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ENTREPRENEURSHIP EDUCATION AND ENTREPRENEURIAL INTENTION THROUGH THE LENS OF THE THEORY OF PLANNED BEHAVIOUR AND ENTREPRENEURIAL ALERTNESS

[1]Babangida Yusuf Tanko, [2]Prof. Nasiru Abdullahi & [3]Dr. Idris Ahmed Aliyu

[1]Entrepreneurship Development Centre (EDC), Shehu Idris Institute of Health Sciences and Technology, Makarfi, Kaduna State University-(KASU), Nigeria
[2]Department of Business Administration, Business School, Ahmadu Bello University, Zaria
[3]Department of Actuarial and Insurance Science, Business School, Ahmadu Bello University, Zaria

[1]+234 8037897308, [2]+234 8039684647, [3]+234 8034067017
[1]babangidatanko3@gmail.com

Abstract

There is persistent rise in the general level of unemployment or more specifically youth and graduate unemployment in recent years among Nigerian graduates. This necessitates Nigerian government to introduce entrepreneurship education programme in 2006/2007 academic session to lessen effect of the problem. The study attempted to empirically establish the effectiveness of entrepreneurship education on entrepreneurial intention of students of colleges of health sciences in the North-Western Nigeria. To run the model, cross sectional data from 293 students of the colleges of health sciences in North-West Nigeria were analysed using the Partial Least Squares Structural Equation Modelling (PLS-SEM), with the aid of SmartPLS 3.3.3. The study established that, entrepreneurial intention is directly influenced by the entrepreneurship education. The study also, established that, the entrepreneurial intention was mediated by entrepreneurship education through attitude and subjective norms. However, entrepreneurial intention was not mediated by entrepreneurship education through perceived behavioural control and entrepreneurial alertness, according to this study. Therefore, finding of this study submits that entrepreneurial intention could be encouraged through entrepreneurship education courses. The study therefore, recommended that lecturers teaching entrepreneurship education (EEd) courses should be sponsored to attend local and international conferences to acquire more up to date knowledge on entrepreneurship. On the teachers/lecturers part they should spare more time to master various methods of imparting knowledge and skills, so that they could meritoriously discharge their duties of creating awareness effectively onto their students. Similarly, the students should be made to understand that, the mandatory entrepreneurship education courses are as important as other courses in their programmes of study.

Keywords: Colleges of Health Sciences, Entrepreneurial Alertness, Entrepreneurship Education, Entrepreneurial Intention, Theory of Planned Behaviour,

Introduction

Entrepreneurial intentions are becoming a vital field of concern among entrepreneurship researchers, practitioners, non-governmental organizations, governments as well as international organizations. This is because entrepreneurial intentions elucidate why entrepreneurship (i.e. behaviour) occur (Kabir, Adam, & Tangaza, 2021; Linan & Chen, 2009; Lubada, Kusumojanto, & Indrawati, 2021). In the extant literature of social psychology, intention is considered to be the best predictor of planned behaviour, such as entrepreneurship (Abdullahi, Kabir, & Bello, 2022; Ajzen, 2011; Ajzen, 2014; Bird, 1998). Hence, entrepreneurial intention is recognised as one of the most important preconditions for entrepreneurship (Khazaei & Sadeghi, 2021). Hence, entrepreneurship plays an important role in employment creation, poverty reduction and promotion of local raw materials in many developing countries (Nambitokan & Hayatu, 2020).

Entrepreneurship education provides students with understanding and capacity for pursuit of entrepreneurial behaviours, skills, motivation and attributes in widely different contexts (Salihu, 2016). Entrepreneurship education is believed to be of great importance to the search for improved youth employment and economic development of any society (Onikoyi, & Odumeru, 2020). Ojotua, Tersoob, & Kenneth, (2022) concluded that undergraduate students' intentions toward entrepreneurship can be enhanced using entrepreneurship education. These behaviour (entrepreneurship) can be learned, developed and practiced (Lusi, Dinar, Ahmed, & Unang, 2022; Zhang, Wei, Sun, & Tung, 2019).

Entrepreneurship education policy is likely to work through students' attitudes, subjective norms, perceived behavioural control, and entrepreneurial alertness. Thus, enhancing these latent variables are likely to increase intention to act (Francis, Eccles, Johnston, Walker, Grimshaw, Foy, Kaner, Smith, & Bonetti, 2004; Yu, & Mei, 2021). This explains the need to use mediation analysis to determine the indirect effect of entrepreneurship education on entrepreneurial intention of students to be owners of businesses after graduation. More so, Darlington, and Hayes, (2017) have argued that, good research often goes further than just establishing that there is some relationship between an independent and a dependent variable. Thus, potential mediators should be selected on the basis of strong logical and theoretical argument (Baron & Kenny, 1986; Fiedler, Wan, & Sivo, 2011; MacKinnon, et al., 2002). In the same way, the mediators of this research were selected based on theoretical and empirical reasons.

Regardless of planned intervention by the Federal Ministry of Education through the National Board for Technical Education (NBTE) in introducing entrepreneurship education in monotechnics (for instance, colleges of health). Graduates are still unwilling to think through entrepreneurship as a viable career option, even in an atmosphere of high employment scarcity (Ademiluyi, 2022; Sani, 2022). Yazeed, et al., (2021) have reported almost similar conclusion where they argued that, in spite of the national entrepreneurship advancement, young graduates continue to experience low level of entrepreneurial intention and high unemployment rate in the country (i.e. Nigeria). The unemployment rate and poverty in Nigeria is very alarming, thus policy makers resort to the development of entrepreneurship activities as the only way to address it (Mahmoud & Garba, 2019).

However, even with the severity of this serious problem only few studies have attempted to consider the influence of entrepreneurship education on entrepreneurial intention in Nigeria

(Abdullahi, Kabir, & Bello, 2022). Similarly, Ojotua *et al.* (2022) have argued that, academic resources are scarce in Nigeria on how entrepreneurship education is related to intentions of undergraduate students. Regardless of the growing awareness of entrepreneurial intention universally the idea is still deficient in the developing countries (Gorondutse, 2019). Hence, Ademiluyi, (2022:106) have gone to the extreme to argued that "the extent of its effectiveness is yet to be empirically determined", referring to entrepreneurship education.

In a research using systematic literature review method carried out by Montiel-Campos (2023) on entrepreneurial alertness. The study identified empirical articles published in scientific journals between 2005 and 2021 that empirically tested the concept of entrepreneurial alertness (EA). The study concluded that, out of the 78 articles published on entrepreneurial alertness (EA) in the world, 13 articles were published in Africa, and only 3 articles were published in Nigeria. This indicate dearth of articles on entrepreneurial alertness especially in Nigeria. This stands as a gap in literature. This is particularly so when, Arnaut, Stanić, and Bećirović, (2022) recommended for further studies to explore the intensity of entrepreneurial alertness on intention formation. Therefore, study of entrepreneurial intentions amongst the students of colleges of health sciences in Nigeria has not gotten the desired attention, and it is the least researched area among higher institutions of learning responsible for the implementation of the entrepreneurship education policy in the country.

Literature Review and Hypothesis Development

Entrepreneurship Education (EE) and Entrepreneurial Intention (EI)

Drucker (1993) considers entrepreneurship as a discipline capable of being learned. Similarly, Fantaye, (2019); Bayero, (2020); Adelaja, (2020); Ojotua, *et al.* (2022); Abdullahi *et al.* (2022); Ademiluyi, (2022); Ediagbonya, (2023); Sani, (2022); Yazeed, *et al.* (2021) among others, have conducted empirical studies on a sample of students and reported significant positive relationship between EEd and entrepreneurial intentions. Accordingly, Patricia, (2016:83) went further to conclude that; "students who have entrepreneurial intention even before they enter the education will be more likely to have higher entrepreneurial intention after the education." This emphasizes the relevance and the need for entrepreneurship education in influencing students' intention toward entrepreneurship. However, Zanabazar, and Jigjiddorj, (2020) result showed that entrepreneurship education demonstrated a slight impact in entrepreneur intention.

Also, there are few researches that have found negative relationship between entrepreneurship education and entrepreneurial intention (for example, Abdullahi, Ooi, & Muhammad 2015; Guyo, 2013; Ndofirepi, & Rambe, 2017; Oosterbeek, van Praag, & IJsselstein, 2007). Nevertheless, scholars such as, Al-Jubari, Mosbah, Talib, Khalid, and Azman, (2019) concluded that, entrepreneurship education and training is crucial in shaping individuals' attitudes, skills and intention regardless of some evidence that it does not. Therefore, entrepreneurship educators, colleges of health technologies and policy-makers should pay more attention to this issue. This may probably create entrepreneurial mindsets which could lead to the establishment of new ventures that will be reflected in overall economic development.
$H0_1$: Entrepreneurship education (EEd) does not have significant effect on entrepreneurial intention (EI).

Mediating Effect of Attitude towards Entrepreneurship

Azjen, (1991) posited that intention is a function of attitude among others. From psychological point of view attitudes are defined as a certain regularity of an individual's feelings, thoughts and predisposition to act (Maio, Haddock, 2010). Elevating the degree of attitude towards behaviour is the best strategy to enhance the level of entrepreneurial intention among students (Saraih, et al., 2017). Therefore, it would be possible to develop the attitudes more linked to entrepreneurship through education (Kleiman, 2008; Jones & Iredale, 2006). For instance, Mahendra, Djatmika, and Hermawan (2017) have found that, "There is a relationship between entrepreneurship education and entrepreneurial attitude". Similar result was reported by Potishuk, and Kratzer (2017) that educational programmes in entrepreneurship positively affect attitudes toward entrepreneurial intention. Also, Ayuo, Auka, and Kibas, (2017) have found that, "there exist indirect relationships between offering entrepreneurship education course and students' intention to become entrepreneurs through changes in attitude". In addition, Badr, El-Gharbawy, Wahba, and Bary, (2018) has found the least impact of entrepreneurship education on attitude toward behaviour. Attitude toward the act is the degree to which values are developed through experience in life or formal education like entrepreneurship education.

$H0_2$: Attitude towards entrepreneurship does not mediate the relationship between EEd and EI.

Mediating Effect of Subjective Norm

The subjective norm (SN) construct is the perceived social pressure to engage or not to engage in behaviour (Ajzen, 2006). This could be through pressure from significant others such as family, friends and society. Bhuyan, and Pathak, (2019) result showed a positive and significant influence of subjective norms that affects the entrepreneurial intention of students. Martínez-González, Kobylinska, García-Rodríguez, and Nazarko, (2019) results show that a subjective norm variable initiates the chain of effects that influence intention. Zanabazar *et al.* (2020) argued that determinants such as subjective norms had positive impacts on becoming an entrepreneur. This conclusion explicitly found subjective norm to be significant in influencing entrepreneurial intention. Al-shami, Shahbodin, Rashid, Jano, and Cheku Mohd, (2019) findings concluded that knowledge of entrepreneurship positively affects students' intention mediated by subjective norms.

$H0_3$: subjective norm does not mediate the relationship between EEd and EI.

Mediating Effect of Perceive Behavioural Control

Perceived behavioural control (PBC) encompasses the perceived ease or difficulty a person associates with a specific task or behaviour (Ajzen, 2006). According to Liñán, Rodríguez-Cohard, and Rueda-Cantuche, (2011) perceived behavioural control could be defined as the perception of the easiness or difficulty in becoming an entrepreneur. Perceived behavioural control is considered one of the strongest predictors of intention (Liñán *et al.* 2009). Taha, Ramlan, and Noor, (2017) study also found that there is a strong relation between students' perceived behavioural control and entrepreneurial intention. Mahmood, et al., (2019) result confirmed the indirect effect of perceived behavioural control on the entrepreneurial intention. Ndofirepi, *et al.* (2017) study outcomes revealed that entrepreneurship education did not have a direct influence on entrepreneurial intentions (EI) of the respondents; it had an indirect effect through perceived behavioural control. Result of research conducted by Karimi, et al., (2012) indicated that entrepreneurship education significantly influences perceived behavioural control. The study also revealed that EEd did not have a direct influence on EI of the respondents, but rather, it had an indirect impact through perceived behavioural control.

$H0_4$: Perceived behavioural control does not mediate the relationship between EEd and EI.

Mediating Effect of Entrepreneurial Alertness

Entrepreneurial alertness represents a constant state of attention in search of perceptions not identified by others (Cenci, Machado, & Carvalho, 2022). Entrepreneurial alertness is one of the central constructs of entrepreneurship (Arnaut *et al.* 2022). Previous studies have shown positive relationship between entrepreneurial alertness and intention (Ediagbonya, 2023; Hu, Wang, Zhang, & Bin, 2018; Neneh, 2019; Salleh, et al., 2019; Urban, 2020). Ugwueze, Obinna, Ike, and Ugwu, (2022) have found that an increase in entrepreneurial alertness was associated with an increase in entrepreneurial intention among undergraduate students in Nigeria. Students who go through entrepreneurship education are more probable to use alertness to spot new business opportunities and align their motivations toward starting a new venture than other students (Adeel, Daniel, & Botelho, 2023). The cultivation of entrepreneurial alertness is a key purpose of entrepreneurship education. A study by Edigbo, et al., (2021) has argued that, the theory of entrepreneurial alertness is a good predictor of entrepreneurial intention and a good mediator in the prior entrepreneurial experiences.

Correspondingly, Sang, and Lin, (2019) results showed that, entrepreneurial alertness plays a substantial indirect influence between entrepreneurial education and entrepreneurial intention. Despite scholars' interest in entrepreneurial alertness in relation to intention, little attention has been paid to the mediating role of alertness, between entrepreneurship education and students' entrepreneurial intention (Montiel-Campos, 2023). Decision to study and includes alertness reflects an attempt to fill this research gap. Thus, what is important about adopting entrepreneurial alertness as a mediator selected for this research is that, many previous researchers have found entrepreneurial alertness as either endogenous or exogenous construct to be reliable. Hence, in this study entrepreneurial alertness served as a mediator between entrepreneurship education and entrepreneurial intention of students.
$H0_5$: Entrepreneurial alertness does not mediate the relationship between EEd and EI.

Theory of Planned Behaviour (TPB)

Theory of planned behaviour (Ajzen, 1991) was used to underpin this study. The theory assumes that a person's intention, when combined with perceived behavioural control, will help predict behaviour with greater accuracy than previous intentions models (Ajzen, 1991). Ajzen, (2014:3) restated that, "All the theory stipulates is that people's attitudes, subjective norms and perceptions of control follow reasonably and consistently from their beliefs, no matter how the beliefs were formed, and that in this way they influence intentions and behaviour". Thus, theory of planned behaviour consists of four components: attitude toward the behaviour; subjective norm; perceived behavioural control and behavioural intention (Ali, Zani, & Kasim, 2014). The purpose of reviewing this *'theory'* is to provide understanding of the theoretical constructs and variables used in this study. Thus, the theory suggest attitude toward behaviour to have a mediation effect between subjective norm and intention. It is also claimed that, perceived behavioural control to have a mediating effect between subjective norm and intention. Going by the suggestion of Ajzen (1991) that variable inclusion should be entertained after all the three standard constructs of the theory were used. Thus, this explained why EA was included among the study constructs. In line with these assumptions, the conceptual framework is formulated below;

Figure 2.1: The Theory of Planned Behaviour (Ajzen, 1991).

Conceptual Framework

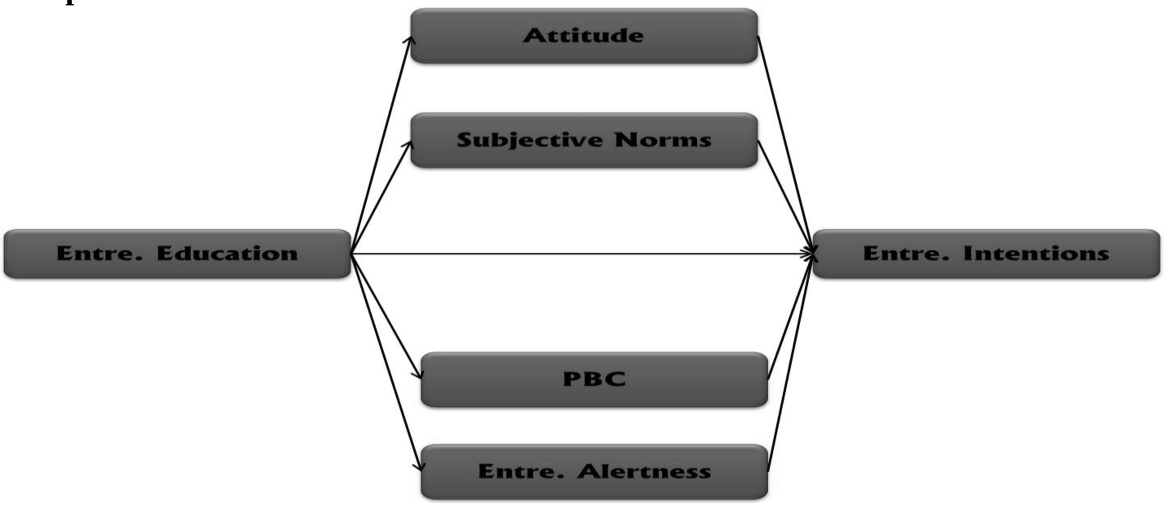


Figure 2.1: Conceptual model developed for the study

Materials and Methods

The study adopted cross-sectional survey design and self-administered questionnaires were used for data collection. Thus, students participated voluntarily and two weeks were given for them to return the questionnaires. Thus, target population of this study consisted of final year HND students from the colleges/schools of health technology, from five out of seven North-West zone, Nigeria. These five institutions (i.e. Shehu Idris College of Health Sciences and Technology, Makarfi; Katsina State School of Health Technology, (Kankia and Daura); Kebbi State School of Health Technology, Jega; School of Hygiene, Kano; Zamfara School of Health Technology, Tsafe) are chosen because they satisfied the selection criteria (i.e. HND programmes; owned by state governments). The remaining two states, none of their colleges of health offer HND programmes at the time of data collection. Therefore, based on the above selection criteria, the study target population size was given as 653 students, obtained from the field study based on the information provided by the offices of the Academic Secretaries of the selected Colleges. Hence, the rationale for choosing final year students (HND) as target population was because they have undergone three mandatory entrepreneurship education courses- Introduction to Entrepreneurship (EEd 126); Practice of Entrepreneurship (EEd 216); and Entrepreneurship Development (EEd 413). Using students' sample is a legitimate approach in entrepreneurship research (Abdullahi *et al.* 2015; Muhammed, Mohammed, Abubakar, Kabiru, & Sani, 2021; Sani, 2022).

Given the targeted population as 653 students. The sample size was determined through the application of Yamane (1967) sample size determination formula. As follows: $n=\frac{N}{1+N(e)^2}$

Where n=sample size; N=population frame (653); e=error tolerance (0.05); 1=constant. Therefore, $n=653/1+653(0.05)^2$; n=248. Hence, a sample size of 248 was realized.

However, in order to take care of likely failure of a researcher to contact some respondent and non-response problem, additional 10%-30% of the minimum sample provided in the formula was suggested by Israel (2013). In this research, the two scenarios are all possible. Therefore, the research adapts 20% to take care of both the possibilities. Therefore, this study has added 20% of the minimum sample size. This is because "larger sample sizes increase the precision (i.e. consistency) of PLS-SEM estimations" (Hair, et al., 2021:12). Thus, 50 respondents were added to the computed sample size of 248 which gives the total of 298.

The study was based on multi-stage sampling technique. The multi-stage sampling improved complex level of representativeness and reduce likely biases by selecting samples at different stages. Thus, it first involved purposive sampling which was used to select the colleges/schools used for this study. The second stage involved stratified sampling (i.e., proportionate) technique which was used to categorized the target population into programmes. As can be seen on the table 3.1 below:

Table 1:

Programmes	Students	Proportionate Sampling	Questionnaires Distri.
SHEHU IDRIS COLLEGE OF HEALTH SCIENCES AND TECHNOLOGY, MAKARFI-KADUNA STATE			
Community Health Sciences	26	26/653×298	12
Dental Technology	71	71/653×298	32
Dental Therapy	73	73/653×298	33
Environmental Health Sciences	40	40/653×298	18
Public Health Nursing	22	22/653×298	10
Social Development	30	30/653×298	13
Sub-total	**252**		**118**
KATSINA STATE SCHOOL OF HEALTH TECHNOLOGY, KANKIA AND DAURA			
Environmental Health Sciences	70	70/653×298	31
Dental Therapy	40	40/653×298	18
Sub-total	**110**		**49**
KEBBI STATE SCHOOL OF HEALTH TECHNOLOGY, JEGA-KEBBI STATE			
Environmental Health Sciences	50	50/653×298	23
Sub-total	**50**		**23**
SCHOOL OF HYGIENE, KANO-KANO STATE			
Environmental Health Sciences	70	70/653×298	31
Public Health Nursing	40	40/653×298	18
Sub-total	**110**		**49**
SCHOOL OF HEALTH TECHNOLOGY, TSAFE-ZAMFARA STATE			
Environmental Health Sciences	91	91/653×298	41
Dental Therapy	40	40/653×298	18
Sub-total	**131**		**59**
Grand Total=	**653**		**298**

Table 1: Allocation of Copies of Questionnaire: School Name, Target Population, Proportionate Ratio, & Questionnaire Distributed.

The third stage, after dividing the students into programmes (i.e., strata), samples was drawn from each programme, through simple random sampling, using lottery method.

Variable Measurement

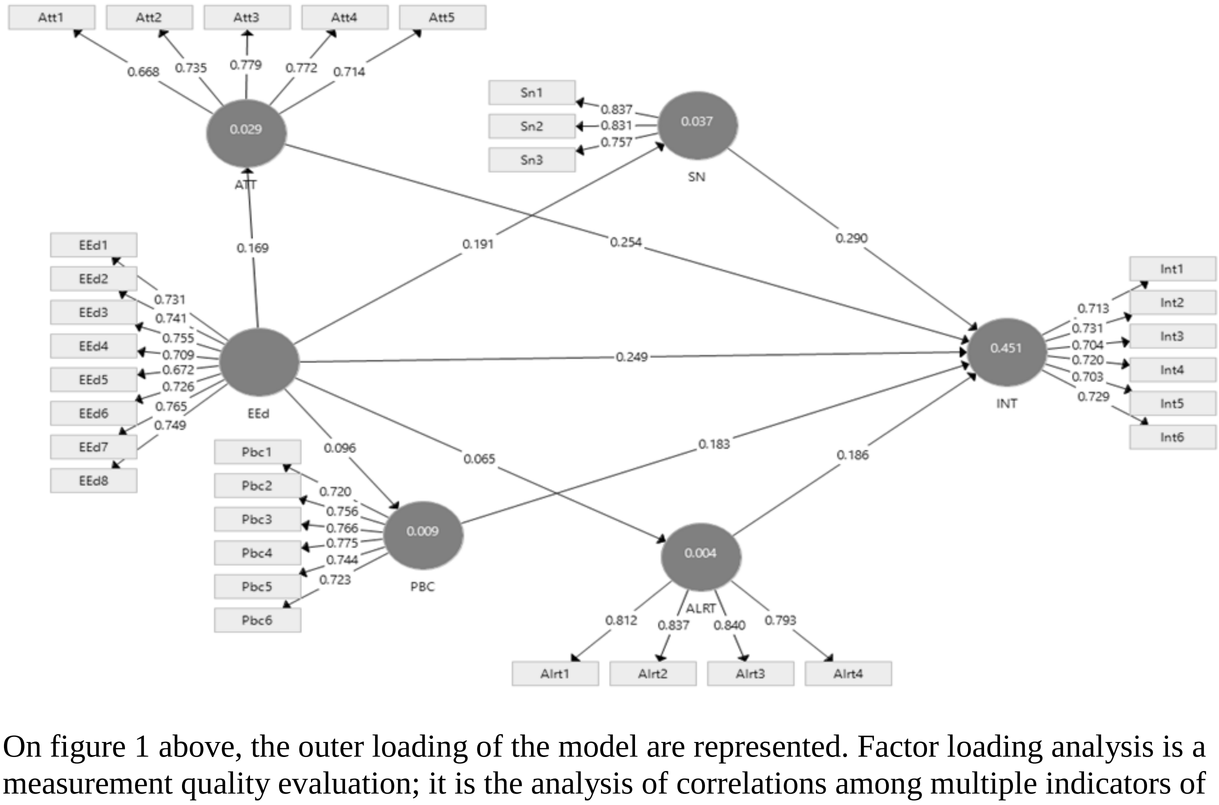
A seven (7) point adjusted Likert scale was used to show a specific amount of agreement/disagreement by the respondents. The 7 point adjusted Likert scale was used because, an upgrade to 5 points Likert scale provides 7 answers options to a respondent to avoid any misunderstanding (Croasmun, & Ostrom, 2011; Josi, et al., 2015). Entrepreneurship education (EEd) as an independent variable of the study was measured with eight-items obtained and adapted from Ooi (2011). Entrepreneurial alertness (EA) as a mediating variable was measured on a four-item obtained and adapted from Kash, & Gilad (1991). Attitude towards entrepreneurship (ATE) as a mediating variable was measured using five-item scale obtained adopted from Linan et al. (2009). Subjective norm (SN) as a mediating variable was measured using three-item scale obtained and adapted from Linan *et al.*, (2009). Perceive behavioural control (PBC) as a mediating variable was measured using six-item scale obtained adopted from Linan et al. (2009). Entrepreneurial intention (EI) as a problem variable was measured using six-item scale obtained and adopted from Linan *et al.* (2009). Statistical software for social science (SPSS version 20) was initially used for data screening and descriptive statistics. Also, Smart PLS 3.3.3 software was used to conduct the partial least squares (PLS) analysis (Ringle, Wende, & Becker, 2015).

Results and Discussion

Measurement Model

Hair, et al., (2019) stated that for the assessment of measurement model, with reflective constructs: factor loadings, Cronbach's alpha, rho_A, composite reliability, average variance extracted (AVE), and heterotrait-monotrait ratio (HTMT) should be assessed. Similarly, the research followed the recommendation to analyses the data obtained from the cross-sectional survey.

Figure 1: the outer loading of the intention model.



On figure 1 above, the outer loading of the model are represented. Factor loading analysis is a measurement quality evaluation; it is the analysis of correlations among multiple indicators of the same latent variable. To assess reflective constructs, indicators' reliability, internal consistency or construct reliability were examined. Also, to assess the measurement model two types of validity were examined - first the convergent validity and then the discriminant validity. Figure 4.2 and table 4.1 below show the results of the assessed measurement model.
Table 4.1: Results of the Individual Item Reliability, Internal Consistency, Convergent

Table 2: **Validity and Discriminant Validity.**

Construct	Indicators	Loadings	CR	AVE
E. Education.			0.902	0.535
	EEd1	0.731		
	EEd2	0.741		
	EEd3	0.755		
	EEd4	0.709		
	EEd5	0.672		
	EEd6	0.726		
	EEd7	0.765		
	EEd8	0.749		
E. Alertness.			0.892	0.674
	Alrt1	0.812		
	Alrt2	0.837		
	Alrt3	0.840		
	Alrt4	0.793		
Attitude			0.854	0.540
	Att1	0.668		
	Att2	0.735		
	Att3	0.779		
	Att4	0.772		
	Att5	0.714		
S. Norm			0.850	0.655
	Sn1	0.837		
	Sn2	0.831		
	Sn3	0.757		
PBC			0.884	0.559
	Pbc1	0.720		
	Pbc2	0.756		
	Pbc3	0.766		
	Pbc4	0.775		
	Pbc5	0.744		
	Pbc6	0.723		
E. Intention.			0.864	0.514
	Int1	0.712		
	Int2	0.730		
	Int3	0.704		
	Int4	0.721		
	Int5	0.704		
	Int6	0.729		

Note: C.R-Composite Reliability; AVE- average variance extracted.
On table 2 above show the values of factor loading, values of composite reliability and values of AVE. All the values are within the recommended threshold.

Results of discriminant validity assessment

Fornell-Larcker criterion does not reliably detect the absence of discriminant validity in common research situations (Henseler, Ringle, & Sarstedt, 2015). Hence, scholars have suggested an alternative approach, based on the use of heterotrait-monotrait ratio of correlations (HTMT). Hence, Heterotrait-Monotrait (HTMT) values close to 1 indicates a lack of discriminant validity. Some authors suggest a threshold of 0.85 (Henseler *et al.* 2015; Kline 2011), whereas others propose a value of 0.90 (Franke & Sarstedt, 2018; Henseler *et al.* 2015; Hair *et al.* 2017; Teo, Srivastava, & Jiang 2008). If the value of the HTMT is above this threshold, there is a lack of discriminant validity. Thus, this study heterotrait-monotrait

(HTMT) ratio of correlation was used to assess the discriminant validity which is considered superior compared to other methods (Henseler et al. 2015). Finally, a bootstrapping procedure was used to determine whether the HTMT value is statistically and significantly lower than one (Ringle, Sarstedt, Mitchell, & Gudergan, 2018). The table 4.2 below represent the heterotrait-monotrait ratio (HTMT) of the latent variables.

Table 3: Discriminant Analysis-Heterotrait-Monotrait Ratio (HTMT)

	ALRT	ATT	EEd	INT	PBC	SN
ALRT						
ATT	0.167					
EEd	0.092	0.203				
INT	0.336	0.542	0.444			
PBC	0.128	0.331	0.117	0.408		
SN	0.121	0.317	0.232	0.581	0.191	

On table 3 above it shows the result of HTMT. All the values were lower than both the lower and higher threshold values of 0.85 as recommended by Henseler *et al.* 2015; Kline, 2011 and 0.90 as recommended by Franke *et al.* (2018); Hair *et al.* (2017); Henseler *et al.* (2015); Teo *et al.* (2008). Therefore, it confirmed that the latent constructs were actually different from each other. This is because the HTMT value is statistically and significantly lower than: 0.85; 0.90; 1.0 as recommended in the literature. Hence, suggesting adequate discriminant validity of the latent variables.

Structural Model

Assessment of structural model "includes testing the collinearity, significance and relevance of the relationships, R^2 (and the Adjusted – R^2), f^2, Q^2, $Q^2_{predict}$, *and* q^2" (Russo & Stol 2021). Almost, similar recommendation was put forward by Rasoolimanesh, & Ali, (2018) and Hair *et al.* (2017) that a common criterion to assess structural model are coefficient of determination (R^2), the effect size (f^2), the Stone–Geisser index (Q^2). Therefore, the study adopted this criterion to analysed the model below.

Figure 2: Structural Equation Model: Bootstrapping Result of the Indirect Effects

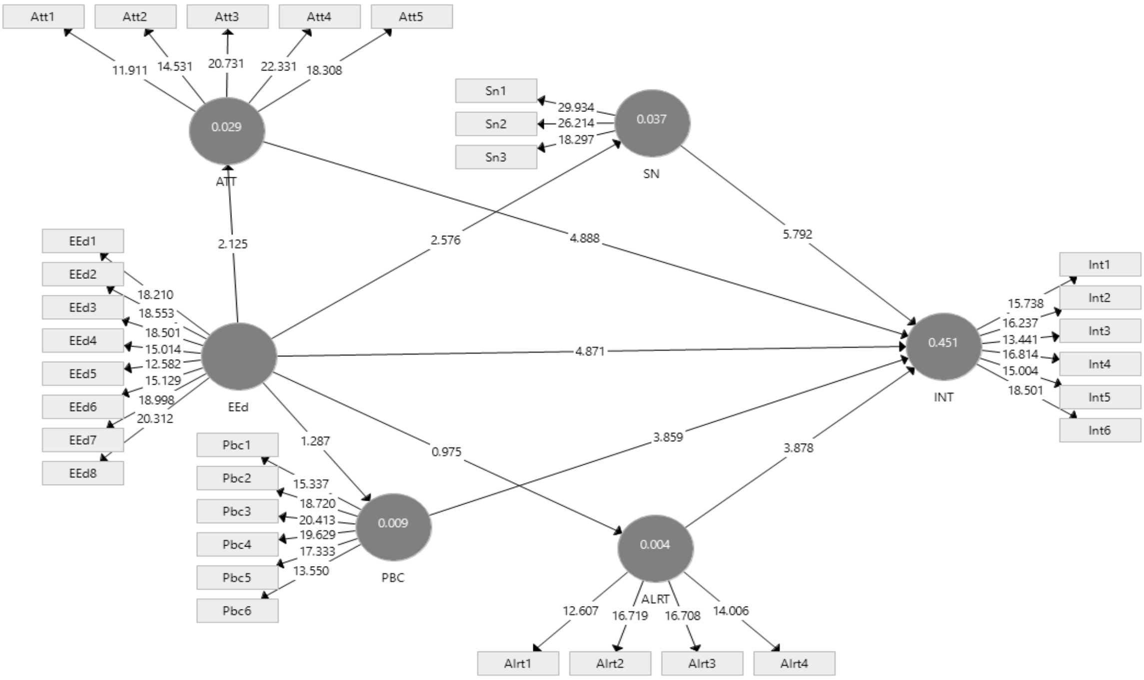


Figure 2: Percentile bootstrapped coefficients of the model.

To test the proposed hypotheses, structural equation modeling (SEM) using partial least square method was employed. PLS-SEM percentile bootstrapping procedure was selected to detect the mediation effect. Moreover, by following the recommendations of Hair, et al., (2014), while examining the mediation effect, the procedure of Preacher, & Hayes, (2004, 2008) was followed and the specific indirect effect was examined. Hence, the current study analyzed the effect of four constructs (i.e., entrepreneurial alertness, attitude toward behaviour, subjective norm, perceive behavioural control) as mediators through Smart PLS 3.3.3 (Ringle et al., 2015) by percentile bootstrapping method and did the resampling of 5,000 to examine the t-values and p-values. Table 4 displays the results of multiple mediation analysis using percentile bootstrapping.

Table 4: Results of Hypotheses Testing

Hypo.	Relationships	Path Coefficient	Standard Error	T-Value	P-Value	Decision
H_{01}	EEd--›INT	0.254	0.052	4.891	0.000***	Rejected
H_{02}	EEd--›ATT--›INT	0.043	0.023	1.879	0.060*	Rejected
H_{03}	EEd--›ALRT--›INT	0.012	0.013	0.931	0.352	Not rejected
H_{04}	EEd--›SN--›INT	0.055	0.023	2.410	0.016**	Rejected
H_{05}	EEd--›PBC--›INT	0.018	0.015	1.157	0.247	Not rejected

Note: ***p < 0.01; **p < 0.05; *p < 0.1

As shown on Table 4 and figure 3 above some of the predictors of the model have significant relationships with the criterion variable by looking at the path coefficient (Beta), T-Statistic and P-Values (i.e., 1%, 5%, 10%) at some level of significance. It is a convention to set the level of significance at 0.05, while 0.01 and 0.10 levels are also commonly used (Sullivan, 2007). There are scholars that suggest higher value such as 0.10 (*see*, Baker & Mudge, 2012; Warner, 2013). Cooper (2011) reported that, the American Psychological Association has recommended reporting all *p-values*, regardless of their level of significance. Specifically, the entrepreneurship education is directly related to entrepreneurial intentions (β=0.254, t=4.891, p<0.01) at 1% level of significance. Thus, not supporting H_{01}, which states that there is no positive direct relationship between entrepreneurship education and entrepreneurial intention. The indirect effect of entrepreneurship education on entrepreneurial intentions through attitude towards entrepreneurship is shown on table 4. The indirect effect of entrepreneurship education on entrepreneurial intentions through attitude is significant at 10% level of significance (percentile bootstrap path coefficient β=0.043, t=1.879, p=0.060) not confirming hypothesis H_{02}. However, the indirect effect of entrepreneurship education on entrepreneurial intentions through entrepreneurial alertness is non-significant (β=0.012, t=0.931, p=0.352) confirming hypothesis H_{03}. The indirect effect of entrepreneurship education on entrepreneurial intentions through subjective norm is significant (β=0.055, t=2.410, p=0.016) at 5% level of significance, hence, rejecting hypothesis H_{04}. However, the indirect effect of entrepreneurship education on entrepreneurial intentions through perceive behavioural control is non-significant (β=0.018, t=1.157, p=0.247) confirming hypothesis H_{05}. In sum, not all the hypothesized relationships of this study are strongly supported empirically.

Coefficient of Determination (R^2), Effect size (f^2) and Predictive Relevance (Q^2)

Coefficient of determination (R^2) is a measure of a model explanatory power (Hair, Hult, Ringle, Sarstedt, Danks, Ray, 2021). There are different thresholds and rule of thumbs concerning R^2(Hair et al., 2014). For example, Hair, Ringle, & Sarstedt, (2011); and

Henseler, et al., (2009) have argued that, R^2 values of 0.75, 0.50, or 0.25 for endogenous latent variables can, as a rough rule of thumb, be respectively described as substantial, moderate, and weak. While, Chin (1998) argued that, the R^2 value around 0.67, 0.333, and 0.19 which are considered substantial, average, and weak, respectively. On the other hand, Falk and Miller, (1992) have recommended the minimum coefficient of determination (R^2) value should be 0.10. Nonetheless, higher R^2 value (for example, ≥ 0.90) in a model that predicts human attitudes, perceptions, and intentions would likely indicate model over fit (Hair *et al.* 2021). Since the value of R^2 is related to the size of the model, it is good practice to also consider the Adjusted R^2 criterion, which adjusts the R^2 value based on the model size (Hair *et al.* 2021; Russo *et al.*, 2021). Table 5 displays the coefficient of determination (R^2) value for the current research.

Table 5: Level of Coefficient of Determination (R^2) and Adjusted-R^2

Construct	R^2 Square	R^2 Square Adjusted
E. Intention	0.451	0.441

On table 5 above, the result demonstrates that the overall model explained 45.1% of the variance in entrepreneurial intention (i.e., endogenous latent variable) by the exogenous latent variable (s). This result demonstrated that the statistical model explained 45.1% which satisfied moderate condition based on Chin (1998) criterion and above minimum requirement based on Falk *et al.* (1992). However, after adjusting for bias due to the complex nature of the model the explanatory power of the model (R^2) explained by the adjusted-R^2 is 44.1% of the variance in entrepreneurial intention by the exogenous latent variables.

Effect sizes (f^2)

Effect size is a measure of the impact of the exogenous construct on the endogenous one (Russo, *et al.* 2021). To assess whether a specific exogenous latent variable has a substantial impact on the endogenous ones, we may use the f^2 effect size (Chin, 1998). Cohen (1988) proposed the following indicative thresholds: a value below 0.02 represents no effect, 0.02-0.15 represents a small effect size, 0.15-0.35 a medium-sized effect, and above 0.35 a large effect size. Table 6 below represent effects sizes of the exogenous latent variables.

Table 6 Effect size (f^2) of exogenous latent variable

Endogenous	Exogenous	R-square Included	R-square Excluded	F-Square	Effect Size
E. Intention	Attitude	0.451	0.000	0.102	small
	Subjective Norm	0.451	0.000	0.139	small
	PBC	0.451	0.000	0.056	small
	E. Education	0.451	0.000	0.107	small
	E. Alertness	0.451	0.000	0.062	small

On table, 6 it indicates that, the entire exogenous latent variable has small effect sizes. In this research, entrepreneurial intention was predicted by attitude toward the behaviour at f^2 value 0.102, while subjective norm at the f^2 value of 0.139. In addition, entrepreneurial intention was predicted by perceive behavioural control at the f^2 value of 0.056. Entrepreneurial intention was predicted by entrepreneurship education at the f^2 value of 0.1 07. Finally, entrepreneurial intention was also predicted by entrepreneurial alertness at the f^2 value of 0.062. According to Cohen (1988) and Chin (1998) the f^2 value between 0.02-0.15, indicates small effect sizes. Therefore, all the values of f^2 were found to be within the small effect size.

Therefore, all the exogenous constructs played small effect in explaining entrepreneurial intention.

Predictive relevance (Q^2)

Predictive relevance is a measure of a model's predictive power (Russo *et al.,* 2021). To assess the predictive relevance of endogenous latent variable, this research calculated Stone-Geisser's Q^2. The Q^2 values should be greater than zero (0) (Stone, 1974; Geisser, 1974). Predictive accuracy can be small (higher than 0), medium (larger than 0.25), or large (greater than 0.50) (Hair *et al.* 2019). To compute it, the study use blindfolding to obtain cross-validated redundancy measures for each endogenous latent variable (Henseler *et al.* 2009; Tenenhaus, et al., 2005). However, prediction by means of cross-validated redundancy fits the PLS-SEM approach perfectly (Hair *et al.* 2014). The Q^2 values estimated by the blindfolding procedure represent a measure of how well the path model can predict the originally observed values. The table 7 below represent the Q^2 values of the endogenous latent constructs.

Table 7: The cross-validated redundancy (Q^2)- Result of Stone-Geisser Test

Constructs	SSO	SSE	1-SSE/SSO
EED- - ›ALRT	1172.000	1168.944	0.003
EED- - ›ATT	1465.000	1445.741	0.013
EED- - ›INT	1758.000	1369.137	0.221
EED- - ›PBC	1758.000	1750.999	0.004
EED- - ›SN	879.000	861.219	0.020

On table 7 above the Q^2 values for all the constructs (i.e., mediators and endogenous) were all above the threshold values of greater than zero (0). As argued by Stone-Geisser (1974) and Hair *et al.* (2014) that the path model has predictive relevance for a selected reflective endogenous construct if the Q^2 value is above zero (0). Similarly, the path between EED and INT represent the highest predictive relevance while the path between EED and ALRT recorded the least value. However, based on threshold values recommended by Hair *et al.* (2019) all the endogenous reflective constructs predictive relevance were small because they all fall between the range of greater than zero (0) but less than 0.25. The Q^2 perform better than R^2 based criteria (Sharma, et al., 2015).

