

ISLAMIC FINANCIAL INSTITUTIONS AS SOLUTION TO FINANCIAL EXCLUSION IN NORTHERN NIGERIA: A MODEL DEVELOPMENT**Tijjani Muhammad** ^(a) **Besar Bin Ngah** ^(b) **Fahd Al-Shaghdari** ^(c)^(a) Faculty Arts, Management and Social Sciences, Federal University, Gashua, Yobe State, Nigeria; E-mail: hajitee@fugashua.edu.ng^(b) Professor, Faculty of Finance and Admin. Science, Al-Madinah International University, Malaysia; E-mail: drbesar.ngah@mediu.edu.my^(c) Assistant Professor, Faculty of Finance and Admin. Science, Al-Madinah International University, Malaysia; E-mail: al.shaghdari@mediu.edu.my**ARTICLE INFO****Article History:**Received: 29th October 2022Accepted: 24th December 2022Online Publication: 30th December 2022**Keywords:**Causes, Financial Exclusion,
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ABSTRACT

The study is to assess the causes and barriers of financial exclusion using three theories, including vulnerability theory (Poverty and Religiosity), financial literacy theory (Awareness), and public service theory (Attitude of Government Policy), to evaluate the relationship between the Islamic financial institutions and financial exclusion in Northern Nigeria. The study adopted a random sampling method with 450 respondents using Confirmatory Factor Analysis under Structural Equation Modelling (SEM) and SPSS. The study indicates the positive relationship between the three theories and financial exclusion and further identified some theoretical contributions indicating highly influential relationships between the predicted variables of the above theories. The study further identified the most significant contribution to the financial institutions by developing relevant literature to sort out the issues and challenges behind financial exclusion in Nigeria. Islamic financial institutions are considered a phenomenon and solution to this current issue of financial exclusion. The present study developed an integrated model which defines financial exclusion and its approach through three theories in addressing financial exclusion in Nigeria. It is also considered among the country's first attempts to solve financial exclusion.

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INTRODUCTION

According to Koku (2015), financial exclusion has become a major global challenge, especially in developing countries. The concept of financial exclusion has drastically attracted the attention of the world. The World Bank effectively introduced several programs to tackle the key barriers of financial exclusion by 2020. However, research has shown that the barriers to financial exclusion include poverty, financial literacy, poor services, lack of trust, distance, and safety of the financial intermediaries (Ozili, 2018). Financial exclusion refers to a specific group of individuals who suffer access to the financial mainstream. Although over time, criteria for exclusion differ, which tends to discriminate against certain groups of people who are less privileged and disadvantaged in the system. Adeleke and Alabede (2022) investigated financial exclusion in a developing country, which indicated that over 36.8 per cent of the adults were financially excluded. Nigeria is the most populated and multicultural country in Africa and has a population of approximately 200 million, with different languages and religions and is recognized as the giant of Africa. However, it has a significant number of approximately 36.6 per cent of financial exclusion in Africa. In other words, this group of people neither have access to nor any financial records in the financial sector. As such, this has disproportionately affected the country's economy regardless of class, group or community, and 66.6 per cent of the financial exclusion is from Northern Nigeria (Oduola, 2019; Eble et al., 2021).

This is because the differences in cultural and societal points of view resulted in some positive and negative sides. Islam emphasizes moral, social, ethical, and religious aspects to justify equality and fairness between the followers (Samanta, 2013), and one of the stems that reasons for financial exclusion is "poverty and religion", which shows the conventional operating system is based on the bias (Marron, 2013). The interest-based banking system is contrary to the

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Muslim faith (Bourhime & Tkiouat, 2021). Adisa and Omitogun (2019), the percentage of financial exclusion dropped by approximately 4.7 per cent within three years from 41.6 per cent to 36.8 per cent after the introduction of Islamic banking. In 2016, the Northeast had 68 per cent, dropping to 55 per cent in 2018. Comparatively, North-West in 2016 was 56% per cent and increased in 2018 to 62% (Anthony-Orji, Ogbuabor, & Onoh, 2019). Abubakar (2020), Islamic financial service enhances the social, supply and demand financial influence in Northern Nigeria. To conclude, this study is also considered among the first attempts to assess the relationship between three theories which include vulnerable theory, financial literacy theory and public service theory, in addressing Financial Exclusion with related variables such as religiosity, poverty, the attitude toward government policy, awareness, and Islamic financial institution.

LITERATURE REVIEW

This current study examines the three theories addressing financial exclusion in Northern Nigeria. The study illustrates some factors that may have influenced financial exclusion in the country. The research has illustrated some theories, including financial literacy theory, vulnerable group theory, and public services theory, which will address Nigeria's exclusion issue (Abdullahi, Othman, & Kassim, 2021). At the same time, others are seen as a situation whereby financial services are inaccessible for the poor due to the exclusive government policies or have appeared as a lack of inadequate funds available to vulnerable people in society (Brown, Soni, & King, 2020).

