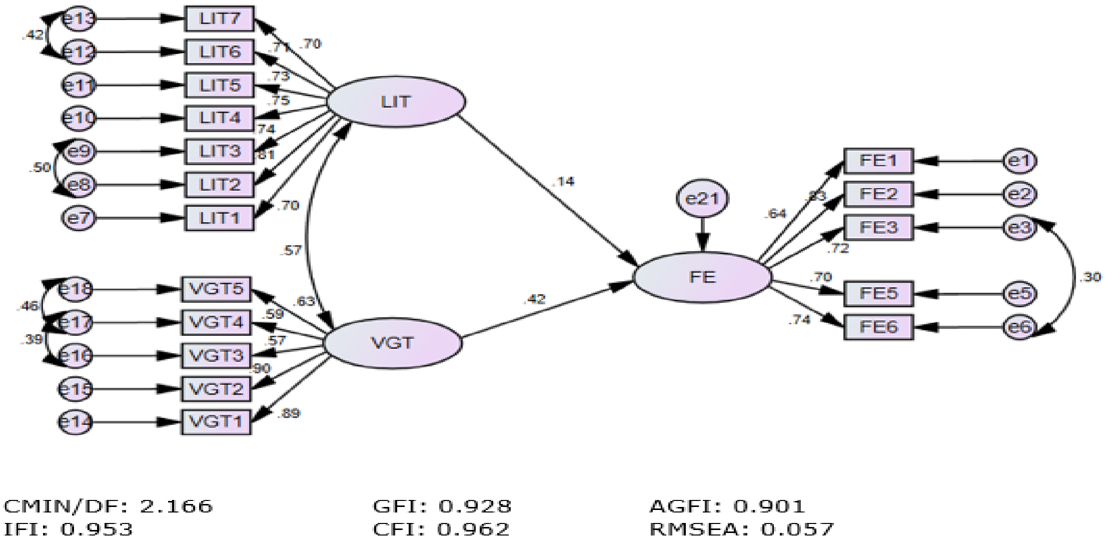

Figure 2. Fit Model

Table 4: Measurement Model fit

Model indications	Model result	Recomd.	Theories	Model Fitness
CMIN	240.424			
DF	111			
P-value	0.000			
CMIN/DF	2.166	<5.0	Marsh & Hocevar (1985)	Acceptable
GFI	0.928	>0.9	Chau (1997)	Acceptable
AGFI	0.901	>0.9	Byrne (2010)	Acceptable
IFI	0.962	>0.9	Hatcher (1994)	Acceptable
TLI	0.953	>0.9	Byrne (2010)	Acceptable
CFI	0.962	>0.9	Byrne (2010)	Acceptable
RMSEA	0.057	<0.085	Byrne (2010)	Acceptable

Source: Authors

A goodness-of-fit test is then performed to determine how well the model fits the series. From observation. This test is with observations Expected value of the model. Based on Table 3 above, the absolute measure of conformance is: This can be seen from the chi-square because the main conditions for the chi-square value are met. The model has a value of 240.424 and a p-value of 0.000 (less than 0.05). The goodness of fit. However, as is known, SEM is very sensitive to the number of samples used. According to the survey, the number of respondents is increasing, but it is improving. On the other hand, the model is considered valuable because CMIN (χ^2) value can be high. Therefore, SEM provides another alternative test for conformance according to the following criteria: Absolute goodness of fit is measured by examining and working with an RMSEA value of 0.057 (less than 0.085) as indicated by (Byrne, 2010). We conclude that this model "fits". GFI of the model has the above-recommended level at > 0.928, AGFI >0.901, IFI scored 0.962 with standards are saturated model. Criteria are based on the Parsimonious Fit Measure by looking at the normalized chi-square value (χ^2 / df) of 2.166 (lower limit 1). And the upper limit 5). Overall, this model has been declared a limit. It can be used to confirm theories built on existing observations that the data or this model can be said to be "properly fit.

Table 5. Hypotheses

Hypothesis	Estimate	SE	CR	P-value	Decision
LIT -> FE	0.164	0.084	1.947	0.052	Rejected
VGT -> FE	0.416	0.74	5.640	0.000	Accepted