Conclusion

In conclusion, this study established that, the entrepreneurial intention is positively influenced by the entrepreneurship education (i.e. EEd 126, EEd 216, EEd 413) of students of colleges/schools of health in North-Western Nigeria. Thus, the study established that, the entrepreneurial intention is positively and indirectly influenced by entrepreneurship education through attitude toward entrepreneurship. Similarly, this study found that student's entrepreneurial intentions are influenced positively and indirectly by entrepreneurship education through subjective norms. However, entrepreneurial intention has not been favourably influenced by student's entrepreneurship education through entrepreneurial alertness, according to this study. Finally, students' entrepreneurial intention is not indirectly influenced by entrepreneurship education through perceived behavioural control, according to the finding of this study. However, many empirical studies have established the mediating effect of perceived behavioural control between entrepreneurship education and entrepreneurial intention (for example, van Gelderen, Brand, Praag, Bodewes, Poutsma, & Gils, 2008; Mai & Nguyen 2016).

Recommendations

Based on the results of this research and in order to motivate students to become entrepreneurs after graduation in North-West Nigeria and the country in general, the following recommendations should be considered. On the part of the government, the lecturers teaching EEd courses should be sponsored to attend local and international conferences to acquire more knowledge so that they can effectively transfer entrepreneurial skills into the mind and life style of students. Also, regular train the trainer programmes should be organized occasionally for the lecturers who have not attended the training or conference. Students should see the mandatory entrepreneurship education as important as other courses in their programmes of study. Students' attitude should be planned to be ready to accept self-employment as an alternative to salaried employment.

Therefore, it is recommended that this, change in attitude should be through dissemination of rigorous entrepreneurship education. Entrepreneurial intention could be influenced the more by entrepreneurship education through entrepreneurial alertness when lecturers of entrepreneurship education help their students to identify potential opportunities within and outside their locality by engaging them in activities that will unleash their entrepreneurial alertness. Therefore, the approach of teaching entrepreneurship education should emphasize role play; this will expose students to grasp close to reality experiences. Entrepreneurial intention could be impacted and influence the more by entrepreneurship education through subjective norms when lecturers of entrepreneurship education partner with local successful entrepreneurs whom the students considered to be their family members, friends, or colleagues within the geo-political zone. By inviting successful entrepreneurs as guest lecturers in the various colleges of health or by embarking on excursions to where they operate their businesses. This opportunity will not only avail students but expose students and lecturers to successful practicing business people who would share their experiences on regular basis as shown by the result of the study.

Likewise, these significant others (i.e., close family members, friends, colleagues) should encourage students who consider them as mentors to become entrepreneurs immediately after graduation from the College by giving them approval through the use of word-of-mouth or giving monetary support. However, this is possible only when lecturers of EEd make them (i.e., mentors) understand the importance of mentor-mentee relationship in encouraging would-be entrepreneurs. Similarly, EEd lecturers should assist to bring it to the understanding of the students that, they have ability, capability and competence to engage in self-employed businesses or ownership of business ventures. This could be achieved through assigning the students to read author biography of successful entrepreneurs. It is necessary to have good understanding of their (i.e. students) ability and capability in the business world.

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EFFECT OF INTELLECTUAL CAPITAL ON START-UP INTENTIONS OF NIGERIAN YOUTH: ROLE OF FINANCIAL CAPITAL

[1]Abdulmunini Suleiman Richifa, [2]Prof. O. D Y Malachy, [3]Prof. Nasiru Abdullahi & [4]Prof. Sani Abdullahi

[1]International Centre of Excellence for Rural Finance and Entrepreneurship, Ahmadu Bello University Zaria
[2,3]Department of Business Administration, Ahmadu Bello University Zaria.
[4]Department of Banking and Finance, Ahmadu Bello University Zaria.
[1]yarimanrichifa@yahoo.com

Abstract

The role of intellectual capital in venture creation, particularly its impact on startup intentions, has been an area of interest among researchers. However, there is still a lack of research on measuring the influence of intellectual capital on start-ups. This study aims to examine the influence of intellectual capital on startup intentions using a data set of 364 respondents comprising Nigerian youth in Ahmadu Bello University, Zaria, Nigeria. The study utilizes the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique to analyze the relationship between intellectual capital components (knowledge and skills, entrepreneurial opportunities, and network), financial capital and startup intentions. The findings reveal that the components of intellectual capital have a positive and significant impact on startup intentions. Specifically, knowledge and skills, entrepreneurial opportunities, affect startup intention positive and significant, and network found to influence startup intentions positively. Furthermore, the study examines the moderating role of financial capital on the relationship between knowledge and skills and startup opportunities. The results indicate that financial capital moderates this relationship positively and significantly. However, in the case of network, the moderation by financial capital is positive but insignificant. This study contributes to the existing literature by examining the relationship between intellectual capital and startup intentions, particularly in the context of developing countries like Nigeria. This research sheds light on the importance of intellectual capital in the entrepreneurial process and provides valuable insights for policymakers and practitioners in fostering entrepreneurship and venture creation in Nigeria.

Keywords: Effect, Financial Capital**,** Intellectual Capital, Nigerian Youth, Role, Start-Up Intentions

Introduction

Entrepreneurship is crucial for enhancing a nation's economy by creating employment opportunities, fostering innovation, and addressing social and environmental challenges through new firms and intentions (Stephan, et al., 2023). The success of Silicon Valley has highlighted the importance of student entrepreneurship, prompting many countries to accelerate it, especially among university students, to promote innovation and start-up intention (Fuerlinger, & Garzik, 2022; Dana, 2021).

In Nigeria, the rising unemployment rate has spurred government initiatives to encourage university students' entrepreneurship, aiming to harness their innovative potential for economic development and job creation (Uchegbue, & Ifedi, 2023). This is in alignment with global trends that recognize entrepreneurship in education as vital for national economic success and societal progress.

The start-up intentions of Nigerian youth are profoundly influenced by a combination of intellectual capital and financial capital, reflecting broader trends observed across Africa and the globe. In Nigeria, a country characterized by a burgeoning young population and high unemployment rates, entrepreneurial activities offer a viable pathway for economic empowerment and job creation (Adebusuyi, 2023). Relating this phenomenon to the broader African context, similar trends are evident. Across the continent, youth entrepreneurship is increasingly being recognized as a key driver of economic development and innovation (Urban, et al., 2024).

African countries are implementing various programs to build the intellectual and financial capital of young entrepreneurs (Gulzar, & Fayaz, 2023). On a global scale, the importance of intellectual capital in fostering entrepreneurial intentions is universally acknowledged. Countries with robust education systems and supportive entrepreneurial ecosystems tend to exhibit higher levels of start-up activities among youth (Olarewaju, et al., 2023).

Furthermore, the role of financial capital is equally crucial worldwide, with access to venture capital, angel investors, and government grants significantly influencing the entrepreneurial landscape. The global emphasis on start-up incubators and accelerators highlights the critical interplay between intellectual and financial capital in driving youth entrepreneurship (Awonuga, et al., 2024; Pierrakis, & Owen, 2023; Kayser, et al., 2023).

Consequently, Nigerian youth, and by extension African youth, are part of a global movement that recognizes entrepreneurship according Odeyemi, et al., (2024) as a cornerstone of economic growth and innovation. This necessitating concerted efforts to enhance both intellectual and financial capital to support their entrepreneurial journeys (Tula, et al., 2024).

Intellectual capital, encompassing skills, knowledge, networks, and innovative capabilities, plays a pivotal role in nurturing the entrepreneurial aspirations of Nigerian youth. Studies (Vo, & Tran, 2023; Salamzadeh, et al., 2022) have shown that educational institutions and entrepreneurial training programs significantly bolster the human capital component of intellectual capital, thereby enhancing start-up intentions. However, the availability and accessibility of financial capital are critical determinants that either enable or constrain these entrepreneurial intentions (Badghish, et al., 2023). Youth with adequate financial resources or access to funding mechanisms are better positioned to actualize their business ideas, suggesting a need for supportive financial policies and initiatives (Tula, et al., 2024).

It is an established fact that venture creation is one of the most significant components for the growth of a nation (Ali, et al., 2023; Mhlongo, et al., 2024). Numerous factors can either enhance or diminish venture creation, making it crucial to understand and nurture those elements that will elevate the venture creation capacity to the next level. The primary objective of this study is to measure the potential of intellectual capital in promoting venture creation, specifically in Nigeria, an area that remains relatively unexplored (Emeka, et al., 2023). Until now, most studies on intellectual capital have focused on its impact on economic performance (Khan, et al., 2023) or innovation performance (Dinu, et al., 2023). Today, policymakers are increasingly interested in exploring new areas related to start-ups. The growing importance of start-ups has motivated some researchers to examine the role of intellectual capital in the success of start-ups (Franco, et al., 2023; Modaffari, et al., 2023; Zane, 2023).

Relating to entrepreneurial start-up intentions, the study emphasizes how intellectual capital can significantly influence the entrepreneurial aspirations and activities of individuals, particularly the youth in Nigeria. A literature reviewed by Malikah, and Nandiroh, (2024) emphasized that intellectual capital, which includes human capital (skills, knowledge, education), structural capital (processes, patents, technology), and relational capital (networks, partnerships), plays a crucial role in fostering a conducive environment for start-up intentions. For Nigerian youth, enhanced intellectual capital can translate into increased confidence and capability to initiate and sustain entrepreneurial ventures (Oyinlola, et al., 2024). This is particularly pertinent given the high unemployment rates and economic challenges faced by many young Nigerians. This study suggests that, investing in and nurturing intellectual capital, Nigeria can create a fertile ground for entrepreneurial start-up intentions, which, in turn, can drive economic growth and innovation. This focus on intellectual capital aligns with global trends, where nations prioritize entrepreneurship as a key driver of economic development and competitiveness (Dauda, 2023).

Some researchers have analyzed the relationship between intellectual capital and venture creation (Ali, & Anwar, 2021; Nigam, et al., 2021), but the results of these studies cannot be generalized to a developing country like Nigeria. This limitation underlines the necessity for context-specific investigations. In this study, the authors aim to analyze the relationship between intellectual capital and entrepreneurial intentions, as intention is widely regarded as the best predictor of entrepreneurial activity (Krueger et al., 2000). Despite the existing literature, the relationship between intellectual capital and venture creation remains inadequately defined, particularly within the context of developing economies like Nigeria.

To bridge this gap, the study introduces financial capital as a moderator and mediator in the relationship between intellectual capital and entrepreneurial intentions. Financial capital, which encompasses access to funds, investment opportunities, and financial management capabilities, can significantly influence the effectiveness of intellectual capital in fostering entrepreneurial intentions (Zhao, Wei, Chen, & Yien, 2020; Modaffari, et al., 2023). As a moderator, financial capital can enhance the impact of intellectual capital on entrepreneurial intentions, indicating that even high levels of intellectual capital might not lead to strong entrepreneurial intentions without adequate financial resources (Yao, & Meng, 2022).

Financial capital can significantly enhance the impact of intellectual capital on entrepreneurial intentions by providing the necessary resources to leverage knowledge, skills, and networks effectively. Recent studies, such as those by Mahmood et al., (2018) and Akram et al. (2018), have shown that access to financial resources amplifies the positive effects of human, social, and structural capital on entrepreneurial outcomes. For instance, financial capital enables aspiring entrepreneurs to invest in advanced training, expand their professional networks, and develop robust business models, thereby translating their intellectual assets into viable business ventures.

Moreover, financial support reduces the perceived risks associated with starting a new venture, boosting entrepreneurial confidence and intention (Zhao, et al., 2020; Yousafzai et al., 2016). This moderating role of financial capital is critical, as it ensures that the intellectual capital is not only cultivated but also effectively utilized in the entrepreneurial process, leading to higher rates of successful venture creation and innovation.

Therefore, examining these relationships, this study seeks to contribute to the broader understanding of how intellectual and financial capital interact to influence entrepreneurial intentions and ultimately venture creation, particularly in the context of Nigerian youth.

Literature Review

Views on Entrepreneurial Intention

Entrepreneurial intentions refer to an individual's conscious state of mind that directs attention, experience, and action toward the creation of a new business venture or the development of new products or services within existing firms. It is the motivational factor that influences individuals to pursue entrepreneurial activities. Entrepreneurial intentions are crucial as they serve as the first step in the entrepreneurial process, preceding actions such as planning and launching a new venture (Krueger, et al., 2000).

The entrepreneurial intention is the set of reasons that determines individuals to engage in a particular behaviour or for venture creation (Shane et al., 2003). The intention to start a new venture generally depends on three perceptions; individual perception, the perception of economic opportunities and socio-cultural perceptions (Linan, et al. 2011). Entrepreneurial intentions are multifaceted and influenced by both individual and contextual factors. The Theory of Planned Behavior as described by Ajzen, (2020) and the Entrepreneurial Event Model (SEE) provide comprehensive frameworks that highlight the importance of attitudes, social norms, perceived control, desirability, feasibility, and propensity to act (Wach, Kruse, Costa, & Antonio, 2023). Moreover, according to the Resource-Based View (RBV) by Barney (1991) emphasizes the availability of resources as a critical determinant. These theories emphasize the role of individual perceptions and motivations in shaping entrepreneurial intentions.

The entrepreneurial ecosystem perspective expands the discussion by considering external factors such as access to finance, mentorship, networks, and supportive policies. This perspective is particularly relevant in the context of developing countries like Nigeria, where external support systems can play a crucial role in fostering entrepreneurial intentions (Oyinlola, et al., 2024). The interplay between these various factors highlights the complexity of entrepreneurial intentions and underlines the need for a holistic approach in fostering entrepreneurial activity (Conner, 2020). Understanding these diverse views can help policymakers, educators, and practitioners create more effective strategies to nurture entrepreneurial intentions and ultimately drive venture creation and economic growth.

Views on Intellectual Capital

Intellectual capital is defined as the set of intangible assets from which ventures can derive their competitive advantage, enhance profit, and create value. This concept has attracted widespread attention (Marr, & Roos, 2012; Ali, et al., 2023). Scholars have illuminated the various dimensions of intellectual capital (Asiaei, et al., 2020). One of the most widely accepted definitions, provided by Edvinsson and Sullivan (1996), considers intellectual capital as the knowledge that can be converted into value. Intellectual capital is an excellent

source for generating wealth and has garnered significant attention in contemporary discussions (Ali, et al., 2024).
The measurement of intellectual capital is complex because it cannot be quantified independently and relies on other factors for its assessment. The selection of these variables remains an intriguing and open question, with various authors proposing different compositions of variables. Understanding the multifaceted nature of intellectual capital and identifying the appropriate metrics for its measurement is crucial for leveraging its full potential in creating value and competitive advantage (Leitão, et al., 2015; Badghish, et al., 2023).

Intellectual capital theorists assert that knowledge enhances an individual's cognitive skills, thereby enabling them to work more productively and efficiently (Egbu, 2004). Entrepreneurs can discover opportunities more readily because their experience and education help them understand the value of new information more easily compared to others (Bell, & Bell, 2020). The knowledge base, which constitutes intellectual capital and determines an individual's capacity to recognize business opportunities, comprises their educational qualifications, knowledge and soft skill competencies, relationships with existing entrepreneurs, and previous entrepreneurial experience.

Intellectual capital has been categorized into various components by different scholars, making it challenging to determine which classification is definitively correct (Baluku, et al., 2018). In this study, the dimensions of intellectual capital considered include knowledge and skills, entrepreneurial opportunities, networking, and the experience of owning and managing a business. These proxy measures are used to evaluate the intellectual capital of Nigerians, aiming to provide a comprehensive understanding of how intellectual capital influences entrepreneurial intentions and venture creation.

Entrepreneurial skills and knowledge are not strictly tied to formal education levels. Some scholars argue that specific education is not always required to possess entrepreneurial abilities (Bauman, & Lucy, 2021). These skills and knowledge can be acquired through past experiences, and individuals who have them are more likely to pursue entrepreneurial endeavors (Omorede, 2021). Those with the necessary skills and knowledge are more inclined to engage in entrepreneurial activities, such as recognizing opportunities. This discussion leads to the hypothesis that knowledge and skills significantly impact the start-up intentions of Nigerians.

Opportunity recognition is crucial in motivating individuals to start their businesses (Chang, & Chen, 2020; Jafari-Sadeghi, 2020). According to the theory of planned behavior, individuals' actions are influenced by their attitudes, which are shaped by their evaluations of behaviors (Ajzen, 2020). When people perceive numerous business opportunities, they assess their abilities to seize these opportunities. Positive evaluations lead to a favorable attitude towards entrepreneurship, forming intentions and subsequent behaviors (Ajzen, 1991). Start-ups can leverage acts of recognition, discovery, or knowledge creation (Paoloni, & Modaffari, 2022). Entrepreneurs need specific capabilities to identify new opportunities in the market, such as technological or social gaps (Odeyemi, et al., 2024). Thus, recognizing opportunities enhances entrepreneurial intentions.

From the perspective of the theory of planned behavior (Ajzen, 1991), personally knowing existing entrepreneurs helps generate positive attitudes towards entrepreneurship. Role theory suggests that individuals with strong networks among existing entrepreneurs are more likely to encounter information and insights that enhance their competence in venture creation. Additionally, network theory highlights the significance of networking in proposing business plans and providing initial information and resources for start-ups (Franco, et al., 2023). Connections with entrepreneurs also facilitate access to other relevant entrepreneurs, benefiting new firms (Shepherd, et al., 2021).

The primary objective of this study is to gauge the impact of intellectual capital on the inclination toward venture creation/entrepreneurial intention. The intellectual capital has been measured by the amount of knowledge and skills, the ability to recognize opportunities, and networking. The expectation to start a new business after some time has been taken as the proxy measure for entrepreneurial intention. Below shows the hypothesized relationship between the components of intellectual capital and the entrepreneurial intention. It shows a clear relationship between the measures of intellectual capital, knowledge and skills, entrepreneurial opportunities, and networking, with entrepreneurial intentions and the enhancement of financial capital.
H1: More knowledge and skills lead to the higher startup intentions.
H2: More entrepreneurial opportunities lead to the higher startup intentions.
H3: Networking has a positive influence on startup intention of Nigerians, or it increases the probability of being entrepreneurs in Nigeria
H4a, H4b and H4c: Financial Capital moderate the relationship between knowledge and skills, entrepreneurial opportunities and networking on startup intentions

Empirical Studies

The empirical studies mentioned provide valuable insights into the relationship between intellectual capital and entrepreneurial intentions across various cultural contexts and populations. Mahmood et al. (2018) found a positive influence of intellectual capital components, including human capital, structural capital, and relational capital, on entrepreneurial intentions among Pakistani entrepreneurs. Similarly, Yousafzai et al. (2016) observed a significant positive relationship between intellectual capital dimensions (human capital, social capital, and organizational capital) and entrepreneurial intentions among university students in Malaysia. Leitão et al. (2015) extended this research cross-culturally to Portugal and Mozambique, revealing a positive association between intellectual capital factors and entrepreneurial intentions in both countries.

Furthermore, Akram et al. (2018) delved into the mediating role of entrepreneurial self-efficacy in the relationship between intellectual capital and entrepreneurial intentions among university students in Pakistan. They found that intellectual capital dimensions positively influenced entrepreneurial intentions through the mediation of entrepreneurial self-efficacy. These studies collectively underscore the importance of intellectual capital in fostering entrepreneurial intentions across diverse populations and settings. Recent studies have underscored the critical role of intellectual capital in fostering entrepreneurial intentions and performance, particularly in the context of innovative start-ups. Modaffari, et al., (2023) explored how intellectual capital contributes to the success of innovative female agri-start-ups, emphasizing the importance of human, relational, and structural capital in driving innovation and entrepreneurship.

Similarly, Franco et al., (2023) highlighted the significance of IC in networks formed by start-ups, illustrating how the interconnectedness and shared knowledge within these networks bolster start-up performance. These findings are corroborated by Matricano (2020), who examined the role of intellectual capital in higher education, revealing that components such as human capital, relational capital, and organizational capital are pivotal in shaping students' start-up intentions. This body of research collectively underlines the multifaceted impact of intellectual capital on entrepreneurial activities and provides a comprehensive understanding of how intellectual capital drives innovation and entrepreneurship.

Expanding on this, Asiaei et al.. (2020) unpacked the relationship between intellectual capital and firm performance, noting that intrapreneurship serves as a crucial intermediary. This finding aligns with Dinu et al., (2023), who linked intellectual capital and technology management to innovative performance in knowledge-intensive business services. The systematic review by Kayser et al., (2023) on digital start-up ecosystems in South Africa further supports the notion that intellectual capital is a cornerstone of start-up success, particularly in digital contexts. Neves and Brito (2020) also contributed to this discourse by reviewing academic entrepreneurship intentions, identifying intellectual capital as a fundamental element influencing entrepreneurial pursuits in academia.

Finally, Malikah and Nandiroh (2024) conducted a systematic literature review on the value of the firm, reinforcing the pervasive influence of intellectual capital on firm valuation and entrepreneurial success. These studies collectively establish a robust research foundation, demonstrating that intellectual capital, encompassing human, relational, and structural, is instrumental in fostering entrepreneurial intentions and enhancing start-up performance across diverse contexts.

However, despite the existing body of literature, there are several gaps and areas for further exploration. Firstly, while these studies provide valuable insights into the general relationship between intellectual capital and entrepreneurial intentions, there is a lack of focus on specific demographic groups, such as graduates youth in Nigeria. Secondly, there is a need to explore an enhancement through which different dimensions of intellectual capital, such as knowledge and skills, entrepreneurial opportunities and networking, interact to influence entrepreneurial intentions. Addressing these gaps would contribute to a more comprehensive understanding of the moderating role of financial capital on intellectual capital in driving entrepreneurial intentions and behavior, particularly among specific demographic groups like graduates' youth in Nigeria.

Theoretical Framework

The relationship between intellectual capital (IC) and entrepreneurial intentions can be understood through the Resource-Based View (RBV) theory, which emphasizes the importance of unique and valuable resources for competitive advantage and performance (Rehman et al., 2023). In entrepreneurship, IC—comprising human capital (knowledge, skills, expertise), social capital (relationships, networks), and structural capital (opportunities, processes, systems)—is viewed as a crucial resource. These elements enable entrepreneurs to identify and exploit opportunities, acquire necessary resources, and enhance self-efficacy, thereby increasing the likelihood of successful venture creation (Rabaya et al., 2020). According to Barney (1991), IC provides a foundation of knowledge, skills, and networks essential for overcoming challenges and persisting in entrepreneurial endeavors. The RBV theory thus offers a lens to analyze how IC influences entrepreneurial intentions and behaviors, highlighting its role as a strategic asset for entrepreneurial success, particularly among Nigerian youth.

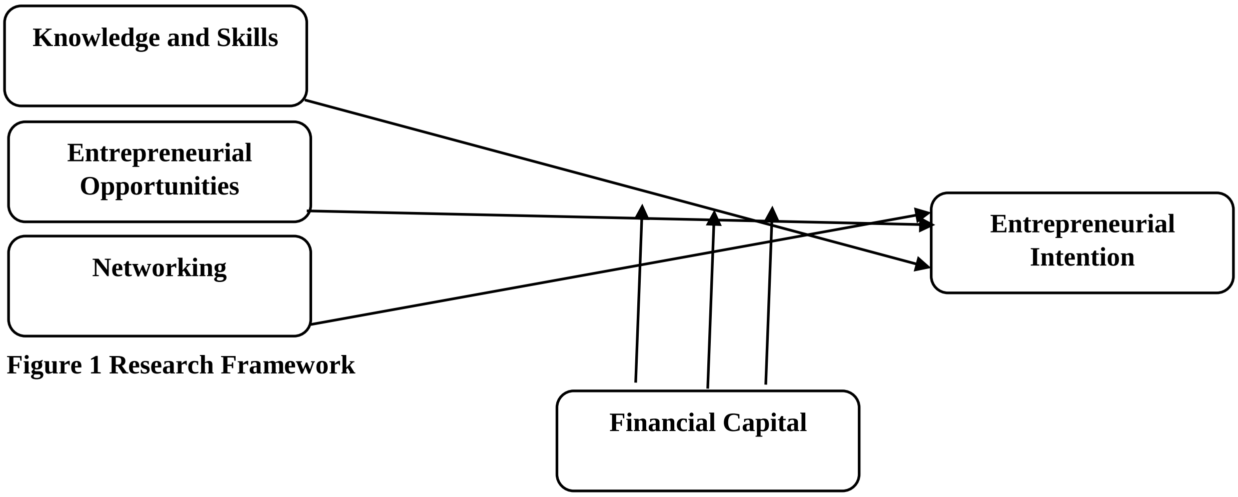

Figure 1 Research Framework

Materials and Methods

The study utilized a descriptive research design, which is commonly employed to systematically describe characteristics or phenomena of interest. Descriptive research aims to provide an accurate representation of the subject being studied, allowing researchers to gather comprehensive data about the variables under investigation. In this case, the researchers focused on understanding the relationship between intellectual capital and entrepreneurial intentions among final year students from the Faculty of Management Science at Ahmadu Bello University, Zaria. The study population is 498 comprises of students from departments of (Acturial 33, Accounting 169, Marketing 42, Insurance 97, Business Administration 123 and Banking Finance 34) and a sample of 364 final-year students from the Faculty of Management Science at Ahmadu Bello University, Zaria, to understand the relationship between intellectual capital and entrepreneurial intentions. To analyze the data collected from the sample of 364 final year students, the researchers employed Partial Least Squares Structural Equation Modeling (PLS-SEM). PLS-SEM is a statistical technique used to assess the relationships between observed and latent variables in a structural model. It is particularly suitable for analyzing complex models with small sample sizes, as it does not require strict assumptions about data distribution and allows for the estimation of both measurement and structural models simultaneously. Using PLS-SEM, the researchers were able to examine the relationships between intellectual capital dimensions (such as human capital, social capital, and organizational capital) and entrepreneurial intentions among the final year students. This statistical technique enabled them to assess the strength and direction of these relationships, as well as any potential mediating or moderating effects that may influence the associations between variables. The combination of a descriptive research design and PLS-SEM analysis allowed the researchers to gain valuable insights into the factors influencing entrepreneurial intentions among final year students in the Faculty of Management Science at Ahmadu Bello University, Zaria.

Result and Discussion

The study population is 498 comprises of students from departments of (Acturial 33, Accounting 169, Marketing 42, Insurance 97, Business Administration 123 and Banking Finance 34). The study have a response rate from the sample surveyed of 364 final-year students from the Faculty of Management Science at Ahmadu Bello University, Zaria, to understand the relationship between intellectual capital and entrepreneurial intentions. Out of the total respondents, a significant 73% participated, providing a robust response rate for the research. Among those who responded, 61% were male students, reflecting a notable majority, while 39% were female students. This gender distribution indicates a relatively balanced participation, although with a higher representation of male students. The data collected from this diverse group of students offers valuable insights into the gender dynamics and overall perspectives regarding entrepreneurial intentions within the university context.

To justify using the above context is due to fact that faculty of management sciences at Ahmadu Bello University, Zaria is a suitable source of participants for study on start-up intentions, because it has a large population of students who are potential entrepreneurs and are likely to have intentions to start their own businesses. Students in this faculty are exposed to various business and management courses, which may inspire and equip them with the necessary skills and knowledge to consider starting their own ventures.

The study utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze data from 364 respondents. PLS-SEM allowed for the assessment of both the measurement model, ensuring reliability and validity of constructs, and the structural model, evaluating hypothesized relationships. The path model assessment examined the links between intellectual capital components and entrepreneurial intentions. This approach provided insights into the direct and indirect effects of intellectual capital on the entrepreneurial intentions of Nigerian university students.

Table 1: Internal Consistency

Items	Loadings	CR	AVE
FC1	0.723	**0.887**	**0.57**
FC2	0.762		
FC4	0.626		
FC5	0.899		
FC7	0.669		
FC8	0.818		
KS1	0.899	**0.888**	**0.508**
KS2	0.564		
KS3	0.817		
KS4	0.829		
KS5	0.792		
KS6	0.576		
KS7	0.555		
KS8	0.565		
NT1	0.732	**0.905**	**0.707**
NT2	0.919		
NT3	0.845		
NT4	0.856		
OPP1	0.920	**0.904**	**0.808**
OPP2	0.877		

OPP3	0.865		
OPP4	0.932		
STI1	0.567	**0.887**	**0.572**
STI2	0.888		
STI3	0.823		
STI4	0.800		
STI5	0.728		
STI6	0.690		

The internal consistency of the constructs in the study was assessed using Composite Reliability (CR) and Average Variance Extracted (AVE). For Financial Capital (FC), the CR was 0.887 and the AVE was 0.57, with item loadings ranging from 0.626 to 0.899, indicating a strong internal consistency. Knowledge and Skills (KS) had a CR of 0.888 and an AVE of 0.508, with loadings between 0.555 and 0.899, showing satisfactory internal consistency despite some lower loadings. Networking (NT) demonstrated excellent internal consistency with a CR of 0.905 and an AVE of 0.707, with item loadings from 0.732 to 0.919. Opportunities (OPP) also showed high internal consistency, with a CR of 0.904 and an AVE of 0.808, and loadings from 0.865 to 0.932. Lastly, Start-Up Intentions (STI) had a CR of 0.887 and an AVE of 0.572, with item loadings ranging from 0.567 to 0.888. These results indicate that the constructs used in the study are reliable and valid, supporting the robustness of the measurement model.

Discriminant Validity of the constructs

Discriminant validity ensures that constructs are empirically distinct from one another, and one reliable method to assess this is the Heterotrait-Monotrait (HTMT) ratio of correlations. In this study, all constructs—Financial Capital (FC), Knowledge and Skills (KS), Networking (NT), Opportunities (OPP), and Start-Up Intentions (STI)—exhibited HTMT values below the threshold of 0.85. This indicates strong discriminant validity, affirming that each construct is measuring a unique dimension of the entrepreneurial process without significant overlap. This validation is crucial as it supports the integrity of the study's findings, demonstrating that intellectual capital, moderated by financial capital, distinctively influences entrepreneurial intentions among Nigerian youth. This robustness in measurement strengthens the study’s conclusions and underscores the importance of these distinct constructs in understanding entrepreneurial dynamics. Below is the result of HTMT.

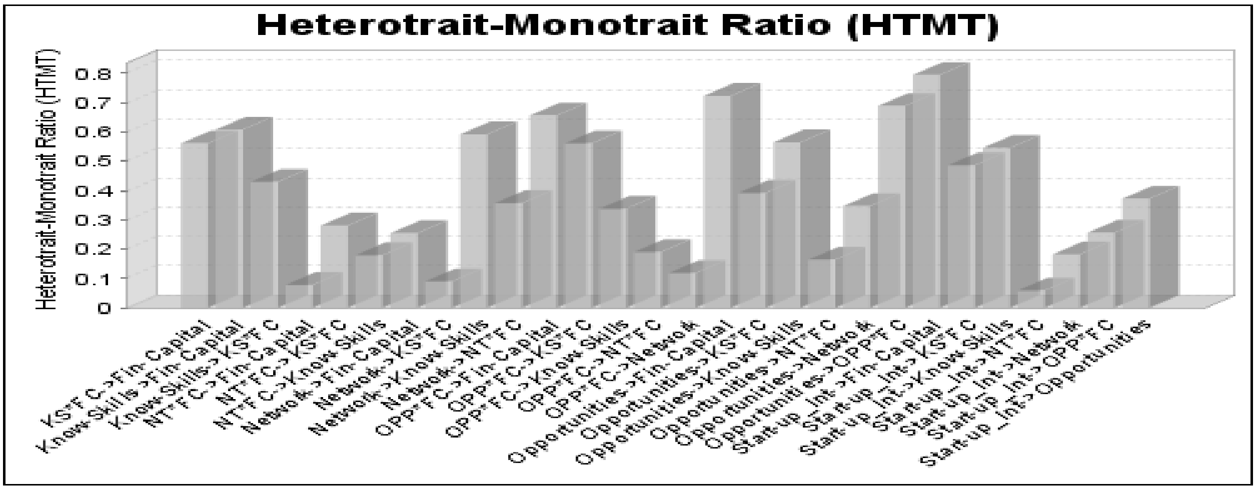

Figure 2 HTMT

Assessment of Structural Model

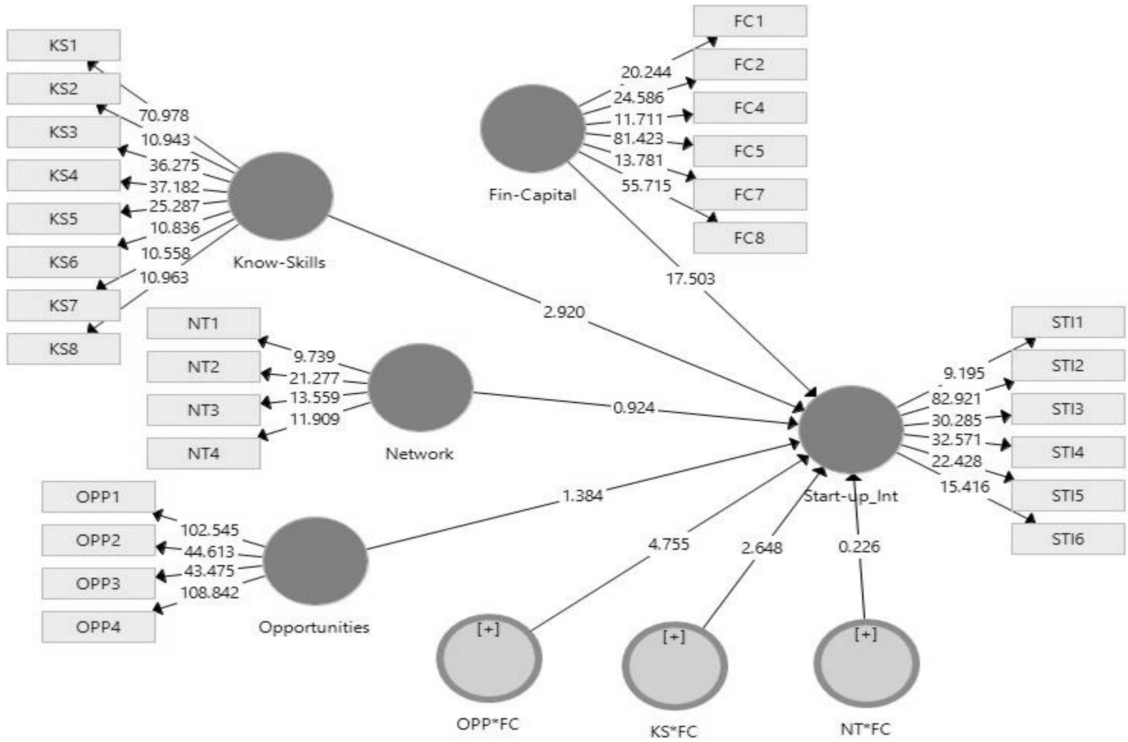

Figure 3, Structural Model

Table 2: Test of Hypotheses

	Beta	Sample Mean	Stand. Dev	T Statistics	P Values	Decision
Know-Skills -> Start-up_Int	0.110	0.109	0.038	2.920	0.005	Supported
Opportunities -> Start-up_Int	0.063	0.065	0.046	1.384	0.137	Not Supported
Network -> Start-up_Int	0.025	0.021	0.027	0.924	0.369	Not Supported
KS*FC -> Start-up_Int	0.146	0.153	0.055	2.648	0.004	Supported
OPP*FC -> Start-up_Int	0.239	0.239	0.050	4.755	0.000	Supported
NT*FC -> Start-up_Int	0.009	0.005	0.039	0.226	0.827	Not Supported

In the context of the study conducted in Nigeria, which focused on the influence of intellectual capital (IC) on entrepreneurial intentions among final year students in the Faculty of Management Science at Ahmadu Bello University, Zaria, several key findings emerged.
Firstly, the components of intellectual capital, namely knowledge and skills, entrepreneurial opportunities, and the network, were found to have a positive and impact on entrepreneurial intentions. Knowledge and skill is positive and significant, network and entrepreneurial opportunities on start-up intention. This suggests that individuals who possess relevant knowledge and skills, identify attractive entrepreneurial opportunities, and have access to a supportive network are more likely to have strong intentions to engage in entrepreneurial activities. This finding aligns with previous research highlighting the importance of intellectual capital in driving entrepreneurial behavior and venture creation.

Furthermore, the study explored the moderating role of financial capital in the relationship between knowledge and skills and entrepreneurial opportunities. The results revealed that financial capital has a positive and significant moderating effect on this relationship. This implies that the presence of financial resources can enhance the link between entrepreneurial opportunities and the network. It suggests that access to financial capital can facilitate the exploitation of entrepreneurial opportunities and the utilization of networks to a greater extent, potentially leading to increased startup intentions.

However, when examining the moderation of financial capital on the relationship between network and entrepreneurial intentions, the results showed a positive but insignificant effect. This suggests that financial capital may not significantly moderate the relationship between knowledge and skills and startup intentions in the given context. Other factors or resources may play a more prominent role in shaping this relationship among graduate students. The findings emphasize the significance of intellectual capital in driving startup intentions among Nigerian youth. The possession of relevant knowledge and skills, the identification of viable entrepreneurial opportunities, and the access to supportive networks are crucial for fostering entrepreneurial intentions. Additionally, the study highlights the importance of financial capital as a moderator, suggesting that adequate financial resources can enhance the relationship between entrepreneurial opportunities and the network.

Discussion

The study conducted in Nigeria highlights the critical role of intellectual capital (IC) components—knowledge and skills, entrepreneurial opportunities, and networks—in shaping entrepreneurial intentions among final year students. The positive and significant impact of knowledge and skills on entrepreneurial intentions corroborates findings from prior studies emphasizing the importance of human capital in entrepreneurship (Mahmood et al., 2018; Yousafzai et al., 2016). Similarly, the significant effect of networks on entrepreneurial intentions underscores the importance of relational capital, as robust networks provide entrepreneurs with valuable resources, information, and support necessary for venture creation (Franco et al., 2023). The recognition of entrepreneurial opportunities further aligns with the notion that identifying and leveraging market gaps is pivotal for entrepreneurial success, as demonstrated in cross-cultural studies (Leitão et al., 2015). These findings collectively suggest that intellectual capital is integral to fostering entrepreneurial intentions, particularly in contexts where students are transitioning into the entrepreneurial ecosystem.

The study's exploration of the moderating role of financial capital yields nuanced insights. The significant moderating effect of financial capital on the relationship between entrepreneurial opportunities and the network indicates that financial resources amplify the capacity to exploit identified opportunities and utilize networks effectively, supporting the Resource-Based View (RBV) theory (Rehman et al., 2023). This suggests that when financial capital is accessible, it acts as a catalyst, enabling students to transform their entrepreneurial aspirations into tangible actions. However, the insignificant moderating effect of financial capital on the relationship between networks and entrepreneurial intentions suggests that other factors may be more influential in this context. This aligns with recent literature suggesting that while financial capital is crucial, other forms of support, such as mentorship and experiential learning, may also significantly impact entrepreneurial intentions (Modaffari et al., 2023). Thus, for Nigerian students, enhancing entrepreneurial education and providing non-financial resources could be as important as financial support in fostering entrepreneurial activity.

These insights provide valuable implications for policymakers, educators, and practitioners in Nigeria. Efforts should be directed towards promoting the development of knowledge and skills relevant and creating an enabling environment for identifying and pursuing entrepreneurial opportunities, and facilitating access to financial resources to support entrepreneurial endeavors. Recognizing the role of intellectual capital and understanding its impact on entrepreneurial intentions, stakeholders can better support youth engagement in graduate students on entrepreneurship and contribute to economic growth and development in the regions.

Conclusion and Recommendations

Based on the findings of the study, which examined the influence of intellectual capital on entrepreneurial intentions among Nigerian youth, several conclusions can be drawn. The components of intellectual capital, including knowledge and skills, entrepreneurial opportunities, and the network, were found to have a positive and significant impact on entrepreneurial intentions. However, the moderation of financial capital was found to have a positive and significant moderating effect only on the relationship between entrepreneurial opportunities and the network, while the relationship between knowledge and skills and entrepreneurial intentions was positive but insignificant.