Dimakou, Romero, and Van Waeyenberge (2021) described the image of financial exclusion as a threat that attracted and drew the attention of public interest in developed countries in the late 1990s. Many academicians and politicians have raised concerns about the subject due to the increasing penetration level of the industrialised world. Financial exclusion has been a challenge in developing countries due to the absence of a comprehensive financial structure that can resist and debate the norms rather than the exception of financial exclusion (Pomeroy et al., 2020). At the same time, some confine as precise to lack of access to any services. Financial exclusion is a circumstance where a proportion number of the population suffers from access to the financial mainstream. The concept of financial exclusion continues to draw people's attention and debates. However, there is almost no compromise between the experts on financial exclusion, which is mostly associated with the issue of access to financial services and negative perception of the available services and affordability (Badu, O'Brien, & Mitchell, 2018).

Poverty Reduction

The backwardness threat and poverty redundancy are interwoven and create a vicious circle in society (Van der Ploeg, 2020). Poverty is the scarcity or the state of an individual who lacks a certain amount of possession, such as money or material things (Groves et al., 2020). Poverty may be understood as the surface of the asymmetrical lop-sided status of inequitable social relationships and social exclusion dependency. Vujcic, Buchmueller, and Klein (2016) stated that barriers between income, employment, and entitlement, access to necessities of life. However, the poor and weaker in society are exposed to exploitation of various kinds of discrimination and financial exclusion. Krounauer (2019) stated that poverty is one of the most serious problems of the current generation, which limits the right awareness of society and their ability to access formal and legal financial institutions to protect their constitutional rights and abilities (De Filippi, Mannan, & Reijers, 2020).

Poverty is one of the core issues of every economy worldwide, and approximately 1/5th of the world's population lives below the poverty line. In the late 1990s, \$1 a day rise by \$2, and this number persist over 2.7 billion, which is half of the world population (Kats, 2019). Millward-Hopkins et al. (2020) stated that consumption measures such as shelter, clothing, transportation and education show the standard of living, which suggests a correlation between the well-being of society. Sani Ibrahim Ozdeser and Cavusoglu (2019) concluded that financial exclusion is both anti-poor and anti-growth of society socially and economically. It indicated that financial exclusion deprived low-income households of access to basic financial services such as loans, credit and other savings. Thus, it shows that fostering the growth of their financial autonomy amplifies and advocates the enhancement of financial services and reduces poverty and social inequalities. Omar and Inaba (2020) investigated that a nation with substantial financial institutions grows faster over decades. A regression on cross-country analysis indicates that a country with low GDP is relatively higher in income inequality, low urbanisation, low literacy rates and poor connectivity, demonstrating the vast number of financial exclusion (David-West, Aluko, & Adetunji, 2019). Fiscal growth and social development work closely to address financial exclusion (David-West, Aluko & Adetunji, 2019).

H1: Poverty (PO) significantly affects Financial Exclusion (FE)

Awareness

Lack of literacy in developing countries has led to a lack of awareness, especially among vulnerable and poor individuals (Nedungadi, 2018). Karjaluoto et al. (2019) discussed a unique feature of financial services and products financial institutions offer. However, the innovation of products indeed deters access to financial services. Lusardi (2019) indicate that a lack of understanding and awareness of financial services and products are caused by low financial literacy, which also leads to financial exclusion. De Bruijn and Antonides (2022) concluded that vulnerable households include those unfamiliar with financial products. Therefore, financial literacy has become significant in such situations as it empowers financial knowledge to enable decisions and strategic financial instruments. However, understanding the idea of financial products and knowledgeable evaluations is important to make an informed decision and maximise demand utility (Daradleh, 2019). Cardoso, Torriti and Lorincz (2020) explained that financial literacy could perceive as identifying and offering a better understanding of mainstream financial institutions and encourages those financially excluded. Indeed, financial

literacy can effectively enhance financial awareness among households classified to be poor or vulnerable in society, especially in developing countries which improves processes of decision-making that improve the savings rate of the poor, which consequently leads to poverty reduction in the community (Khan et al., 2021).