Financial Literacy Theory (LIT) significantly affects Financial Exclusion (FE). The p-value of financial literacy theory (LIT) in predicting the Financial Exclusion (FE), the probability of getting a critical ratio as large as 1.947, while the areas related in absolute value is above 0.052. In other words, the regression weight for financial literacy theory in the prediction of Financial Exclusion is rejected as therefore shows that financial literacy theory indicates no issue to financial exclusion. Vulnerable Group Theory (VGT) significantly affects Financial Exclusion (FE). The probability of getting a critical ratio as large as 5.640 in absolute value is 0.000. In other words, the regression weight for VGT in the prediction of financial exclusion is supported by hypothesis 2 (H2) and indicates a positive relationship between vulnerable group theory and financial exclusion. The magnitude of each standardization effect (normalization effect) or indirect (normalization) effect (Indirect effects) is shown in above Table 4. It is well known that Financial Literacy Theory has a negative impact, while Vulnerable Group theory has a positive impact. Consistent with previous research (Muhammad and Ngah, 2021; Bongomin et Al., 2018). Norms arise from individual problem-solving activities in which standards play a major role. The rules of expected behaviour. Religion, and poverty, are considered vulnerable groups to financial exclusion. This is the primary foundation for financial institutions to be more responsive and flexible in responding to their needs. Community / community. Therefore, norms shape the choices of people who use personal financial services. The institution is considered better, and there is trust between the two.

Discussion

Financial Literacy Theory play an important role in making financial decisions while this study rejected the theory based on the causes of financial exclusion. Therefore, decisions are made by groups according to individual behavior. Those who are exposed to deviant behavior and expect to do the same in social groups for sanctions. While for the Vulnerable Group Theory (VGT) accepted as the significant impact on financial exclusion and has the positive impact. Therefore, the economic decisions of poor households are shaped by social policy. It is found in existing norms and adapts to those determined by the community. Test results from previous studies are different (Bongominetal. 2016; Koseu Gunes, 2018), showing that adverse effects on financial inclusion are caused by procedures as indicates (H2). In this case, the established rules can be too difficult Followed by vulnerable groups. In reality, each financial services institution has its own rules. However, the problem is that the procedure used is very cumbersome and a bit complicated. The inclusion program can be successful using the VGT

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theory. The system needs to be more accessible and economically improved an inclusion program that benefits the community. This is the implementation of the directive given by some procedural points, it makes it easier management procedures. The two tested hypothesis have shown a negative and positive effect on declarative cognitive towards financial exclusion. While the second group VGT indicates the religious and poorest group who depend on the ability to use memory dimensions and cognitive ability to filter financial services and business decision. This is consistent with previous studies (Muhammad and Zanna, 2021). Financial inclusion information not covered by their schematic templates the mind is ignored based on the need to tackle the financial exclusion.

5. CONCLUSIONS

The result identifies equal opportunities in using banking services within the society regardless of status and vulnerability. On the other hand, access and promotion of financial services. Access to comprehensive financial services in urban areas is very beneficial to urban communities, but such access is minimal in rural areas. This indicates that the financial literacy theory and vulnerable group theory have pointed out the clear status of financial exclusion theories that can be used for addressing exclusion and inclusion. The institution must decide to apply a proper and appropriate system for the vulnerable community as the institution promotes the correct behaviour. In this case, the Negative effect means that you can protect the accessible financial inclusion process. Group, but conversely, if the process is more complex, this is almost the goal of financial inclusion achievement, while the hypothesis (H1) does not work considered significant towards financial exclusion as indicated in (Muhammad, Dauda and Mamman, 2019) under the groups' financial literacy. In the second variable, evidence has found that hypothesis H2 has a positive effect and relationship with financial exclusion. Therefore, the vulnerable group, which consists of poverty and religiosity, are considered the main predictors of the research and rules applied by financial services are conceptualized based on that direction. Regulatory authorities should actively affect financial integration according to the theories described. In other words, the community chooses financial inclusion programs based on their needs. The problem of limiting financial inclusion is both poor households and vulnerable groups. In rural or remote areas, it is clearly indicated that there is a lack of financial awareness, and we fully understand the information awareness from financial exclusion. Financial services to promote financial inclusion. The government also has different regions, especially vulnerable groups. The legal system needs to be easily accessible in rural areas for economic reasons and compensation.

Financial inclusion is the procedure or process of ensuring access to the financial services that society needs in an affordable, fair and transparent manner, including vulnerable groups such as financial literacy and vulnerable groups and low-income groups. To achieve the national goal of financial inclusion, the Government of Nigeria and policymakers need to take steps to remove the above barriers to financial inclusion.

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Appendix

Appendix 1
Model credibility based on R-squared

Regression statistics	
Multiple R	0.896608261
R Square	0.87942855
Adjusted R square	0.805999975
Standard Error	2.627324621
Observations	**300**

CAUSALITY relationship among the variables

Intercept	**Coefficients**	**Standard Error**	**T-Stat**	**P-value**	**Lower 95%**	**Upper 95%**
Intercept	7.747	2.020	3.835	0.002	3.300	12.193
Financial Literacy theory (LIT)	0.673	0.133	5.058	0.000	0.3806	3.967
Vulnerable Group Theory (VGT)	2.067	0.689	2.997	0.012	0.549	3..585

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