These findings indicate the importance of intellectual capital in shaping entrepreneurial intentions among Nigerian youth. The possession of knowledge and skills, access to entrepreneurial opportunities, and a strong network can significantly influence individuals' intentions to start and develop new ventures in Nigeria. Based on these conclusions, several recommendations can be made:

1. It is crucial to invest in programs and initiatives that enhance the knowledge and skills of aspiring young entrepreneurs. Providing training, workshops, and educational resources can help individuals acquire the necessary competencies and expertise to pursue entrepreneurial opportunities effectively.
2. Efforts should be made to create an environment that supports and promotes entrepreneurial opportunities in the different sectors in Nigeria. This can involve collaboration with government agencies, industry associations, and other relevant stakeholders to identify and develop viable opportunities, provide access to resources and funding, and reduce barriers to entry.
3. Encouraging the formation of networks and fostering collaboration among youth entrepreneurs can be beneficial. Facilitating platforms for networking, mentorship, and knowledge-sharing can help individuals expand their social capital and access valuable resources, such as information, expertise, and partnerships.
4. Recognizing the moderating role of financial capital, it is essential to provide adequate financial support and resources to aspiring young entrepreneurs. This can include access to microfinance, grants, loans, and other funding mechanisms that enable individuals to overcome financial constraints and implement their entrepreneurial ideas.
5. Policymakers and institutions should create an enabling environment for entrepreneurship in the Nigeria. This involves implementing supportive policies, regulations, and incentives that encourage innovation, investment, and growth in the sector. Additionally, establishing entrepreneurship support centers or incubators can provide guidance, mentorship, and resources to aspiring young entrepreneurs. Stakeholders can foster an entrepreneurial ecosystem that leverages intellectual capital and supports the intentions and actions of youth in Nigeria, ultimately contributing to the growth and development of business sectors.

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TOWARDS A DETERMINATION OF THE BEARING OF CONTACT WITH REVENUE AUTHORITIES ON TAX COMPLIANCE IN SOUTH-SOUTH NIGERIA

[1]Dr Perelayefa George Owota & [2]Prof. Stanley Ogoun

[1]Department of Accounting, Faculty of Management Sciences, Niger Delta University, Wilberforce Island, Bayelsa State.
[2]Department of Accounting, Faculty of Management Sciences, Niger Delta University, Wilberforce Island, Bayelsa State
[1]georgeowota@ndu.edu.ng, owotageorge@gmail.com
[2]stanleyogoun@ndu.edu.ng, stanleyogoun@gmail.com
[1]**07032267951,** [2]**08033391043**

Abstract

This research looked at the bearing of contact with revenue authorities on tax compliance rate amongst eligible tax payers in Nigeria's six south-south geopolitical delineation. This is anchored on the renewed push for public revenue through the taxation tool, as efforts are gaining traction in widening the tax net. Relying on the survey research model, primary data were obtained via a structured questionnaire from a pool of sampled eligible tax payers in the delineated study zone. The data were analysed descriptively and inferentially using the Pearson correlation and analysis of variance via the Statistical Package for Social Sciences (SPSS) version 25. The descriptive and inferential analysis showed that taxpayers who had contacts with revenue authorities are likely to have a good tax compliance attitude. Since taxpayers' interactions with revenue authorities impact their view of the tax system, which in turn influence their compliance decision, efforts should be made by the tax authority to ensure that its staff act more responsible, improve service delivery to customers and provide taxpayers with the needed support.

Key Words: Contact, Compliance, Revenue Authority, Tax

Introduction

Over time, governments throughout the globe have come to recognise taxes as their main domestic income source. Taxation has a rich pedigree as being the prime source of domestic public revenue. Developing nations have weaved a complex framework of tax policies and administration designed to cover all eligible taxable individuals and corporate bodies (Gelawu, 2019). The interlock between taxation and public revenue generation is so integrated in some nations that tax evasion or avoidance is weighted as criminality. However, natural benevolence has conferred rich resource endowment for some countries, thus diminishing reliance on the taxation tool for accumulating public revenue. Furthermore, given that the tax revenue pool criterion is tied exclusively to the volume of earnings for both individuals and corporations, the prevalence of economic poverty implies a drained pool for taxable funds. This was asserted to by Cobham, (2005) and Gelawu, (2019) when they reported that economically behind countries, generate little cash domestically~~,~~ thus increasingly dependent on foreign funding to support their budgets. After the oil boom weakened the colonially inherited tax structure, Nigeria, like other developing nations, is struggling to produce enough domestic revenue to sustain economic progress (Ogoun, 2014).

The worldwide drop in the price of crude oil (leading to a massive decline in oil bearing export earnings), coupled with rising government spending and the responsibility of repaying or servicing debt, has put pressure on the Nigerian state to maximise and secure domestic income via taxes. This has cascaded down the three tiers of governance in the Nigerian state. This happenchance has triggered a frenzy of efforts towards repositioning taxation as the prime driver of public revenue.

One of the numerous variables influencing the amount of revenue taxes produce is the willingness of taxpayers to comply with the country's tax regulations. Establishing a fair tax structure would boost investment, generate wealth and provide an environment that is more conducive to business (Oji, 2020). Contrarily, a complicated tax structure makes compliance and administration more expensive and promotes tax evasion. A widened tax net or public acceptance and honouring of tax laws is the critical benefactor for high tax yield (Cobham, 2005).

From a historical standpoint, the unexpected influx of crude oil resulted in serious methodological constriction and neglect of the Nigerian tax system (Ogoun, 2014). Ogoun (2014) noted that this deliberate disregard destroyed the tax system, which dishonest and opportunistic tax officials exploited for their benefit, which orchestrated public distrust in the tax system. A system of various levies that severely damaged residents' mental health was also sparked. As a result, the compliance rate declined. Taxpayers' non-compliant activity may be seen as a socially damaging problem that weakens a state's stability, distorts the employment market and feeds the appearance of dishonesty and fraud (Desta, 2010; Gelawu, 2019). Tax compliance may be enhanced if the reasons for non-compliance are identified and addressed. The foregoing implies that relevant tax authorities must understand the motivations underlying taxpayers' acts of tax evasion and non-compliance.

Contact with revenue officials may have a big impact on taxpayers' compliance attitudes, according to research. In particular, Feld and Frey (2010), Braithwaite (2003), Kirchler et al. (2008), Alm and Torgler (2011), and Gangl et al. (2013) discovered a connection between taxpayers' tax-compliance behaviour and their perception of the support services offered by revenue authorities. Furthermore, research by Smith et al. (2018) found that taxpayer compliance rates were much higher when there was more interaction with revenue authorities, such as via personalised letters or phone calls. According to different research by Hesami, et al. (2023), the kind of interaction also matters, with in-person encounters having a higher effect on compliance than impersonal correspondence like emails. These studies provide compelling evidence that taxpayers' compliance behaviour may be influenced by their interactions with revenue authorities. However, these studies were based on other climes that are not homogeneous with the focal area of the study. Furthermore, being the oil revenue base of the country and its associated agitations of resource control, the question of a determination tax compliance in the region becomes imperative. Thus, the study examined how taxpayers' interactions with revenue authorities affect compliance amongst eligible taxable residents of the south-south states in Nigeria.

Literature Review

Tax Compliance

Tax compliance refers to taxpayers' strict adherence to tax authorities' legal responsibilities, which include precise income reporting, punctual tax return submission and prompt payment of owed taxes (Alm, 2023). Gaining insight into the patterns of behaviour related to tax compliance, specifically in Nigeria, is essential for improving tax revenue collection and mitigating instances of tax evasion. This conceptual framework aims to investigate the intricacies of tax compliance, tax compliance behaviour, tax evasion, and the influence of interactions with key tax agencies in the Nigerian environment.

Several variables impact tax compliance in Nigeria, such as the perceived equity of the tax system, the intricacy of tax legislation, and the effectiveness of tax administration. Studies suggest that individuals are more inclined to willingly adhere to their tax obligations when they consider the tax system to be just and impartial (Torgler, 2023). In Nigeria, measures to improve compliance have involved streamlining tax procedures and intensifying taxpayer education to ensure that residents are well aware of their tax responsibilities (Odusola, 2006).

Tax compliance behaviour refers to taxpayers' actions and decisions in relation to their tax obligations (James & Alley, 2004). Several economic, psychological and social aspects impact it. The economic approach underscores the assessment of costs and benefits by taxpayers, considering the probability of detection and the severity of penalties (Allingham & Sandmo, 2002). Psychological variables encompass individual attitudes, perceptions of the fairness of the tax system and personal ethical principles (Kirchler, 2007; Luttmer & Singhal, 2014). External factors, such as prevailing social norms and the behaviour of one's peers, have a significant impact on individuals' compliance with tax regulations (Frey & Torgler, 2007).

Trust in government, the perceived allocation of tax funds and cultural attitudes towards taxes are significant elements that strongly impact compliance behaviour in Nigeria (Alabede, 2012). Research suggests that taxpayers' inclination to adhere to tax regulations increases when they have confidence in the allocation of their taxes towards public goods and services (Fagbemi et al., 2023).

Tax Evasion

Tax evasion is the unlawful act of avoiding tax payments by deliberately misrepresenting income, exaggerating deductions, or concealing funds and interest in offshore accounts (Allingham & Sandmo, 2002). Tax evasion is a major concern for tax authorities because it has a negative impact on the integrity of the tax system and reduces government revenue. Various factors, such as the perceived equity of the tax system, the intricacy of tax legislation and the efficacy of enforcement mechanisms, can impact the inclination to engage in tax evasion (Allingham & Sandmo, 2002).

Tax evasion is a notable problem in Nigeria, frequently motivated by the perceived ineffectiveness and corruption within the tax administration system (Owolabi & Okwu, 2023). The problem is worsened by the absence of strict enforcement measures and the perception that the chance of being detected is minimal. Individuals assess the possible advantages of dodging taxes against the possibility of discovery and the severity of penalties, according to the economic model of tax evasion (Allingham & Sandmo, 2002; Becker, 1968).

Contact with Revenue authorities

Contact with the revenue authority encompasses all instances of taxpayers engaging with government institutions tasked with tax collection. Examples of such services may encompass obtaining counsel on tax legislation, soliciting aid in completing tax forms or settling conflicts and queries pertaining to the tax framework. Efficient communication and prompt replies from revenue authorities are crucial for ensuring that taxpayers comprehend their rights and responsibilities and can successfully navigate the intricate tax environment (Sebele-Mpofu & Chinoda, 2019). Moreover, it is imperative for revenue authorities to ensure the provision of unambiguous and precise information, refraining from using complex terminology that might potentially perplex or exasperate taxpayers. In general, the absence of unambiguous and consistent information from revenue authorities might impede taxpayers' capacity to execute their duties with accuracy and efficiency.

Contact with the appropriate tax authorities is critical for influencing tax compliance behaviour. Improved communication and engagement between taxpayers and tax authorities may bolster compliance by offering clear guidance on tax responsibilities and simplifying tax procedures. When people see tax authorities as sympathetic and helpful, their likelihood of voluntary compliance increases (Feld & Frey, 2010). In contrast, hostile and punitive exchanges might result in heightened efforts to avoid and oppose conformity (Murphy, 2010). The relationship between taxpayers, the Federal Inland Revenue Service (FIRS) and other tax agencies in Nigeria is of utmost importance. The tax authorities' effective communication, transparency and responsiveness can significantly influence compliance rates.

According to research, taxpayers are more capable of meeting their tax responsibilities when tax authorities provide them with prompt and precise information (Luttmer & Singhal, 2014; Harb, et al., 2023). Ineffective and overly complicated procedures, on the other hand, might result in annoyance and a higher rate of failure to follow the rules. For example, extended periods of waiting and ambiguous answers might demotivate taxpayers from requesting essential assistance (Manasseh, et al., 2023).

Theoretical Premise

Theoretical frameworks used to understand tax compliance and evasion may incorporate many ideas. The deterrence theory posits that individuals primarily adhere to rules and regulations due to their apprehension of detection and potential punishment (Becker, 1968). According to this argument, increasing the likelihood of audits and the magnitude of fines should help to reduce tax evasion. Nevertheless, empirical data indicates that relying just on deterrence is inadequate, as a significant number of taxpayers adhere to tax regulations because of their inherent incentives and societal conventions (Alm & Torgler, 2023).

The Theory of Planned Behaviour (TPB) asserts that attitudes towards compliance, perceived subjective standards and perceived behavioural control influence taxpayers' intentions to comply (Ajzen, 2023). This approach emphasises the significance of psychological and social elements in influencing compliance behaviour.

Hypothesis Development

Ensuring tax compliance is of utmost importance for the economic progress of Nigeria, as it directly impacts the country's capacity to finance public services and infrastructure. Several studies have investigated different factors and impacts on Nigeria's tax compliance; however, there are still important gaps that require further investigation. This review consolidates current empirical investigations to identify these deficiencies and propose avenues for further research.

Braithwaite (2003) and Alm, Jackson, and McKee (2010) highlighted the importance of enforcement and responsive regulation in ensuring compliance. Alm et al. (2010) emphasised the need for sharing enforcement information to discourage non-compliance. These studies emphasise the need for a proactive and communicative tax administration. Nevertheless, further focused study is required to identify the precise obstacles and approaches necessary for successful implementation of law enforcement in Nigeria's distinct socio-economic environment.

Alabede (2012) conducted a study to examine the factors that affect tax compliance among Nigerian taxpayers. The study considered variables such as the quality of public services, the variety of the population, the financial position, and the tolerance for risk. The study gathered data from taxpayers in Nigeria's Federal Capital Territory through the utilisation of a multi-stage cluster random sampling approach. According to Alabede (2012), a multiple regression study found that taxpayers' compliance behaviour is highly influenced by their evaluations of public governance quality and tax services. This foundational study laid the groundwork for understanding the complex interplay of various factors influencing compliance but did not delve deeply into the role of socio-cultural factors and their impact on taxpayer behaviour.

Atawodi and Ojeka (2012) investigated the factors that influence tax compliance among small and medium-sized enterprises (SMEs) in the north-central region of Nigeria. Their survey revealed that the main causes of non-compliance were elevated tax rates and intricate filing procedures. Additional considerations were the issue of double taxation and a lack of proper knowledge. Atawodi and Ojeka (2012) suggested that small and medium-sized enterprises (SMEs) should be granted lower tax rates in order to improve their chances of development and survival in a competitive market. However, the study primarily offers a descriptive analysis without providing in-depth solutions or exploring the potential benefits of technological interventions in easing compliance burdens.

In 2014, Gangl, Torgler, Kirchler, and Hofmann performed a field experiment to evaluate how tax authority monitoring affects the promptness of tax payments. Through the examination of a subset of 93 businesses chosen from a total of 1,721 companies founded in 2011, the regression analysis revealed that the supervision of tax authorities did not have a significant impact on enhancing timely tax payments This counterintuitive finding suggests that enforcement strategies need to be carefully calibrated to avoid diminishing returns. The study's findings are based on European data, and similar investigations in Nigeria could provide more relevant insights.

Ocheni (2015) investigated the factors that influence people' inclination to adhere to tax legislation and the subsequent effects on the Nigerian economy. The study examined many characteristics, including government trustworthiness, infrastructure supply, government accountability, service delivery efficiency, income level, moral values, tax knowledge, tax rate, and payment systems, to compare attitudes in Kogi and Enugu states. Ocheni (2015) discovered that these factors have an impact on the inclination of taxpayers to contribute towards tax payments. Despite these insights, Ocheni’s work did not sufficiently address the psychological and ethical dimensions of tax compliance, which are vital for a comprehensive understanding of taxpayer behaviour.

Pukelienė and Kažemekaitytė (2016) conducted a study on the determinants of tax compliance in different European nations between 2003 and 2014. The researchers utilised data from research publications, Eurostat, and the World Bank to investigate the impact of tax morale, socio-cultural variables, and contacts between tax authorities and taxpayers on compliance. They employed an aggregated ordinary least squares model to analyse the data and concluded that these factors had a substantial influence on compliance. Nevertheless, the researchers observed substantial differences across various areas and highlighted that their analysis did not encompass additional factors that affect tax behaviour.

In their study, Puspita, Subroto, and Baridwan (2016) examined the impact of several aspects, such as tax fairness, knowledge, relief, preparedness, and service quality provided by tax officials, on tax compliance. Following a survey of 136 accounting and finance professionals in Malang and Batu, the researchers employed the partial least squares approach for data analysis. Their research showed that business tax compliance is influenced by factors such as tax relief, planning, knowledge, service quality, and perceived systemic fairness. Puspita et al. (2016) acknowledged that further indications would be necessary to properly substantiate their findings.

Abdu, Jibir, and Muhammad (2020) investigated the extent to which firms in Sub-Saharan Africa comply with tax regulations by analysing data from the World Bank's longitudinal business surveys. Their extended slippery slope framework demonstrated that the perceived authority of tax authorities had no substantial impact on the tax compliance of firms.

In their study, Susuawu et al. (2020) examined the influence of tax service quality on compliance behaviour among small and medium-sized enterprises (SMEs) by the use of a survey design and regression analysis. The researchers discovered that the factors of dependability, responsiveness, certainty, and empathy had a substantial impact on tax compliance. Susuawu et al. (2020) utilised Parasuraman et al.'s (1988) service quality metrics to offer suggestions for enhancing tax compliance via updated tax administration systems. The integration of digital tools and platforms could enhance these service quality dimensions, yet research on the implementation and effectiveness of such technologies in Nigeria remains sparse.

Abiola and Asiweh (2023) investigated the influence of tax administration techniques on Nigeria's tax compliance. They highlighted the need for an effective and open administration to promote a culture of adherence to tax regulations among taxpayers. Although this study provides useful insights, it primarily focuses on administrative efficiency and fails to adequately examine the complex relationships between tax authorities and taxpayers that could potentially influence this connection.

Adeyemi and Dada (2023) conducted a study to examine the factors that affect tax compliance among small and medium-sized enterprises (SMEs). They found that high tax rates and complicated filing procedures were major obstacles to compliance. Nevertheless, this research fails to thoroughly investigate the ways in which certain administrative processes or taxpayer services may effectively reduce these compliance costs, resulting in a lack of comprehension about the various tactics that tax authorities could use to alleviate them.

Akintoye and Olufemi (2023) examined the impact of individuals' opinions of tax justice on their compliance behaviour. Their research indicates that the perception of fairness can have a substantial impact on individuals' willingness to comply with certain behaviours. However, the study does not provide a comprehensive examination of the processes shaping these impressions or the ways tax authorities can effectively enhance them through their activities and communication techniques.

Alabi and Adegbola (2023) examined the impact of tax authorities on promoting voluntary compliance. Although they emphasised the significance of service quality, their research does not thoroughly investigate the precise tactics that tax authorities might employ to cultivate confidence and encourage voluntary compliance among various groups of taxpayers. Balogun and Akinyemi (2023) conducted a study investigating the correlation between tax morale and compliance, proposing that stronger tax morale is associated with improved compliance. However, the study does not delve into how specific administrative procedures or regulations can promote tax morale.

Mohammed and Ibrahim (2023) evaluated the efficacy of communication tactics employed by tax officials. Their study emphasizes the importance of efficient communication, but it lacks a comprehensive examination of the specific communication methods and messages that are most effective across various taxpayer groups.

However, it is important to note that the existing research on the impact of contact with revenue authorities has some limitations. Many of the studies are based on self-reported data, which may be subject to bias. Additionally, the studies primarily focus on compliance rates without fully exploring the underlying reasons for these behavioural changes. Future research could address these limitations by utilizing more objective measures of compliance (such as, implementing digital tools and platforms and training for revenue officers to provide courteous and constructive encounters) and conducting qualitative interviews to gain a deeper understanding of taxpayers' experiences with contact. Hence, the hypothesized :

Ho: Taxpayers’ tax compliance rate is not significantly influenced by their contact with revenue authorities in South-South Nigeria.

Materials and Methods

The study adopts the survey research design. The choice is influenced by the ontological and epistemology underpinning of what has been observed and it is a method used by prior studies in the literature. The research population consist of all individuals from the age of 15 to 64 who are willing and able to work regardless of whether they have jobs or not. According to the Labour force statistics for 2022, the total working population in Nigeria’s six south-south states is 13,929,527 (NBS,2022). 384 respondents were selected as sample using the Krejcie and Morgan sample size determination table. In addition, the Bowley proportion allocation technique was employed to generate the sample for each of the six south-south states, and the purposive sample technique was used to collect the sample subjects from each of them. Therefore, 70 respondents were drawn from Akwa Ibom State, 28 from Bayelsa State, 54 from Cross River State, 69 from Delta State, 55 from Edo, and 108 from Rivers State

A structured primary data obtaining instrument framed on the Likert Scale was deployed. Consequently, the research instrument was subject to both face validity and construct validity by subjecting the measurement instrument (questionnaire) to the approval of the professionals in the field. In calculating the internal consistency of the research, the Cronbach alpha (α) reliability coefficient established by Nunnally (1978) was relied on. The questions were adapted from those of kirchler et al., (2008) and Alm and Torgler (2011).

Results and Discussion

The total number of questionnaires distributed, completed, and retrieved from the survey is shown in Table 1. The six states that were surveyed had a positive reaction overall. Akwa Ibom, Bayelsa, Cross River, Delta, Edo, and Rivers had response rates of 93 per cent, 89 per cent, 83 per cent, 87 per cent, 82 per cent, and 83 per cent, respectively. Three hundred and thirty (330) copies of the questionnaire were recovered from the total of 384 distributed. It represents 86% of the total population and is used to create the study's sample.

Table 1: Descriptive Statistics showing the responses of taxpayers on Tax Compliance behaviour

		N	Minimum	Maximum	Mean		Std. Deviation
		Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
1.	It is unethical for a person to fail to report any of their earnings to avoid paying tax.	330	1.00	5.00	3.1818	.05619	1.29115
2.	We cannot blame taxpayers that fail to pay tax and fees to the government.	330	1.00	5.00	3.1515	.06125	1.40741
3.	Since taxes are so heavy, it is understandable that people want to limit their tax payments to live.	330	1.00	5.00	3.6818	.05096	1.17092
4.	If you had the opportunity, you would lie on your taxes.	330	1.00	5.00	3.1212	.05227	1.20108
5.	You will gladly pay taxes if they are not enforced.	330	1.00	5.00	3.2273	.05132	1.17914
6.	You would not disclose it if you doubted whether you would declare a particular source of revenue.	330	1.00	5.00	3.3030	.05085	1.16846
7.	You would pay no tax if you knew you would not be fined if you did.	330	1.00	5.00	3.3636	.04893	1.12432
8.	Even though the majority of the taxes collected is spent responsibly, tax avoidance is ethical.	330	1.00	5.00	2.6061	.06247	1.43556
9.	If the risk of being caught is minimal, tax avoidance is ethical.	330	1.00	5.00	2.3636	.05123	1.17709
10.	If everybody is doing it, tax avoidance is ethical.	330	1.00	5.00	2.5758	.05925	1.36156
11.	Even though a substantial part of the revenue raised is spent on worthwhile programs, tax avoidance is ethical.	330	1.00	5.00	2.4091	.05873	1.34942
12.	Tax avoidance is ethical if a significant amount of the funds raised is invested in non-profit projects.	330	1.00	5.00	2.6364	.05342	1.22759
Valid N (listwise)		330					

Source: Field Survey, 2024

The mean and standard deviation utilized to summaries the answers of taxpayers' tax compliance behaviour in Nigeria's six south-south states are shown in table 1. On a 5-point Likert scale, the mean ratings of the analytical findings vary from 2.36 to 3.68, with standard deviations ranging from 1.12 to 1.44. Because the standard deviation is minimal compared to the mean values, it is apparent that data points are near to the means, and therefore the computed means accurately reflect the observed data (Saunders et al., 2012; Field, 2006). The average level of tax compliance among taxpayers in Nigeria's south-south area is shallow. For example, the most robust agreement in terms of mean score of 3.68 and standard deviation of 1.17 is that taxes are too heavy and it is understandable that people want to limit their tax payment in other to live. In other words, respondents feel that the taxes imposed on them is too high in light of the present economic reality. The justification for not compliance is to survive. The second strongest agreement regarding the mean score (3.36) and standard deviation (1.12) is that respondents would pay no tax if they knew that there are no penalties and fines for tax non-compliance.

Respondents strongly agreed that they would not blame taxpayers who fail to pay taxes and fees to the government (3.15, 1.41), reduced their tax payment in order to live (3.68, 1.17), lie on their taxes (3.12, 1.20), not report some of their income for taxation if in doubt (3.30, 1.17), and not pay taxes if they will not be fined for doing so (3.36, 1.12). Overall, respondents strongly believed that tax non-compliance is ethical (see questions 8-12 in table 1) even if the taxes collected are spent responsibly (2.61, 1.44).

Table 2: Descriptive Statistics for the Influence of Taxpayer's Contact with Revenue Authorities on Tax Compliance

	N	**Minimum**	**Maximum**	**Mean**		**Std. Deviation**
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
13. The number of tax office employees is not adequate for efficient service	330	1.00	5.00	3.1061	.05369	1.23367
14. The tax office is far away from my business center, and it leads to incurring additional costs.	330	1.00	5.00	2.9545	.05491	1.26169
15. The FIRS is unable to keep up with technological advancements.	330	1.00	5.00	3.3939	.04907	1.12759
16. Faster response from revenue authorities will increase tax compliance	330	1.00	5.00	3.7273	.04259	.97864
17. A friendlier and helpful revenue department will increase tax compliance	330	1.00	5.00	3.3485	.05058	1.16225
18. The revenue department should service more like a commercial bank service and promote both tax obligations and tax allowances	330	1.00	5.00	3.5758	.04800	1.10284
19. Improve IT and increase the staff of the revenue department will increase tax compliance	330	1.00	5.00	3.5152	.05321	1.22271
20. Overall, contact with revenue authorities affects tax compliance behavior	330	1.00	5.00	3.3788	.04535	1.04204
Valid N (listwise)	330					

Source: Field Survey, 2024

Table 2 shows the descriptive results of the responses to the questions on the effect of taxpayers' interactions with revenue officials on tax compliance in Nigeria's six south-south states. On a 5-point Likert scale, with 1 indicating strong disagreement and 5 indicating strong agreement, the mean scores for all analytical results varied from 2.95 to 3.57, with standard deviations ranging from 0.98 to 1.26. Because the standard deviation is slight compared to the mean values, it is clear that the data points are close to the mean and the calculated means correctly represent the observed data. It indicates that the respondents agreed with all of the eight-question items. Including the number of employees working in the tax office not being enough for adequate service, the tax office is too far away from their business center and how this leads to additional costs, the tax office not being able to adapt to technological advancements and the need for faster response from the revenue department. In general, the respondents strongly agreed that contact with revenue authorities affects tax compliance behaviour (3.38, 1.04).

Table 3: Correlations

		TaxCom	Contact with Revenue Authority
TaxCom	Pearson Correlation	1	.980**
	Sig. (2-tailed)		.000
	N	330	330
Contact with Revenue Authority	Pearson Correlation	.980**	1
	Sig. (2-tailed)	.000	
	N	330	330

**. Correlation is significant at the 0.01 level (2-tailed).

The Pearson connection between the dependent variable (tax compliance behaviour – TaxCom) and the independent factor (contact with revenue officials) is shown in the table above. The Pearson correlation findings were used to determine the degree of connection between the dependent and independent variables; the correlation ranged from-1 (negative) to +1 (positive), with 0 (zero) correlation indicating no link (Field, 2006). The Pearson correlation results revealed that the Pearson (r) value is positive and closer to one (1). Contact with revenue authorities =.980, indicating that contact with revenue authorities is related to tax compliance behaviour. At $p < 0.001$, this relationship is statistically significant.

Test of Hypotheses

H_0: Taxpayers' tax compliance rate is not significantly influenced by their contact with revenue authorities in South-South Nigeria.

There is a positive and significant relationship between taxpayers' contact with revenue authorities and their attitude towards tax compliance, as shown in Table above ($r= .980$, p-value $= 0.000 < 0.05$). It indicates that as taxpayers' contact with revenue authorities increases, their attitude towards tax compliance increases. Therefore, the study rejects the null hypotheses (H_0) and accepts the alternative hypothesis (H_1), which states that: "*Taxpayers' stance on tax compliance is significantly influenced by their contact with revenue authorities in South-South Nigeria".*

The rejection of the null hypothesis (H_0) affirms that taxpayers' compliance rates are significantly influenced by their contact with revenue authorities. This finding underscores the importance of continuous interaction and collaboration in fostering a culture of compliance. It further supports the argument that noncompliance is not merely a function of deliberate evasion but can stem from a lack of understanding or perceived detachment from revenue authorities (Kirchler, 2007).

Discussion of Findings

The implications of these findings can be discussed from theoretical, practical and policy perspectives. Support for Psychological ideas of Tax Compliance: The strong association lends credence to ideas focusing on the psychological contract between taxpayers and authorities. Feld and Frey (2010) stated that tax compliance might be thought of as a psychological contract in which mutual respect and good interactions result in better compliance rates. This conclusion experimentally backs up their theoretical model, emphasising the relevance of relationship variables in tax compliance.

Validating the "Slippery Slope" Framework: Kirchler et al. (2008) proposed the "slippery slope" theory, which holds that trust and authority impact tax compliance. The considerable positive association suggests that regular contact increases trust, which improves compliance. This reinforces the framework's premise that trust is critical to guaranteeing compliance.

Braithwaite's (2003) idea of responsive regulation proposes that regulatory bodies communicate with regulatees in a responsive way in order to increase compliance. The data support this notion, indicating that frequent and favourable contacts between taxpayers and revenue authorities can lead to higher compliance outcomes.

To improve tax compliance, it is crucial to:

1. Develop effective communication strategies, such as creating regular and easily accessible means of taxpayer assistance, such as hotlines, online chat services, and face-to-face consultations (Alm. et al. 2010; Alabede, 2012; Gangl, et al., 2013).

2. Training for revenue officers is also essential to optimize taxpayer engagement and promote collaboration and trust. Providing courteous, enlightening, and constructive encounters can lead to higher compliance rates (Feld & Frey, 2010; Yahaya, et al., 2013).

3. Lastly, implementing digital tools and platforms can further enhance communication between revenue authorities and taxpayers. Online portals for tax inquiries, filing help, and real-time assistance can make the process more accessible and less daunting for taxpayers. This can lead to improved tax authority communication and better understanding of taxpayer issues (Awolowo & Lawal, 2023; Alm et al., 2010).

Finally**,** tax policies should prioritize support systems and involve taxpayers, promoting frequent communication between authorities and taxpayers (Braithwaite, 2003). Investing in infrastructure like digital platforms and local tax offices can boost compliance rates, especially in areas with lower compliance rates (Alm & Torgler, 2011). Educating the public about the value of compliance and the resources provided by authorities can dispel myths and anxieties, empowering taxpayers (Ajayi & Adebayo, 2023). Using behavioural understanding, policymakers can create initiatives that encourage positive interaction, such as personalized reminders and follow-ups, which can improve taxpayer involvement and compliance. By implementing methods informed by taxpayer behaviour, authorities can successfully encourage compliance and cultivate a positive attitude towards taxation (Kirchler et al., 2008).

Conclusion and Recommendations

The strong positive link between interacting with revenue officials and adhering to tax regulations highlights the significance of relational elements in ensuring tax compliance. Theoretical implications support and strengthen current psychological and regulatory ideas, while practical consequences propose measures to enhance relationships amongst taxpayers. The policy implications emphasise the necessity of establishing enabling infrastructure and implementing educational initiatives. In general, encouraging constructive and regular communication between taxpayers and revenue officials may significantly improve tax compliance behaviour.

The study has some limitations that readers should bear in mind when generalising the results of this study. Firstly, is the collection of data to populate the sample. The respondents were taxpayers drawn from the six south-south states in Nigeria. Secondly, the scope of the study is also a limitation as many determinants could affect taxpayers' stance on tax compliance. However, the study only examined taxpayers' contact with revenue authorities. Finally, the problem of sourcing for relevant secondary data, location of respondents from one south-south state to another, and distributing questionnaires at these states limit the latitude of the study. However, this was addressed with the help of research assistants who regularly visit participants to collect completed questionnaires.

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WORK FLEXIBILITY AND EMPLOYEES' PERFORMANCE IN HOSPITALITY INDUSTRY

[1]Muritala Arowolo ALAO

[1]Department of Business and Entrepreneurship, Kwara State University, Malete
[1]**muritala.arowolo@kwasu.edu.ng**
[1]**Orcid.org/0009-0001-9365-3611**
[1]**+2348060462126**

Abstract

The study looks into how work flexibility affects employee performance in selected hotels in Ilorin metropolis. The three selected hotels for the study are; Noktel Hotel and suite, G-Pinnacle hotels, Phoenix hotels, Ilorin. The goals of the study are to analyze the effects of part-time employment on worker output, the relationship between job sharing and employee job happiness, and the impact of part-time employment on employee job satisfaction. The goal of this study links increased flexibility in the work flexibility, the allocation of work hours, and the number of hours performed .This type of arrangement provides employees more discretion over how much work they choose to perform, where and when it gets done. As a result, there are more options for workers to strike the ideal balance between work, job sharing, productivity, and job happiness. This study examines the impact of job sharing and part-time working arrangements on employee satisfaction and productivity at the three selected hotels in Ilorin, Nigeria. The study employed a closed-ended questionnaire to obtain data from 97 respondents and adopted the survey method (48 males and 49 females). Data was analysed using regression analysis through SPSS to test hypothesis. The results showed that effective flexible working arrangement has significant relationship with employees' performance. The finding however shows positive and strong relationship between the variables used to measure the two construct after the postulation of the two hypotheses which invariably declares that flexible working arrangement play significant role on employee performance.

Keywords: Hospitality, Job Satisfaction, Job Sharing, Part-time, Shift Work, Work Flexibility

Introduction

Major changes in the work flexibility and in the dynamic between businesses and employees took place in the 1980s and 1990s. Work flexibility is a manner of working that accommodates an employee's demands, for as allowing them to work from home or during specific hours. Anyone can request flexibility from their employment. Most developed nations have statutory laws that make it simpler for specific employees to adjust their working hours. Laws that permit changing working hours to attend training or hospitality events or to retire gradually are also widespread.

Most nations, including the UK, have regulations that are unique to workers who are caring for their dependent children or adults. This often takes the shape of part-time employment during parental leave in other nations, something UK parents are not permitted to do.Many nations also allow parents to work fewer hours after parental leave. In his 1996 book, historian Honeycutt outlines a significant historical development that took place in December 1930. The largest cereal producer in the world, the W.K. Kellogg Company, changed the standard of an 8-hour day split into three shifts to four 6-hour shifts in order to provide jobs for laid-off workers during the Great Depression. As employees worked more productively, employee morale grew, leading to more free time, fewer accidents, and a decrease in the cost per unit of production (Dlamini, et al., 2022). According to Natalia (2011), strategic responses to company needs led to the emergence of flexible working in the early 1980s (Herhausen et al., 2020). Regardless of their reasons for wanting a change, all employees have the right to alternative work arrangements in four different countries. With the exception of the Netherlands, these universal rights come in addition to those that provide for parental and professional work flexibility.

The difficulty of job flexibility is rising to the top of many employers' consciousness both within firms and at home. Many businesses now provide flexible work schedules to aid employees in juggling work and family obligations (Glansky, Bond & Sakai 2008). Human resource professionals look for ways to boost their organizations' bottom lines, boost employee happiness, retain employees who have vital company expertise, and keep up with work flexibility changes in today's fast-paced culture. Any work schedule that differs from the typical workweek is referred to as an alternative work schedule (Joseph, 2012).

Part-time, over-time long-term leaves, job sharing, flex time, and shift work are all examples of flexible working (Change and Tilden 2012).Additionally, he said that working time refers to the level of flexibility, gender equity, negotiating structure, and diversity of working time, and that all employees must be present at their places of employment within a certain amount of time. When this approach is used in an organization, employees can choose the best time to check in and out as long as allotted working hours for the day or the week are still met.
Previous research demonstrates that employees frequently have conflicts with their co-workers or employers, which has a negative impact on the organization's productivity. In their study, Sparks, Cooper, Fried, and Shiron (1997) give some evidence that people's health and job performance start to deteriorate when they spend too much time at work and too little time with their families.

In other cases, workers who put in long hours every day for a week, a month, or even a year think of themselves as hard workers. Their results diminish as time goes on, their jobs become less interesting, and they grow weary. They will subsequently lose their most beloved job as a result of these, and they will place the blame elsewhere. The goal of this study is to ascertain how work-life balance affects employees' productivity. Lack of work flexibility, intense work pressure, and long work hours may have a negative impact on an employee's contribution and performance at their place of employment because people who find it difficult to manage their personal and professional lives tend to find it difficult to manage tasks at work as well. This leads to poor employee performance.

Literature Review

Work Flexibility

In today's technologically advanced world, professionals and the younger generation have access to a broad array of opportunities in the labor market. To remain competitive, organizations must adapt by introducing modern work styles that offer more than just financial rewards. Flexible working arrangements not only help retain employees but also boost their motivation and productivity, thereby benefiting the organization as a whole (Origo

& Pagani, 2006). Conversely, rigid workplace practices risk losing talent in a dynamic and expanding labor market. Flexibility at work allows young professionals to achieve a balance between their careers and personal lives (Kompa, 2019), fostering greater employee engagement and enhancing overall organizational performance (Govender et al., 2018). The importance of such flexibility became even more evident during the COVID-19 pandemic, as social distancing measures accelerated the adoption of flexible work norms (Davidescu et al., 2020).

Work flexibility is believed to significantly reduce turnover rates and absenteeism, resulting in improved organizational performance and profitability (Asad, 2020). Closely linked to work flexibility, autonomy stands out as a critical factor influencing the quality of work life (Allam & Shaik, 2020). Moreover, work flexibility has become a central focus in human resource management and industrial sociology, emerging as a prominent subject in contemporary research due to its importance in modern work environments (Davidescu et al., 2020). Organizations that adopt work flexibility often implement various models tailored to their specific contexts (Dex&Scheibl, 2001).

Work flexibility refers to employees' ability to determine where, when, and how they manage their tasks (Rastogi et al., 2018). This concept aligns with employee empowerment, which has a substantial impact on organizational performance (Asad et al., 2021). Reilly (2001) identified five types of work flexibility from an employee perspective: temporal, numerical, financial, functional, and local. These categories provide a foundation for exploring work flexibility in research. Additionally, Origo and Pagani (2006) categorized work flexibility into two main types: qualitative flexibility, which focuses on work quality and skill content, and quantitative flexibility, which pertains to working hours and workforce size. Cășuneanu (2013) expanded on this by identifying four forms of work flexibility: contractual, working time, wage, and functional flexibility, all of which are valuable for research purposes. Furthermore, studies by Davidescu et al. (2020) and Roskams& Haynes (2020) utilized workspace flexibility to examine its relationship with job satisfaction, psychological comfort, enthusiasm, and productivity.

Employee Performance

According to Safitri and Lathifah (2019), employee success requires completing specific, well-defined tasks inside the company. These tasks will be evaluated in relation to well crafted goals and objectives. Armstrong (2020) defines employee performance management as an ongoing process that aims to improve performance through the development of employees' knowledge, skills, and abilities; the planning of performance to meet these objectives; the evaluation of progress; and the setting of individual and team goals that are in line with the organization's strategic goals. (Aidan, 2013; Armstrong, 2020) Productivity, efficiency, effectiveness, quality, and profitability are the main performance criteria. Employee performance demonstrated increased productivity through the best use of modern technology, made possible by highly engaged staff (Al-Omari et al., 2020). Managers set high standards for people to evaluate workers' performance in order to develop the company (Buchanan & Badham, 2020).

Performance is a well-established idea in the workplace, particularly in formal settings. Because human resources and people specialists are becoming increasingly concerned about the level of productivity that employees are producing as a result of inadequate compensation, employee performance has become increasingly critical. According to Charles and Anthony (2014), performance cannot be measured or managed if it cannot be defined

(Armstrong and Baron, 1998). This concept emphasises the need for certain criteria or standards to be measured in order to assess an employee's performance level. Performance is a multifaceted idea.

Performance, according to Charles and Anthony (2014), is a process that involves a number or sequence of behaviours aimed at achieving specific preset goals. Performances are the "accomplishment, execution, carrying out and working out of anything ordered or undertaken," according to the Oxford English Dictionary. Performance is defined as "the actions or manner of carrying out an activity, piece of work, etc. the ability of a person to do something well; behaviour" in the latest edition of the Longman's Dictionary of Contemporary English. In addition to referring to results or output (accomplishment), this also says that performance is about both the effort done and the outcome attained.

Irum et al., (2014) note that Yang's (2008) research on individual performance shown that it is impossible to verify an individual's performance. In a similar vein, he claims that if employee success is apparent, the company may utilise direct bonuses and prizes based on individual performance. Yang (2008) and Bishop (1987) looked into employee performance and found that employee productivity discrimination is influenced by the acknowledgement, reward, and acknowledgement of employees' performance.

Job Satisfaction

Farsole, (2023) describes job satisfaction as the emotional orientation employees hold toward their roles in the workplace. It is a critical factor for motivating and encouraging employees to achieve better performance. Over time, job satisfaction has been defined in various ways. Anton (2009) characterize it as a combination of psychological, physiological, and environmental factors that lead employees to perceive themselves as content or happy with their jobs. Moreover, the significance of employees' roles within the organization is highlighted, acknowledging the impact of various factors on their workplace experience.

De Clercq, & Belausteguigoitia, (2020) argues that employees who are dissatisfied with their tasks or workplace conditions—such as unclear rights, unsafe environments, uncooperative colleagues, disrespectful supervisors, or exclusion from decision-making are likely to feel disconnected from the organization. He further emphasizes that in today's competitive landscape, firms cannot afford to retain dissatisfied employees, as their subpar performance may lead to termination and incur additional costs for hiring replacements. To mitigate this, organizations should foster a flexible and inclusive work environment where employees feel valued and part of the team. High employee morale, reflected in improved performance, is essential, as low morale results in reduced efforts to excel.