H2: Awareness (AW) significantly affects Financial Exclusion (FE)

Religiosity

Religion is defined as an individual's belief in the Almighty and abiding by His rules as stipulated by religious devotion (Thiemann, Herring, & Perabo, 2021). The measurement scale of religiosity has different understandings and is viewed differently by various scholars and researchers in the field. Junaidi, Wicaksono, and Hamka (2022) discussed religiosity using the Extrinsic-Intrinsic Religious Orientation. Generally, religiosity covers the commitment to religious strength and beliefs, encompassing participation in religious activities and congregation (Schnitker, King, & Houlberg, 2019; Barnard & Mamabolo, 2022). Hassan et al., (2021) religion is an essential aspect of humanity that has no compromise in several aspects of societies. Religious denominations are among the obvious illustrations that influence economic outcomes. However, some researchers consider religiosity a form of social tie and signify its demand for products based on the financial institution. Yadav and Heath (2022) suggest that religiosity causes lower information asymmetry and provides community-based financial services and informal financing. As mentioned by Singh (2021), religiosity has been recognised to influence individual behaviour. Many studies identify that religiosity influences practices and customers' attitudes. Furthermore, significant financial decisions indicate religiosity's role in Islamic banking and adoptions among Muslim individuals. Similarly, this research shows a positive relationship between the two variables (Mindra, 2022).

The study identifies a range of Islamic religious factors that obstruct people's access, specifically Muslim individuals, to the use of financial services (Abdullah Hassan, & Masron, 2016). Interestingly, Haddad (2021) argue that financial institutions and religiosity influences faith and belief in the financial institution operations for both conventional and Islamic financial intermediaries. A similar study examines the two variables and signifies a positive relationship, as indicated by (Pomi, Sarkar, & Dhar, 2021). Furthermore, empirical research shows that a developed financial system and the inclusiveness of Muslims has a significant issue that shows the uses of conventional institution for macro and micro influence exclusion within the Muslim community (El-Chaarani, Ismail, & El-Deeb, 2022). Mia (2022) showed that more access to a financial institution in Muslim-dominated areas positively correlates with religiosity and financial exclusion.

H3: Religiosity (RE) significantly affects Financial Exclusion (FE)

The attitude of Government Policy

The government's attitude in approaching financial exclusion directly or indirectly plays a vital role in advancing inclusion. Financial exclusion is a key part of societal hardship in industrialised nations (Chen & Sivakumar, 2021). Therefore, a portion of the chosen strategies proposed by the Nigerian government in handling financial exclusion is to be one of the main 20 economic power in the world. The Nigerian government has established strategies to advance mindfulness and pull individuals to take an interest in its approach to microfinance and the remaining policies strategically. It was an accomplishment in the South-East, South-South and South-West regions principally dominated by non-Muslims. In the North-East, North-Central and North-West, the response was below 49 per cent of each region and was dominated by Muslims, and the framework wound up with bias as constant with fewer members in another region (Abdullahi, Hassan, & Masron, 2016). Lawhaishy and Otheman (2022) stated that the policies presented by the Nigerian government, for example, microfinance, are not following Muslim beliefs (negate their confidence) because they are not under Islamic standards, as they are paying *riba* (usury) which is contradicting with Shari'ah and is firmly disallowed under the Islamic Law consequently promoting financial exclusion.

H4: Attitude of Government Policy (AG) significantly affects Financial Exclusion (FE)

Islamic Financial Institution's Performance

Al-wlaqi and Aamer (2016) investigated the performance of Islamic Financial Institutions through survey studies that signify the relationship based on customer preference of selecting a brand of Islamic Financial Institutions to maintain existing customers and attract new ones. Islamic Financial Institution has emerged as one of the most significant institutions regarding trend expansions of the financial sector. However, with the development of viable Islamic alternatives, Muslims consider and prefer a certain length, and even non-Muslims are seeking and prefer Shariah compliance in most instances. Studies have shown that the socio-cultural and economic background is important in Islamic financial institutions and their services. However, governors of the commercial institutions in which their operation is based on an interest-based system recently reviewed the development of financial intermediaries, with outcomes of studies revealing service quality and religious reasons are instigating migration from a conventional financial institution to an Islamic financial institution (Yasin & Hafeez, 2022).

Furthermore, religiosity is considered a part and a significant factor and is also inconsistently in line with Shariah principles. In most cases, the selection of any financial intermediary depends on customers' satisfaction and awareness of the banking operation and its layers (Alharthi et al., 2022). Giron et al. (2022) studied financial exclusion and revealed religiosity as the primary reason for exclusion. Al-Kwif, Farha, and Ahmed (2019) re-access the scenario with 281 bank customers for preference selection of Islamic financial institutions, and the same results emerged, stating religiosity as the primary reason.

H5: Islamic Financial Institution's Performance (IFI) significantly affects Financial Exclusion (FE)

MATERIALS AND METHODS

This study considered a systematic random sampling and selected 450 respondents who participated in the exercise. The questionnaires were given to the financial institution's customers as respondents from different organizations and financial institutions in Northern Nigeria. The study shows the experimental results to verify the above hypotheses shown in the study using AMOS and SPSS software packages. The research proposed a latent construct, considered unobserved variables in identifying comparative measurement. However, the research considered a measurement model using Confirmatory Factor Analysis (CFA) to evaluate and examine the uni-dimensionality, reliability and validity of the chosen and constructive items. The latter is considered as the construct items of the descriptive outcomes and reporting part of the outcomes through the structural models to evaluate the direct link with the hypotheses.