Theoretical Review

Herzberg Theory

Motivation was interpreted differently by Herzberg et al., (1987). Since it divides the factors of motivation into two categories—the motivator factor (extreme factors) and the hygiene factor (intrinsic factors), their concept is now known as the Herzberg two-factor theory. While the latter, which includes compensation, promotions, and job security, frequently results in a lack of motivation on the side of employees, the former, which includes success and acknowledgement, promotes job happiness. Using the two motivating components, this study will also use Herberg's theory, which emphasises the impact of motivation on employee performance.

Tangible rewards including pay and benefits, job stability, promotions, contracts of service, and working conditions are all associated with extrinsic motivation. Individual managers may not have much control over such material benefits, which are frequently decided at the organisational level (Mullins 2005; referenced by Ukaejiofo 2013). Psychological benefits including the chance to apply one's skills, a sense of challenge and accomplishment, getting praise, positive acknowledgement, and being treated with consideration and care are all associated with intrinsic motivation.

According to Mullin (2005), psychological incentives are those that are often decided by the behaviours and actions of certain managers. It's possible that other academics criticised Herzberg's study. Friedlander and Margulies (1969), quoted by Mosammod& Nurul (2011), found that management and cordial staff relationships are what influence work happiness. Nonetheless, the degree of job satisfaction is influenced by this link between results. Nonetheless, this finding runs counter to Herzberg's (1966) assertion that work happiness is unaffected by supervision.

Empirical Analysis

According to Erkut and Siller (2014), flexible work arrangements have grown in popularity due to their positive impact on workers' quality of life. Due to the fact that businesses value their employees' personal lives more, the number of Turkish companies that promote flexible working models and assist workers in better balancing their personal and professional lives is growing. The development of flexible working techniques was also significantly influenced by changes in sectoral scope. For example, new work procedures that prioritise customer satisfaction and provide more flexible working techniques were brought about by the service sector's requirement to support long-term initiatives in the shipping, banking, communications, press, and oil industries. The impact of flexible work arrangements on worker performance is examined in this study. It was discovered that flexible work arrangements are quite valuable for enhancing and maintaining employee performance. Numerous flexible ways aspects, including as a job's appropriateness for flexibility, job loyalty, and attitude towards flexible working hours, have been found to have a direct impact on employee performance.

Anekwe (2019) carried out a research to look into the performance of employees at a few commercial banks in Anambra State and their flexible work arrangements. The design of the survey was descriptive. Using the Taro Yamani method, 186 respondents were selected as the sample size from the target population of 348 respondents. A systematic questionnaire was used to gather data. The instrument was validated using construct and content validity, and its reliability was tested using the Cronbach's alpha (α) statistical approach. Descriptive statistics were employed to analyse the data, and the hypotheses were tested using the Pearson product moment correlation coefficient. The findings showed a favourable and substantial correlation between flextime and employee happiness in the banking industry under study, as well as a statistically significant association between work sharing and employee commitment. According to the study's findings, flexible work arrangements promote mental and physical stability, lower stress levels, and increase productivity and effectiveness. Because flextime work arrangements boost employee performance, lower absenteeism, and raise employee happiness, the research advises managers to promote their use.

Flexible working arrangements (FWA) are crucial to work flexibility in the twenty-first century, according to Austin-Egole, Iheriohanma, and Nwokorie (2020). Employers struggle to find a work-life balance for their staff members that will allow them to minimise any related issues while maintaining productive and successful performance. Because flexibility has advantages for both employers and employees, many organisations provide flexible working arrangements to their staff. One of the most frequent advantages is significantly better organisational and personnel performance. Additionally, it promotes a healthy work-life balance, which lowers stress and improves employee wellness while also lowering absenteeism and staff turnover for the company. The purpose of this essay is to discuss the many types of flexible work arrangements, their general principles, and how they affect worker performance. The approach involves library research that includes a critical analysis of secondary sources. In order to support the assertion that the impacts of flexible work arrangements (FWAs) differ based on the primary beneficiary, it suggests that more research be done on the effects of employer-driven and employee-driven FWAs on organisational performance.

Materials and Methods

This study adopts quantitative method to assess the effect of work life balance on Employees' Performance in an organisation with special reference to the three selected Hotels and Suite in Ilorin metropolis.Survey method was usedwith the help of self-administered questionnaire to facilitate the study to establish the opinions, attitude, and characteristics of intended beneficiaries on the consequence of effect of work life balance on Employees' Performance in an organisation with special reference to the three selected Hotels and Suite in Ilorin metropolis. The research work specifically focused on the workers of the three selected Hotels and Suite in Ilorin metropolis estimated to be 187while the sample size of the study was determined using Taro Yamane sample size determination model and estimated to be 127. Simple random sampling technique was also used and instruments used for the Regression analysis was SPSS.

Test of Hypotheses and Results

Hypotheses 1

H_{01} There is no significant impact between part time work and employee productivity.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.638[a]	.407	.401	1.73433

a. Predictors: (constant), part time

Table 2: ANOVA[b]

Model	Sum of Square	df	Mean Square	F	Sig.
1 Regression	196.332	1	196.332	65.272	.000[a]
Residual	285.750	95	3.008		
Total	482.082	96			

a. Predictors: (constant), part time
b. Dependent Variable: employee productivity.

Interpretation and Decision

The model summary is 0.407 (4.07%). In the ANOVAa table above the fcal is 65.272 at 0.000 significant levels. The decision rule however states that the level of significance is 0.05 and at a state where $p \leq 0.05$ there will be needed for the rejection of null hypotheses and a necessary acceptance of alternative hypotheses. This however means that impact between part time and employee productivity as P=0.000 and it is lower than the set significant level (0.05) hence there will need to reject null hypothesis and embrace alternate hypothesis.

Table 3: Coefficients[a]

Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	7.247	1.044		6.941	.000
Part time	.226	.088	.258	2.585	.011

a. Dependent Variable: job satisfaction

The coefficient table above shows the simple model that expresses how part time work impact employee job satisfaction. The model is shown mathematically as "Y=a+bx" where "y" is job satisfaction and "x" is part time, a is a constant factor and "b" is the value of coefficient. From the table therefore, job satisfaction=7.247+0.226 part time. The coefficient table indicates the impacts of the part time work on employee job satisfaction where the beta value is 22.6% and the P value is 0.011 and this indicates that for a 100% change in job satisfaction, part time contributes or constitutes a 22.6% impact.

Decision

To decide however following the decision rule which states that p should be ≤ 0.005 for null hypothesis to be rejected and alternate to be accepted or vice-versa. Thus the decision would be alternate hypothesis (H_1).

Hypothesis 2

H_0 Job sharing and job satisfaction are not related to one another.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.446[a]	.199	.190	2.01642

a. Predictors: (constant), job sharing

Table 5: ANOVA[b]

Model	Sum of Square	Df	Mean Square	F	Sig.
1 Regression	95.817	1	95.817	23.566	.000[a]
Residual	386.266	95	4.066		
Total	482.082	96			

a. Predictors: (constant), job sharing
b. Dependent Variable: employee productivity.

Interpretation and decision

The model summary above shows the impact between job sharing work and employee productivity. In the ANOVAa table above the fcal is 23.566 at 0.000 significant levels. The decision rule however states that the level of significance is 0.05 and at a state where $p \leq 0.05$ there will be needed for the rejection of null hypotheses and a necessary acceptance of alternative hypotheses. This however means that impact between part time and employee productivity as P=0.000 and it is lower than the set significant level (0.05) hence there will need to reject null hypothesis and embrace alternate hypothesis.

Discussion of Results

This study examines the impact of flexible work on employee performance (case study of Kwara hotel Ilorin). The X construct is flexible work in which two variables were incorporated to demystify the concept of flexible work and it include part time work and job sharing while the Y construct is employee performance with two variable also which include employee productivities and job satisfaction. The study tend to know whether flexible working policy of Kwara hotel Ilorin and how this activity has marginalized the performance of employee. The finding however shows positive and strong linear relationship between the variables used to measure the two constructs after the postulation of the four hypotheses which invariably declare that flexible work plays significant role on employee performance .as from information gathered from the unstructured interview with the staffs of Kwara hotel Ilorin it was found out that the flexible working policies do not only enrich the organization productivity but also its positive impact is felt by all including Kwara hotel, customers and the entire society at large.

Conclusion

The study concluded that organizations are not looking into all areas of economy which can evenly generate societal benefits alongside organizational values whereby creating a hunger in the heart of employees to be entrepreneurial and forward looking that will create investible innovations with lasting positive impacts. It is however important to state that the concept of flexible working policies should be embraced by all sector of the economy, as benefits to be accrued has positive far reaching effects in individual self and organization actualization.

Recommendations

The study therefore recommended that Organization should engage their employees in flexible time in policy of employee working hours and also ensures that employees are provided with adequate and innovative resources available in identifying social/family issues procuring solutions in form of policies to meet this needs and as such ensure optimal job performance of employees in taking this into consideration managers and policy makers should also ensure that all the traditional policies should be dropped and rather the gather knowledge i.e. they should be up to date, to follow the trends they should also allow for subordinates participation in research/idea generation and also in decision making. Organization should also activate a culture of ethics within the organizations so as to channel the midst of employees towards proactive pursue of socio progress hereby maximizing positive imparts by using social/family challenges as a drive to innovation.

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ROLE OF EARNINGS MANAGEMENT IN THE FINANCIAL STABILITY OF NIGERIAN BANKS: A STUDY ON RETURN ON ASSETS (ROA), RETURN ON EQUITY (ROE), AND NON-PERFORMING LOANS (NPLS)

[1]Raliat Abdulshaheed-Tolani, [2]Sani Abdullahi & [3]Ahmed Idris Aliyu

[1,2,3]Department of Business Administration, Banking and Finance and Insurance
Ahmadu Bello University, Zaria
[1]raliatiyabo@gmail.com; [1]raliatiyabo@yahoo.com
[1]08023550827 [1]07040002700

Abstract

This study investigates the role of earnings management (EM) in the financial stability of Nigerian banks, focusing on key performance indicators such as Return on Assets (ROA), Return on Equity (ROE), and Non-Performing Loans (NPLs) over the period 2017-2022. Using regression analysis, the study reveals that EM has a significant positive impact on ROA and ROE, indicating that strategic earnings management can enhance profitability and asset utilization. Conversely, EM is found to have a significant negative relationship with NPLs, suggesting that effective earnings management practices can mitigate credit risk and improve loan quality. The findings revealed the importance of transparent and judicious earnings management in bolstering financial performance and stability in the banking sector. Practical implications include the need for enhanced regulatory oversight, targeted training programs for bank personnel, and investor education on the effects of earnings management. The study recommends that Banks should invest in training programs for their management and staff to enhance their understanding and execution of effective earnings management strategies. Such programs should focus on best practices in financial reporting, risk management, and ethical considerations in earnings management.

Introduction

The Nigerian banking sector has undergone significant transformations over the past few decades, influenced by regulatory reforms, technological advancements, and economic fluctuations. Despite these developments, the sector continues to face numerous challenges that threaten its stability and performance (Oriji, et al., 2023). Earnings management involves the deliberate manipulation of financial statements by company management to achieve desired financial outcomes (Baskaran, et al., 2020). In the banking sector, such practices can have profound implications on the financial stability and performance metrics, particularly in developing economies like Nigeria. This study focuses on how earnings management affects the financial stability of Nigerian banks, using key performance indicators such as Return on Assets (ROA), Return on Equity (ROE) (Gwatiringa, 2020), and Non-Performing Loans (NPLs) (Kumar, Hossain, & Islam, 2020).

One of the foremost challenges is the prevalence of non-performing loans (NPLs), which has been a persistent issue for Nigerian banks. High levels of NPLs erode the profitability of banks, constrain their lending capacity, and ultimately affect their overall financial health (Ofodile, et al., 2024). The inability to effectively manage credit risk and recover loans has led to substantial financial losses, necessitating stringent regulatory oversight and better risk management practices (Saleh, Afifa, & Haniah, 2020).

Regulatory compliance also poses a significant challenge as Nigerian banks are required to adhere to various regulations set by the Central Bank of Nigeria (CBN) and other financial authorities (Oguejiofor, et al., 2023). These regulations aim to ensure financial stability and protect depositors, but they also impose considerable administrative and operational burdens on banks. Compliance costs can be substantial, and failure to meet regulatory requirements can result in penalties and loss of reputation according to Nzeako, et al., (2024).

Furthermore, the Nigerian banking sector is grappling with issues related to technological advancements and cybersecurity. While technology has enabled banks to offer innovative products and services, it has also exposed them to cyber threats and operational risks (Ibekwe, 2021). Ensuring the security of digital transactions and safeguarding customer data are critical concerns that require significant investment in cybersecurity infrastructure and expertise (Akintoye, et al., 2022).

Another challenge is the intense competition within the banking sector as Nigerian banks face stiff competition not only from domestic banks but also from international financial institutions and fintech companies (Ozili, & Iorember, 2023). This competitive landscape compels banks to continually innovate and improve their service offerings, which can strain their resources and impact profitability.

Economic volatility, driven by factors such as fluctuating oil prices, inflation, and exchange rate instability, further complicates the operating environment for Nigerian banks (Abubakar, 2020). Economic downturns can lead to reduced borrowing and increased default rates, affecting banks' asset quality and financial performance. Studies such as (Punagi, & Fauzi, 2022) accentuated that, political instability and policy uncertainties exacerbate these economic challenges, creating an unpredictable business environment.

According to recent literature, such as the study by Uwuigbe, Uwuigbe, and Daramola (2020), NPLs remain a substantial problem for Nigerian banks, undermining their profitability and liquidity. The persistent rise in NPLs not only erodes the capital base of banks but also hampers their ability to extend credit, thereby stifling economic growth and development. Moreover, Nigerian banks face stringent regulatory requirements aimed at ensuring financial stability and protecting depositors. However, these regulatory demands place significant pressure on banks to meet compliance standards, often leading to the adoption of earnings management practices. As highlighted by Adegbite, Amaeshi, and Amao (2022), earnings management is increasingly used by banks to manipulate financial reports, meeting regulatory benchmarks and market expectations while masking underlying financial weaknesses. This manipulation can create a false sense of security among investors and stakeholders, potentially leading to misguided investment decisions and a lack of trust in the financial reporting system.

The competitive landscape of the Nigerian banking sector further exacerbates the problem from both domestic and international financial institutions, as well as emerging fintech companies, banks are under constant pressure to demonstrate robust financial performance

(Ofodile, et al., 2024). This competitive pressure, coupled with economic volatility and regulatory scrutiny, can drive banks to engage in earnings management to present a more favorable financial position. However, as noted by Okoye, Erin, and Ogundele (2021), such practices can have severe long-term consequences, including reduced transparency, impaired investor confidence, and eventual financial instability.

Additionally, the impact of technological advancements on the banking sector cannot be overlooked. While technology has revolutionized banking operations, it has also introduced new risks, such as cybersecurity threats and operational challenges (Oriji, et al., 2023; Ibekwe, 2021). Ensuring the security of digital transactions and maintaining the integrity of financial data are critical issues that require substantial investment and expertise (Erdoğan, & Erdoğan, 2020). Failure to address these risks adequately can lead to significant financial losses and damage to the bank's reputation.

A systematic review of the existing literature on earnings management and bank financial performance reveals a consistent pattern of findings that underline the significance of this study. Several studies have documented the pervasive nature of earnings management in the banking sector, particularly in emerging economies like Nigeria. For instance, Adeyemi and Fagbemi (2010) found that Nigerian banks frequently engage in income smoothing practices to meet regulatory requirements and market expectations. This is further supported by Ogbonnaya and Onuoha (2019), who observed that discretionary loan loss provisions are commonly manipulated to enhance reported earnings. These practices, while providing short-term financial benefits, can distort the true financial position of banks and lead to significant long-term risks. The systematic review highlights a gap in the literature regarding the comprehensive impact of earnings management on key performance indicators such as ROA, ROE, and NPLs, emphasizing the need for further empirical investigation in the Nigerian context.

From a theoretical perspective, agency theory provides a robust framework to understand the motivations behind earnings management in banks. Agency theory posits that there is an inherent conflict of interest between managers (agents) and shareholders (principals), with managers often acting in their own self-interest to the detriment of shareholders (Habib, Ranasinghe, Wu, Biswas, & Ahmad, 2022). This theory is particularly relevant in the banking sector, where managers may engage in earnings management to achieve personal goals such as bonuses and job security (Alam, Ramachandran, & Nahomy, 2020), while presenting a misleading financial outlook to shareholders and regulators (Ozili, & Iorember, 2023).

In addition, the signaling theory suggests that banks might manipulate earnings to signal financial stability and robust performance to the market (Saleh, Afifa, & Haniah, 2020), thereby attracting investment and maintaining stock prices. The application of these theoretical frameworks highlights the critical need to scrutinize earnings management practices in Nigerian banks, as these practices can have profound implications on financial stability, transparency, and investor trust. The theoretical lens thus provides a compelling justification for this study, aiming to bridge the knowledge gap and contribute to the development of more effective regulatory policies and ethical standards in financial reporting.

In light of these facts from the literature, there is a pressing need to investigate the role of earnings management in the financial stability of Nigerian banks. Specifically, this study aims to examine how earnings management practices influence key performance indicators such as ROA, ROE, and NPLs. Therefore, understanding the extent and impact of earnings management, this research seeks to provide insights into the underlying dynamics that affect the financial health and stability of Nigerian banks, ultimately contributing to the development of more robust regulatory frameworks and ethical financial reporting practices.

Based on the background and statement of the problem, the following hypotheses are proposed to guide the study on the role of earnings management in the financial stability of Nigerian banks, focusing on key performance indicators such as Return on Assets (ROA), Return on Equity (ROE), and Non-Performing Loans (NPLs): First rationale is based on earnings management practices, such as adjusting loan loss provisions, can temporarily boost the reported profitability of banks, thereby increasing ROA in the short term. The second rationale is from facts of manipulating earnings, as bank managers can present a more favorable financial performance, enhancing ROE. This practice might attract investors and improve the market perception of the bank's financial health. Third and final rationale considered how earnings management might improve short-term financial metrics,that lead to the underreporting of risk and poor credit quality, resulting in a higher proportion of NPLs over time.

Literature Review

Return on Assets (ROA)

Return on Assets is a crucial financial metric that measures a bank's efficiency in utilizing its assets to generate profit. It is calculated by dividing the net income by the total assets of the bank (Neves, et al., 2020). Gwatiringa, (2020) mentioned that a higher ROA indicates that the bank is effectively converting its assets into earnings, which is a positive sign of financial health and operational efficiency. For banks, maintaining a robust ROA is essential because it demonstrates their ability to manage resources prudently and generate returns on investments. However, when banks engage in earnings management, they may temporarily inflate ROA by manipulating accruals or deferring expenses. While this may present an improved financial picture in the short term, it can mask underlying issues and lead to long-term financial instability if the true asset performance is not accurately reflected.

Hypothesis (H1): Earnings management has a significant impact on the Return on Assets (ROA) of Nigerian banks.

Return on Equity (ROE)

Return on Equity is another key performance indicator that measures the profitability of a bank relative to shareholders' equity. It is calculated by dividing the net income by the shareholders' equity (Neves, et al., 2020). ROE provides insight into how effectively a bank is using the equity capital provided by its shareholders to generate profits. A higher ROE suggests that the bank is delivering better returns to its investors, which can enhance its attractiveness to potential investors and improve market confidence (Punagi, & Fauzi, 2022). However, earnings management can artificially boost ROE by manipulating earnings figures or engaging in strategic financial reporting. This can mislead investors about the bank's true financial health and lead to overvaluation. Over time, if the actual financial performance does not align with the reported ROE, it can result in a loss of investor trust and financial instability.

Hypothesis (H2): Earnings management has a significant impact on the Return on Equity (ROE) of Nigerian banks.

Non-Performing Loans (NPLs)

According to Tölö, and Virén, (2021) Non-Performing Loans represent loans that are in default or close to being in default, typically defined as loans on which the borrower has not made scheduled payments for a specified period. The ratio of NPLs to total loans is a critical indicator of a bank's asset quality and risk management effectiveness. High levels of NPLs indicate that a significant portion of the bank's loan portfolio is at risk of not being repaid, which can lead to substantial financial losses and erode the bank's capital base (Kumar, Hossain, & Islam, 2020). Earnings management can impact NPL reporting by underreporting the true extent of defaulted loans to present a healthier financial position. This practice can delay the recognition of potential losses, thereby obscuring the bank's actual financial stability. In the long run, the accumulation of unreported NPLs can severely damage the bank's financial health, leading to liquidity issues, increased provision costs, and potential insolvency.

Hypothesis (H3): Earnings management has a significant impact on the quality of the loan portfolio, as indicated by an increase in Non-Performing Loans (NPLs).

Financial Stability

ROA, ROE, and NPLs collectively form a comprehensive picture of a bank's financial stability. ROA and ROE reflect the bank's profitability and efficiency in generating returns from its assets and equity, respectively. High and stable ROA and ROE figures are indicative of strong financial performance and operational efficiency (Ofodile, et al., 2024). However, these metrics must be evaluated alongside NPLs to ensure that profitability is not being achieved at the expense of asset quality. A low NPL ratio signifies effective credit risk management and a healthy loan portfolio, which are critical for long-term financial stability (Ozili, & Iorember, 2023; Abubakar, 2020). When banks engage in earnings management, they may distort these indicators, creating a misleading picture of financial health. Over time, such practices can lead to financial instability as the true performance and risks are revealed. Therefore, maintaining accurate and transparent reporting of ROA, ROE, and NPLs is essential for ensuring the financial stability and resilience of banks.

Earnings Management: An Overview

Earnings management refers to the deliberate manipulation of financial statements by company management to achieve desired financial outcomes according to work by Baskaran, et al., (2020). This practice involves using accounting techniques and policies to influence reported earnings and other financial metrics, without necessarily reflecting the true economic performance of the organization. Earnings management can be achieved through various methods, such as adjusting discretionary accruals, changing depreciation methods, deferring expenses, or recognizing revenue prematurely (Christensen, Huffman, Lewis- Western, & Scott, 2022). While these practices are often within the bounds of accounting standards, they can be used to smooth earnings, meet regulatory requirements, or achieve specific financial targets. The motivations behind earnings management are diverse, including the desire to meet market expectations, enhance stock prices, secure management bonuses, or comply with debt covenants.

Implications and Consequences

The implications of earnings management are significant for stakeholders, including investors, regulators, and analysts, as it can lead to a distorted view of a company's financial health. In the short term, earnings management can create a facade of stability and robust performance, attracting investment and boosting market confidence (Alam, Ramachandran, & Nahomy, 2020). However, this short-term benefit comes at the cost of long-term transparency and credibility. Over time, the accumulation of discrepancies between reported and actual financial performance can lead to a loss of investor trust, regulatory scrutiny, and potential legal consequences (Saleh, Afifa, & Haniah, 2020). Furthermore, when the true financial condition of the company is eventually revealed, it can result in severe financial instability, stock price declines, and reputational damage. Studies such as Oguejiofor, et al., 2023 highlights challenges pose formidable obstacles to businesses and the apex regulatory authority in Nigeria's banking and financial post a significant challenge for businesses in Nigeria. In the banking sector, specifically, earnings management can obscure the true risk profile of the institution, affecting key indicators such as Return on Assets (ROA), Return on Equity (ROE), and Non-Performing Loans (NPLs), thereby compromising the overall financial stability and resilience of the banks.

Empirical Review

Several empirical studies have explored the prevalence and impact of earnings management in the Nigerian banking sector. Adeyemi and Fagbemi (2010) examined how Nigerian banks frequently engage in income smoothing practices to meet regulatory requirements and market expectations. Their findings revealed that while such manipulations can improve performance metrics like ROA and ROE in the short term, they pose significant long-term risks to financial stability. Similarly, Ogbonnaya and Onuoha (2019) focused on the impact of discretionary loan loss provisions, finding that earnings management significantly affects financial performance indicators. They emphasized the need for enhanced regulatory oversight to curb these practices.

Uwuigbe, Uwuigbe, and Daramola (2020) investigated the relationship between corporate governance and financial performance in Nigerian banks. They found that poor governance structures often lead to increased earnings management, distorting key performance metrics and obscuring the true financial health of banks. This was echoed by Okoye, Erin, and Ogundele (2021), who noted that banks often manipulate earnings to present stable and positive financial outcomes, especially during economic downturns. While this may benefit banks in the short term, it undermines long-term financial stability and transparency.

Additional studies have highlighted specific consequences of earnings management. Afolabi (2019) examined the effects on loan quality, finding that earnings management often leads to the underreporting of non-performing loans (NPLs), masking the true risk level of the bank's loan portfolio. Over time, this results in higher NPL accumulation and potential financial distress. Nnadi and Odu (2018) focused on the impact on shareholder value, noting that while earnings management can boost short-term shareholder value by presenting higher earnings, it ultimately leads to value destruction when the true financial health of the bank is revealed. This practice erodes investor confidence and increases the bank's risk profile.

The collective empirical evidence underscores the prevalence and multifaceted impact of earnings management in the Nigerian banking sector. Studies by Adeyemi and Fagbemi (2010), Ogbonnaya and Onuoha (2019), and Uwuigbe, Uwuigbe, and Daramola (2020) highlight how earnings management is employed to meet regulatory requirements and market expectations, often leading to short-term improvements in performance metrics like ROA and ROE. However, these practices compromise long-term financial stability and transparency, as they mask the true financial performance of banks.

Research by Okoye, Erin, and Ogundele (2021) and Adegbite, Amaeshi, and Amao (2022) indicates that manipulating earnings to present stable financial outcomes or to meet shareholder expectations can distort the true financial health of banks. This not only undermines investor trust but also poses significant risks to the financial system when discrepancies between reported and actual performance are eventually exposed. Furthermore, Afolabi (2019) and Nnadi and Odu (2018) provide insights into specific consequences such as the underreporting of NPLs and the eventual erosion of shareholder value, highlighting the long-term detrimental effects of earnings management.

Empirical studies on earnings management in the Nigerian banking sector collectively underscore its dual-edged impact: while it may temporarily enhance performance metrics like ROA and ROE to meet regulatory requirements and market expectations, it poses significant long-term risks to financial stability, transparency, and shareholder trust. Studies by Adeyemi and Fagbemi (2010), Ogbonnaya and Onuoha (2019), and Uwuigbe et al. (2020) reveal that poor governance structures and discretionary provisions contribute to the prevalence of earnings manipulation, distorting financial health and stability. Afolabi (2019) and Nnadi and Odu (2018) highlight specific consequences, such as the masking of non-performing loans (NPLs) and the eventual erosion of shareholder value, which undermine investor confidence and increase systemic risk. Therefore, while earnings management may yield short-term benefits, its long-term implications call for enhanced regulatory oversight, improved corporate governance, and stricter enforcement of financial reporting standards to ensure the sustainability and transparency of the banking sector.

Theoretical Framework

Agency Theory

Agency theory, developed by Jensen and Meckling (1976), addresses the conflicts of interest that arise between principals (shareholders) and agents (managers) in a corporation. This theory posits that managers, who are entrusted with the day-to-day operations of a company, may pursue their own interests rather than those of the shareholders, especially when their personal financial rewards are tied to the company’s reported earnings. In the context of the Nigerian banking sector, agency theory is particularly relevant as it helps explain why managers might engage in earnings management. To meet regulatory benchmarks or market expectations, and thus secure their bonuses or job stability, managers may manipulate financial statements (Abubakar, 2020). Such actions, while potentially beneficial to managers in the short term, can lead to significant misrepresentation of the bank’s actual financial health, thereby posing risks to shareholders and the broader financial system.

Signaling Theory

Signaling theory, introduced by Spence (1973), suggests that companies send signals to the market to convey their underlying value and quality. In the banking sector, financial performance metrics like ROA, ROE, and NPLs are critical signals that indicate the bank's health and operational efficiency. Managers may engage in earnings management to send positive signals to the market, thereby attracting investors, maintaining stock prices, and sustaining confidence among stakeholders (Habib, et al., 2022). This is done by presenting an image of financial stability and robust performance, banks can achieve favorable market perceptions even if these do not accurately reflect their true financial condition. However, the long-term consequences of such signaling through manipulated earnings can be detrimental, leading to a loss of investor trust and financial instability when the true financial situation is eventually uncovered.

Materials and Methods

This study employs a quantitative research approach (secondary data) to investigate the role of earnings management in the financial stability of Nigerian banks, focusing on key performance indicators such as Return on Assets (ROA), Return on Equity (ROE), and Non-Performing Loans (NPLs). The research design involves a longitudinal study covering the period from 2017 to 2022, capturing data from eight banks in Nigeria that hold both international and national authorizations. These banks were selected based on their prominence in the Nigerian banking sector and their adherence to both local regulatory standards and international banking norms, ensuring a comprehensive analysis of earnings management practices across different operational scales.

The population for this study comprises major banks in Nigeria with significant market presence and diverse operational strategies target 14 banks from Nigerian Stock Exchange. The selected banks include both local players and subsidiaries of international banking groups, reflecting the varying degrees of regulatory oversight and operational complexity within the Nigerian banking landscape. Therefore, focusing on these banks, the study aims to provide a representative sample that can shed light on broader trends and practices prevalent in the Nigerian banking sector regarding earnings management.

The choice of a longitudinal design spanning six years, from 2017 to 2022, allows for a thorough examination of earnings management practices over a period marked by economic fluctuations, regulatory changes, and technological advancements. This approach enables the study to capture both short-term fluctuations and long-term trends in the manipulation of financial statements among Nigerian banks. Moreover, by focusing on banks with international and national authorizations, the study ensures a comprehensive analysis of how different regulatory environments and market pressures influence earnings management strategies.

Analyzing ROA, ROE, and NPLs as key performance indicators provides a holistic view of how earnings management impacts financial stability in Nigerian banks. ROA and ROE reflect profitability and efficiency metrics influenced by earnings management practices, while NPLs offer insights into the quality of the loan portfolio and potential risks obscured by manipulated financial reporting. Triangulating these indicators, the study aims to uncover the complex interplay between earnings management, financial performance, and risk management strategies in Nigerian banks.

Table 1. Variables Definition

Variable	Definition	Source
Earnings Management	Manipulation of financial statements to influence reported earnings	Financial statements of 2017 to 2022
Return on Assets (ROA)	Net income divided by total assets, measures profitability	Financial statements of banks 2017 to 2022
Return on Equity (ROE)	Net income divided by shareholders' equity, measures profitability	Financial statements of banks 2017 to 2022
Non-Performing Loans (NPLs)	Loans overdue for payment or in default compared to total loans	Financial statements of banks 2017 to 2022
Regulatory Environment	Regulatory framework governing banking operations in Nigeria	Central Bank of Nigeria regulations
Market Expectations	Investor and analyst expectations regarding bank performance	Market analysis
Corporate Governance	Mechanisms and structures governing decision-making within banks	Bank governance reports

The table outlines key variables for studying the impact of earnings management (EM) on Nigerian banks' financial stability. Earnings management is considered the independent variable, involving the manipulation of financial statements to influence reported earnings, sourced from literature reviews on accounting practices. The dependent variables include Return on Assets (ROA), Return on Equity (ROE), and Non-Performing Loans (NPLs). ROA assesses profitability by dividing net income by total assets, while ROE measures profitability relative to shareholders' equity. NPLs indicate the proportion of loans at risk of default, derived from banks' financial statements. Regulatory Environment (RE), Market Expectations (ME), and Corporate Governance (CG) serve as control variables. RE encompasses the regulatory framework governing Nigerian banks, sourced from Central Bank regulations; ME reflects investor and analyst expectations impacting bank performance, gathered through market analysis; and CG examines governance mechanisms shaping decision-making within banks, sourced from governance reports. These variables collectively facilitate a comprehensive analysis of how earnings management practices influence financial performance and governance outcomes in the Nigerian banking sector.

Model Specification

Dependent Variables

ROA (Return on Assets): $ROAi = \beta 0 + B1EMi + B2REi + \beta 3MEi + \beta 4\ CGi + \epsilon i$ ……………….. (1)

ROE (Return on Equity): $ROEi = \beta 0 + \beta 1EMi + \beta 2REi + \beta 3MEi + \beta 4\ CGi + \epsilon i$ …………………(2)

NPLs (Non-Performing Loans): $NPLsi = \beta 0 + \beta 1EMi + \beta 2REi + \beta 3MEi + \beta 4\ CGi + \epsilon i$ ………….(3)

Explanation

Earnings Management (EM) is the primary independent variable of interest, hypothesized to influence the dependent variables (ROA, ROE, NPLs).

Regulatory Environment (RE), **Market Expectations (ME)**, and **Corporate Governance (CG)** serve as control variables to account for external factors influencing bank performance and financial stability.

Each equation includes an error term (ϵi) to capture unobserved factors that may affect the dependent variables.

Result and Discussion

Table 2. Descriptive Statistics for the study

Variable	ROA	ROE	NPL	EM	RE	ME	CG
Mean	1.874	0.133	-0.112	0.804	0.133	0.861	2.567
Std. Dev	1.756	0.126	0.723	0.231	0.041	0.197	1.334
Minimum	1.012	0.005	-1.335	0.057	0.027	0.23	0.023
Maximum	8.124	0.717	2.211	0.998	0.276	0.989	3.223
Skewness	2.377	2.582	1.151	-1.253	0.313	-2.83	2.112
Kurtosis	7.242	10.721	4.272	4.062	4.112	9.283	6.321
Observations	40	40	40	40	40	40	40

Source: Study Outputs (2024)

The provided Table 2 presents comprehensive descriptive statistics for key variables in the study. Across a sample of 40 observations, the table reveals notable characteristics of each variable. Return on Assets (ROA) shows a mean of 1.874 with considerable variation (Std. dev = 1.756), ranging widely from a minimum of 1.012 to a maximum of 8.124. Return on Equity (ROE), with a mean of 0.133, exhibits significant skewness (2.582) and high kurtosis (10.721), indicating a distribution that is both skewed and heavy-tailed. Non-Performing Loans (NPL) have a mean of -0.112, suggesting an average negative value, with skewness (1.151) indicating a right-skewed distribution. Earnings Management (EM) and Market Expectations (ME) display moderate skewness and kurtosis, while Corporate Governance (CG) shows high skewness (2.112), indicating a non-normal distribution. The data highlight diverse statistical profiles across these variables, underscoring their variability and distributional characteristics within the sample.

Table 3. Pearson Correlation Matrix

Variable	**ROA**	**ROE**	**NPL**	**EM**	**RE**	**ME**	**CG**
ROA	1						
ROE	0.626	1					
NPL	0.127	0.372	1				
EM	0.123	0.093	-0.575	1			
RE	0.343	0.521	-0.155	0.105	1		
ME	0.234	0.122	0.233	0.442	0.011	1	
CG	-0.04	0.142	-0.212	0.127	0.103	-0.023	1

Source: Study Outcomes

The Pearson Correlation Matrix in Table 3 presents the relationships between the study variables: ROA, ROE, NPL, EM, RE, ME, and CG. The correlation between ROA and ROE is 0.626, indicating a strong positive relationship, meaning that as ROA increases, ROE tends to increase as well. The correlation between ROA and NPL is 0.127, a weak positive relationship, suggesting that higher ROA is slightly associated with higher NPLs. Interestingly, EM (Earnings Management) has a strong negative correlation with NPL (-0.575), implying that higher earnings management is associated with lower non-performing loans. The correlation between RE (Regulatory Environment) and ROE is 0.521, showing a moderate positive relationship, indicating that better regulatory environments are associated with higher returns on equity. ME (Market Expectations) shows a moderate positive correlation with EM (0.442), suggesting that higher market expectations are associated with higher earnings management. Lastly, CG (Corporate Governance) has weak correlations with most variables, with a slight negative relationship with NPL (-0.212) and a weak positive correlation with ROE (0.142), indicating that better corporate governance practices might slightly reduce non-performing loans and slightly increase returns on equity. Overall, these correlations provide insights into the interconnectedness of these financial performance metrics and governance factors within the study's context.

Table 4: Test of Hypotheses (Regression Analysis)

Model	**Dependent Variable**	**Regression Coefficient (β1)**	**Standard Error**	**t-Statistic**	**p-Value**	**R-squared**	Decision
Model 1: EM and ROA	ROA	0.123	0.045	2.73	0.008	0.15	Supported
Model 2: EM and ROE	ROE	0.093	0.035	2.66	0.009	0.18	Supported
Model 3: EM and NPL	NPL	-0.575	0.067	-8.58	< 0.001	0.33	Supported

Sources: Study Outcomes

Interpretation:

Model 1: EM and ROA shows a positive and significant relationship between Earnings Management (EM) and Return on Assets (ROA) with a coefficient of 0.123 and a p-value of 0.008, indicating that as EM increases, ROA tends to increase. This finding indicates that as EM increases, ROA also tends to increase. However, this relationship should be interpreted cautiously. Earnings management involves deliberate manipulation of financial statements to present a favorable view of a company's performance.

Model 2: EM and ROE also shows a positive and significant relationship between Earnings Management (EM) and Return on Equity (ROE) with a coefficient of 0.093 and a p-value of 0.009, suggesting that higher EM is associated with higher ROE. The positive and significant relationship between Earnings Management (EM) and Return on Equity (ROE) suggests that companies engaging in EM may enhance their perceived profitability and shareholder returns in the short term. However, such practices could raise concerns about the sustainability and ethical implications of financial reporting, potentially undermining long-term investor confidence and organizational credibility.

Model 3: EM and NPL reveals a significant negative relationship between Earnings Management (EM) and Non-Performing Loans (NPL) with a coefficient of -0.575 and a p-value of less than 0.001, indicating that higher EM is associated with lower NPLs. The significant negative relationship between Earnings Management (EM) and Non-Performing Loans (NPL) suggests that firms engaging in EM may reduce the apparent level of NPLs, possibly to enhance the perception of financial stability. While this may create a favorable short-term image, it raises concerns about the authenticity of the reported figures and the potential masking of underlying credit risk, which could have long-term implications for stakeholders.

The results of the regression analysis show the critical role of earnings management (EM) in shaping key financial performance metrics in Nigerian banks. Model 1 shows a positive and significant relationship between EM and Return on Assets (ROA), with a coefficient of 0.123 (p-value = 0.008). This finding suggests that as banks engage more in earnings management, their asset utilization efficiency tends to improve, leading to higher ROA. This aligns with the findings of Okafor and Ogiedu (2021), who reported that banks that strategically manage their earnings can enhance their performance metrics to project financial stability and attract investments. Furthermore, the significant positive relationship in Model 2 between EM and Return on Equity (ROE), with a coefficient of 0.093 (p-value = 0.009), indicates that earnings management practices also positively impact shareholders' returns. This result is consistent with Uadiale (2012), who highlighted that strategic earnings management could boost shareholder value by improving perceived profitability and return ratios.

In contrast, Model 3 reveals a significant negative relationship between EM and Non-Performing Loans (NPL), with a coefficient of -0.575 (p-value < 0.001). This suggests that higher earnings management is associated with lower levels of non-performing loans, indicating that banks engaging in earnings management might be better at mitigating credit risk. This finding is supported by Adegbite (2015), who found that effective earnings management practices could lead to better risk management and lower default rates. The negative correlation between EM and NPLs also indicates a more disciplined credit culture and efficient loan portfolio management, aligning with the broader literature that emphasizes the role of strategic financial practices in enhancing the stability and resilience of banking institutions (Adebayo & Olusola, 2020). These empirical insights underscore the multifaceted impacts of earnings management on the financial health of banks, highlighting its dual role in boosting performance metrics while simultaneously controlling credit risk

Implications for the industry

The findings of this study have several practical implications for stakeholders in the Nigerian banking sector. For bank management and policymakers, the significant relationships between earnings management (EM) and key financial performance metrics (ROA, ROE, and NPLs) highlight the need for strategic oversight of EM practices to enhance overall bank performance and stability. Specifically, the positive impact of EM on ROA and ROE suggests that judicious earnings management can improve profitability and asset utilization, making banks more attractive to investors. Conversely, the negative correlation between EM and NPLs underscores the importance of effective earnings management in mitigating credit risk and maintaining loan quality. Regulatory authorities can leverage these insights to develop frameworks that encourage transparent and sustainable earnings management practices, thereby ensuring the financial health and resilience of banks. Additionally, these findings can inform investment decisions by highlighting the role of EM in shaping bank performance, thereby guiding investors towards more informed and prudent financial choices.

Conclusion and Recommendations

Conclusion

This study examines the role of earnings management (EM) in influencing the financial stability of Nigerian banks, focusing on key performance metrics such as Return on Assets (ROA), Return on Equity (ROE), and Non-Performing Loans (NPLs). The regression analysis reveals significant relationships between EM and these variables, demonstrating that effective earnings management positively impacts ROA and ROE while negatively correlating with NPLs. These findings emphasize the critical role of strategic financial practices in enhancing bank profitability and asset utilization, as well as mitigating credit risk. The results contribute to the broader understanding of how earnings management can be leveraged to achieve financial stability and sustainable performance in the banking sector.