Subsequently, the models consist of three significant areas of the goodness-of-fit indices, absolute fit assessment such as Chi-square, Root Mean Square Error of Approximation (RMSEA) and Goodness-of-fit statistic (GFI), the addition of incremental fit measures such as Normed Fit Index (NFI), Tucker Lewis Index (TLI), Incremental Fit Index (IFI) and Comparative Fit Index (CFI) (Byrne, 2013). When the Chi-Square fit index shows a significant p-value that does not mean the p-value cannot be interpreted or is unacceptable; rather, the researcher can use the GOF indices as an alternative. Goodness-of-Fit Index (GFI) is known as a non-statistical ranging index from 0 (poor fit) and 1 (perfect fit) (Savalei & Bentler, 2006)). In other words, the Goodness-of-fit index (GFI) indicates any value above 0.90 that shows a good fit of the model (Hoyle, 1995). While the Root Mean Square Error of Approximation (RMSEA) is another absolute fit, a score lower than 0.1 indicates a good fit, as justified by (Hair et al., 2006).

RESULTS

Table 1. Assessment of Normality for Measurement Model

Construct	Item	Skewness	CR	Kurtosis	CR
Poverty reduction (PO)	PO1	-1.024	-7.825	0.584	2.229
	PO2	-0.969	-7.399	0.812	3.103
	PO3	-0.758	-5.786	0.363	1.385
	PO4	-0.972	-7.427	0.754	2.879
	PO5	-0.887	-6.777	0.519	1.982
Awareness (AW)	AW1	-1.148	-8.769	1.010	3.858
	AW2	-1.167	-8.917	1.847	7.055
	AW3	-1.087	-8.300	1.250	4.773
Religiosity (RE)	RE1	-1.692	-12.921	3.421	13.063
	RE2	-1.180	-9.011	1.605	6.128
	RE3	-0.982	-7.498	0.880	3.360
	RE4	-1.776	-15.561	3.571	13.63
	RE5	-1.171	-8.943	1.239	4.730
	RE6	-0.999	-7.631	0.675	2.577
	RE7	-0.980	-8.684	0.719	2.745
	RE8	-1.137	-9.159	0.860	3.284
Attitude of Government Policy (AG)	AG1	-0.940	-7.182	0.649	2.480
	AG2	-0.952	-7.275	0.516	1.971
	AG3	-1.092	-8.339	1.164	4.445
	AG5	-1.345	-10.273	1.887	7.205
	AG6	-1.285	-9.814	1.696	6.478
	AG7	-1.160	-8.858	1.112	4.246
	AG8	-0.848	-6.473	0.226	0.865
	Islamic Financial Institution (IFI)	IFI1	-1.273	-9.719	2.116
IFI2		-1.114	-8.507	1.258	4.803
IFI3		-1.000	-7.639	0.839	3.203
IFI4		-0.963	-7.355	0.855	3.264
IFI5		-0.920	-7.028	0.671	2.562
Financial Exclusion (FE)	FE1	-1.229	-9.385	1.448	5.530
	FE2	-1.109	-8.470	1.513	5.778
	FE3	-0.964	-7.362	0.617	2.358
	FE4	-0.880	-6.724	0.431	1.647
	FE5	-1.199	-9.159	1.287	4.913

The result of the assessment of the normality has shown that the skew and kurtosis of all items as well as the variables placed among ± 2 and ± 9 , respectively; however, we can be decided that the data set of all items constructs were well-modeled by a normal distribution, we can see from the Table 4.6, the skew ranged from -0.848 to -1.776 as well as the kurtosis ranged from 0.226 to 3.571.

Table 2. Goodness of Fit Indices of Measurement Model

Fit index	Modified Model	Recommended Value	Acceptable Value	Source
Df	479			
CMIN (x ²)	764.563			
X ² /df	1.596	<3.00	>5.00	Bagozzi, Wong and Yi (1999)
p-value	0.135	>0.05	>0.000	Raykov and Marcoulides (2001);
GFI	0.883	>0.90	>0.80	Hair et al. (2006), Hoyle (1999) and Kline (2010)
AGFI	0.863	>0.90	>0.80	Chau and Hu (2001)
CFI	0.922	>0.90	>0.90	Byrne (2013), Bagozzi and Yi (2012)
TLI	0.914	>0.90	>0.90	Savalei and Bentler (2006)
IFI	0.923	>0.90	>0.90	Hair et al. (2006)
RMSEA	0.041	<0.05-0.08	<0.10	Byrne (2013), Bagozzi and Yi (2012)