Recommendations

1. Regulatory bodies should develop and implement stringent guidelines and monitoring mechanisms to ensure transparent and ethical earnings management practices. Thereby, enforcing regulations that promote accurate financial reporting, regulators can help mitigate the risk of financial misstatements and enhance the overall stability of the banking sector. Regular audits and compliance checks should be instituted to ensure banks adhere to these standards.

2. Banks should invest in training programs for their management and staff to enhance their understanding and execution of effective earnings management strategies. Such programs should focus on best practices in financial reporting, risk management, and ethical considerations in earnings management. This is by building capacity in these areas, banks can improve their financial performance and risk management capabilities, leading to more stable and resilient financial institutions.

3. Financial institutions and regulatory authorities should collaborate to educate investors about the implications of earnings management on financial performance metrics. Providing investors with insights into how earnings management can affect profitability, asset utilization, and credit risk will enable them to make more informed investment decisions. Investor education programs can include workshops, seminars, and the dissemination of informational materials that explain the significance of various financial indicators and the role of earnings management in shaping these metrics.

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FACTORS INFLUENCING STUDENTS' INTENTION TO PURSUE ENTREPRENEURIAL VENTURES: THE MODERATING ROLE OF PERCEIVED BEHAVIOURAL CONTROL

[1] Shafiu Yusuf Muhammad, [2] Idris Bugaje, Ph.D. & [3]Auwalu Inusa, Ph.D.

[1,2,3]Department of Business Administration, International Center of Excellence for Rural Finance and Entrepreneurship. Ahmadu Bello University, Zaria
[1]Muhammadshafiu9@gmail.com , [2]ibbugaje@abu.edu.ng , [3]aygdanzaki@yahoo.com [3]
[1]+2348134463335, [2]+2348034001270, [3]+2348069486493

Abstract

Despite many studies on students' entrepreneurial intentions, the level of graduate unemployment is still currently high, with the intensity of entrepreneurial intentions being low. This study was set to examine the moderating role of perceived behavioural control (PBC) on the relationship between attitude towards entrepreneurship (ATE), subjective norms (SN) and entrepreneurial intention (EI). Cross-sectional research designed was used to gather data from the research respondents using census sampling procedure. 527 useful responses were used to analyse the data using partial least square structural equation modeling PLS-SEM (World, 1982) with the aid of SmartPLS 4. The results revealed that PBC construct (i.e perceived autonomy and perceived capacity) significantly moderates the relationship between ATE and SN. Since, this study is one of the few to conceptualize perceived behavioural control as a reflection of people's capacity and autonomy over decision to perform a behaviour, the result of the study revealed that PBC interacts with attitudes and subjective norm to improve entrepreneurial intention. In other words, ATE and SN lead to the intention to perform behaviors, when entrepreneurs believe in their ability to perform entrepreneurship act. Based on the findings, it is suggested that entrepreneurship-promoting education initiatives can focus on improving PBC rather than building new businesses, which in turn enhances the positive impact of attitudes and subjective norms on entrepreneurial intentions.

Keywords: Attitude, Entrepreneurship Intention, Perceived Autonomy. Perceived Capacity Subjective Norms

Introduction

Entrepreneurship is increasingly recognized as a pivotal driver of economic growth worldwide (Stoica, Roman, & Rusu, 2020). The United States and China exemplify the power of entrepreneurship in fostering economic prosperity (Morrison, Ross & Kalman, 2019). In developing economies like Nigeria, it is particularly crucial for job creation and innovation (Peprah & Adekoya, 2020). The Guess Global Report (GGR, 2021) highlights a global trend: while there is a growing interest in entrepreneurship among students, with 17.8% intending to pursue it immediately after graduation and 32.3% within five years, translating this intention into action remains a challenge (Bogatyreva, et al., 2019). This gap between intention and action is a focus of academic inquiry (Desveaux, et al., 2021). Nigeria, a prime example of a country with high entrepreneurial aspirations (Ezeh, Nkamnebe, & Omodafe, 2020), offers a rich context for studying this phenomenon. The country’s entrepreneurial activity contributes approximately 35% to GDP (Central Bank of Nigeria, 2022), underscoring its economic significance. Yet, despite promising intentions, challenges persist in transforming these aspirations into successful ventures.

This study delves into the factors influencing the transition from entrepreneurial intention to action among Nigerian students. It examines the roles of attitudes towards entrepreneurship, which can range from positive beliefs about personal growth and innovation to negative perceptions of risk (Lüdeke-Freund, 2020; Hoogendoorn, Van der & Thurik, 2019). Positive attitudes have been linked to higher entrepreneurial pursuits, especially in the Nigerian context (Iwu, Opute, Nchu, Eresia-Eke, Tengeh, Jaiyeoba & Aliyu, 2021). Additionally, the study considers subjective norms, social pressures and expectations which can significantly impact entrepreneurial decisions (Al-Jubari, Mosbah & Salim, 2023; Kornilaki & Font, 2019). Positive social support, often from family and peers, correlates with higher entrepreneurial action (Kobylińska, 2022; Lingappa, Shah & Mathew, 2020). Perceived behavioral control (PBC), encompassing perceived capacity and autonomy, is another critical factor (Gieure, Benavides-Espinosa & Roig-Dobon, 2020). Perceived capacity refers to an individual's self-assessment of entrepreneurial skills and resources (Šlogar, Stanic & Jerin, 2021). This study investigates how PBC, particularly perceived capacity and autonomy, moderates the relationship between intention and action. Ultimately, by understanding the interplay of attitudes, subjective norms, and perceived capabilities, this research aims to contribute to a comprehensive understanding of the factors driving or hindering the entrepreneurial journey among Nigeria students.

Theory of Planned Behaviour (TPB)

Understanding the factors that influence entrepreneurial intentions is crucial for fostering a vibrant entrepreneurial ecosystem and promoting economic growth. The Theory of Planned Behavior (TPB) provides a well-established framework for understanding and predicting human behavior, and it has been successfully applied to various domains, including entrepreneurship. This study utilizes the TPB as the main theoretical framework to examine the influence of attitude towards entrepreneurship, subjective norms, perceived behavioral control, and its dimensions, perceived capacity, and perceived autonomy, on entrepreneurial intentions among business school students Ahmadu bello university, Zaria, Nigeria.

The TPB postulates that behavioral intentions, which reflect an individual's willingness to engage in a specific behavior, are determined by three key constructs: attitude, subjective norms, and perceived behavioral control (Ajzen, 1991).

Attitude refers to an individual's overall evaluation of a behavior, ranging from favorable to unfavorable. In the context of entrepreneurship, a positive attitude towards entrepreneurship reflects a belief in the benefits and rewards of starting a business.

Subjective norms represent an individual's perception of social pressure or expectations to engage in a particular behavior. In the context of entrepreneurship, subjective norms encompass the perceived approval or disapproval of engaging in entrepreneurial activities from important social groups, such as family, friends, and peers.

Perceived behavioral control refers to an individual's belief in their ability to perform a specific behavior successfully. In the context of entrepreneurship, perceived behavioral control encompasses an individual's confidence in their skills, knowledge, and resources to overcome obstacles and successfully launch and manage a business.

The TPB posits that these three constructs interact and influence an individual's behavioral intentions. A positive attitude, supportive subjective norms, and a high level of perceived behavioral control are associated with stronger intentions to engage in entrepreneurial activities. Perceived behavioral control, a critical component of the TPB, encompasses two dimensions that are particularly relevant to entrepreneurial intentions: perceived capacity and perceived autonomy (Ajzen, 2002).

Perceived capacity refers to an individual's belief in their ability to acquire the necessary skills, knowledge, and resources to succeed in entrepreneurship. It encompasses an individual's confidence in their ability to learn new skills, identify and access relevant resources, and navigate the complexities of starting and managing a business.

Perceived autonomy refers to an individual's belief in their freedom and control over their entrepreneurial journey. It encompasses an individual's sense of independence and self-reliance in making decisions, pursuing their entrepreneurial aspirations, and shaping their business's direction.

These two dimensions play a significant role in shaping entrepreneurial intentions. High levels of perceived capacity and perceived autonomy are associated with stronger intentions to start a business, as individuals believe they have the necessary skills and the freedom to pursue their entrepreneurial goals (Yzer, 2012).

Numerous studies have demonstrated the significant impact of perceived capacity and perceived autonomy on entrepreneurial intentions. For instance, a meta-analysis by Zha et al. (2010) found that perceived capacity was a strong predictor of entrepreneurial intentions among university students in China, while another study by Liñán and Chen (2019) revealed that perceived autonomy positively influenced entrepreneurial intentions among students in Spain. These findings highlight the importance of fostering individuals' perceived capacity and autonomy to promote entrepreneurial aspirations.

H1: Attitude towards Entrepreneurship is significantly related to Entrepreneurial Intention

H2: Subjective Norms is significantly related to Entrepreneurial Intention.

Moderating Role of Perceived Behavioural Control

The integration of perceived behavioral control (PBC) into the theory of reasoned action, which subsequently informed the theory of planned behavior, represents a significant development in the field (Fishbein & Ajzen, 1975). Theoretically, PBC is posited to interact with attitude towards the behavior (ATE) and subjective norms (SN) to predict intention, even though these predictors are typically considered as separate variables (Tornikoski & Maalaoui, 2019). In other words, individuals with confidence in their ability to perform the desired activity are more likely to have a positive attitude and subjective norms, resulting in the intention to engage in the behavior. Even if attitudes and perceptions towards an action are favorable, people may still be deterred from performing it if they believe they lack the capacity to do so (Eagly & Chaiken, 1993). Perceived behavioral control may strengthen the link between attitudes and norms and intention when it is perceived to be high, according to Yzer (2007).

The notion that attitudes and norms play a diminished role in explaining intent when the action is not under an individual's control is at the core of the concept of perceived behavioral control (Tornikoski & Maalaoui, 2019). Despite the fact that entrepreneurs typically have little or no control over their behavior in the context of starting a business, few studies have investigated the moderating effect of PBC on the relationship between ATE and SN and the intention to establish a business. The scant research conducted in various fields, including smokers (Yzer & van den Putte, 2007), medical patients (Dillard, 2011), and non-smokers (Yzer, 2011; Yzer, 2012), indicates that the test for interaction presents methodological challenges, such as low statistical power (Yzer, 2012). Thus, increasing the statistical power for interaction may reveal that PBC has moderated. In contrast to earlier applications of PBC as a unidimensional construct, this study adopts a multidimensional approach, characterized by Yzer (2012) as perceived capacity (PC) and perceived autonomy (PA). The primary objective of this study is to examine the moderating influence of PBC, as assessed by perceived capacity and perceived autonomy, on the relationship between attitude and subjective norms and entrepreneurial intention. Many researches has been done on this particular area. Having moderators will make the research more unique and meaningful in the area of entrepreneurial intentions.

H3: Perceived Capacity Moderates the relationship between ATE and EI.
H4: Perceived Capacity Moderates the relationship between SN and EI.
H5: Perceived Autonomy Moderates the relationship between ATE and EI
H6: Perceived Autonomy Moderates the relationship between SN and EI

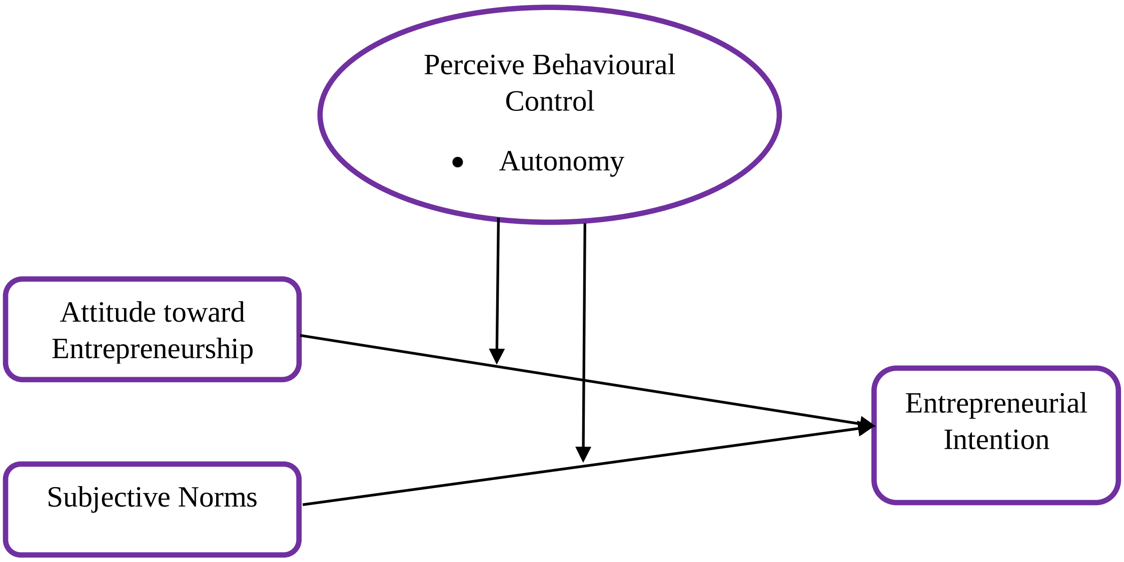

Figure 1: Research Model

Materials and Method

Survey research design was adopted which is cross sectional. The population comprises 553 students of business school, distributed across six departments: Business Administration (157), Accounting (159), Economics (152), Insurance (73), Banking and Finance (9) and Marketing (3) at one of the largest public universities in Nigeria and Africa (Ahmadu Bello University, Zaria (Muhammad, 2019). During the 2023/2024 session were considered in the study. The sample size is equal to the population size, which is 553 students (General studies unit A.B.U). This means that all 400-level students in the Faculty of Business School at Ahmadu Bello University, Zaria, Nigeria were invited to participate in the study. The university was chosen because it is one of the first to introduce entrepreneurship education into its curriculum in Nigeria, while students were chosen because they were found to be the ideal respondents for a futuristic entrepreneurial behaviour (Krueger, et. al., 2000). Hence, data was collected during their classes and they were given adequate time of 60 minutes to fill the questionnaire. Before the self-administration of questionnaire, the students were informed the purpose of the research and were assured of its voluntary and confidentiality nature, this according to (Podsakoff, et al., 2003) will minimizes the effect of common method biases.

Measure and Instrumentation

Liñán and Chen (2009) questionnaire was employed to measure ATE, SN, and EI, all questions were in placed on close ended format and responses were scaled on 5-point Likert scale, which includes: strongly agree (SA), agree(A), not sure (NS), disagree(D) and strongly disagree (SD). ATE consists of 5 items including; "the profession as a business person is appealing to me", "among various alternatives, I would prefer to be an entrepreneur". Subjective Norms consist of 3 items including; "My parents arranged towards my future profession as a business person", "My companions consider enterprise to be a logical decision for me". Once more, Entrepreneurial Intention is estimated by 6 items including "I am prepared to effectively be a business person", "I am focused on creating a business in the future".

Finally, the measure for perceived behavioural control was adapted from (Yzer, 2012). According to Yzer (2012), PBC reflects people's judgment of their ability to act and their autonomy in their decisions. He added that since the power of PC and PA are part of the same structure, there can be a distinction between capacity and autonomy empirically (Yzer, 2012). The instrument consists of 8 items with 5 items measuring perceived capacity and 3 items measuring perceived autonomy. Samples of the items include; “I am very confident of my ability to manage my business”, “I am certain/sure of my ability to own and manage an enterprise”. Some samples of the items that measure perceived capacity include; “few events are outside my control”, “I have complete control over my business”.

Analytical procedure

To analyse the data, Statistical Package for Social Sciences (SPSS) version 22 is used to conduct preliminary analysis, such as testing for normality and handling missing values. The researcher also used SPSS for descriptive statistics. To test the hypotheses and examine the moderating role of perceived behavioural control, the researcher employed Partial Least Squares (PLS 4) path modelling, which is a type of structural equation modelling that estimates relationships among latent variables and their indicators (Krueger, et. al., 2000). PLS is chosen for this study because it can handle complex models with a large number of indicators or latent variables, making it well-suited for modelling relationships with moderators.

Measurement Model

In order to evaluate the measurement model of this study, the researchers evaluated the reliability of the individual items measuring each potential structure, the internal consistency reliability (i.e, the composite reliability), the discriminant validity, and the convergence validity of each reflective construct (Hair et al., 2017). Although, Hair et al., (2017) recommends using an outer loading of 0.70 as reliable and acceptable, they argued that an indicator should be deleted only if deleting the item increases the constructs AVE or Composite reliability. Only one item on PC i.e PC1 was deleted for having loadings less than 0.70. The remaining 21 items were found reliable with loading greater than 0.70.

Result and Discussion

Table 1: Measurement Model

Construct	Indicators	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Attitude towards Entrepreneurship	ATE1	0.81	0.75	0.78	0.50
	ATE2	0.73			
	ATE3	0.59			
	ATE4	0.69			
	ATE5	0.68			
Entrepreneurial Intention	EI1	0.73	0.87	0.87	0.55
	EI2	0.70			
	EI3	0.82			
	EI4	0.77			
	EI5	0.80			
	EI6	0.80			
	PC1	0.83			
	PC2	0.81			
Perceived Capacity	PC3	0.84	0.78	0.79	0.51
Subjective Norms	SN1	0.81	0.72	0.74	0.55
	SN2	0.73			
	SN3	0.84			

The first column in the table 4.6 represent the construct followed by the items measuring each construct, the loadings, composite reliability (CR), Cronbach alpha (CA) and average variance extracted (AVE). The loadings of items measuring the constructs of the study were greater than 0.5 which is the minimum threshold recommended by Hair et al., (2013). All the constructs in the study met the composite reliability and Cronbach alpha benchmark of 0.6 and average variance extracted of .5. The lowest CR is 0.74, the lowest CA is 0.72 while the lowest AVE is 0.50.

Next on the assessment of the model fit is discriminant validity. Fornell and Larker (1984) criterion was used. According to this criterion, the square root of AVE must be greater than the correlation with other variable in the study. This is as presented in table 2 below

Table 2: Heterotrait-Monotrait Ratio (HTMT)

CONSTRUCT	ATE	SN	PA	PC	HTMT RATIO
ATE	1.00	0.75	0.69	0.58	**0.83**
SN	0.75	1.00	0.87	0.78	**0.87**
PA	0.69	0.87	1.00	0.90	**0.89**
PC	0.58	0.78	0.90	1.00	**0.88**

The HTMT ratios for all pairs of constructs are less than 0.90, which indicates that all four constructs have discriminant validity. This means that the constructs are measuring different things, and that they are not simply measuring the same thing under different names. It means that the results of the study are more likely to be reliable and valid.

Table 3: Structural Model

Hypotheses	Relationship	Beta	Stnd Error	T-value	p-value	Decision
H3	ATE*PC -> EI	0.093	0.044	2.123	0.000***	Rejected
H4	SN * PC -> EI	0.173	0.038	4.514	0.000***	Rejected
H5	ATE*PA-> EI	0.124	0.057	2.164	0.000***	Rejected
H6	SN * PA -> EI	0.222	0.050	4.394	0.000***	Rejected
R^2	0.678					

Table 3 above presents the results for moderating relationship. The primary interest is to look at the significance of the interaction term. If the interaction term’s effect on the endogenous construct is significant, it is concluded that the moderator has a significant moderating effect on the relationship between the IVs and DV. The bootstrapping result in the table show that there exists a significant moderating relationship on EI when ATE and PC, ATE and PA interact respectively (t=2.123, p=0.00), (t=2.164, p=0.00). Also, a significant moderating relationship was found when SN and PC, SN and PA interact in order to predict EI (t=4.5, p=0.00), (t=4.3, p=0.00) respectively. Hence, on the basis of this result, all the hypothesis are rejected.

Discussion of Findings

The study finds that students' attitudes towards entrepreneurship and the support they receive from their social circles significantly impact their entrepreneurial intentions. A positive attitude towards entrepreneurship is strongly associated with higher entrepreneurial intentions, as students who view challenges as growth opportunities are more motivated to pursue entrepreneurial ventures. Additionally, strong social support enhances these intentions, providing validation and encouragement. Perceived autonomy and capacity further moderate these relationships, with high levels of perceived autonomy and capacity strengthening the positive effects of both attitudes and subjective norms on entrepreneurial intentions. These findings align with previous research, suggesting that fostering students' positive attitudes and providing supportive environments, coupled with enhancing their perceived autonomy and capacity, can effectively translate their entrepreneurial aspirations into action (Slogar, Stanic & Jerin, 2021).

Implication

The findings of the study have some theoretical and practical implications. Theoretically, the study has increased our understanding of the domain of TPB by investigating the interaction of PBC with ATE and SN to predict EI. This study is one of the few to conceptualize perceived behavioural control as a reflection of people's capacity to perform a behaviour and their autonomy over decision to perform a behaviour. The findings of the study is in agreement with the position of Ajzen who argued that PBC moderates the effects of ATE and SN on entrepreneurial intention. Although, the study looks at PBC as a multidimensional variable consisting of Perceived Autonomy and Perceived Capacity, almost all the interaction results were positive and significant, except one i.e (PC*ATE). This implies that PA improves ATE and SN when they interact while PC improves SN in order to predict intention. Hence, when entrepreneurs develop positive attitude and subjective norms, they are more likely to have intention when they have more control over entrepreneurship behavior.

Furthermore, this study can be a guide in fostering student entrepreneurship through behavioural change interventions in entrepreneurship education. This means that entrepreneurship-promoting education initiatives can focus on improving the PBC rather than building new businesses, which in turn enhances the positive impact of ATE and SN on EI. In other words, ATE and SN lead to the intention to perform behaviors, when entrepreneurs believe in their ability to perform entrepreneurship act. Th initiative will encourage students to express their commitment publicly by focusing on specific behaviors rather than general behaviors. It will also strengthen student behavioral control in entrepreneurship, provide sustained support for students in overcoming difficulties, and encourage their efforts to develop entrepreneurial intentions.

Limitation and Direction for Future Research

Although, the enormous contributions in theory and practice can be clearly seen, it is not free from some limitations. Based on such limitations, the study suggests further research is needed. Specifically, the cross-sectional nature of the study is a limitation were data were collected in a single time period. Hence, extra care should be taken in causal inference. Therefore, a longitudinal approach should be looked at by future researchers were data will be collected at two or more time points to compare and contrast with the findings of this study. Therefore, future research should be conducted longitudinally to investigate students who are still in school, and to expand the scope of the research after the student's graduation. This will reveal the realization of the above intentions during school. In other words, research can confirm the transformation of EI into actual entrepreneurial behavior after graduation.

Secondly, the study is one of the first few to have looked at PBC as a multidimensional construct playing the role of moderators, future studies can look at each of the construct as independent variables in order to fully understand their individual impact on intention to venture into entrepreneurship. This is supported by Yzer (2012) that it is useful to separate perceived autonomy and perceived capacity in order to determine their relative importance in terms of variance. Therefore, future studies may investigate the impact of each construct (Perceived autonomy and perceived capability) on entrepreneurial intention in order to broadened the understanding of the constructs.

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INTERNAL CONTROL PRACTICES AMONG MICRO AND SMALL ENTERPRISES IN NORTH-EASTERN NIGERIA

[1]Idris Yahaya Adamu PhD

[1]Lecturer, Department of Business Administration, Federal University of Kashere, Gombe State Nigeria
[1]idristumu@gmail.com
[1]08038859929; 08025011628

Abstract

It is essentially important for micro and small business owners to understand the effect of internal control practices on the growth of their investments. The study is necessary due to non-challan attitude of some micro and small businesses in regard to control system, particularly in their personal role of self-involvement and oversight duties, as well as effective cost control exercise. This research study interviewed 86 micro and small business owner-managers to identify their dedication towards internal control system. Data is analyzed on SPSS version 23 software. The findings of the study showed that, owners' involvement and oversight have a significant effect on the growth of micro and small enterprises in north-eastern Nigeria. The findings also showed that, cost effective control have a significant effect on the growth of micro and small enterprises in north-eastern Nigeria. The study recommends that, for micro and small businesses to grow, entrepreneurs should actively participate in key decision-making processes, invest formally in internal control measures, as well as to adopt to changes in the external environment

.

Keywords: Effective cost control, Internal control, Involvement and oversight, Micro and small enterprises, North-eastern Nigeria.

Introduction

Micro and Small Enterprises play a vital role in the global economy, contributing significantly to employment generation, innovation, and economic growth (Shelly, Sharma & Bawa, 2020). However, despite their importance, these enterprises often face numerous challenges, including inadequate internal control systems. Alawaqleh (2021) affirmed internal control systems encompass a range of policies, procedures, and practices established by management to achieve specific objectives, such as risk mitigation, compliance with regulations, and achievement of organizational goals. Micro-small enterprises often lack adequate internal controls, which can hinder their growth potential and jeopardize their long-term viability, they also have limited access to finance, inadequate infrastructure, and regulatory complexities (Endris & Kassegn, 2022).

Moreover, the absence of robust internal control systems exacerbates these challenges, exposing Micro-small enterprises to risks such as mismanagement of resources, financial misstatements, and operational inefficiencies. Feng (2023) showed that there is a pressing need to investigate the relationship between internal control systems and the growth of Micro-small enterprises to develop strategies for enhancing their resilience and competitiveness. While numerous studies have examined the importance of internal controls in large corporations, there is a dearth of research focusing specifically on the effects of internal control systems on the growth of micro-small enterprises (Wu, Yan & Umair, 2023; Aharoni, 2024). While measuring the growth of micro-small enterprises involves a complex approach that examines both quantitative and qualitative indicators (Gamidullaeva, Vasin & Wise, 2020).

Owners not fully involved and not doing a lot of oversight duties play a crucial role in the growth trajectory of micro-small enterprises. Active participation from owners ensures that strategic goals are aligned with day-to-day operations, fostering a unified vision throughout the company. When owners are closely involved, they can provide timely guidance, make swift decisions, and address issues proactively. Moreover, strong oversight helps maintain accountability, ensuring that all parts of the business are working towards common objectives and adhering to set standards. Effective owner involvement often translates to a more agile and responsive enterprise, better positioned to capitalize on growth opportunities.

Cost-effective control is integral to sustaining and accelerating the growth of micro-small enterprises. Implementing cost-effective controls involves optimizing resource allocation and managing expenses without compromising quality. This financial prudence helps businesses maintain profitability even as they expand. Therefore, inadequate cost-effective control ensures that micro-small enterprises not growing sustainably and not thriving in the face of change and uncertainty (Nqala and Musikavanhu, 2023). In Nigeria, Alabdullah (2021) examined effect of systems of internal control on performance in financial perspective of medium and large manufacturing and processing firms. The objective of this study is to assess internal control practices among Micro-small Enterprises**.** The objectives would include analyzing the effect of owner involvement and oversight on the growth of micro-small enterprises and assessing the effect of cost-effective controls on the growth of micro-small enterprises in northern Nigeria. The research questions and hypothesis are designed to reflect the above objective.

The independent variable, internal control systems was operationalized by adopting owner involvement and oversight, as well as cost-effective controls as dependent variables. The study was carried out in selected micro and small enterprises in northern Nigeria and took place between January and July, 2024.

Literature Review

Agency Theory is used to underpin this study because it focuses on the relationship between principals (owners) and agents (managers), highlighting how conflicts of interest can impact firm performance. It emphasizes the need for robust internal controls to align managerial actions with shareholder interests and mitigate potential agency costs (Chen, Yang, Zhang & Zhou, 2020), (Abhayawansa, Adams and Neesham 2021) and (Arwinge & Arwinge, 2013).

Conceptual framework diagrammatically depicts the relation between dependent and the independent variables of a study. Dependent variable for this study was growth of micro-small enterprises while independent variables will include internal control system with owner involvement and oversight, as well as cost-effective control. Figure 2.1 depicts the conceptual framework

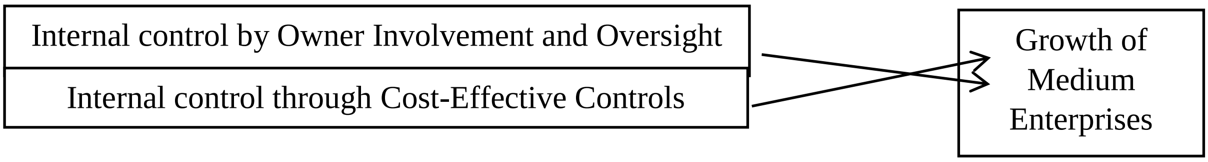

Figure 1, Conceptual Framework, relationship between variables.
Source: Ratliff, (2022).

Dimensions of internal control system

There are several determinants of internal control system, but this study adopted owner involvement and cost effectiveness control because they are directly involving owner manager. It is also confirmed that Micro-small enterprises are mostly managed by owners Alayli (2022).

Owner Involvement and Oversight: Alayli (2022) affirmed owner involvement and oversight represent a crucial component of internal control systems, particularly for micro and small enterprises. Given the close-knit nature of many Micro-small enterprises, active participation by owners and top management is essential for establishing a strong internal control environment. Fatoki (2020) showed that owners have a vested interest in the success and sustainability of their businesses and are uniquely positioned to provide leadership and direction in implementing effective control measures. Their involvement sends a clear message to employees that internal controls are a priority, fostering a culture of compliance and accountability throughout the organization.

Cost-Effective Controls: Cost-effective controls represent a crucial dimension of internal control systems, especially for micro, and small enterprises operating within tight budgetary constraints (Fapohunda, 2020). These businesses must balance the need for effective risk management with limited financial resources, making it essential to implement control measures that offer the greatest impact on risk mitigation at minimal cost. Wellem (2022) said cost-effective controls are those that provide the most significant benefits in terms of risk reduction relative to their implementation and maintenance costs (Fapohunda, 2020)

Empirical Review: Abei (2021) indicated that internal control systems and the growth of micro, small, and medium enterprises (Medium enterprises) are significant and multifaceted. Tang and Marlina (2023) affirmed internal control systems contribute to the improvement of operational efficiency within Micro-small enterprises by streamlining processes, reducing errors, and optimizing resource allocation. Furthermore, Sari and Nuvriasari (2023) said internal control systems play a crucial role in enhancing financial management and transparency within micro-small enterprises. Moreover, Balasubramanian (2022) opined that internal control systems contribute to risk mitigation and resilience building within Micro-small enterprises. Furthermore, Olaniyi, O., & Omubo, D. S. (2023) suggested that internal control systems support compliance with laws, regulations, and industry standards, thereby reducing legal and reputational risks for micro-small enterprises. Tijani (2022) assessed the existence of the relation between internal control system and performance in financial perspective of Telecommunication Company of Golestan province in Iran. The study revealed a significant and positive relation between internal control system and performance in financial perspective.

Abiodun (2020) assessed the relation between internal controls on SME performance. A significant relation between implementation of internal control and SMEs performance in financial perspective. Mumba and Wekesa (2020) examined effect of systems of internal control on performance in financial perspective of sugarcane out grower firms in Kenya. The study adopted a descriptive correlational survey design and collected data using questionnaires. A study by Alawaqleh (2021) assessed whether internal control system can lead to an increased performance in financial perspective of organizations. The findings of the study established that internal control and performance in financial perspective are statistically significant and a positive relation between communication and information, environment control and performance in financial perspective. Said, Alam, Radzi and Rosli (2020) examined the relationship between internal controls on SME performance. A significant relation between implementation of internal control and SMEs performance in financial perspective. Dangi, Nawawi and Salin (2020) explored effect of internal auditing towards systems of internal control effectiveness in higher learning institutions in Selangor.
Nyangoya (2022) assessed effect of systems of internal control on performance in financial perspective of sugarcane out grower firms in Kenya. The study adopted a descriptive correlational survey design and collected data using questionnaires. In addition, the study used the key informant's method where is obtained data from all the finance managers and heads of internal audit for every out-grower company.

Sharekh and Almaamari (2022) examined the existence of the relation between internal control system and performance in financial perspective of Telecommunication Company of Golestan province in Iran. The study revealed a significant and positive relation between internal control system and performance in financial perspective of the Telecommunication Company of Golestan province. Thus, the study concluded that existence of system of internal control influence financial performance positively and an internal control system seems to be necessary for effective performance.

Materials and Methods

In accordance with Kremmel and Harding (2020), (Dawson & Yan, 2021). Mardon and Belk (2019), Bennett (2021) the population of the study consist of all micro-small enterprises in north-eastern Nigeria, which runs into tens of thousands in each state of northeastern Nigeria. According to National Bureau of statistics (NBS 2023). It is estimated that there are more than two Million (2M) Micro-small enterprises in entire northeast Nigeria. Some are registered while others are not registered with corporate affairs commission and very little perform formal audit functions. In line with the work of Iliyasu and Etikan, (2021) Due to the size of the population, eighty-six (86) management and audit staff are selected as the sample size for this study. In this study, the census sampling technique is employed. Fifteen owner managers of Micro-small enterprises are selected from each state and it deemed suitable for respondents with similar characteristics Iliyasu and Etikan, (2021). An interview was used to collect the data from managers and some audit staff of micro-enterprises. The interview was simple so that participants may comprehend it and provide accurate answers (Nakano et al., 2021). 86 questionnaires were administered to respondents. 79 copies of questionnaire representing 91.86 percent were returned while 7 copies of questionnaire representing 8.14 percent were not returned. However, while only 71 (89.87%) copies of questionnaire were correctly filled and thus suitable for data analysis. The quality of the questionnaire items and their ability to measure the consistency of the instrument in providing the ended response is verified by the researcher, who validated the instruments' content and face validity. When an instrument is used again under the same circumstances and with the same subjects or components, how consistently it measures is estimated by the term "reliability." Test/Retest and Internal Consistency are the two methods that reliability is typically calculated using (Kennedy, 2022). By grouping questions in a questionnaire that measure the same notion, internal consistency calculates reliability (Sürücü and Maslakci, 2020). The Cronbach alpha method, a widely used method of computing data by dividing all the questions on an instrument to assess the instrument's reliability, was used to ascertain the instrument's dependability. The scale that was employed in this investigation had previously been deemed trustworthy. The quantitative survey is used for data collection. A five-point Likert scale questionnaire is used to gather the data. This paper employed two primary statistical methodologies to analyze the collected survey data. In relation to the methods employed for survey analysis, a comprehensive descriptive analysis, utilizing SPSS version 23 is used. However, reliability results were confirmed by a confirmatory Cronbach alpha internal consistency test on the instrument with our sample. This calculates the threshold level, 0.7, which is commonly regarded as the rule of thumb (Thunberg et al., 2023), and the average of all potential Split-half Reliability Coefficients.

Table 1: Reliability Results

S/No	Dimensions/Measures of the study variable	Number of items	Number of cases	Cronbach's Alpha
2.	Owner Involvement & Oversight	4	71	0.920
3	Cost Effective Control	4	71	0.891

Source: Research data output, 2024

Results and Discussions

Demographic Analysis

In this study the output of the demographic analysis were presented. These presentations would further enable the understanding of demographic distribution of the sample.

Gender: From the data obtained in SPSS software, 27 representing 38.0 percent of the respondents are females while 44 representing 62.0 percent of the respondents are Males. It can be deduced from this result that there are more male in the organization surveyed. Possible because more men are in the higher institution owing to the fact that it provides them with better work-life balance.

AGE: From the data obtained in SPSS software 15 respondents representing 21.1 percent of the respondents were less than 29 years, 23 respondents representing 32.4 percent fell within the 30-39 years age bracket, the remaining 24 of the respondents' representing 33.8 percent were observed to have fallen within the 40-49 years age bracket while the remaining 9 respondents representing 12.7 percent were 50-59 years and above. The implication of this result is that more of the respondents are within the middle age. This is because institution in search for excellence seek this category to drive their objectives and achieve competitive advantage.

Experience: From the data obtained in SPSS software, 17 respondents indicating 23.9 percent had worked for less than 5 years, 28 respondents which indicated 39.4 percent had been working for a period between 6-10 years, 15 respondents indicating 21.1 percent had been in the system for between 11-15 years, while 11 respondents indicating 15.5 percent had been in the system for between 16-20 years and above. This is because institution is in search for excellence seek this category to drive their objectives. In this section, the output of the primary data was presented. Analysis was carried out on individual variables and measures. Mean scores and standard deviations are also illustrated. The presentation begins with the independent variable which is internal control system with its dimension –owner involvement & oversight and cost-effective control. It then proceeds to the dependent variable – growth of Micro-small enterprises. These were all scaled on the five (5) point Likert scale (ranging from 1: **SD**= strongly disagree, 2: **D**= Disagree, 3**: N**=neutral, 4: **A**= agree and 5: **SA**= strongly agree).

Dimension of the Internal Control System

Table 2: Descriptive Statistics for the Variable of Internal Control System

	N	Minimum	Maximum	Mean	Std. Deviation
Owner Involvement and Oversight	71	1.00	5.00	3.9085	1.14193
Cost-Effective Control	71	1.00	5.00	3.6620	1.31006
Valid N (listwise)	71				

Source: SPSS 23.0 data Output, 2024

Table 2 above illustrates the descriptive statistics for owners' involvement & oversight, and cost-effective control with mean scores of 3.9085, and 3.6620 indicates that most of the respondents were on the agree range of the measurement scale.

Table 3: Descriptive Statistics for the Study Variable

	N	Minimum	Maximum	Mean	Std. Deviation
Internal Control System	71	1.19	5.00	3.8407	1.18198
Growth of Micro-small Enterprises	71	1.00	5.00	3.9261	1.19178
Valid N (listwise)	71				

Source: Research Survey, 2024

Table 3 above illustrates the descriptive statistics for study variable where independent and dependent variable have a mean scores of 3.8407 and 3.9261 indicates that most of the respondents were on the agree range of the measurement scale

Bivariate Level of Analysis

Here we present the data results for the analysis and tests for all previously hypothesized bivariate associations are presented. The hypotheses stated in the null form were all tested using the linear regression correlation. However, considering the nature of the study, which involved the test of causal effect, the variables involved, and the data measurement scale used, the study adopted and applied the descriptive statistical method for the bivariate analysis. The interpretation of Cooper and Schindler (2014) correlation decision scale frame as used in this study has been presented as follows:

(a) ±.00 – 19 (Very weak)
(b) ±.20 - .39 (Weak)
(c) ±.40 - .59 (Moderate)
(d) ±.60 - .79 (Strong)
(e) ±.80 - .99 (Very Strong)
(f) ±1 (Perfect)

Effect of Owners' Involvement and Oversight on Growth of Micro-small Enterprises

Table 4: Model Summary for Owners' Involvement and Oversight on Micro small enterprises

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.925[a]	.856	.854	.45589

a. Predictors: (Constant), Owner Involvement and Oversight

R square .856 which is approximated to R^2 = .854. This means the predictor has 85% variance with the dependent variable.

Table 5: ANOVA for Owners' Involvement and Oversight on Growth of Micro small enterprises

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.084	1	85.084	409.375	.000[b]
	Residual	14.341	69	.208		
	Total	99.424	70			

a. Dependent Variable: Growth of Micro-small Enterprises
b. Predictors: (Constant), Owners' Involvement and Oversight
F (409.375), P value = 0.000 which is < 0.05 hence shows a strong significant relationship

Table 6: Coefficients for Owners' Involvement and Oversight on Growth of Micro small enterprises

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.665	.170		3.909	.000
	Owner Involvement and Oversight	.831	.041	.925	20.233	.000

a. Dependent Variable: Growth of Micro-small Enterprises

Source: SPSS Output

Model Summary Table shows R value of .925; R square 0.856 which is approximated to R^2 = 0.854. ANOVA table (Test using Alpha 0.5) shows F = 409.375, P = 0.000, that is, < 0.05, mean square of 85.084 and Coefficient Table (Predictor Test at Alpha 0.05); t value of 3.909 and 20.233 with std. error of 0.170 and 0.041.

Ho2: Owner involvement and oversight have no significant effect on the growth of micro-small enterprises in north-eastern, Nigeria.

The result of the model showed R value of .815 which is the coefficient of determination are shown in Table 4.3, 4.4 and 4.5. This simply depict that about 85% of the growth of micro-small enterprises is accounted for by owners' involvements and oversight. Therefore, based on observed findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, owners' involvement and oversight have a significant effect on the growth of micro-small enterprises in north-eastern Nigeria.

Effect of Cost-Effective Control on Growth of micro and small Enterprises

Table 7: Model Summary for Cost-Effective Control on Growth of micro-small Enterprises

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.905[a]	.819	.816	.51056

a. Predictors: (Constant), Cost Effective Control

R square .819 which is approximated to $R^2 = 0.816$. This means the predictor has 81% variance with the dependent variable.

Table 8: ANOVA for Cost-Effective Control on Growth of micro and small Enterprises

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.438	1	81.438	312.418	.000[b]
	Residual	17.986	69	.261		
	Total	99.424	70			

a. Dependent Variable: Growthof micro-small Enterprises
b. Predictors: (Constant), Cost-Effective Control

F (312.418), P value = 0.000 which is < 0.05 hence shows a strong significant relationship.