The results identified the Goodness of Fit indices and that of chi-square as insignificant, as shown above (p-value > 0.05). The relative CMIN/df shows 1.427, which is less than 5.0, and the model's fitness is met as recommended by Bagozzi Wong and Yi (1999). The value of GFI is 0.883, which meets the acceptable requirement and absolute fit, as stated by Hair et al. (2006), Hoyle (1999), and Kline (2010). AGFI was 0.878, which met the cut-off point of 0.80, as recommended by (Chau and Hu 2001). Furthermore, the CFI, TLI, and IFI indices met the cut-off value of 0.9 (0.945, 0.938, and 0.946, respectively), indicating that the model had a good fit of data (Byrne, 2013; Bagozzi & Yi, 2012; Savalei and Bentler 2006; Hair et al., 2006). Moreover, the root-mean-square error of approximation (RMSEA) was 0.035, below the threshold of 0.1, as Bagozzi and Yi (2012) recommended, showing the above results as indicating the model measurement and adequate fit and no adjustment is required for justification.

Reliability and Convergent Validity

Formerly, the uni-dimensionality of the latent constructs was observed; each construct was assessed for its reliability and validity. Reliability is assessed using composite reliability (CR), Cronbach’s alpha, and Average Variance Extracted (AVE), while validity uses to construct, including convergent and discriminant. Table 2 represents the results of convergent validity and Cronbach’s alpha for the iterative model under CFA.

Table 3. Cronbach and Convergent Validity for Measurement Model

Construct	Item	Final factor loading	Composite Reliability (CR)	Average Variance Extracted (AVE)	Cronbach Alpha
Poverty (PO)	PO1	0.615	0.757	0.618	0.753
	PO2	0.685			
	PO3	0.707			
	PO4	0.546			
	PO5	0.537			
Awareness (AW)	AW1	0.775	0.698	0.651	0.700
	AW2	0.605			
	AW3	0.573			
	AW4	0.467 ^c			
	AW5	0.410 ^c			
Religiosity (RE)	RE1	0.580	0.799	0.604	0.825
	RE2	0.560			
	RE3	0.575			
	RE4	0.503			
	RE5	0.672			
	RE6	0.656			
	RE7	0.657			
	RE8	0.634			
Attitude of Government Policy (AG)	AG1	0.537	0.802	0.604	0.801
	AG2	0.567			
	AG3	0.650			
	AG4	0.118 ^c			
	AG5	0.594			
	AG6	0.607			
	AG7	0.627			
	AG8	0.650			
Islamic Financial Institution (IFI)	IFI1	0.635	0.725	0.587	0.725
	IFI2	0.534			
	IFI3	0.595			
	IFI4	0.557			

Construct	Item	Final factor loading	Composite Reliability (CR)	Average Variance Extracted (AVE)	Cronbach Alpha
Financial Exclusion (FE)	IF15	0.616	0.720	0.582	0.718
	FE1	0.626			
	FE2	0.624			
	FE3	0.554			
	FE4	0.574			
	FE5	0.536			

^a: Average Variance Extracted = above 0.5 ^b: Composite reliability =0.7 ^c: denotes for discarded item due to insufficient factor loading below cut off 0.5. ^d: Cronbach alpha>0.7

The three (3) items were deleted due to the lower loadings than the total items in the constructs (33 items). The removal does not significantly change the content of the constructs as they are conceptualized. The remaining indicators have moderate factor loadings, despite many lowest factor loadings affecting some variables. However, factors loadings ranged from 0.503 to 0.775. Table 2 results also show that the AVE reflects the overall variance in the indicators accounted for by the latent construct were loaded between 0.582 to 0.651 for Poverty (PO), Awareness (AW), Religiosity (RE), and Attitude of Government Policy (AG), Islamic Financial Institution’s Performance (IFI) and Financial Exclusion (FE), respectively. All these values were above the cut-off of 0.5, as indicated by (Hair et al., 2006). The composite reliability value depicts the degree to which the construct indicators indicate the latent construct was loaded between 0.698, to 0.802. For Poverty (PO), Awareness (AW), Religiosity (RE), Attitude of Government Policy (AG), Islamic Financial Institution’s Performance (IFI), and Financial Exclusion (FE), respectively. All these values exceeded the recommended value of 0.6 for social science by Bagozzi and Yi (2006). The Cronbach’s Alpha value, which explains the degree to which a measure is error-free, was loaded between 0.700 to 0.801 for Poverty (PO), Awareness (AW), Religiosity (RE), Attitude of Government Policy (AG), Islamic Financial Institution’s Performance (IFI) and Financial Exclusion (FE) respectively. All these values were above the threshold of 0.7 as only Awareness at the near point of 0.698, as suggested by Bagozzi and Yi (2006). Therefore, Cronbach’s alpha for all constructs was error-free and sufficiently achieved.