Table 9: Coefficients for Cost-Effective Control on Growth of micro and small Enterprises

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.911	.181		5.033	.000
	Cost-Effective Control	.823	.047	.905	17.675	.000

a. Dependent Variable: Growth of micro-small Enterprises

Source: SPSS Output

Model Summary Table shows R value of 0.905; R square 0.819 which is approximated to $R^2 = 0.816$. ANOVA table (Test using Alpha 0.5) shows F = 312.418, P = 0.000, that is, < 0.05, mean square of 81.438 and Coefficient Table (Predictor Test at Alpha 0.05); t value of 5.033 and 17.675 with std. error of 0.181 and 0.047.

H_{o3}: Cost effective control have no significant effect on the growth of micro-small enterprises in north-eastern Nigeria.

The result of the model showed R value of .658 which is the coefficient of determination are shown in Table 4.6, 4.7 and 4.8. This simply depict that about 81% of the growth of micro-small enterprises is accounted for by cost effective control. Therefore, based on observed findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, cost effective control have significant effect on the growth of micro-small enterprises in north-eastern Nigeria.

Discussion and Findings

The findings revealed a positive significant relationship between the dimension of internal control system, such owners' involvement and oversight, and cost-effective control on growth of micro-small enterprises in north-eastern Nigeria. This finding correlate with the result by Vu and Nga (2022). Tang and Marlina (2023) affirmed internal control systems contribute to the improvement of operational efficiency within micro-small enterprises by streamlining processes, reducing errors, and optimizing resource allocation. Well-designed control measures help identify and eliminate inefficiencies, bottlenecks, and redundancies in workflows, enabling micro small enterprises to operate more smoothly and cost-effectively.

Summary

We posed research questions that reflected the dimensions of internal control system to include owners' involvement and oversight, and cost-effective control, and the measures of growth of micro-small enterprise. From the data generated/analyzed, the findings revealed that there is positive and significant influence of internal control system on growth of micro-small enterprises in north-eastern Nigeria.

Conclusion

Micro small enterprises across industries are recognizing that traditional growth strategies may not suffice in an era of rapid technological advancement and evolving consumer preferences. As a result, there is a growing shift towards embracing innovation-driven approaches to achieve and sustain growth. Businesses face obstacles such as resource constraints, market saturation, and changing competitive dynamics.

Specifically, also and in line with the objectives of this study, the study concludes that there is a relationship between owners' involvement and oversight and growth of micro-small enterprises in north-eastern Nigeria. Moreso, there is a relationship between cost-effective control and growth of micro-small enterprises in Northern Nigeria.

Recommendations

Based on the findings and conclusion above, the following recommendations are hereby made:

1. The owners should effectively communicate the organization's vision and goals to all employees. They should also actively participate in key decision-making processes within the organization.
2. There should be an investment format in internal control measures provide a good return in terms of enhanced efficiency and reduced risk.
3. Micro-small enterprises should be capable of adapting quickly to changes in the external environment, such as regulatory updates or market conditions. The enterprise should also be scalable and can be adjusted to accommodate organizational growth and expansion.

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IMPACT OF TRAINING AND DEVELOPMENT ON ORGANISATIONAL EFFICIENCY AMONG LOCAL GOVERNMENT COUNCILS IN YOBE STATE, NIGERIA

[1]Umar Mustapha Kachalla & [2]Habib Abu Chiroma

[1,2]Department of Business Administration, Federal University, Gashua Yobe State, Nigeria
Kachallaumar19@Gmail.Com

Abstract

This study aimed to investigate the impact of training and development programs on the efficiency of local government councils in Yobe State, Nigeria. The objectives were to determine the effect of training and development programs, examine the extent to which skills and capabilities acquired through training affect efficiency, explore the effect of training implementation and outcomes on efficiency, and investigate the perceived effectiveness of training initiatives on efficiency. Primary data was collected using questionnaires, and statistical tools such as STATA13 were used for data analysis and the study has a sample size of 260 response rate of 98.9% The findings of the study revealed that training and development programs were found to have no significant effect on the efficiency of local government councils in Yobe State. This suggests that training alone may not be sufficient to improve efficiency in this context, the relationship between the skills and capabilities acquired through training and the efficiency of local government councils in Yobe State was examined. This suggests that the successful implementation and positive outcomes of training programs contribute to improved efficiency, the perceived effectiveness of training initiatives was found to have no significant effect on the efficiency of local government councils in Yobe State.

Keywords: Training and development, organizational efficiency, Local government council, Yobe state

Introduction

Local government councils play a crucial role in grassroots governance and service delivery in Nigeria. However, these institutions, particularly in Yobe State, face significant challenges in achieving organizational efficiency and effectiveness. Recent studies have highlighted inadequate funding, poor infrastructure, and a lack of skilled personnel as major obstacles to efficient service delivery (Adamu et al., 2020; Umar & Okafor, 2022). In the face of these challenges, training and development have emerged as potential solutions to enhance organizational efficiency. Okoye and Ezejiofor (2021) demonstrated a positive correlation between training programs and improved organizational performance in Nigerian public sector institutions. Similarly, Aliyu and Bello (2023) found that well-designed training programs significantly improve job satisfaction and productivity among local government employees.

The importance of aligning training programs with organizational goals has been emphasized by Musa and Ibrahim (2019), who argue that such alignment is crucial for achieving optimal results in public sector institutions. Specifically, in Yobe State, Yakubu and Baba (2022) identified a significant gap in the skills and competencies required for effective service delivery in local government councils, recommending the implementation of targeted training and development programs.

Despite these insights, there is a notable lack of comprehensive research on the specific impact of training and development on organizational efficiency in local government councils in Yobe State. Lawan et al. (2024) highlighted the need for a more structured and consistent approach to training in Yobe State's local governments compared to other states in Nigeria. This study, therefore, aims to investigate the impact of training and development as effective tools for enhancing organizational efficiency among local government councils in Yobe State.

Statement of problem

The effectiveness of training and development as tools for enhancing organizational efficiency in local government councils in Yobe State faces several significant challenges. Firstly, many councils lack structured and tailored training programs, resulting in a workforce inadequately prepared for their roles (Obi-Anike & Ekwe, 2014). Financial constraints further limit investment in quality training initiatives, leading to ineffective programs that do not meet employee needs (Bukar & Umar, 2024). Additionally, employee resistance to change discourages participation in these programs, undermining their potential benefits (Obi-Anike & Ekwe, 2014). There is also a lack of evaluation mechanisms to assess the impact of these training initiatives on productivity, which makes it difficult to determine their effectiveness (Bukar & Umar, 2024). Furthermore, rapid technological changes create skill gaps among employees who may not receive adequate training to adapt (Obi-Anike & Ekwe, 2014). Lastly, weak management support often results in deprioritization of employee development, further impeding organizational efficiency (Bukar & Umar, 2024). Addressing these challenges is crucial for creating a competent workforce capable of achieving quality public service delivery.

Research Objectives:

The specific Objectives of the study are to:

1. Determine the effect of training and development programs on efficiency of local government councils in Yobe State.
2. Examine the extent skills and capabilities of training affect the efficiency of local government councils in Yobe State.
3. Explore the effect of implementation and outcomes of training on the efficiency of local government councils in Yobe State.
4. Investigate the effect of perceived effectiveness of training initiatives on efficiency of local government councils in Yobe State.

Hypothesis of the study

Ho1: Training and development programs have no significant effect on efficiency of local government councils in Yobe State.

Ho2: There is no significant relationship between skills and capabilities of training and the efficiency of local government councils in Yobe State.

Ho3: Implementation and outcomes of training has no significant effect on the efficiency of local government councils in Yobe State.

Ho4: Perceived effectiveness of training initiatives has no significant effect on efficiency of local government councils in Yobe State.

Literature Review

Concept of Training and Development

The concept of training and development is well-established in the field of organizational management and human resource development. Training refers to the systematic process of acquiring and enhancing the knowledge, skills, and abilities of employees to improve their performance and enable them to contribute more effectively to the achievement of organizational goals (Dessler, 2017). Development, on the other hand, is a broader concept that encompasses the ongoing process of enhancing an individual's capabilities, competencies, and potential to meet future job responsibilities and challenges (Noe, 2017).

Organizational efficiency

Organizational efficiency in local government councils can be defined as the ability of these public institutions to effectively and optimally utilize their resources, including human, financial, and material resources, to achieve their stated goals and objectives (Andrews & Boyne, 2012). Efficiency in local government councils is crucial for ensuring the effective delivery of public services, the responsive and accountable governance of the local community, and the overall development and well-being of the region.

Important of Training and development

1. Improved employee performance: Training and development programs help employees acquire the necessary knowledge, skills, and abilities to perform their job responsibilities more effectively, leading to improved individual and organizational performance (Dessler, 2017).
2. Enhanced employee motivation and job satisfaction: Well-designed training and development initiatives can contribute to increased employee motivation, job satisfaction, and commitment, which in turn can lead to improved organizational outcomes (Elnaga & Imran, 2013).
3. Organizational adaptability: Training and development programs can help employees develop the flexibility and adaptability required to respond to changing organizational needs and environmental demands (Saksvik et al., 2017).
4. Facilitated career growth and succession planning: Training and development opportunities can support employee career development and enhance the organization's ability to identify and develop internal talent for future leadership roles (Noe, 2017).
5. Increased organizational competitiveness: Investing in the training and development of employees can enhance an organization's competitiveness by improving its ability to adapt to changing market conditions and maintain a skilled and knowledgeable workforce (Kang & Snell, 2009).

6. Improved organizational efficiency and effectiveness: Training and development programs can help organizations optimize their use of resources, streamline their processes, and enhance their overall performance and productivity (Armstrong & Taylor, 2020).

Role of Training and Development in Enhancing Employee Skills and Knowledge

1. Skill development: Training and development programs provide employees with the opportunity to acquire new skills, improve existing ones, and stay up-to-date with the latest industry practices, technologies, and methods (Aguinis & Kraiger, 2009).
2. Knowledge enhancement: Training and development activities help employees deepen their understanding of their job responsibilities, organizational policies and procedures, and the broader business context, enabling them to make more informed decisions and contribute more effectively to the organization (Dessler, 2017).
3. Improved job performance: By enhancing employee skills and knowledge, training and development initiatives can lead to improvements in individual job performance, which can in turn positively impact overall organizational performance (Elnaga & Imran, 2013).
4. Career development: Training and development opportunities support employee career growth and progression, allowing them to acquire the competencies required for future roles and responsibilities within the organization (Noe, 2017).

Relationship between Training and Development and Employee Motivation and Job Satisfaction

1. Training and development opportunities support employee career growth and progression, which can lead to increased job satisfaction and higher levels of motivation (Noe, 2017).
2. Providing employees with access to meaningful learning and development activities contributes to a sense of value and investment in the organization, fostering greater job satisfaction and engagement (Kang & Snell, 2009).
3. Employees who perceive their organization as supportive of their professional development are more likely to exhibit higher levels of motivation, job satisfaction, and commitment to the organization (Elnaga & Imran, 2013).

Training and Development Practices in Local Government Councils

1. Local government councils often provide in-house training programs to enhance the skills and knowledge of their employees, helping them better serve the needs of the local community (Armstrong & Taylor, 2020).
2. Many local government councils collaborate with external training providers and educational institutions to offer specialized courses and workshops, such as leadership development, project management, and customer service training, to support the professional growth of their workforce (Dessler, 2017).
3. Local government councils may also encourage and fund employees to attend industry conferences, workshops, and seminars to stay up-to-date with the latest trends, regulations, and best practices in the public sector (Saksvik et al., 2017).

Evaluation and effectiveness of training and development programs

1. Organizations often assess the impact and effectiveness of their training and development initiatives through various measures, such as pre- and post-training assessments, on-the-job performance improvements, employee feedback, and return on investment (Aguinis & Kraiger, 2009).
2. Effective training and development programs are designed to align with the organization's strategic objectives and are regularly evaluated to ensure they are delivering the desired outcomes, such as enhanced employee skills, increased productivity, and improved organizational performance (Elnaga & Imran, 2013).
3. The use of a comprehensive evaluation framework, which may include measures of reaction, learning, behavior, and results, can provide valuable insights into the effectiveness of training and development programs and identify areas for improvement (Noe, 2017).

Methods and Materials

In this study, survey research design was adopted and empirically explained research methods that were used to examine the Impact of Training and Development as Effective Tools for Organizational Efficiency among Local Government Councils in Yobe State. Preliminary analyses were conducted to ensure all the assumptions of the regression model were met. For this study a total of two hundred and sixty-three (263) copies of questionnaire were administered and only Two hundred and sixty (260) questionnaires were retrieved giving a sample response rate of 98.9%.

Results and Discussion

Reliability of constructs

Table 1: Reliability Result

S/N	Questionnaire Constructs	Cronbach Alpha Reliability Result	Number of Items	Remark
1	Training and development programs	0.773	5	Reliable
2	Skills and capabilities of training (**SCT**)	0.738	5	Reliable
3	Implementation and outcomes of training (**IOT**)	0.659	5	Reliable
4	Perceived effectiveness of training (**PET**)	0.667	5	Reliable
5.	Organizational Efficiency (**OGE**)	0.695	5	Reliable
6	**Overall**	0.824	25	Reliable

Source: SPSS 26.0

The reliability test indicated that since the overall Cronbach Alpha value is 0.824 and is higher than the benchmark value of 0.7, it can be indicated that the instrument for data collection is reliable.

Table 2: Correlation Matrix

		OGE	TRD	SCT	IOT	PET
OGE	Pearson Correlation	1	.188**	.394**	.370**	.294**
	Sig. (2-tailed)		.002	.000	.000	.000
	N	260	260	260	259	260
TRD	Pearson Correlation	.188**	1	.328**	.281**	.288**
	Sig. (2-tailed)	.002		.000	.000	.000
	N	260	260	260	259	260
SCT	Pearson Correlation	.394**	.328**	1	.524**	.655**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	260	260	260	259	260
IOT	Pearson Correlation	.370**	.281**	.524**	1	.579**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	259	259	259	259	259
PET	Pearson Correlation	.294**	.288**	.655**	.579**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	260	260	260	259	260

Source: SPSS 26.0

The correlation result for dependent and independent variables in table 5 shows that all the variables have a positive relationship to organizational efficiency (OGE). The result revealed that TRD, SCT, IOT and PET correlate to organizational efficiency (OGE) by 18.8%, 39.4%, 37.0%, and 29.4% respectively.

Table 3: Multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
	TRD	.871	1.147
	SCT	.524	1.908
	IOT	.621	1.609
	PET	.493	2.028

From table 6, the variance inflation factor (VIF) for the predictors is used to test if there is a strong linear association among them. The result of the multicollinearity shows that there is no multicollinearity among the independent variables, since the values of the VIF are all less than 10 which is the benchmark.

Table 4: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.441[a]	.194	.181	.57970	1.840

a. Predictors: (Constant), TRD, SCT, IOT, PET
b. Dependent Variable: OGE

The value of the *R*-Squared. In a multiple regression model, this is the proportion of the total sample variation in the dependent variable that is explained by the independent variable. The closer the R^2 is to 1 or 100% the better the goodness of fit. The R^2 lies between zero and one, because sum of square error cannot be greater than sum of square total. A value of R^2 that is nearly equal to zero indicates a poor fit of the OLS line. The coefficient of determination

r^2=0.194 shows a 19.4% contribution of TRD, SCT, IOT and PET to OGE. The result also indicated that there is no auto-correlation since the Durbin-Watson value is approximately 2

Table 5: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	20.564	4	5.141	15.298	.000[b]
	Residual	85.358	254	.336		
	Total	105.922	258			

a. Predictors: (Constant), TRD, SCT, IOT, PET

b. Dependent Variable: OGE

The F-Statistic is a test used to test multiple hypotheses about the parameters in a multiple regression model. This statistic tests the null hypothesis that all the regression coefficients are equal to zero. If the Fcal > F0.05 (tab), reject the null hypothesis and accept the alternative hypothesis vice-versa. The F- test with a value of 15.298 and p-value of 0.000 shows that there is a strong linear dependency existing among the variables. The F-statistic shows a very good fit, statistically.

Test of Hypotheses

Table 6: Regression Result for TRD, SCT, IOT and PET on OGE

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.329	.182		7.292	.000
	TRD	.046	.064	.043	.718	.473
	SCT	.200	.055	.282	3.626	.000
	IOT	.156	.048	.231	3.237	.001
	PET	-.034	.074	-.037	-.457	.648

a. Dependent Variable: OGE

Test of Hypothesis One

The hypothesis one is restated as follows:

H_0: Training and development programs have no significant effect on efficiency of local government councils in Yobe State.

The result of the regression result in table 9, shows that the p-value of Training and development (TRD) is 0.473, the decision rule is that if the p-value is less than the level of significance of 0.05, the null hypothesis will be rejected while the alternate hypothesis is accepted. But if the p-value is greater than the level of 0.05, accept the null hypothesis and reject the alternate. Since the p-value (0.473) is greater than the significant level of 0.05. The null hypothesis is therefore not rejected concluding that Training and development programs have no significant effect on efficiency of local government councils in Yobe State.

Test of Hypothesis Two

The hypothesis two is restated as follows:

$H0_2$: There is no significant relationship between skills and capabilities of training and the efficiency of local government councils in Yobe State.

The result of the regression result in table 9, shows that the p-value of skills and capabilities of training (SCT) is 0.000, the decision rule is that if the p-value is less than the level of significance of 0.05, the null hypothesis will be rejected while the alternate hypothesis is accepted. But if the p-value is greater than the level of 0.05, accept the null hypothesis and reject the alternate. Since the p-value (0.000) is less than the significant level of 0.05. The null hypothesis is therefore rejected concluding there is a significant relationship between skills and capabilities of training and the efficiency of local government councils in Yobe State.

Test of Hypothesis Three

The hypothesis three is restated as follows:

$H0_3$: Implementation and outcomes of training has no significant effect on the efficiency of local government councils in Yobe State.

The result of the regression result in table 9, shows that the p-value of Implementation and outcomes of training (IOT) is 0.001, the decision rule is that if the p-value is less than the level of significance of 0.05, the null hypothesis will be rejected while the alternate hypothesis is accepted. But if the p-value is greater than the level of 0.05, accept the null hypothesis and reject the alternate. Since the p-value (0.001) is less than the significant level of 0.05. The null hypothesis is therefore rejected concluding that Implementation and outcomes of training has a significant effect on the efficiency of local government councils in Yobe State.

Test of Hypothesis Four

The hypothesis four is restated as follows:

$H0_4$: Perceived effectiveness of training initiatives has no significant effect on efficiency of local government councils in Yobe State.

The result of the regression result in table 9 shows that the p-value of Perceived effectiveness of training initiatives (PET) is 0.648; the decision rule is that if the p-value is less than the level of significance of 0.05, the null hypothesis will be rejected while the alternate hypothesis is accepted. But if the p-value is greater than the level of 0.05, accept the null hypothesis and reject the alternate. Since the p-value (0.648) is greater than the significant level of 0.05. The null hypothesis is therefore rejected concluding that Perceived effectiveness of training initiatives has no significant effect on efficiency of local government councils in Yobe State.

For hypothesis one, Training and development programs has no significant effect on efficiency of local government councils in Yobe State. This result is consistent with the study of Jane Smith (2019) who found that a significant positive relationship between training and development programs and organizational efficiency in local government councils. Employees who participated in training programs reported higher levels of job satisfaction, increased job performance, and improved efficiency in their work processes. The study also identified a positive correlation between the perceived skill improvements resulting from training programs and organizational efficiency.

In the case of hypothesis two, there is a significant relationship between skills and capabilities of training and the efficiency of local government councils in Yobe State. This is in agreement with the study of Abdulwahab, and Sulaiman (2014) whose findings showed that employees who participated in training programs were found to be more knowledgeable, skilled, and motivated, leading to improved performance in their respective roles. Again, the result supported that study of Chikwelu, and Okoro (2013) in the influence of training and development programs on organizational productivity in manufacturing companies in Enugu State, Nigeria. The study found that training and development programs had a positive impact on organizational productivity through improved employee skills, knowledge, and efficiency. Similarly, the findings agreed with that of Adetunji and Olusola (2018) who found a Positive correlation between training, job satisfaction, and performance. Training contributed to improved knowledge, skills, and motivation, leading to higher job satisfaction and better performance.

For hypothesis three, implementation and outcomes of training has a significant effect on the efficiency of local government councils in Yobe State. This is in agreement with the study of David Johnson (2020) who contributed to successful training program implementation, such as strong leadership support, adequate resources, and a culture that values continuous learning and development.

Finally, for hypothesis four, Perceived effectiveness of training initiatives has no significant effect on efficiency of local government councils in Yobe State. This result does not agree consistent with the study of Jane Smith (2019) who found a positive correlation between the perceived skill improvements resulting from training programs and organizational efficiency and based on the findings,

Key Finding

1. Training and development programs have no significant effect on efficiency of local government councils in Yobe State.
2. The relationship between skills and capabilities of training and the efficiency of local government councils in Yobe State.
3. Implementation and outcomes of training has a significant effect on the efficiency of local government councils in Yobe State.
4. Perceived effectiveness of training initiatives has no significant effect on efficiency of local government councils in Yobe State.

Conclusion

The main objective of this study is to evaluate the Impact of Training and Development as Effective Tools for Organizational Efficiency among Local Government Councils in Yobe State. Specifically, the study examined the impact of Training and development programs, skills and capabilities of training, implementation and outcomes of training and Perceived effectiveness of training initiatives on efficiency of local government councils in Yobe State. From the findings and discussions in the previous chapters, the following conclusions were derived. Training and Development is an Effective Tools for Organizational Efficiency and it must be sustainable over time to ensure effective and efficient performance.

Recommendations

The study recommends that local government councils should invest in comprehensive and well-designed training and development programs. These programs should focus on enhancing employees' skills, knowledge, and competencies relevant to their roles and responsibilities, State government of Yobe state should increase investment in training and development programs for local government employees, with a focus on programs tailored to specific job roles and needs. Yobe state government should allocate sufficient resources; establish goals and objectives for training initiatives, and the development of a supportive organizational culture that encourages continuous learning. This is because regular evaluation and feedback mechanisms will enhance skills and knowledge to daily work practices.

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MODERATING ROLE OF ORGANIZATIONAL CULTURE ON THE IMPACT OF INNOVATION CAPABILITY ON SMALL AND MEDIUM ENTERPRISES (SMEs) PERFORMANCE IN KADUNA STATE, NIGERIA

[1]Mohammed Sani, Saidu, [2]Prof. Nasir Abdullahi, [3]Dr. Aliu Audu, Gemu & [4]Prof. Tijani Bashir, Musa

[1]Department of Business Administration, Confluence University of Science and Technology (CUSTECH), Osara, Kogi State, Nigeria
[2,3]Department of Business Administration, ABU Business School, Ahmadu Bello University, Zaria
[4]Department of Finance, Ahmadu Bello University, Zaria
[1]saidums@custech.edu.ng, [2]nasiruabdullahi@abu.edu.ng, [3]aagemu@abu.edu.ng, [4]tbmusa@abu.edu.ng
[1]+2348131280710, [2]+2348039684649, [3]+2348035990862, [4]+2348033472659

Abstract

Small and medium-sized enterprises (SMEs) are widely recognized as a critical sector, the foundation of global industrialization and economic growth, and play a major role in the global economy. This study deployed innovation capability dimensions as; marketing and organizational innovation capability to investigate the moderating role of organizational culture on the impact of innovation capability on SMEs performance. The cross-sectional study focused on SMEs in the services sector in Kaduna State, Nigeria. The study population consists of 672 SMEs registered with the Kaduna Chamber of Commerce and Industry, Mines and Agriculture (KADCIMA). A sample size of 436 was drawn from the population using Taro Yamane's (1967) statistical formula. A stratified random sampling technique was used to divide the sample into various strata. The data collected was analyzed using Partial Least Square Structural Equation Modelling (Smart PLS 4.0) software. The findings from the study indicated that marketing and organizational innovation capability has a positive and significant impact on SMEs' performance. However, organizational culture failed to moderate the relationship between marketing innovation capability and SME performance. Moreover, the moderating relationship of organizational culture between organizational innovation capability and SME performance was found to be weak but statistically significant. From the implication of the findings, it is observed that organizational culture cannot necessarily strengthen the marketing and organizational innovation capabilities of SMEs. However, the presence of other variables may change the impact. It is therefore recommended future studies to use organizational culture as an intervening factor in the model.

Keywords: Innovation Capability, Marketing Innovation, Organizational Culture, SMEs Performance, Structural Equation Modelling (PLS-SEM).

Introduction

SMEs are vital for economic growth, job creation, and poverty reduction, contributing significantly to GDP and revenue in both emerging and developed countries. Studies by López-Fernández, Maté-Sánchez-Val and Somohano Rodriguez (2021), and Madison, Moore, Daspit, and Nabisaalu (2022) underscore SMEs' impact on GDP and employment creation. The World Bank (2022) states that SMEs contribute over 90% of revenue and 60% of global employment. Haris, Jamaluddin, and Usman (2023) reported a 9% growth in Indonesian SMEs from 2015 to 2020. In Africa, SMEs play a key role, with 96% of Nigerian firms being SMEs (Oyeyinka, 2020).

Notwithstanding their importance, SMEs in some developing countries, including Nigeria, underperform despite substantial support (Arshad & Arshad, 2019). SMEDAN (2018, 2021) reported a decline in the number of operating SMEs in Nigeria, prompting a search for solutions. Moreover, most research on SMEs performance focuses on Asian (Sari, et al., 2023; Saula, Akinlabi, & Makinde, 2023; Aswan, 2023; Wongsansukcharoen & Thaweepaiboonwon, 2023; Suryoto, 2022; Zhang, et al., 2023, Matloob, et al., 2023) and European countries (Cervantes, Aguirre, Rivera, Huerta & Lopez, 2023: Borodako, et al., 2022; Lungu, 2020; Heenkenda et al., 2022) while few are visible in Africa and specifically Nigeria (Eloundou & Chi, 2023; Gontur, Goyit & Vem, 2022; Oluwa & Ibrahim, 2021; Shuaib & He, 2021).

Moreover, the dynamic business environment pressures SMEs to innovate for survival and growth. Fu et al. (2021) highlight evolving customer needs, competition, and technology, while Jiménez et al. (2021) stress that innovation is essential for long-term success. Zhang et al. (2023) emphasize Innovation Capability (IC) in achieving sustainable growth, helping firms adapt and create new products (Olsson et al., 2010). While Sari et al. (2023) see a positive IC-performance link, Saputra and Nasution (2023) challenge this. Kafetzopoulos and Psomas (2015) identify key innovation types, with most research focusing on product and process innovation (Martínez-Román et al., 2019).

Mejía Vallejo and Arias-Pérez (2017) argue that product and process innovation capabilities (IC) do not guarantee sales growth or market share. Martínez-Román et al. (2019) noted research on small business innovation focuses on these IC types, neglecting organizational and marketing innovation (Gupta et al., 2016; Mendoza-Silva, 2020). Saunila (2019) emphasized expanding IC studies to dimensions like process, organizational, or marketing IC. Zastempowsk (2022) highlighted IC determinants vary across sectors, urging industry-specific research. This study examines Nigeria’s services sector, which grew significantly, contributing 56.3% to GDP in 2022, underscoring its global economic and industrial performance impact (Izuaka, 2023).

Studies identify factors promoting innovation in organizations, with Shiva Sheikhi, Ghaleh, and Mehralian (2022) noting that innovative businesses focus on products, services, technologies, and fostering an innovation culture. Research also explores the link between organizational culture (OC) and innovation (Zhang et al., 2023; Ayandibu & Vezi-Magigaba, 2021; Schuldt & Gomes, 2020; Shuaib & He, 2021). Fu et al. (2021) propose a moderating variable in the innovation-performance relationship. This study aims to explore OC as a moderator between marketing and organizational innovation capability, and SME performance in Kaduna State, Nigeria. Thus, the hypothesis one and two are stated as follows;

H₀1: Marketing innovation capability has no significant effect on SMEs' performance.
H₀2: Organizational innovation capability has no significant effect on SME performance

Literature Review and Hypotheses Development

Innovation Capability (IC)

IC is crucial in innovation research, connecting closely with innovation literature (Mendoza-Silva, 2020). However, terms like innovation, innovation capacity, and innovation capability are often used interchangeably, which some scholars argue has slowed theoretical progress (Dewett, Whittier, & Williams, 2007; Downs & Mohr, 1976). Saunila (2014) views IC as a multifaceted concept, which can be assessed through its dimensions, outputs, and determinants. The OECD (2005) defines innovation as implementing new or significantly improved products, processes, marketing methods, or organizational practices. IC's measurement is often tied to performance outcomes like sales, new products, patents, and overall firm performance (Yam et al., 2011; Qi et al., 2020; Guo & Zhou, 2016; Zhang et al., 2017). It involves transforming creative ideas into practice (Bedford, Ma, & Vojvoda, 2020).

Moreover, IC involves the creation and adoption of new ideas for improved products, services, or business models. Ferreira et al. (2020) view IC as activities that facilitate new ideas. Kafetzopoulos and Psomas (2015) sees IC as the continuous transformation of ideas into valuable outputs. Zhang and Merchant (2020) highlight IC's role in developing market-accepted innovations. Walter et al. (2021) described IC in the perspective of open innovation as the ability of firms to obtain, generate, and apply knowledge. Rajapathirana and Hui (2018) see IC as critical for sustaining competitive advantage. Hogan et al. (2011) define IC as the firm's collective ability to innovate across various domains, which is adopted for this study due to its comprehensive scope.

SMEs Performance

SMEs performance is crucial for evaluating business outcomes (Rehman et al., 2019; Wang et al., 2020). It is defined as the ability to achieve strategic goals through efficient resource use (Muthuveloo et al., 2017). Nayel (2023) describes SMEs' performance as achieving market-oriented (non-financial) and financial goals. Non-financial goals include market share, sales growth, product quality, and customer satisfaction, while financial goals involve profitability, ROI, and ROA. This study examines both financial and non-financial indicators such as sales growth, market share, customer satisfaction, new product success, and profitability.

Innovation Capability and SME Performance

Innovation is crucial for SMEs' growth and survival in competitive global markets (Zahra & Covin, 1994; Bayarçelik et al., 2014). It serves as a key driver of long-term success, with SMEs acting as incubators of innovation. Rosenbusch et al. (2011) highlight that SMEs' small, flexible structures and entrepreneurial intent enable greater exposure to new ideas. Vu (2020) adds that SMEs with strong innovation capabilities have higher survival rates. Moreover, recent studies highlight the advantages of SMEs in innovation due to their flexibility, minimal bureaucracy, and use of external networks. This enables a better understanding of customer needs, strategic alliances, and the pursuit of disruptive technologies (Anwar, 2018; Leckel et al., 2020; Owalla et al., 2021). Empirical research shows a strong link between IC and business performance (Agyapong et al., 2017). Bigliardi (2013) in his findings reported that improvement in firm's innovation potential can increase its operational competence and financial position. This study uses OECD (2005) dimensions: product, process, marketing, and organizational innovation. In addition, Maldonado-Guzmán, Garza-Reyes, Pinzón-Castro, and Kumar (2018) found that IC in products, processes, marketing, and organization enhances business returns. However, Mejía and Arias-Pérez (2017) argued that product and process IC don't always drive sales growth. Saunila (2019) and Martínez-Román, et al. (2019) reported that research on IC focused mostly on product and process innovation and few on organizational and marketing innovation.

Organizational Culture (OC) and SME Performance

Oluwa and Ibrahim (2021) described OC as a set of distinctive characteristics that is gradually developed in the organization over time. Yirdaw (2016) defined OC as the glue which combines the nonhuman assets to the human assets in an organization to build teamwork and decent performance. Schuldt (2020) claimed that OC that inspires calculated risk-taking and self-sufficiency functions as an antecedent to the effective application of the innovation strategy. Fiordelisi (2014) identifies four OC types: clan, adhocracy, hierarchy, and market culture, each with unique focuses like teamwork, creativity, stability, and results. Many studies has discovered that OC has a positive relationship with business performance (Cura, 2018; Gorondutse & Hilman, 2019; Heris, 2014; Kohtamaki et al., 2016; Nikpour, 2017; Sengottuvel & Aktharsha, 2016; Wahyuningsih et al., 2019). However, few studies claim that such a relationship does not exist (Leithy, 2017; Rashid & Shah, 2016). Thus, the relationship is hypothesized as follows;

$H_0$3: Organizational culture has no significant effect on SME performance.

The Moderating Role of Organizational Culture

Research on innovation enterprises highlights organizational characteristics as key determinants of IC (Mendoza-Silva, 2020). Rajapathirana and Hui (2018) identify factors like organizational culture, knowledge use, and stakeholder participation as IC determinants. Dziallas and Blind (2019) focus on dimensions such as strategy, innovation culture, competence, structure, R&D, and financial performance. Naranjo-Valencia et al. (2016) and Anning-Dorson (2017) emphasize that organizational culture can either facilitate or hinder innovation. Kim and Chang (2019), Sanchez-Baez et al. (2019), and Khedhaouria et al. (2020) note that market, adhocracy, and hierarchical cultures support innovation. Saputra & Nasution (2023) suggest that innovation management practices are necessary for IC to enhance SMEs' performance. Therefore, the moderating relationship is hypothesized as follows;

$H_0$4: Organizational culture does not moderate the relationship between marketing innovation capability and SME performance.

$H_0$5: Organizational culture does not moderate the relationship between organizational innovation capability and SME performance.

Conceptual and Theoretical Framework

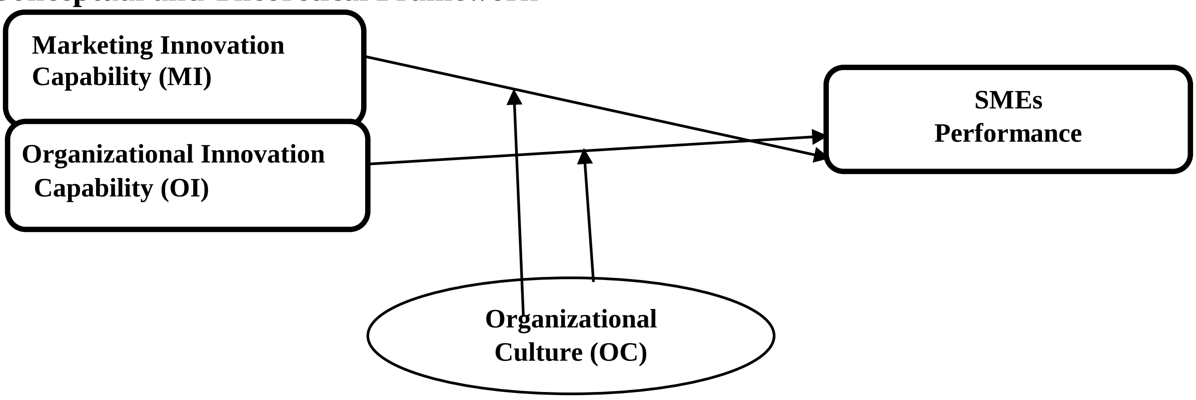

Figure 1: Research Framework

The Resource-Based View (RBV) theory, introduced by Jay B. Barney in 1991, explains the link between resources and competitiveness. According to RBV, a firm's competitive advantage and performance arise from unique, inimitable resources (Kiyabo & Isaga, 2020). This theory highlights the importance of innovation for SMEs in achieving sustained competitiveness.

Materials and Methods

This research employed a descriptive survey design and cross-sectional approach. Data was collected between October and November, 2023 from owners/managers of SMEs in services sector situated in Kaduna metropolis this is because many of the SMEs in service sector domiciled in the metropolis according to Kaduna Chamber of Commerce and Industry, Mines and Agriculture (KADCIMA). The population of the study comprises 672 SMEs in services sector registered with KADCIMA as at October, 2023. Sample size of 436 was drawn from the population using Taro Yamane (1967) statistical formula. To avoid poor response issue, the sample size was increased by 10% which make it up to 480 SMEs used for the study. Stratified random sampling was used to divide the population of the sector into various stratum, and simple random sampling was use to select the population sample which is believe to be true representative of the population. A total of 413 were completed and returned representing 86% of the whole questionnaires distributed for the study. The data collected was analyzed using Smart Partial Least Square Structural Equation Modelling (PLS-SEM) 4.0 software. Variables used for the study include; innovation capability dimensions (independent variables) as marketing innovation capability (MI) and organizational innovation capability (OI) with 6 items adopted from Calik, et al., (2017), organizational culture (OC) as moderator with 7 items adopted from Sánchez- Báez, et al., (2019) while SMEs performance (FP) with 12 items was adapted from Cervantes, et al. (2023). 5 point Likert scale (strongly agree to strongly disagree) was used in measuring the variables.

Results and Discussion

Presentation and Discussion of Results

In this study, measurement model and structural model analysis were carried out in different phases. The first phase of the analysis was the measurement model which showed the internal consistency reliability and convergent validity of the construct presented in Figure 1. The second phase is the structural model used to assess the significance of the hypotheses.

Figure 2: Measurement Model

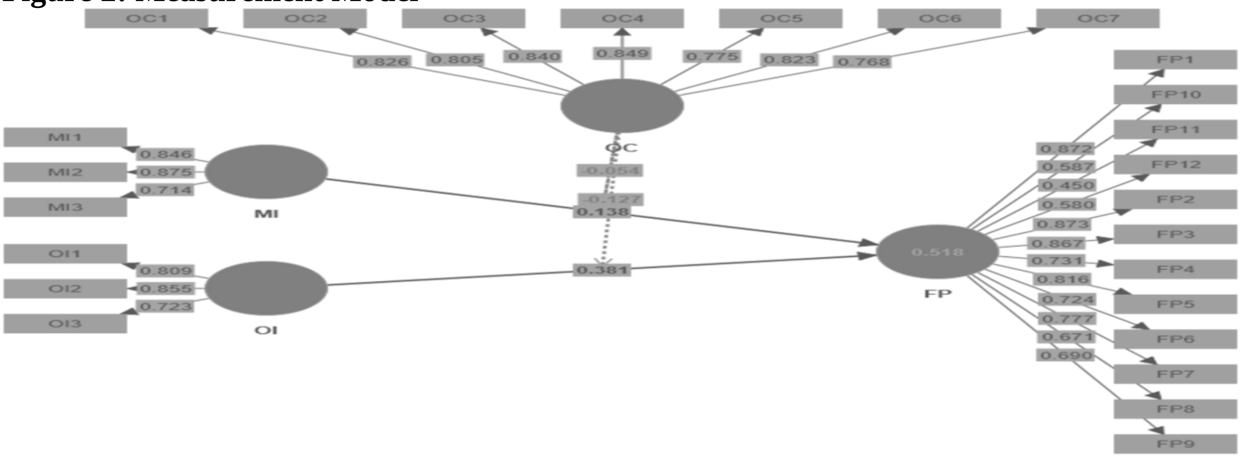

Table 1: Internal Consistency Reliability and Convergent Validity Result

	Code	Loadings	Composite Reliability (CR)	Average Variance
SMEs Performance	FP1	0.872	**0.936**	**0.535**
	FP10	0.587		
	FP11	0.450		
	FP12	0.580		
	FP2	0.873		
	FP3	0.867		
	FP4	0.731		
	FP5	0.816		
	FP6	0.724		
	FP7	0.777		
	FP8	0.671		
	FP9	0.690		
Marketing Innovation Capability	MI1	0.846	**0.751**	**0.664**
	MI2	0.875		
	MI3	0.714		
Organizational Culture	OC1	0.826	**0.915**	**0.661**
	OC2	0.805		
	OC3	0.840		
	OC4	0.849		
	OC5	0.775		
	OC6	0.823		
	OC7	0.768		
Organizational Innovation Capabili	OI1	0.809	**0.713**	**0.636**
	OI2	0.855		

Table 1 presents the composite reliability (CR) and average variance extracted (AVE) for construct validation. The CR values for SME performance (FP) are 0.936, marketing innovation (MI) 0.751, organizational culture (OC) 0.915, and organizational innovation capability (OI) 0.713, all exceeding the 0.7 threshold, indicating acceptable internal consistency. The AVE values also meet the required threshold of 0.5, demonstrating that each construct explains significant variance in its indicators. Additionally, the Fornell-Larcker Criterion, a measure of discriminant validity, is used to assess the distinctiveness of constructs in the model (Hair et al., 2017). This is presented in Table 2 as follows.

Table 2: Discriminant Validity Result using Fornell and Larcker Criterion

	FP	MI	OC	OI
FP	**0.731**			
MI	0.565	**0.815**		
OC	0.621	0.663	**0.813**	
OI	0.669	0.648	0.711	**0.798**

Table 2 presents the result of the Fornell and Larker Criterion. As shown in the table, the values on the diagonal show that the square root value of AVE (diagonal values) is greater than the correlations (off-diagonal values) for all reflective constructs. This indicates that the constructs are different and measure separate concepts with no issue of multi-collinearity among them.

Figure 3 presents the structural model of the study. The structural model is used to assess the hypotheses testing (path coefficient), effect size (f^2), and coefficient of determination (R^2 value). The study utilizes a 5,000 bootstrap sample size to assess the significance level of the path coefficient in the relationships.

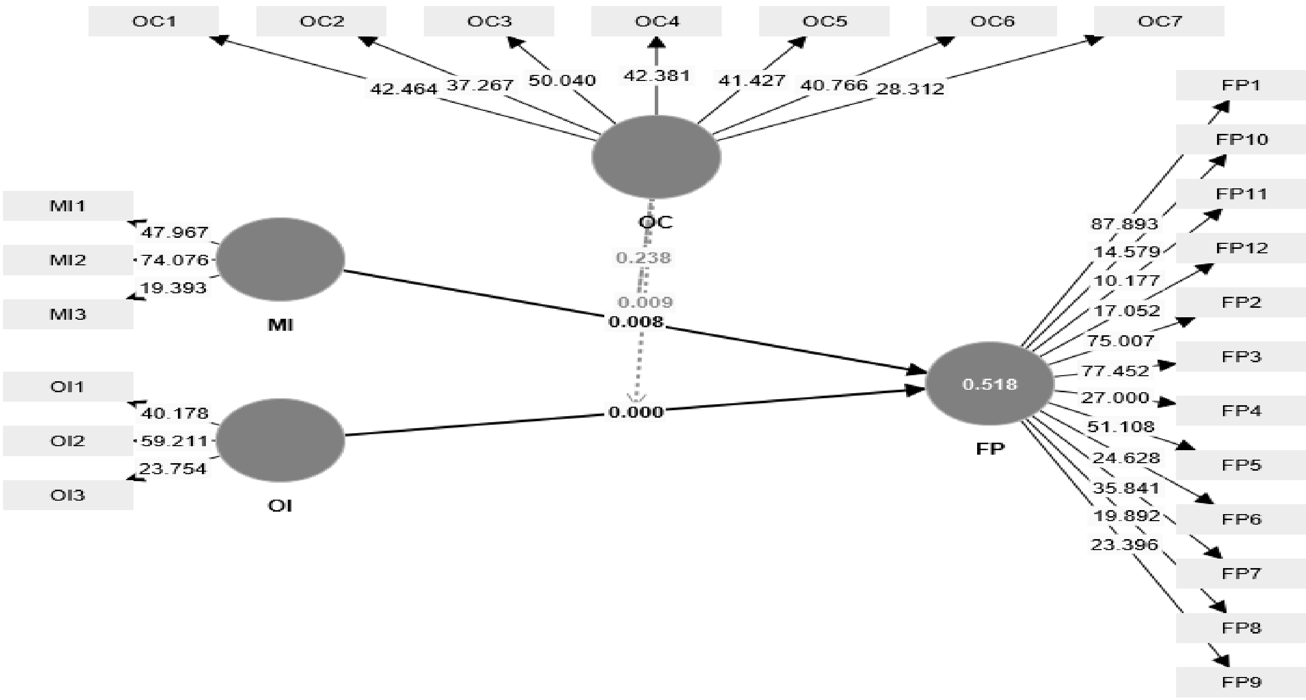

Table 4: Path Coefficient for Direct and Moderation Relationship

Hypotheses	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV/)	P Values	Decision
MI -> FP	0.138	0.138	0.052	2.668	0.008	Rejected
OC -> FP	0.292	0.292	0.047	6.252	0.000	Rejected
OI -> FP	0.381	0.384	0.054	7.017	0.000	Rejected
OC * MI -> FP	-0.054	-0.054	0.046	1.180	0.238	Accepted
OC * OI -> FP	-0.127	-0.126	0.049	2.610	0.009	Rejected

Table 4 shows the results of hypothesis testing using T-statistics and p-values to determine hypothesis acceptance or rejection. Hypotheses H01, H02, and H03, which examine the direct relationships between marketing innovation capability, organizational innovation capability, organizational culture, and SME performance, are statistically significant (p-values: 0.008, 0.000, and 0.000), leading to the rejection of the null hypotheses. Hypothesis H04, testing the moderating effect of organizational culture on marketing innovation, is statistically insignificant (p-value: 0.238), supporting the null hypothesis. Conversely, H05 shows a weak negative but statistically significant relationship (p-value: 0.009), resulting in the rejection of the null hypothesis.

Table 5: R Square (R2) and Effect Size (f2)

Indicator	R2	
SMEs Performance	0.518	
Indicator	F2	Effect Size
MI -> FP	0.019	Medium
OC -> FP	0.069	Large
OI -> FP	0.126	Large
OC * MI -> FP	0.013	Small
OC * OI -> FP	0.016	Medium

Table 5 presents the coefficient of determination (R^2) and effect size (f^2). The R^2 value of 0.518 indicates that 51.8% of the variance in firm performance is explained by exogenous variables, showing a moderate effect, while 48.2% is attributed to other factors. According to Cohen (1988), f^2 values indicate the strength of these effects: MI has a medium effect, OC and OI have large effects on firm performance, and OC shows small and medium effects on the relationships between MI, OI, and firm performance, respectively.

Conclusion and Recommendations

This study examined the moderating role of organizational culture on the impact of marketing and organizational innovation capabilities on SME performance in Kaduna, Nigeria. The direct relationships between marketing innovation capability, organizational innovation capability, and organizational culture on SME performance were positive and significant. However, organizational culture did not moderate the relationship between marketing innovation capability and SME performance and showed a weak but significant moderation between organizational innovation capability and performance. The study suggests that organizational culture alone may not strengthen these innovation capabilities in SMEs, particularly in the services sector.

Limitations and Suggestions for Further Study

This study has three limitations: it focuses only on SMEs in the service sector, suggesting the need for testing the model in other industries. Since organizational culture did not moderate the relationships, future research could explore it as an intervening factor. Additionally, data was limited to Kaduna, Nigeria, indicating a need for broader studies across other states for diverse insights.

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CREDIT RISK IN ISLAMIC AND CONVENTIONAL BANKING SYSTEMS: EVIDENCE FROM NIGERIA

[1]JIMOH, Abdulrazaq Taiye, [2]KHALEEL, Sa'adatu Ibrahim, [3]ABDULMAJEED, Tajudeen Idera & [4]ORILONISE, Mubarak Abiodun

[1]Department of Finance, University of Ilorin
[2,3]Department of Banking and Finance, University of Abuja
[4]Department of Accounting, University of Ilorin
[1]jimoh.at1@unilorin.edu.ng, [2]aadah1993@gmail.com, [3]abdulmajeed.idera@uniabuja.edu.ng,
[4]orilonise.ma@unilorin.edu.ng
[1]+2348064363986

Abstract

Islamic banking has been characterised by high credit risk exposure as receivables take higher portion of the banks' assets which are only held till maturity as discounting is not allowed. The high level of exposure may affect their performance in relation to conventional banks. However, there is dearth of research on the comparative analysis of credit risk exposure of Islamic and conventional banks in Nigeria. This study therefore investigated the level of credit risk of Islamic banks in comparison with that of conventional deposit money banks in Nigeria. Data were collected from annual reports of the selected banks and analysed via Wilcoxon Signed Ranks Test. The study found that Islamic banks had significantly lower loss provision ratio than conventional banks (ų= 2.99<4.89; p=0.001). Non performing financing was also found to be significantly lower for Islamic banks than conventional banks (ų= 4.99<5.27; p=0.220). However, Islamic banks had higher but insignificant level of cost to loan asset (ų= 16.67<11.72; p=0.530). Based on these findings, the study concluded that Islamic banks have lower level of credit risk exposure than their conventional counter-parts in Nigeria. The study thus recommended moderate provision for loss financing to reduce cost and enhance profitability.

Keywords: Conventional banks, Credit risk, Islamic banking, Nigeria, Profitability

Introduction

Banking, regardless of its modalities, is all about credit creation through which profits are made for banking firms and shareholders' wealth are promoted. It is also this process that fosters financial intermediation through which funds are mobilized by banking institutions and then channeled as lending for productive activities within the economy. Theoretical literature establishes certain costs attributable to financial intermediation of banks, indicating that banks are not charity organization but profit-making entities. Such profits come majorly from credit creation activities regardless of whether their operational modalities are conventional or Islamic. While conventional banks make their profits on lending via interest charges, Islamic banks earn theirs on profit sharing basis. However, how customers respond to repaying their debts under the various lending or financing arrangements may determine the quantity or level of profit on a banking transaction. This is accurate since credit is the main product of financial intermediation, and credit risk always follows. Reducing credit risk can directly affect the value and performance of financial intermediaries and erode banks' capital bases (Michael & Enang, 2022). In other words, both conventional and Islamic banking activities are now plagued by credit risk. Credit risk is the inability of a client to pay his financial commitments to the banks when they become due.

Even though both Islamic and conventional banking both involve credit risk, the two banking types handle risk in different ways. Compared to their traditional counterparts, Islamic banks appear to be more exposed to credit risk. A greater percentage of Islamic banks' assets, for example, are receivables, which they are only permitted to maintain until maturity because Shariah prohibits discounting (Li, 2016). When a counterparty defaults, the problem is exacerbated because banks are not allowed to penalize defaulters or charge any accrued interest (Jimoh, et al, 2022). Consequently, in contrast to conventional banking, Islamic banks face challenges in measuring and analysing credit risk due to the distinct structure and contractual framework of Islamic financing (Susamto, Octavio, & Wardani, 2020).

It should be noted that no consensus has been reach on Islamic banking having higher credit risk than conventional banking. In fact, some researchers noted that credit risk is lower for Islamic banks. According to Chamberlain, Hidayat and Khokhar (2020), conventional banks exhibit higher credit risk when compared with their Islamic counterparts. The lower degree of exposure may be attributed to the borrowers' (customers') religiosity, which may motivate them to keep their end of any agreement made under Islamic financing contracts (Susamto, *et al.,* 2020). Notwithstanding the conflicting stands on the level of credit risk exposure, it is important to ascertain the level of risk exposure of Islamic banking model relative to conventional banking for the purpose of banking market competition. This is particularly necessary for Islamic banks in countries like Nigerian where Islamic banking market is still evolving.

In Nigeria, Credit risk is a key issue that has contributed to bank underperformance and failure in recent past. Failure of banks in emerging market economies like Nigeria resulted majorly from improper lending practices as well as lack of expertise to adequately assess credit risk (Ogbulu & Eze, 2016). The poor performance and eventual failure of some of these banks were indicated by poor loan quality, high credit risk and high non-performing loans, among others (Kolapo, Ayeni, & Oke, 2012). For Islamic banks, Adewale and Elena (2019) identified some reasons for credit risk exposure to include lack of valuable securities, absence of good titles to properties and lack of proper financial documentation. Although Ijaiya et al (2021) stated that high credit risk is associated with Islamic banking across Africa, primarily from Murabaha financing, empirical evidence specific to Nigeria is still lacking.

Sequel to the conflicting reports of past empirical researches, this study deemed it fit to contribute to literature by reassessing the levels of credit risk between the banking model. Apart from the conflicting report of past empirical studies, a dearth of research still exists in Nigeria on comparison of credit risk levels of Islamic and conventional banks. This becomes necessary to establish competitive position of the evolving Islamic banks in the Nigerian banking market. This study was therefore conducted to empirically investigate the level of credit risk of Islamic banks and compare the credit risk level with that of conventional deposit money banks in Nigeria.

Literature Review

Concept of Credit Risk

Credit risk is the likelihood that a bank trading partner (borrower or partner) won't be able to fulfil his financial commitments as per the terms set forth with the bank (Helmy, 2012). Li and Zou (2014) defied credit risk as the possibility that counterparties in loan transactions and derivatives will default, and will not be able pay back the principal and interest on timely basis. Credit risk may also be described as the danger of loss resulting from a debtor's failure to make payments on a loan or other line of credit (principal, interest or both). The risk is also known as counterparty risk. As such, credit risk is the possibility that a counterparty or loan borrower will not fulfill its responsibilities in line with the terms that were agreed upon (Kwabena, 2014).

Several reasons have been highlighted for credit risk exposures in banks. Bankruptcy, fraud and legal issues as well as technical defaults were mentioned by Van Gestel and Baesens (2008) as some of the causes of borrower's inability to repay his loan as agreed. That is, a debtor (borrower) may refuse or not be able to settle his loan if he is under financial stress or on the verge of filing for bankruptcy. Also, n the event of fraud or a legal issue, such a debtor may choose not to fulfill its debt service obligations. Another point identified is technical defaults which might be caused by information system defects (Kwabena, 2014; Van Gestel & Baesens, 2008).

Credit Risk in Islamic and Conventional Banking

One of the main issues that financial institutions, the banking industry, deal with is credit risk (Ahmed, Nizam & Ahsan, 2023). The biggest and most visible source of credit risk in the majority of banks is loans. However, a bank's operations contain additional sources of credit risk. They cover both on-and off-balance sheet activity as well as those recorded in the banking and trade books. In addition to loans, banks are increasingly exposed to counterparty or credit risk in a variety of financial products. These consist of trade finance, foreign exchange transactions, bankers' acceptances, swaps, bonds, stocks, options, and financial futures. They also involve the settlement of transactions (Kwabena, 2014).

According to Jimoh, et al., (2022), Islamic banking exposes to a variety of credit risks based on the kind of contract (funding) involved. When a consumer does not pay for the manufactured goods as agreed upon, the bank is exposed to credit risk of *Istisna* (Jimoh, et al, 2022). It occurs in the murabahah and musharakah profit-sharing contracts when the business owner declines or neglects to send the bank's portion of the profits (Al-Wesabi & Ahmad, 2013). The credit risk associated with Murabaha arises from the buyer's inability to pay the seller when the items are delivered or from his failure to fulfill his instalment payments as per the agreement with the bank (Boumediene, 2011). Another way by which credit risk comes up in Murabaha transactions is when buyers decline to accept delivery of the item they have purchased, even after the bank has potentially paid for the products' supply (Ijaiya et al, 2021). This kind of defaults in meeting obligations by customers occurs mostly in non-binding Murabaha when the goods do not meet the customers' specifications (Iqbal & Mirakhor, 2011).

Credit risk and Bank Performance

The primary source of revenue for banks is the creation of credit. The lender and the borrower are both exposed to significant risk in this procedure. The business of the bank could be seriously jeopardized if a trading partner fails to meet its contractual commitments on time or at any later point. Conversely, depositors are put at risk of bankruptcy when a bank with a high credit risk files for bankruptcy. According to Ekinci and Poyraz (2019), credit risk is commonly characterized as the most significant risk that impacts a bank's performance. The bank's performance and profitability are both impacted by the large percentage of non-performing loans on its balance sheet. Beyond the aforementioned hazards, banks are especially vulnerable to credit risk. Consequently, the existence and expansion of financial institutions now depend heavily on efficient credit risk management (Afriyie & Akotey, 2012).

Banks may experience symptomatic distress due to the fact that certain customers' qualities and their business environment carry a high perceived risk. For this reason, bank authorities and regulators take the issue of credit risk in bank lending activities very seriously. In other words, bank regulators place much emphasis on risk management particularly credit risk (Kayode et al, 2015). Credit risk is expected to be effectively managed as poor management tends to affects bank performance negatively. Ineffective credit risk management causes nonperforming loans (NPLs) to mount up, which has turned into a major issue for the Nigerian banking sector. Non-Performing Loans (NPLs) have a direct impact on bank performance since they decrease bank liquidity, restrict loan growth, and impede the expansion of the real sector (Kayode et al, 2015).

Measuring Credit Risk

The main goal for measuring credit risk is to be able to quantify the possible losses from credit operations. That is an estimate of credit risk made because it is nearly impossible to determine the exact quantity of losses from such exposure (Spuchľáková, Valašková & Adamko, 2015). Researchers have identified two distinct approaches for measuring credit risk. These are default mode approach and market-to-market approach (Spuchľáková, et al., 2015). In the default mode approach, the amount of assets on balance sheets that are subject to credit risk are displayed. The whole loan amount plus any accumulated interest and fees are represented as the credit risk or potential loss when the loan was granted to the customer (Kollar, 2014). This might be remedied if high-quality collateral was available. The bank does not create reserves or make adjustments to the loans while employing this strategy. The reserves will only begin to accumulate as a warning of potential credit loss in the event that the client breaches the conditions of the loan arrangement (Gavlakova & Kliestik, 2014).
The market-to-market approach to measuring credit risk employs continuous models. It is distinguished by the fact that, in contrast to discrete models, which function on a system of only two possibilities for the client's situation (failure or success), the debtor can obtain a variety of values (Kollar, 2014).

Credit risk has been measured with different ratios in empirical studies on conventional and Islamic banking systems. Loan loss provision, non-performing loan, loan and advances are commonly used to measure credit risk in past researches on credit risk in conventional banks (Michael & Enang, 2022; Hamza, 2017). Non-performing financing ratio and financing Impairment Provision ratio have also been used in relation to Islamic banks (Ijaiya, et al, 2021). The measures seem to be the same for both conventional and Islamic banks as the observed difference was only in the nomenclature. Loans in conventional banking is regarded as financing in Islamic banking due to the fact that Islamic banks mostly, finance customers need rather than giving loan to the customers.

Theory of Anticipated Income

This study was situated within the framework of anticipated income theory. According to Mohammad, Prajanti and Setyadharma (2020), the theory of anticipated income was proposed by Prochanow (1944) on the basis of credit extension terms of commercial banks. According to the theory, the bank plans the term loan's liquidation from the borrower's anticipated income, regardless of the type and characteristics of the borrower's business. Jibril (2021) views the theory as a cash flow approach to lending which supported a term loan of a duration greater than one year but less than five years. This implies that banks rely on the recovery of their loan portfolios as a source of liquidity; as a result, instances of loan default can be effectively managed to lower loan loss reserves and improve bank performance (Jibril, 2021).

The theory expatiated further that banks should be able to offer extended long-term credit as long as loan principal repayments and interest can be anticipated. Based on the anticipated come, scheduled payments made according to a defined time frame. Also, regular cash flow from the customer's payback schedule will help the bank satisfy its liquidity requirements. One of the weaknesses of the anticipated income theory is its assumption that all loans may be billed at the planned period without considering the potential of a debtor defaulting on credit owing to internal or external circumstances (Mohammad, et al., 2020). The foundation of the theory of anticipation of income is the low loan application volume to banks, which leads to excess liquidity and low bank profitability, particularly during periods of economic weakness. This notion pushes banks to extend long-term loans more aggressively. One of the most notable features of the anticipated income theory is its future-oriented approach to bank loan and advance granting (Kolapo, Ayeni, & Oke, 2012).

Fapetu, Seyingbo and Owoeye (2017) stated that the theory satisfies three goals of profitability, safety, and liquidity and that makes it preferable to the shiftability and the commercial bill theories. It was further argued that the theory is significant since it provides a means of evaluating a borrower's creditworthiness. This is because it supplies the banks with standards for assessing a borrower's likelihood of making timely loan repayments (Fapetu, et al, 2017). This means that anticipated theory also provides a framework for identifying and managing credit risk in banks. The anticipated income theory was therefore selected for this study because it provides guide to banks in making sufficient loan provisions to prevent potential loss.

Empirical Review

Empirical literature indicates that mixed reports have been given regarding the comparative analysis of credit risk levels between Islamic and conventional banks. Some researchers reported that Islamic banks exhibited higher credit risk, some found higher exposure for conventional banks while some others found no significant difference in the level of credit risk between the two banking models. Some of the empirical findings of past researchers are presented in this section.
Kabir, Worthington and Gupta (2015) evaluated the credit risk of 156 conventional banks and 37 Islamic banks across 13 countries between 2000 and 2012. Market-based credit risk

measure was used within the framework of Merton's distance-to-default (DD) model. For comparison purposes, accounting information-based Z-score and nonperforming loan (NPL) ratio were computed. Results of analysis for distance-to-default model indicated significantly lower credit for Islamic banks than for conventional banks. Conversely, the results of the Z-score and NPL ratio analysis showed that Islamic banks have much higher credit risk. Ferhi and Chkoundali (2015) assessed credit risk of the Islamic and conventional banks in 28 countries for periods from 1999 to 2010. A sample of 99 Islamic banks and 110 conventional banks were taken for the study. The study employed the generalized method of moments (GMM) estimate the level of risk in the two banking systems. It was found and reported that the selected conventional banks exhibited higher credit risk than the Islamic ones.

Ferhi (2018) evaluated the credit risk of Islamic and conventional banks in 14 countries of the Middle East and North Africa region. 58 Islamic banks and 89 conventional banks were selected for period from 2005 to 2015 period were selected. Generalized method of moments GMM) was used measure the difference in the credit risk levels between the selected Islamic banks and conventional banks. The findings demonstrated that the Islamic banks had a lower credit risk than the conventional ones. In contrary, Lassoued (2018) made a country-level comparative analysis of credit risk for Islamic and conventional banks in Malaysia. The study selected 22 conventional banks and 17 islamic banks covering 2005 to 2015. Using the generalized least squares (GLS) approach to data analysis, it was found that Islamic banks recorded higher degree of credit risk than their conventional counterparts in Malaysia.

Alkhawaja and Görmüş (2019) studied credit risk in Islamic and Conventional banks in Turkey from 2008 to 2017. Panel data were collected and fixed effect model was estimated with Regression technique. The study used non-performing loan ratio to proxy credit risk. It was reported that loan loss provision had positive effect on non-performing loan ratio for both Islamic banks and conventional banks. Different results were however found for the effect of Net Interest Margin, capital adequacy, Loan to Deposits ratio, and Loans to Assets ratio. The study concluded that Islamic banks and conventional banks differ in the level of credit risks with many measures except for loan loss provision and loan to assets ratios. Susamto, Octavio and Wardan (2020) investigated the levels of the credit risk of Islamic and conventional banks in a comparative study of Indonesian banks. The study selected a sample of 11 Islamic banks and 95 conventional banks for period between 2003 and 2018. Dynamic panel regression of GMM estimators were estimated. The study concluded that no major difference could be found in the level of the credit risk between Islamic and conventional banks.

On credit risk management, Akram and Khalil ur Rahman (2018) compared the credit risk management of Islamic banks and conventional banks in Pakistan between 2004 and 2016. Data were collected from annual financial reports of the five conventional banks and four Islamic banks were selected for the study. Multiple regression, correlation and descriptive analyses were conducted and the study found that Islamic banks performed better than their conventional counterparts in terms of credit risk management.

From the above empirical review, it is clearly evidenced that no consensus has been reach on which of the banking models- Islamic or conventional, has higher exposure to credit risk. Higher level of credit risk was found was Islamic banks by researchers like Kabir et al (2015) when the risk was measured with non-performing loan ratio. The same result was later found with Islamic banks having higher level of credit risk, by Lassoued (2018). Conversely, Kabir et al (2015 reported that conventional banks' credit risk was higher when the Merton's distance-to-default (DD) model was applied. Also, Ferhi and Chkoundali (2015), Ferhi (2018) found that conventional banks exhibit higher credit risk exposure than Islamic banks. However, results from Alkhawaja and Görmüş (2019) and Susamto, et al (2020) showed that no significant difference could be found between the two banking models in terms of credit risk exposure. In terms of risk management, Akram and Khalil ur Rahman (2018) reported that Islamic banks manage their credit risk better than their conventional banks.

Materials and Methods

The study made a comparative analysis of credit risk exposure between Islamic and conventional banks in Nigeria. The study was restricted to the listed banks that have national authorisation for banking business. As a result, 9 conventional banks and 1 Islamic bank were selected for the study. The conventional deposit money banks were Access Bank, FCMB, Fidelity Bank, First Bank, Guaranty Trust Bank, Stanbic Bank, Sterling Bank, Unity Bank and Zenith Bank. Jaiz Bank was selected as the only listed Islamic bank with national license as at the time of this research. Data were collected from annual reports of the selected banks for 12 years period from 2012 to 2023. For each variable, data were averaged for the conventional banks for the purpose of comparison with those of the selected non-interest financial institution (Islamic bank). The data were analysed using both descriptive and inferential statistics. The descriptive analysis was done via analysis of summary statistics of mean, minimum, maximum and standard deviation, while wilcoxon signed ranks test was conducted for inferential analysis. The study had earlier conducted normality and levene test of homogeneity to check for compliance of the data set with parametric assumptions. The apparent violation of these assumptions led to the selection of wilcoxon signed ranks test for the study.

Results and Discussion

Table 1: Descriptive Statistics

Variables	**Obs.**	**Minimum**		**Maximum**		**Mean**		**Std. Deviation**	
Bank ID	N	Conv. Banks	Islamic Banks	Conv. Banks	Islamic Banks	Conv. Banks	Islamic Banks	Conv. Banks	Islamic Banks
LPTL	12	2.28	0.35	15.60	9.05	4.89	2.99	3.63	2.25
NPLR	12	2.73	1.23	15.22	10.87	5.27	4.49	3.56	3.10
CTLA	12	6.57	3.86	38.31	61.23	11.72	16.67	8.70	16.76

Source: Author's computation (2024)

Table 1 presents summary statistics of credit risk variables for conventional and Islamic banks in Nigeria. The observation (N) of 12 indicates that the data were obtained for the banks over a period of 12 years. According to the Table, loss provision to total loan (LPTL) shows a mean value of 4.89 for conventional banks and 2.99 for Islamic banks. This means that loan loss provision was found on average, to be about 5% of the total loan for conventional banks. In the case of Islamic banks, the loss provision was found to be approximately 3% of the banks' total financing. The minimum ratios of LPTL for the models of banking were recorded as 2.28 and 0.35 respectively. That is, the least LPTL for conventional banks was about 2.28% while that of Islamic banks was found to be around

0.35% for the period under investigation. Similarly, Table 1 shows the maximum value for LPTL both conventional and Islamic banks as 15.60 and 9.05 respectively. The descriptive statistics results on loss provision to total loan as measure of credit risk showed that conventional banks made higher provision for loan losses than Islamic banks during the periods of the study. This indicates higher credit risk exposure on the part of conventional banks.

Another measure of credit risk used in this study is non-performing loan ratio (NPLR). From Table 1, NPLR of conventional banks showed an average ratio of 5.27 and 4.49 which means that non-performing loan/financing takes approximately 5.3% and 4.5% of the total loan/financing of conventional and Islamic banks respectively. NPLR also indicates that conventional banks had higher exposure to credit risk than their Islamic counter-parts. The result was buttressed by the minimum and maximum values of NPLR for the two banking models, as reported in the Table. In the Table 1, conventional banks had minimum NPLR of 2.73 whereas the ratio was 1.23 for Islamic banks. Also, conventional banks recorded higher maximum value of NPLR (15.22%) than their Islamic counterparts (10.87%).

Finally, cost to loan asset (CTLA) was used to measure credit risk exposure of the banks. It is assumed that operating cost tends to influence loan pricing decision of the banks. Banks may react to increase in operating cost by increasing the interest on loan. In the same vein, Islamic banks with high operating cost tend to cover for the cost with increased profit margin on their cost-plus financings. However, arbitrary increase in interest rate or profit margin may result in higher default rate. Thus, operating cost as percentage of loan asset was used to measure credit risk in this study. According to Table 1, CTLA has mean values of 11.72 and 16.67 for conventional and Islamic banks respectively. In other words, conventional banks have lower operating cost to loan asset ratio than Islamic banks. This means that the credit exposure of Islamic banks might have been induced by higher operating cost. Similar result was found for CTLA of the banks in terms of their maximum ratios. The Table shows that conventional banks had a maximum of 38.31% while that of Islamic banks was 61.23%. Conversely, lower minimum and maximum values of CTLA were reported for Islamic banks during the period under investigation. Conventional banks had a minimum CTLA ratio of 6.57% and this was high than the ratio of 3.86% recorded for Islamic banks for the same study period.

Table 2: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
LPTL	.269	24	.000	.735	24	.000
NPLR	.215	24	.006	.826	24	.001
CTLA	.280	24	.000	.705	24	.000

a. Lilliefors Significance Correction
Source: Author's computation (2024)

Kolmogorov-Smirnov and Shapiro-Wilk tests of normality were conducted and the results were reported in Table 2. Normality is a major assumption of parametric tests which hypothesized that the sample was drawn from normal population. That is, the sample data were normally distributed. Using Kolmogorov-Smirnov and Shapiro-Wilk tests, the null hypothesis that the sampled data do not significantly different from normal distribution will be rejected if the p-value is less 0.05. According to Table 2, Kolmogorov-Smirnov test of normality showed that the p-values of all the credit rate variables, LPTL (0.000), NPLR (0.006) and CTLA (0.000) were less than 0.05 significant level. Also, the Table showed that the Shapiro-Wilk test result buttressed that of the Kolmogorov-Smirnov with all p-values less than 0.05. The null hypothesis was therefore rejected and it was confirmed that the data were not normally distributed. Based on the result, the normality assumption was violated indicating that parametric tests analysis could not be done in this study.

Table 3: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
LLPTL	4.866	1	22	.02
NPLR	7.028	1	22	.008
CTLA	3.758	1	22	.010

Source: Author's computation (2024)

Table 3 presents Levene test's result which was used to check homogeneity of variance. Homogeneity of variance is another assumption of parametric tests which holds that variances are equal for all observed groups. The assumption is violated if the p-value of levene's test is less than 0.05. That is, if the result is significant, it means the variances are heterogeneous. In such a case, parametric tests cannot be used for data analysis. From Table 3, results of levene's test showed that the p-values of the credit risk variables were less than 0.05. Therefore, the assumption of equal variances was rejected.

Based on the results of normality and homogeneity of variances tests displayed in Tables 2 and 3 above, it is obvious that parametric test could not be applied to analyse the significance of the differences in credit risk level established in with descriptive statistics. The study therefore resorted to non-parametric test. Wilcoxon Signed Ranks which is a non-parametric equivalent of paired-sample t-test was employed and the result was presented in Table 4.

Table 4: Wilcoxon Signed Ranks Test Statistics[a]

Varaible	LPTL	NPLR	CTLA
Z	-7.255[b]	-4.941[b]	-.628[c]
Asymp. Sig. (2-tailed)	.001	.022	.530

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.
Source: Author's computation (2024)

Results of Wilcoxon Signed Ranks Test was presented in Table 4 to analyse the significance of the differences in credit risk levels between the two banking models. Negative ranks mean that conventional banks have higher level of credit risk exposure that Islamic banks while positive ranks indicate higher risk exposure for Islamic banks.

According to Table 4, LPTL was found to be based on the negative ranking. This means that conventional banks have higher LPTL than Islamic banks. The result was found to be significant with Z statistic of -7.255 and p-value of 0.01 which less than 0.05 level of significance. This implies that, in terms of loss provision to total loan, credit risk exposure of conventional banks is significantly higher than that of Islamic banks. Similarly, NPLR recorded negative ranks indicating that non-performing loan ratio was higher for conventional banks. This also implies that conventional banks exhibited higher credit risk exposure during the period under investigation. Wilcoxon test showed that the higher NPLR reported for conventional banks was significant at 0.05 level of significance with Z-statistic and p-value of -4.941 and 0.022 respectively.

Conversely, cost to loan asset (CTLA) ratio was found to have positive ranking which means that CTLA ratio was lower for conventional banks than Islamic banks. However, the result was not significant with p-value (0.530) greater than 0.05 level of significance. This implies that the observed difference cost to loan asset as a factor contributing to higher credit risk was not statistically significance. Z-value of 0.628 also testifies to the insignificance of the difference.

Discussing the findings of descriptive and inferential analyses, it was revealed that conventional banks had higher loss provision ratio than Islamic banks in Nigeria. This indicates the higher level of credit risk exposure of conventional banks relative to their Islamic counterparts. Higher loan loss provision shows attempt to mitigate higher risk exposure. The finding was in tandem with Ozili and Outa (2017) that loan loss provision is mainly used by banks as a credit risk management tool to mitigate expected losses on bank loan. Comparatively, Ferhi (2018) had earlier reported similar findings that conventional banks were exposed to higher level of credit risk than Islamic banks in North Africa. In contrary, Lassoued (2018) reported that Islamic banks recorded higher degree of credit risk than their conventional counterparts in Malaysia.

In terms of non-performing loan ratio as a measure of credit risk, the study found higher non-performing loan with conventional banks. A high non-performing loan ratio is an indication of higher credit risk with high probability of failure in collection of unpaid loan balances. This finding is consistent with Alkhawaja and Görmüş (2019), Ferhi and Chkoundali (2015) and Kabi et al. (2015) which found that conventional banks had higher non-performing loans than Islamic banks.

This study however revealed that Islamic banks had higher ratio of cost to loan asset than conventional banks. It implies Islamic banks may react to increase in operating cost by increasing profit margin on their cost-plus financings. Since it is assumed that high operating cost can influence loan pricing decision of the banks, high cost to loan asset ratio could be an indication of high credit risk exposure for Islamic banks. The difference in cost to loan asset ratio between the two banks was however found to be statistically insignificant. The insignificant report could be linked with the finding of Susamto et al (2020) that no significant difference could be found between the two banking models in terms of credit risk exposure.

Summarily, the lower level of credit risk established for Islamic banks relative to conventional banks in Nigeria, tends to boost their performance as the banks will be able to lower their loss provision while focusing on customers repayment of their obligations as suggested by the anticipated income theory. This is expected to improve their competitiveness in the Nigerian banking market.

Conclusion and Recommendations

Since Credit risk has been identified as a major factor contributing bank to failure in emerging market economies like Nigeria, it became imperative to evaluate the level of credit risk exposure in conventional and Islamic banks in Nigeria. This is to ascertain the performance of the banks in the area of credit risk management as they compete in the market for financial intermediation. The study therefore made a comparative analysis of loss provision, non performing facilities and cost to loan asset, between Islamic and conventional banks in Nigeria. The study found that Islamic banks exhibited significantly lower loss provision and non-performing facilities than conventional banks. However, cost to loan asset was found to be insignificantly lower for conventional banks in Nigeria. Based on these findings, the study concluded that Islamic banks have lower level of credit risk exposure than their conventional counter-parts in Nigeria. The study thus recommended a moderate level of provision for loss financing so as to reduce the operating cost of the banks and improve their profitability.

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FACTORS INFLUENCING THE SUCCESS OF WOMEN-OWNED SMALL AND MEDIUM ENTERPRISES IN KATSINA STATE, NIGERIA

[1]Salisu Lawal Ladan PhD, [2]Unyime, Abasido Anthony, [3]Emmanuel, Ngbede Adejo, [4]Idara Uduk Mboho & [5]Abasifreke, Uwemedimo Anthony

[1]Department of Vocational and Technical Education, Ahmadu Bello University, Zaria.
[2,3]Department of Business Administration and Management, Federal Polytechnic Daura
[4]Department of Business and Organizational Communication, University of Uyo.
[5]Department of Library and Information Sciences, University of Uyo
[1]salisladan@gmail.com, [2]unyimeaa@fedpolydaura.edu.ng, [3]adejoemma2@gmail.com,
[4]mbohoidara8@gmail.com & [5]abuwan4all@gmail.com
[1]08035964786, [2]07068112903, [3]08063006474, [4]08089184920, [5]07061856182

Abstract

This study examined the factors that contribute to the success of Small and Medium-Sized Enterprises (SMEs) owned by women in Katsina state, Nigeria. The study aims to evaluate the influence of financial capital, motivation and goal orientation, social networking, government support, and Information and Communication Technology (ICT) on the overall success of SMEs owned by women. The study population consists of female entrepreneurs who are operating SMEs in Katsina state. A purposive sampling method was used to obtain a sample size of 200 participants. The gathered data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The results demonstrate a strong and statistically significant correlation between financial capital, motivation and goal orientation, social networking, and government support with business success. Nevertheless, ICT did not demonstrate a substantial impact on the success of SMEs. These findings suggest that in order to empower women entrepreneurs and improve the success of their SMEs in Katsina state, it is recommended to implement customised financial assistance programmes, motivational activities, networking platforms, and focused ICT training.

Keywords: Women-owned SMEs, Financial Capital, Motivation and Goal Orientation, Social Networking, Government Support, and Information and Communication Technology.

Introduction

Small and medium-sized enterprises (SMEs) play a crucial role in the Nigerian economy, exerting substantial impact on economic expansion, employment generation, and alleviation of poverty. Zhang et al., (2023) argue that these firms are fundamental to the nation's economic landscape. They not only contribute to the Gross Domestic Product (GDP), but also play a crucial role in driving innovation, economic diversification, and inclusive growth. A plethora of SMEs in Nigeria play a significant role in the country's economic activities. These SMEs are actively involved in several sectors and make large contributions to the local economy. As a result, they also contribute to the broader national development agenda

(Effiom & Edet, 2018). The significance of SMEs in Nigeria is highlighted by their dynamic and varied nature, as they play a crucial role in stimulating economic activity, influencing regional development, and strengthening the fundamental basis of Nigeria's economic resilience (Zhang et al., 2023). These SMEs play a vital role in creating jobs, promoting entrepreneurship, and improving the socio-economic landscape of the entire nation (Amah & Oyetuunde, 2020).

Women entrepreneurs have made tremendous achievements, but they still face many obstacles, especially when it comes to obtaining funding and using ICT to expand their businesses. Due to numerous obstacles, women-owned small and medium-sized businesses (SMEs) continue to underutilize their potential while playing a crucial role in economic development. These SME’s are essential to Nigeria's economy because they increase GDP, create jobs, and reduce poverty. However, a number of barriers prevent Katsina State's female entrepreneurs from succeeding and remaining in business. The position of women entrepreneurs within the SME environment is of great importance and has the potential to bring about significant and revolutionary changes (Ojediran & Anderson, 2020). The presence of around 23 million women actively leading micro-businesses in Nigeria has a significant and widespread impact on the socio-economic structure of the country (Opute et al., 2021). They opined that women's entrepreneurial endeavours in Nigeria's SME sector go beyond simple business activities, but serve as a significant driving force for economic development and promote inclusivity in society.

The importance of women-owned SMEs becomes even more significant when taking into account the predictions of the McKinsey Global Institute. According to their expectations, tackling gender disparity in the entrepreneurial sector could result in significant benefits (Rafi, 2020). By taking a proactive stance on achieving gender parity, Nigeria has the opportunity to significantly boost its GDP. It is projected that by 2025, there may be a remarkable increase of about 19%, equivalent to a whopping $90 billion (Atama, 2024). These forecasts highlight the unexplored economic opportunities in small and medium enterprises controlled by women. They also emphasise the wider social and economic advantages that may be achieved by making smart investments to promote women entrepreneurs.

Despite the indisputable and significant contributions made by women entrepreneurs, Nigeria is marked by a noticeable lack of enterprises held by women (The Cable, 2023). This scarcity is worsened by substantial obstacles, especially in the areas of market entry and financial means. Surprisingly, a meagre 10% of commercial loans in the country are granted to firms managed by women, indicating a structural problem that limits the growth and success of these enterprises (The Cable, 2023). When evaluating venture capital funding in Africa, it becomes apparent that just a meagre 7% is allocated to enterprises managed by women (Price, 2023). These findings highlight a significant gender-based inequality in the availability of essential financial resources, which hinders the development and long-term viability of small and medium-sized enterprises owned by women. The constraints experienced by female entrepreneurs in Nigeria highlight the pressing necessity for specific laws that not only recognise but actively tackle the distinct financial obstacles impeding the success of women-led businesses. Additionally, their full potential is hampered by gender-based disadvantages including restricted access to financial resources and inadequate government assistance; hence, resolving these issues can yield significant economic benefits, such as improved gender parity and economic inclusion. Closing this gap and creating an environment that supports the equitable and thorough growth of women-owned small and medium-sized businesses are essential. This will enable them to reach their full potential as important contributors to the country's economic growth.

However, based on a thorough examination of existing literature, this research identifies several key factors that may influence the success of women-owned SMEs in Katsina State. These factors include financial capital, motivation and goal orientation, government support, social networking, and the adoption of Information and Communication Technology (ICT). Although the significance of women-owned SMEs in Katsina State and Nigeria as a whole is widely recognised, there is a noticeable lack of research on the factors that contribute to the success of these businesses. The existing literature acknowledges the major difficulties encountered by women entrepreneurs (Rudhumbu et al., 2020; Rahman et al., 2022; Afshan et al., 2021; Nguyen et al., 2020; Li et al., 2020). However, there is a lack of comprehensive examination concerning specific factors, such as financial capital, motivation and goal orientation, government support, social networking, and the utilisation of Information and Communication Technology (ICT), which could have a substantial impact on the success of SMEs owned by women. The current study frequently lacks a comprehensive knowledge of how these elements interact and impact the overall success or challenges encountered by female entrepreneurs in the region. In addition it is becoming obvious that there could be possible context-specific challenges such as low ICT skills or inadequate infrastructure and presence of systemic barriers in allocating venture capital resources to women.

This study addresses the lack of information in existing literature by performing a comprehensive analysis into these factors, providing a detailed understanding of the specific difficulties and advantages faced by female entrepreneurs in Katsina State. The research aims to make a significant contribution to the current knowledge by providing more focused and efficient policy interventions and practical solutions to improve the success and sustainability of women-owned SMEs in the region.

Literature Review

Theoretical Framework

Resource-Based View theory of the Firm

The study is based on the Resource-Based View (RBV) theory of the business, which explains the complex connections between important factors and the success of SMEs controlled by women in Katsina State. Financial capital is a crucial resource within the RBV framework. It is highly valued for its role in enabling corporate operations, promoting innovation, and encouraging growth (Zahra, 2021). Chatterjee et al., (2023) found that when women entrepreneurs have access to and effectively use financial resources, it gives them a competitive edge. This allows them to overcome obstacles and invest in activities that improve their overall business performance. More so, motivation and goal orientation, which are intangible resources according to the RBV framework, have a significant impact on the development of the entrepreneurial spirit in women-owned SMEs in Katsina State. According to the notion, these inherent attributes are important assets that cannot be replaced and contribute to the competitive advantage of these businesses (Freeman et al., 2021). The motivation and goal orientation of women entrepreneurs significantly effect their strategic decisions, promoting perseverance and determination in the face of adversity, ultimately affecting their total performance.