Discriminant Validity

The testing discriminant validity was examined to assess how genuinely distinct a construct is from other constructs. In this case, the correlations between factors in the measurement model do not exceed 0.85 as recommended by Kline (2010), and the validity was checked based on comparisons of the correlations between constructs and the square root of the average variance extracted for a construct (Fornell & Larcker, 1981). Table 3 shows the discriminant validity of the measurement model.

Table 4. Discriminant Validity for Measurement Model

Variables	PO	AW	RE	AG	IFI	FE	
Poverty (PO)		0.786					
Awareness (AW)		0.555	0.806				
Religiosity (RE)		0.576	0.796	0.777			
Attitude of Government Policy (AG)	0.540	0.734	0.820	0.777			
Islamic Financial Institution (IFI)	0.756	0.680	0.683	0.672	0.766		
Financial Exclusion (FE)		0.820	0.826	0.825	0.683	0.847	0.762

“The Above Diagonals represent the square root of the average variance extracted while the other entries represent the square correlations”

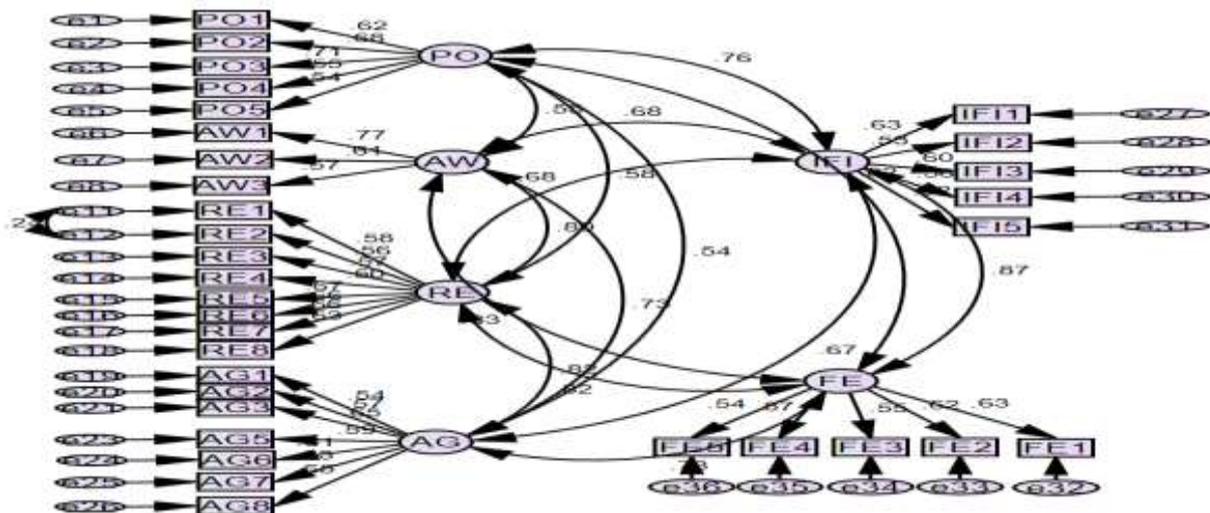


Figure 1. Measurement Model with Remaining 33 Items

The inter-correlation between the six (6) constructs indicates the range between 0.338 to 0.847, which were below the recommended threshold of 0.85 by Kline (2010). However, the correlations were less than the square root of the average variance, which indicates good discriminant validity as extracted by indicators amongst these factors (Kline, 2010). Moreover, the goodness of fit data, discriminant validity, and convergent validity of the measurement model is considered as concluded and the measurement model is standardized with 33 factors.

Absolute Fit Indices

p-value: .135

Incremental fit Indices CMNI/DF df= 479 GFI = 0.883 CFI = 0.922

$\chi^2/df = 1.596$

Chi Square =764.563 AGFI= 0.863 TLI = 0.914

RMSEA=.041 IFI = 0.923

Descriptive Analysis

Descriptive analysis has been calculated by covariance matrix technique so that the variables contained in the research might be involved in the analysis, so as the composite variable scores were computed using the original measurement item parcelling or scores parcels which are considered as average or sum of different individual items based on the construct on the factor loadings (Hair et al., 2006). Table 4 shows the means and standard deviation of the constructs defined at 5-point Likert scale.

Table 5. Result of Descriptive Statistic for Variables

Constructs	Mean	Standard Dev.	Minimum	Maximum
Poverty (PO)	3.886	0.979	1.0	5.0
Awareness (AW)	4.078	0.914	1.0	5.0
Religiosity (RE)	4.103	0.942	1.0	5.0
Attitude of Government Policy (AG)	3.991	0.960	1.0	5.0
Islamic Financial Institution (IFI)	4.047	0.924	1.0	5.0
Financial Exclusion (FE)	3.950	0.978	1.0	5.0

The mean was applied as a measurement of central tendency, which shows that the mean value of constructs was above the midpoint, as shown in Table 4. The phenomenon indicates that the respondents' consensus towards the constructs' perception was above average. However, the highest mean rating belongs to Religiosity (RE), with a mean of 4.103, and the lowest rating is Poverty (PO), with a mean value of 3.886. The standard deviation applied dispersion to determine the degree to of any individual's variables that differ from the means variable. Within the studied variables, the value of the individual of Poverty (PO) shows the deviation from its mean where the Standard deviation (SD=0.979). This standard deviation value indicated a high variability response toward Poverty (PO). On the other hand, the lowest deviation from the mean was for Awareness (AW), with a standard deviation of 0.914. Figure 4.2 provides more information on the mean of all variables and their respective standard deviations.

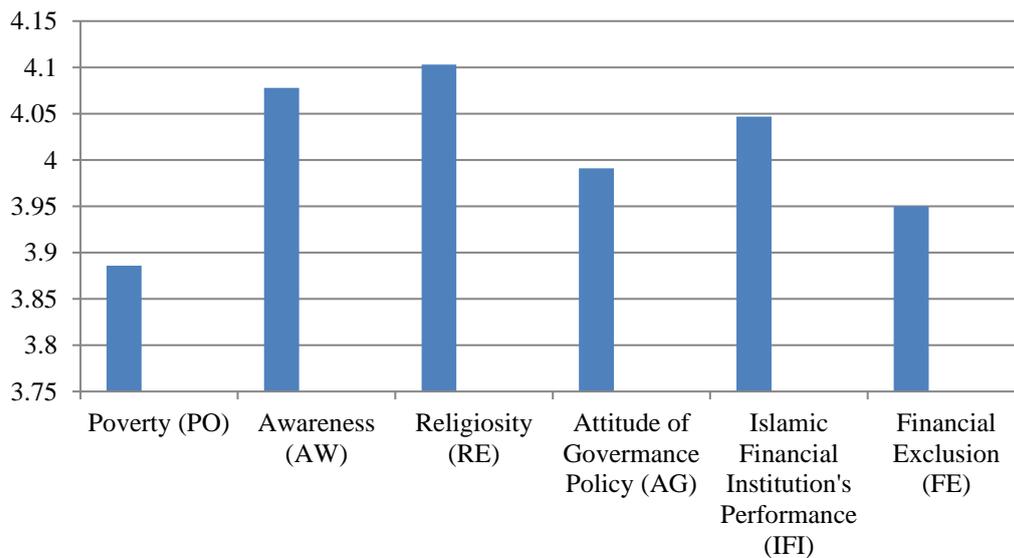


Figure 2. Structural Models: Stage 2 of Structural Equation Modeling

The study examines the second stage of SEM, which is a significant part of the study and represents the entire structural work since the measurement model has been validated. The model was designed to identify the relationship between the construct items and variable factors. This indicates specific information on the relationship between exogenous and endogenous variables, as indicated by Fornell and Larcker (1981) and Hair et al. (2006). The confirmation of the

structural designed model of the study proposed based on the affirmation of variables relationships measured and acknowledged the stated model as expected and hypothesized based on the Maximum Likelihood Estimate techniques. The subsequent sections show the structural progress and the hypotheses examined.

Direct Effects of Construct Items

The Structural model directly affects the relationship between the variables. Poverty (PO), Awareness (AW), Religiosity (RE), Attitude of Government Policy (AG), and Islamic Financial Institution (IFI) were investigated as dependent variables (H1, H2, H3, H4, and H5,). The model also examines the direct effect of Independent Variables to Financial Exclusion (FE) and the standardized regression and direct effect of constructs portrayed Table 5.

Table 6. Direct effect of the hypotheses construct

Path Hypothesis	Unstandardised Estimates		Standardised Estimates		critical (C.R)	ratio	p-value	Result
	Esti.	S.E	Beta					
PO->FE	0.307	0.094	0.312***		3.257	0.001		H1) Supported
AW->FE	0.240	0.100	0.280***		2.406	0.016		H2) Supported
RE->FE	0.335	0.127	0.262**		2.637	0.009		H3) Supported
AG->FE	-0.079	0.131	-0.066		-0.604	0.546		H4) Rejected
IFI->FE	0.363	0.140	0.314**		2.597	0.009		H5) Supported

Table 5 shows one path from Poverty (PO), Religiosity (RE), and Attitude of Government Policy (AG) to Islamic Financial Institution’s Performance (IFI). In contrast, Poverty (PO), Awareness (AW), and Religiosity (RE) on Financial Exclusion (FE) were statistically significant at their p-values and were all below the significant level of 0.05. However, hypotheses H1, H2, H3, and H5 were supported, and H4 was rejected. The section explained the results of path analysis concerning the structural model:

The critical ratio of Poverty (PO) in predicting Financial Exclusion (FE) is 3.257, and the absolute p-value is 0.001. It means that the regression weight for (PO) in predicting (FE) is significantly different from zero and indicates a positive relationship. Thus, H5 was supported.

On the other hand, the critical ratio for Awareness (AW) in predicting Financial Exclusion (FE) is 2.406, and the p-value is 0.016, respectively. The regression weight for (AW) in predicting (FE) is significantly different from zero at the 0.016 level. Thus, H6 was supported and indicated a positive relationship between (AW) and (FE).

The critical ratio of Religiosity (RE) in predicting Financial Exclusion (FE) is 2.637, and the p-value is 0.02, respectively. It means that the regression weight for (RE) in predicting (FE) is significantly different from zero and shows a positive relationship. Thus, H9 was supported.

As shown in Table 4.10, the results show no significant relationship between the Attitude of Government Policy (AG) and Financial Exclusion (FE); $\beta = -0.066$, $CR = -0.604$, $p = 0.546$. Thus, H8 was rejected.

The critical ratio of Islamic Financial Institutions’ Performance (IFI) in predicting Financial Exclusion (FE) is 2.597, and the p-value is 0.009, respectively. It means that the regression weight for (IFI) in predicting (FE) is significantly different from zero at the 0.009 level (two-tailed). Thus, H9 was supported and indicated a positive relationship.

DISCUSSIONS

In this section, the study discusses the data analysis in different phases and stages analysed. The first phase signifies an initial analysis of related information contained in the data. The procedure confirmed that the main assumption has adequately met in conducting Structural Equation Modelling (SEM). It also viewed that the data of all construct items were normally distributed. The study consists of the measurement for constructs as latent. The second phase consists of the validity, reliability and uni-dimensionality of the constructs in Structural Equation Modeling, where the hypotheses were examined. The stated hypotheses in which direct effects and relationship comprises of the following hypotheses, which are H1, H2, H3, H4, and H5. Thus, processes were quietly adhered to and followed by examining the path analysis through AMOS in testing the significant and hypothesized path analysis.

Table 5 indicates that the direct effect of the hypothesis H1 was supported (PO -> FE), and significant relationship between (PO) and (FE). Hypothesis H2 was supported (AW ->FE) as the result indicated the relation of the significant effect between (AW) and (FE). Hypothesis H3 was supported (RE->FE) as the results indicated a significant relationship between the (RE) and (FE). Hypothesis H4 was rejected (AG->FE) as the results showed no significant relationship between (AG) and (FE). Finally, the study identified religiosity as significant in addressing issues related to financial exclusion as the essential problem and strongest predictor for the research.

CONCLUSIONS

The study indicated that Financial Exclusion and the three theories developed an approach to analysing the performance between the modern construct’s variables of Financial Exclusion and Islamic Financial Institution’s Performance in Nigeria. This major and essential requirement suggests that financial exclusion must address the variables of Poverty (PO),

Awareness (AW) and Attitude of Government Policy (AG) they were considered well organized and conversant with objectives while the direct effects from Poverty (PO), Awareness (AW), Religiosity (RE), and Attitude of Government Policy (AG) on Islamic Financial Institution's Performance (IFI) were considered important and highly significant. The study identified the capacities and capabilities of the system to perfect the system based on addressing issues related to Religiosity (RE) as the essential problem and strongest predictor.

Theoretical Implications narrowed down the most theoretically significant implication, which significantly contributed to the knowledge. The study developed factors that need to consider during the research, based on three theories that is vulnerable group theory which consists (religiosity and poverty), financial literacy theory (awareness) and public service theory (attitude of government policy). The study has chosen the most current factors by comparing with the society issue of financial exclusion. The research conducted while evaluating the level of financial exclusion in Nigeria as a new model. These factors were Poverty, Awareness, Religiosity, Attitude of Government Policy, and Islamic Financial Institution in addressing Financial Exclusion in northern Nigeria. Furthermore, the study was mainly designed to formulate new combination theories in addressing factors affecting Financial Exclusion.

Research Contributions focused on examining relationship between three theories using the below variables (Poverty, Awareness, Religiosity, Attitude of Government Policy, Islamic Finance Institutions, and Financial Exclusion. Islamic Financial Institution is considered as variable that have an impact on financial exclusion. The researchers have also indicated some important areas such as awareness and revealed that financial exclusion will be reduced and tackled if the variable used were considered.

Future Research identified the gap between the current study and future studies based on required financial exclusion through Islamic Financial Institution's performance as a mediator for the financial exclusion, which needs to be expanded to the rest Eastern part of Nigeria. The current study developed an integrated model that defines financial exclusion and its approach through three theories of Financial Exclusion will surely be an access door to address financial exclusion in Nigeria. However, several improvements can be done and recommended for future studies based on assessing Islamic and conventional institutions' performance in addressing financial exclusion in Nigeria.

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