Within the RBV framework, government support is acknowledged as a valuable and potentially scarce resource that has the ability to greatly impact the competitive position of

SMEs owned by women. The availability of favourable policies, incentives, and programmes from the government offers a distinct edge, which enhances the overall competitiveness and performance of these firms. The study, conducted under the guidance of the RBV, aims to investigate the impact of the interactions between women entrepreneurs and government support on the unique resources that influence the competitive environment in Katsina State. Furthermore, the study examines the complex network of social networking among women entrepreneurs using the RBV framework. RBV posits that social networks can be seen as valuable and potentially scarce assets that enhance competitive advantage. This study analyses the interactions and networks formed by SMEs owned by women in Katsina State. It explores how these social connections facilitate the purchase of resources, sharing of knowledge, and ultimately contribute to the overall success of their businesses.

Finally, the examination of the adoption of Information and Communication Technology (ICT) is analysed using the RBV framework as a valued and possibly scarce asset. According to RBV, utilising technology can give women-owned SMEs a competitive edge by improving productivity, expanding market access, and enhancing communication (Gerhart & Feng, 2021). This study examines how the deliberate integration of Information and Communication Technology (ICT) serves as a unique asset that impacts the achievements of female entrepreneurs in Katsina State.

Conceptual Review

Business success is a multidimensional concept measured through financial and non-financial indicators such as profitability, ROI, customer satisfaction etc. Several studies have examined the various aspects of business success, as emphasised by Moktadir et al., (2020) and Amaechi (2020). The researchers identified two primary elements that have a significant impact on business success: financial considerations and non-financial factors. Financial success is commonly measured using many metrics, including return on assets (Sukathong et al., 2021), return on investment (Lal et al., 2019), assets (Pham et al., 2021), profitability (Ozili & Ndah, 2021), and income (Lal et al., 2019). Non-financial components, as defined by Alatawi et al. (2023), include factors such as customer satisfaction, personal growth, and entrepreneurial awareness. Liu et al., (2022) further include community needs and wants as additional non-financial measures of performance. This study utilises the non-financial metric of asset value as a primary indicator of entrepreneurial achievement.

Women entrepreneurs are change agents who seek to create value at various markets. Women entrepreneurs are a vibrant and expanding group of business executives who are actively engaged in starting, owning, and managing companies with the goal of attaining financial success (Rudhumbu et al., 2020). The notion highlights the changing role of women in business, which challenges established gender conventions and makes a substantial contribution to economic development (Cardella et al., 2020). Within the domain of female entrepreneurs, the act of starting new company endeavours is a key trait that highlights their ability to recognise possibilities, introduce new ideas, and contribute to the expansion and variety of the business environment (Rosca et al., 2020). Importantly, women entrepreneurs play a crucial role in both initiating the establishment of new firms and taking on the responsibilities of ownership and management. This encompasses the act of making calculated choices, supervising the daily functioning, and assuming the ultimate accountability for the triumph of their businesses (Agarwal et al., 2021). Their engagement is motivated by the pursuit of financial gain, in line with the primary objective of business activities to contribute to the expansion of the economy, the creation of employment opportunities, and the accumulation of wealth (Alene, 2020).

Determinants of Business Success: The objective of this study is to understand the complex connections between important independent variables and the overall success of these firms. The study examines several independent variables, including financial capital, motivation and goal orientation, government backing, social networking, and the use of Information and Communication Technology (ICT). The selection of these variables is based on their pivotal roles in shaping the entrepreneurial landscape. Financial capital is considered a fundamental resource, motivation influences strategic decisions, government support is a crucial external factor, social networking fosters collaboration, and ICT adoption drives technological advancements.

Financial Capital: The availability of financial capital has a pivotal role in determining the success of women entrepreneurs in small and medium-sized enterprises (SMEs), as it directly affects their capacity to obtain money for their business endeavours (Azad & Pritchard, 2022). Usually, the necessary financial capital to start a firm is obtained from different sources, such as debt, personal investments made by entrepreneurs, donations from other business stakeholders, or assistance from venture capitalists. Limited access to financial resources poses a major barrier for individuals who aspire to become entrepreneurs, impeding the establishment and expansion of businesses (Chen, 2023). The study conducted by Moftakhari et al., (2020) emphasises a strong positive association between the amount of starting capital and the performance of businesses. This suggests that organisations with larger original capital are less prone to closure and are more likely to achieve higher profitability and sales.

Vanensy (2022) conducted a study in Jakarta, Indonesia, which found that business capital has a beneficial impact on the overall success of beverage enterprises. The study utilised a sample of 100 entrepreneurs in the food and beverage industry. Multiple linear regression analysis was used to evaluate the influence of venture funding. The results showed a notable and favourable relationship between the presence of financial resources for businesses and the achievement of their goals. Thus, this study sees financial capital is a fundamental resource for entrepreneurial success.

Hypothesis 1: Based on the empirical review of the aforementioned studies, we can hypothesize that there is a positive and significant relationship between financial capital and business success in the context of small and medium-sized enterprises.

Motivation and Goal: Motivation is a crucial aspect that impacts human attitudes and behaviour, and it has a key influence in defining different levels of performance (Chien et al., 2020). The concept refers to a set of internal motivations that guide individuals towards specific acts and behaviours with a clear objective (Van Tuin et al., 2020). Incentive can be defined as a psychological drive that compels individuals to exert effort in order to achieve desired goals. For example, the incentive for profitability might lead to increased effort in the workplace. The provision of financial assistance, namely in the form of initial investment, has been recognised as a crucial incentive for women entrepreneurs embarking on their own company ventures (Salas-Vallina et al., 2020). The concept of self-efficacy has also been acknowledged as a driving force that motivates entrepreneurs to spend the required effort (Welsh et al., 2020). The influence of entrepreneurial drive on achievement is well examined in industrialised nations, with factors such as external incentives, autonomy, internal gratification, and familial security recognised as crucial motivators that affect business performance (Virgiawan et al., 2021).

The study conducted by Otiendo and Makokha (2020) explored the precise correlation between employee motivation and organisational performance among part-time instructors in chosen private universities in Kisumu County. The study utilised a descriptive survey research design, using Abraham Maslow's hierarchy of needs and Equity theory. The study's results, obtained through the use of multiple regression analysis and ANOVA, demonstrated a noteworthy and beneficial impact of employee motivation on organisational performance. The empirical evidence highlights the significance of motivational elements in shaping the overall effectiveness of organisations, specifically in the context of academic institutions. This study views motivation and goals as drivers to entrepreneurs that persevere through challenges and help in achieving goals.

Hypothesis Two: Building on the empirical evidence, we hypothesize that there is a positive and significant relationship between motivation and goal orientation and business success.

Social Networking: Social Networking, in the context of entrepreneurship, pertains to the establishment and maintenance of professional ties that entrepreneurs (ego) foster with their contacts (alter) for the goal of conducting business. These relationships, whether they be direct or indirect, usually involve family members, friends, relatives, and business contacts. They play a vital role in helping entrepreneurs gather important resources for their endeavours. Networks have a crucial function in connecting organisations, promoting innovation through contractual relationships, collaborations for product development, and intricate inter-organizational alliances. Prior studies emphasise the importance of networks as a primary means of obtaining information for entrepreneurs and small businesses (Bai et al., 2021).

Dolega et al., (2021) examined the influence of social media marketing on the levels of website traffic, orders, and sales in the retail industry. According to the study, which analysed data from a prominent e-commerce platform, engaging in social media engagement results in a rise in website visits. Nevertheless, it did not result in a substantial increase in product orders and sales revenue. The study also found that the efficacy of social media marketing differs depending on the complexity, cost, and brand status of the products. This study views social networking as critical resources, such as knowledge, partnerships, and market access.

Hypothesis Three: Building on the empirical evidence from these studies, we hypothesize that effective social networking, facilitated through social media and other channels, positively influences business success.

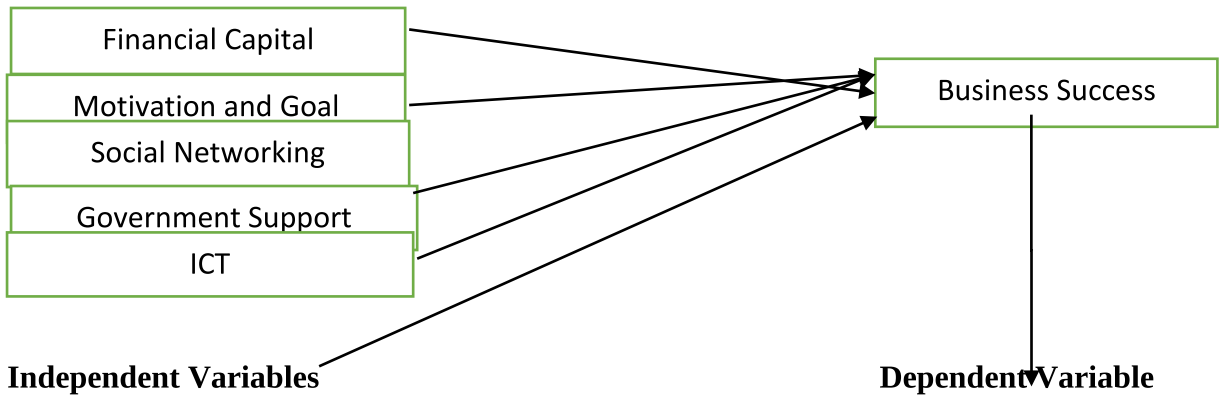
Government Support: Government Support in the realm of entrepreneurship encompasses a range of initiatives and policies geared toward fostering the growth and sustainability of small and medium-sized enterprises (SMEs) (Li et al., 2020) These initiatives often take the form of financial assistance, regulatory frameworks, and targeted programs designed to facilitate the development of entrepreneurial ventures. Governments play a pivotal role in providing crucial support mechanisms, including start-up capital and tax incentives, creating an environment conducive to entrepreneurial success (Apleni & Smuts, 2020). The impact of government support on SMEs is profound, as it can help mitigate barriers to entry, enhance access to resources, and stimulate economic development by nurturing an ecosystem that encourages entrepreneurial activities (Noor et al., 2022).

Chen et al. (2021) investigated the government's role in enhancing digital transformation for small service businesses in the digital economy. The study identified barriers to digital transformation, such as funding, digital capabilities, human resources, and technical constraints. It highlighted four essential roles of government in supporting digital transformation: constructing a digital platform, promoting mobile/digital payment, providing digital training, and fostering a digital collaboration ecosystem. This study considers government support to be government initiatives, such as funding programs and regulatory frameworks that play a vital role in SME success.
Hypothesis Four: Based on the empirical evidence from Nakku et al. (2019) and Chen et al. (2021), we hypothesize that effective government support programs positively influence the overall success of small businesses.

Information and Communication Technology: Information and Communication Technology (ICT) in the entrepreneurial landscape involves the incorporation and application of digital tools and technology to improve corporate operations, communication, and overall effectiveness. Entrepreneurs utilise Information and Communication Technology (ICT) to optimise procedures, tap into international markets, and maintain competitiveness in a progressively digitalized company landscape (Mushtaq et al., 2022). This encompasses the utilisation of software applications, online platforms, and digital communication tools that empower entrepreneurs to efficiently oversee their businesses, engage with clients, and promptly adapt to market changes (Amoako et al., 2020). The profound influence of ICT on entrepreneurship is demonstrated by its capacity to stimulate innovation, enhance decision-making processes, and foster collaboration among stakeholders (Beynon et al., 2021). Entrepreneurs that adopt ICT not only improve their operating competence but also position themselves to take advantage of growing opportunities in the digital economy.

Martínez-Caro et al., (2020) put up a model that proposes the idea that fostering a digital organisational culture promotes the process of digitising businesses and harnessing the benefits of digital tools, ultimately leading to enhanced organisational performance. The research conducted by Wamba-Taguimdje et al., (2020) examined the impact of Artificial Intelligence (AI) on the success of companies. The study emphasised the significance of AI-driven initiatives in enhancing corporate performance and highlighted the potential advantages of AI in streamlining operations and enhancing organisational effectiveness.
Digitalization of communication and technology is an important view of ICT in this study.
Hypothesis Five: Based on the empirical review, we hypothesize that increased investment and adoption of ICT positively enhances business success.

Conceptual Framework



From the literature review, it is seen that the independent variables in the study are financial capital, motivation and goal, social networking, government support and ICT, while the dependent variable in the study is Business Success. From the review of literature, it is expected for the independent variables to exert positive and significant influence on women-owned SMEs in Katsina state.

Materials and Methods

The study employed a cross-sectional methodology, ruling out the possibility of conducting a longitudinal investigation. The study specifically examined women-owned SMEs in Katsina State. According to SMEDAN (2021) report, there are 24,136 SMEs operating in Katsina state. However, there is no detail on the number of SMEs that have either male owners or female owners. As a result, the study used a sample size of 200 women-owned SMEs in Katsina state for the study. The study utilized a purposive sampling technique, deliberately selecting participants to focus exclusively on women-owned SMEs in Katsina State. This is as a result of the need for focused insights, relevance to the population peculiarity and resource efficiency. In this case, the study aimed to gather targeted and meaningful insights from women entrepreneurs in the SME sector within the specified geographic area, allowing for a more concentrated investigation into factors affecting their success.

Specifically, four items were used to measure financial capital taken from the study of Gross-Gołacka et al. (2020). On the other hand, employee motivation was measure using the measurement scale of Ryan (2011). Social network was measured using the study the three items developed by Shane and Cable (2002). Furthermore, six items were used to measure government support based on the six items developed by Zamberi Ahmad and Xavier (2012). ICT was measured using the five measurement scale developed by Gonzálvez-Gallego et al. (2010). Finally, business success was measure using the measurement scale developed by Krauss et al. (2005). The hypotheses of the study were subjected to testing at a 5% significance level. A P value less than 0.5 would lead to the rejection of the null hypothesis, while a P value equal to or greater than 0.5 would result in the retention of the null hypothesis.

Results and Discussion

Table 1: Construct Reliability and Validity

Construct	Items	Loadings	AVE	CR
Financial Capital	FC1	0.869	0.684	0.864
	FC2	0.824		
	FC3	0.853		
	FC4	0.758		
Employee Motivation and Goal	EM1	0.780	0.685	0.783
	EM2	0.894		
	EM3	0.803		
Social Network	SN1	0.771	0.696	0.889
	SN2	0.905		
	SN3	0.822		
Government Support	GS1	0.833	0.726	0.811
	GS2	0.900		
	GS3	0.822		
ICT	ICT1	0.989	0.834	0.938
	ICT2	0.875		
	ICT3	0.871		

Business Success	BS1	0.883	0.784	0.864
	BS2	0.891		
	BS3	0.882		

Hair et al., (2019) underscored the importance of loadings surpassing the 0.7 threshold. As depicted in Table 1, all items exhibit loadings exceeding the 0.7 criterion, indicating consistent association with their respective constructs.

Additionally, all constructs fulfill the minimum requirement for average variance extracted (AVE) of 0.5, as outlined by Tabachnick and Fidell (2013). Consequently, it can be inferred that the evidence supports convergent validity. Discriminant validity was evaluated using the data from Table 2.

Table 2: Discriminant Validity using Heterotrait-monotrait Ratio

	1	2	3	4	5	6
1. Business Success						
2. Employee Motivation and Goal	0.396					
3. Financial Capital	0.389	0.408				
4. Government Support	0.708	0.567	0.289			
5. ICT	0.078	0.136	0.262	0.111		
6. Social Network	0.423	0.563	0.364	0.614	0.030	

Each construct exhibits stronger associations with its own indicators than with indicators of other constructs, affirming the concept of discriminant validity. The assessment methods applied to evaluate these constructs are distinctly diverse, affirming that they gauge distinct underlying concepts in the research.

Test of Hypotheses

Table 3: Path Coefficient

Hypotheses	Beta Value	Standard Error	T Stat	P Value	Decision
H_1: FC->BS	0.241	0.05	6.765	0.00	Supported
H_2: MG->BS	0.323	0.08	2.851	0.01	Supported
H_3: SN->BS	0.221	0.06	3.665	0.00	Supported
H_4: GS->BS	0.531	0.10	5.313	0.00	Supported
H_5: ICT->BS	0.087	0.12	0.762	0.45	Not Supported

There exists a positive and significant relationship between Financial Capital (FC) and the success of women-owned SMEs (BS) in Katsina state, Nigeria shown by a a statistically significant relationship at less than 1% significant level ($\beta = 0.241$, T Stat = 6.765, $P<0.01$), Motivation and Goal (MG) does exert positive and significant influence on the success of women-owned SMEs in the study area ($\beta = 0.323$, T Stat = 2.851, $P <0.05$), Social Networking (SN) is a positive and significant predictor of the success of women-owned SMEs in Katsina state, Government Support (GS) does have significant influence on the success of women-owned SMEs in Katsina state, Nigeria ($\beta= 0.531$, T Stat = 5.313, $p<0.01$); and ICT does not significantly predict the success of women-owned SMEs (BS) in Katsina state ($\beta = 0.087$, T Stat = 0.762, $P>0.05$).

Table 4: R Square

Construct	R Square
Firm Performance	0.402

The R-square value of 0.402 in the study indicates that approximately 40.2% of the variation observed in the business success of women-owned SMEs in Katsina state can be explained by the independent variables included in the analysis.

Discussion of Findings: The study's findings demonstrate a significant and positive correlation between Financial Capital (FC) and the success of women-owned SMEs in Katsina state, Nigeria. This supports previous research that emphasises the crucial importance of financial capital in promoting business performance (Vavensy & Handoyo, 2023).

The study found a strong and positive correlation between Motivation and Goal (MG) and the success of women-owned SMEs in the study area. This highlights the crucial impact that motivational elements have on business outcomes. The findings might be ascribed to the notion that driven entrepreneurs are inclined to demonstrate elevated degrees of exertion, tenacity, and perseverance in attaining their business objectives (Saputra, 2021). The positive correlation between Social Networking (SN) and the success of women-owned SMEs in Katsina state highlights the important significance of social connections in promoting economic success. This discovery is consistent with the idea that strong social networks, which include relationships with family, friends, business contacts, and social media connections, play a key role in the success of entrepreneurs (Anwar & AliShah, 2020).

The significant positive influence of Government Support (GS) on the success of women-owned SMEs in Katsina state confirms the crucial importance of government interventions in strengthening the economic environment. This is consistent with the idea that government assistance, both in terms of funding and other forms of support, can accelerate entrepreneurial achievement by supplying the essential resources and creating a favourable atmosphere for development (Chen et al., 2021). In contrast to the fifth hypothesis, the study did not discover a substantial correlation between Information and Communication Technology (ICT) and the success of women-owned SMEs in Katsina state. This unforeseen outcome implies that, in the specific circumstances of the study, greater investment and use of ICT may not have a significant impact on improving the overall performance of small and medium enterprises controlled by women. This finding contradicts prior study that emphasised the beneficial influence of ICT on corporate performance (Chatterjee et al., 2023). Possible reasons for this difference may be attributed to the distinct attributes of the SMEs in Katsina state, their differing degrees of ICT implementation, or the distinctive obstacles and advantages present in the local business landscape. This finding highlights the significance of taking into account contextual variables when evaluating the correlation between ICT and SME success.

Conclusion

Ultimately, this study offers significant knowledge regarding the factors that contribute to the prosperity of small and medium-sized enterprises owned by women in Katsina state, Nigeria. The study demonstrates how the RBV theory may be used to explain why women-owned SMEs are successful. Government support serves as an enabling resource, whereas key resources such as financial capital, motivation, and social networking have been demonstrated to offer competitive advantages. The results cast doubt on the widely held belief that ICT has an influence, indicating that its usefulness is mediated by contextual elements like infrastructure and expertise. In order to account for such possibilities, the RBV needs to be further refined. The study also provides a Gender-Specific Entrepreneurship Model that highlights the interconnected nature of financial, motivational, social, and institutional resources in driving SME success**.** The findings of this study will also guide policy makers on policy development, capacity building, social networking facilitation and motivation of women entrepreneurs in Northern Nigeria and the nation at large.

Recommendations

The findings of this study provide specific recommendations to improve the performance of small and medium enterprises owned by women in Katsina state. Firstly, governments should develop and execute financial assistance initiatives that are specifically customised to meet the distinct requirements and obstacles encountered by women entrepreneurs. Furthermore, it is crucial to acknowledge the substantial impact of motivation and goal orientation on the achievement of company objectives. Therefore, it is advisable to support programmes that foster entrepreneurial motivation. Training programmes, mentorship schemes, and networking events can be arranged to stimulate and encourage women entrepreneurs. Platforms that enable the establishment of objectives, the sharing of achievements, and the provision of help for overcoming challenges can contribute to the development of a resilient and motivated entrepreneurial community. Moreover, given that social networking has been identified as a crucial factor in determining success, it is imperative to focus on establishing an environment that facilitates efficient social networking for female entrepreneurs.

Nevertheless, the study discovered no substantial correlation between ICT and economic success. Given this information, although the adoption of ICT is still significant, the primary emphasis should be on guaranteeing that female entrepreneurs obtain the training and assistance to fully utilise digital tools. Capacity-building initiatives focused on e-commerce, digital marketing, and online business management have the potential to empower SMEs owned by women. These programmes aim to provide them with the necessary skills and knowledge to effectively leverage ICT in order to enhance their economic success.

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FORECASTING OF INFLATION RATES IN WEST AFRICA USING AUTOREGRESSIVE INTEGRATED MOVING AVERAGE MODEL

[1]Professor Mu'azu Saidu Badara, [2]Salisu Lawal Ladan PhD, [3]Unyime, Abasido Anthony & [4]Abubakar Mohammed

[1]Department of Accounting, A.B.U. Business School, Ahmadu Bello University, Zaria.
[2]Department of Vocational and Technical Education, Ahmadu Bello University, Zaria.
[3]Department of Business Administration and Management, Federal Polytechnic Daura, Katsina State
[4]Department of Business Administration and Management, Federal Polytechnic Daura, Katsina State
[1]08065487339, [2]08035964786, [3]07068112903, [4]09030879111,
[1]muazubadara@yahoo.com, [2]salisladan@gmail.com, [3]unyimeaa@fedpolydaura.edu.ng & [4]abubakarmohd01211@gmail.com

Abstract

Inflation as a persistent increase in the overall price level of goods and services holds significant implications for a nation's economic landscape. This quantitative study employs data sourced from the World Bank spanning 1970 to 2021 for Key Five West African countries (Gambia, Ghana, Nigeria, Senegal, and Togo); using purposive sampling. The primary aim is to forecast inflation rates in West Africa using tailored autoregressive integrated moving average (ARIMA) models. Augmented Dickey-Fuller (ADF) unit root tests confirm the first-order integration of inflation rates in the examined West African nations. Subsequent time series analysis, specifically ARIMA modeling, identifies optimal models—ARIMA (1,1,2), ARIMA (1,1,1), and ARIMA (2,1,2)—based on various selection criteria including significant coefficients, volatility, adjusted R-squared, Akaike Information Criterion, and Schwarz Criterion. However, the study underscores the necessity for governments to enact suitable policy measures to alleviate inflationary effects on the economy. Projections indicate a downward trend in inflation rates for West African countries, signaling a positive economic trajectory.

Keywords: ARIMA, Economic policy, Forecasting, Inflation rate, Unit root, West Africa

Introduction

Inflation, recognized as a continuous escalation in the general prices of goods and services, bears multifaceted economic implications (Nathaniel & Emmanuel, 2018). While acknowledged for potentially bolstering investors' incomes and benefiting lenders through increased profits, it holds adverse effects. Inflation erodes the savings of individuals and imposes financial strain on fixed-income groups (such as salaried workers), while also influencing a nation's balance of payments (Kelukume & Salami, 2014).
For nations to attain consistent and sustained economic growth, maintaining relatively stable prices is imperative, often achievable through governmental monetary policies. An uptick in

the composite value of various goods and services over time signifies a substantial decline in the population's purchasing power. A rise in the average price levels, typically expressed as a percentage, denotes that the currency's purchasing power diminishes. Distinguishing inflation from deflation is crucial—while inflation involves a decline in purchasing power and a rise in prices, both are correlated with economic expansion (Jason, 2020).

Measuring changes in the value of individual assets over time can be complex, as human needs encompass a diverse array of products and services. A fulfilling life demands an array of necessities including food, shelter, clothing, fuel, transportation, power, entertainment, healthcare, and employment opportunities. Inflation aims to gauge the collective impact of price hikes across these varied categories over an unspecified period, encapsulating a singular representation of increased value levels within the economy over the same duration.
Effectively monitoring and reliably predicting inflation levels present persistent macroeconomic challenges for countries and central banks. This study intends to scrutinize inflation rates in West African nations, specifically the Gambia, Ghana, Nigeria, Senegal, and Togo. The primary focus of this study is to forecast inflation rates in West African countries by identifying the most suitable ARIMA model. This forecast aims to provide insights into future inflation values, facilitating the formulation of appropriate policy measures to counteract the adverse effects of inflation on the economy.

Literature Review

Conceptual Review

Inflation: One important economic issue that affects consumers, companies, and governments in different ways is inflation. Both positive and negative effects are possible: whereas high or fluctuating inflation can destabilize economies, drain savings, and increase uncertainty, moderate inflation frequently spurs economic growth by promoting investment and consumption (Kelukume & Salami, 2014). A steady increase in the average price of goods and services over time that reduces the purchasing power of money is known as inflation. Indices like the Producer Price Index (PPI) and the Consumer Price Index (CPI) are commonly used to measure it (Jason, 2020). Exchange rate depreciation, commodity price volatility, and lax fiscal policies are some of the factors that commonly impact inflation rates in developing economies, including those in West Africa (Nyoni, 2018). In addition to attempts to address fundamental economic inadequacies, successful inflation management calls for targeted fiscal and monetary actions.

Three primary schools of thought have dominated the discussion of inflation dynamics in theoretical and empirical literature: monetarist, Keynesian, and structuralist theories. Monetarists emphasize monetary policy as the primary control mechanism and contend that inflation is caused by an excessive increase in the money supply in comparison to economic output (Friedman, 1956). But according to Keynesians, inflation results from aggregate demand surpassing aggregate supply, and fiscal policy is crucial in reducing demand-pull pressures (Samuelson, 1971). According to structuralists, supply constraints and institutional inefficiencies—two issues that are exclusive to emerging economies—are the main causes of inflation (Thirlwell, 1974).

These theoretical stances are consistent with empirical evidence in West Africa that currency devaluations and import dependence frequently worsen inflation (Nyoni, 2018; Kelukume &

Salami, 2014). These observations highlight how crucial it is to combine structural reforms with prudent monetary policy in order to attain long-term economic stability.

Empirical Framework

In today's society, it is important to know the factors that serve as a standard measure or barometer for inflation. By projecting the inflation rates, policymakers of nations can obtain earlier indicators of possible future inflation levels (Nyoni, 2018). It is also possible to connect the rise in West Africa's inflation rate to myriad of factors, such as low development rate of the region, the high prices of imported products, the continuous currency devaluation against the foreign exchange market and the presumed externalities such as the crude prices. One of the basic essence of monetary policy is in the stability and predictability of the pricing of goods and services, it is therefore incumbent upon the policy makers or administrators to foresee the likelihood of inflation rate of the nearest future. In order to achieve this objective, precise capability to predicting through a careful empirical analysis is necessary. Forecasting inflation is not only useful as a guide to policymaking, but also plays a prominent role in situations when countries are practicing inflation concentrating system, this can influence policymakers to adopt the necessary actions when inflation go against its expected target (Iftikhar & Iftikhar – ul - amin, 2013).

The precision and versatility of the ARIMA model in modeling time series data have made it a popular tool for predicting inflation rates in recent years. Nyoni and Nathaniel (2021), for instance, used ARIMA models to analyze inflation data in sub-Saharan Africa and showed that the model could accurately forecast inflation patterns. In order to lessen the negative consequences of inflation, their study underlined how crucial it is to incorporate ARIMA forecasts into the creation of policies. In a similar vein, Hussen and Demissie (2020) examined Ethiopia's inflation rates using ARIMA. The study found that the best model for predicting inflation was ARIMA (1, 1, 1), which shed light on the relationship between domestic monetary policy and foreign shocks in determining inflationary trends. Several empirical studies on modeling the inflation rates in Africa have been understudied. Jere and Siyanga (2016) modeled the Zambian inflation rate in their analysis. The research applied ARIMA model to the series of inflation rates and Holts exponential smoothing. The study revealed that the ARIMA (12, 1, 0) model out-performed Holts exponential smoothing.

In another study, Mustapha and Kubalu (2016) decided to model the Nigerian inflation rates based on the inflation rates series from the period of January, 1995 to December. 2013. ARIMA was the most suitable model for explaining the relationship between the past and the present inflation rates based on the findings of the study comparing the various models examined. Using the ARIMA model, Out et al. (2014) examined the inflation rate in Nigeria, and their findings revealed that the ARIMA model gives more accurate forecasts of the inflation rates in Nigeria.

Also, Okafor and Shaibu (2013) evaluated the dynamics of the inflation rates using the inflation rate series to cover from 1981 - 2010. The study analyzed various models of ARIMA. The ARIMA (2,2,3) was revealed to be the most appropriate model for the forecast the inflation rate in Nigeria, according to the study.

Similarly, Wanjoya and Waitiitu (2016) collected data from the Consumer Price Index (CPI) values which were retrieved from the Central Bank of Rwanda database using the domestic currency from 1995 to 2015. The data for 1995 to 2013 were used to fit the parsimonious model, while data observations from the years 2014 and 2015 were utilized to evaluate the model's predictive ability. It was determined that ARIMA (4, 1, 6) was an efficient model for predicting the future values of the CPI which was used as the measure of inflation. Nyoni (2018) modeled and forecasted Zimbabwe's inflation using yearly time series data from the year 2009 to 2018 and utilized autoregressive models. It was discovered by the study that the ARIMA model had a greater predictive power for future inflation rate than the exponential smoothing.

Furthermore, Ahmed and Sarker (2022) used ARIMA models to study inflation dynamics in South Asia and found that ARIMA (2,1,2) was the best model for predicting inflation rates in Bangladesh. The results demonstrate how exchange rate volatility and global oil prices affect inflation in emerging nations. Chaudhry et al. (2022) used machine learning and ARIMA models to forecast inflation in Pakistan in a comparative study. The study found that although ARIMA performed better than simpler models in the short term, its predictive value might be increased over longer time horizons by integrating it with other methods. These results highlight how ARIMA models can be used to address inflationary patterns in a variety of economic environments. Using the Schwarz Information Criterion (SIC), Akaike Information Criterion (AIC), the number of significant coefficients of the model, the volatility and adjusted R - squared, this paper selects the best-fitted ARIMA model among the tentative ARIMA models for prediction of inflation rates in the selected West Africa.

Theoretical Framework: In every economy, one of the most important responsibilities of monetary policy is to maintain price stability while also creating the conditions necessary for adequate credit expansion. This, in turn, will foster economic expansion and advancement. There are quite a few different perspectives on what causes inflation. A number of these theories include, amongst others, the monetarist theory, the Keynesian theory, and the neo-Keynesian theory. There is not yet an agreement among these hypotheses about the fundamental reasons for inflation and the best methods for bringing it under control. According to the monetarist theory, inflation, in the long run, is caused by an increase in the money supply that is not proportional to an increase in output (Friedman 1956, 1960, 1971). The monetarist's postulation was rejected by the Keynesians because they disagreed with it. According to their view, the creation of new money does not have an immediate effect on total market demand. Only through interest rates is it possible to assess the effect that money has on aggregate demand. The impact of the interest rate on aggregate demand is negligible when considered alone (Samuelson, 1971). The Keynesian school of economics contends that the velocity of money is not nearly as stable as the monetarist school of economics has postulated it to be. Inflation theorists belonging to the Neo-Keynesian school can be roughly classified into one of three categories: demand-pull, cost-push, or structural. Inflation that is caused by demand-pull takes place when there is a greater level of demand than supply. If this excess does place, there will be an inflation gap. According to cost-push theories, the rise in inflation can be attributable to an increase in both the factor input costs and overall production costs (Kavila and Roux, 2017). They assert that contrary to what monetarists believe, inflation is not caused by an increase in the total amount of money in circulation. Structuralists thought that inflation is caused by structural rigidities, flaws in the market, and social tensions (Thirwell, 1974; Aghevei and Khan, 1977). They placed a greater emphasis on the economic sector that dealt with supply (Bernanke, 2005). Khan and Schimmelpfennig (2006) took into consideration several other elements that contribute to inflation, including food costs, administered pricing, wage prices, and import price prices.

Materials and Methods

Time series data from 1970 to 2021 for each of the selected West African countries was employed for this study. This secondary data that was sourced from the World Bank data publications for the period under review. The choice of the selected countries from the region was firstly, based on data availability and secondly, the sampling technique utilized which is purposive. A quantitative research design was adopted and the method of data analysis includes mean and standard deviation for descriptive statistics; time series using unit root test to test for stationarity of the inflationary series and ARIMA to predict the future values of the inflation rates in the selected West African countries. The statistical software utilized for the analysis of is E-Views version 11.0. The variable in this study which is inflation rate is measured in percentage. This is the international standard of measuring inflation rate. The ARIMA model is usually expressed in the form (p, d, q) which was built by combining three building blocks, namely; p for autoregressive (AR), d for integration order term (I) and q for moving average (MA) for modeling the serial correlation in the disturbance. This means that ARIMA utilizes the past values (AR) and the mean residuals of the error term (MA) appropriately.

The general autoregressive (AR (p)) of order p can be expressed below as:

$y_t = p_1\mu_{t-1} + p_2\mu_{t-2} + \ldots\ldots + p_p\mu_{t-p} + \delta + \varepsilon_t$ ………………………….. (1)

While MA (q) is specified as:

$y_t = \mu_t + \varepsilon_t - \theta_1\varepsilon_{t-1} - \theta_2\varepsilon_{t-2} - \ldots\ldots - \theta_q\varepsilon_{t-q}$ ……………………. (2)

Therefore, ARMA (p, q) is given as:

$y_t = p_1y_{t-1} + p_2y_{t-2} + p_py_{t-p} + \varepsilon_t + \theta_1\varepsilon_{t-1} + \theta_2\varepsilon_{t-2} + \ldots\ \theta_q\varepsilon_{t-q}$ …… (3)

Hence, ARIMA process of order (p, d, q) can be specify using backward shift operator as:

$\Phi(B)\Delta^d y_t = \delta + \theta(B)\varepsilon_t$…………………………….... (4)

$\Phi(B) = 1 - \varphi_1B - \varphi_2B^2 - \ldots\ldots - \varphi_pB^p$………….... (5)

And $\theta(B) = 1 - \theta_1B - \theta_2B^2 - \ldots\ldots - \theta_qB^q$……….... (6)

Where $\Phi(B)$ is the autoregressive operator while $\theta(B)$ is the moving average operator

However, ARIMA (p, d, q) can also be expressed as:

$y_t = \sum^p_{i=1}\varphi_iy_{t-I} + \sum^q_{i=1}\theta_ie_{t-I} + e_t$………………. (7)

Results and Discussion

Table 1: Descriptive

Var (Inflation rates)	Obs	Mean	Standard deviation
Gambia	51	8.51	8.65
Ghana	51	28.12	27.37
Nigeria	51	18.17	15.33
Senegal	51	4.93	6.78
Togo	51	5.17	7.45

Source: Author's computation by using E-Views

Table 1 shows that average Gambia inflation rate on average is about 9% with variability of 9% also, Ghana inflation rate on average is about 28% with variability of about 27%, Nigeria inflation rate is about 18% with variability of about 15%, average inflation rate in Senegal is about 5% with variability of about 7% and the average inflation rate in Togo is about 5% with variability of about 7% during the period under review from 1970 to 2021.

Table 2: Unit root test (ADF)

Differenced Variables	Test statistic	P-value	Order
Gambia	-7.23	0.0000*	I (1)
Ghana	-4.36	0.0011*	I (1)
Nigeria	-7.34	0.0000*	I (1)
Senegal	-13.58	0.0000*	I (1)
Togo	-7.45	0.0000*	I (1)

Source: Author's computation by using E-Views

Table 2 shows the unit root test using ADF and it reveal that the five series (Gambia, Ghana, Nigeria, Senegal, and Togo Inflation rates) are significant statistically at 1% and become stationary after the first difference, I(1) which indicates that the series are integrated of order one. The stationarity of the series also suggest that further time series analysis like ARIMA can be performed. The unit root test, which is also known as the stationarity test, indicates the presence of a unit root when the series lack stationarity and this may lead to spurious results and in otherwise, that is, the absence of a unit root when there is a presence of stationarity in the series. In order to solve the problem of spurious results where it arises, the unit root test is utilized through the use of the ADF test.

Table 3: Results of ARIMA models for Nigeria

Model	No of significant Coefficients	Adj. R^2	Volatility (SIGMASQ)	AIC	SBIC
ARIMA (1,1,4)	2	0.3178	147.90	8.00	8.15
ARIMA (3,1,1)	2	0.4130	135.23	7.91	8.06
ARIMA (1,1,2)	3	0.4326	130.00	7.88	8.03
ARIMA (2,1,1)	2	0.4251	132.44	7.89	8.04

Source: Author's computation by using E-Views software

Table 3 reveals the results of estimated tentative ARIMA models for Nigeria inflation rate and it can see that ARIMA (1,1,2) is the best fitted model among the tentative models. This is because it possess the highest number of significant coefficients, highest adj. R^2, lowest volatility, lowest AIC and lowest SBIC. Therefore, Nigeria inflation rate will be predicted with ARIMA (1,1,2).

Table 4: Results of ARIMA models for Ghana

Model	No of significant Coefficients	Adj. R^2	Volatility (SIGMASQ)	AIC	SBIC
ARIMA (1,1,1)	3	0.2322	530.89	9.27	9.42
ARIMA (1,1,5)	2	0.1423	592.99	9.38	9.53
ARIMA (3,1,2)	2	0.1663	576.46	9.36	9.51
ARIMA (2,1,2)	2	0.1889	560.81	9.33	9.48

Source: Author's computation by using E-Views software

Table 4 reveals the results of estimated tentative ARIMA models for Ghana inflation rate and it can see that ARIMA (1,1,1) is the best fitted model among the tentative models. This is because it has the highest number of significant coefficients, highest adj R^2, lowest volatility, lowest AIC and lowest SBIC. Therefore, Ghana inflation rate will be predicted with ARIMA (1,1,1).

Table 5: Results of ARIMA models for Gambia

Model	No of significant Coefficients	Adj. R^2	Volatility (SIGMASQ)	AIC	SBIC
ARIMA (1,1,2)	2	0.2195	53.92	6.99	7.14
ARIMA (2,1,1)	2	0.2167	54.12	6.99	7.14
ARIMA (1,1,3)	2	0.1932	55.74	7.02	7.17
ARIMA (1,1,5)	2	0.1947	55.64	7.02	7.07

Source: Author's computation by using E-Views software

Table 5 shows the results of estimated tentative ARIMA models for Gambia Inflation rate and it can see that ARIMA (1,1,2) is the best fitted model among other tentative models because it has the highest adj R^2, lowest volatility, lowest AIC and lowest SBIC. Therefore, Gambia inflation rate will be predicted with ARIMA (1,1,2).

Table 6: Results of ARIMA models for Senegal

Model	No of significant Coefficients	Adj. R^2	Volatility (SIGMASQ)	AIC	SBIC
ARIMA (1,1,1)	3	0.0022	42.39	6.74	6.89
ARIMA (1,1,2)	1	0.0216	41.57	6.72	6.87
ARIMA (2,1,6)	2	0.0219	41.55	6.72	6.87
ARIMA (2,1,2)	2	0.0250	41.42	6.71	6.86

Source: Author's computation by using E-Views software

Table 6 shows the results of estimated tentative ARIMA models for Senegal Inflation rate and it can see that ARIMA (2,1,2) is the best fitted model among other tentative models because it has the highest adj R^2, lowest volatility, lowest AIC and lowest SBIC. Therefore, Senegal inflation rate will be predicted with ARIMA (2,1,2).

Table 7: Results of ARIMA models for Togo

Model	No of significant Coefficients	Adj. R^2	Volatility (SIGMASQ)	AIC	SBIC
ARIMA (1,1,6)	2	0.0845	46.89	6.84	6.99
ARIMA (1,1,1)	2	0.1013	46.03	6.83	6.97
ARIMA (2,1,1)	1	0.0793	47.15	6.85	7.00
ARIMA (1,1,2)	2	0.0870	46.76	6.84	6.99

Source: Author's computation by using E-Views software

Table 7 reveals the results of estimated tentative ARIMA models for Togo Inflation rate and we can see that ARIMA (1,1,1) is the best fitted model among other tentative models because it has the highest adj R^2, lowest volatility, lowest AIC and lowest SBIC. Therefore, Togo inflation rate will be predicted with ARIMA (1,1,1).

Figure 1: Graphical representation of Inflation rate in West Africa Countries

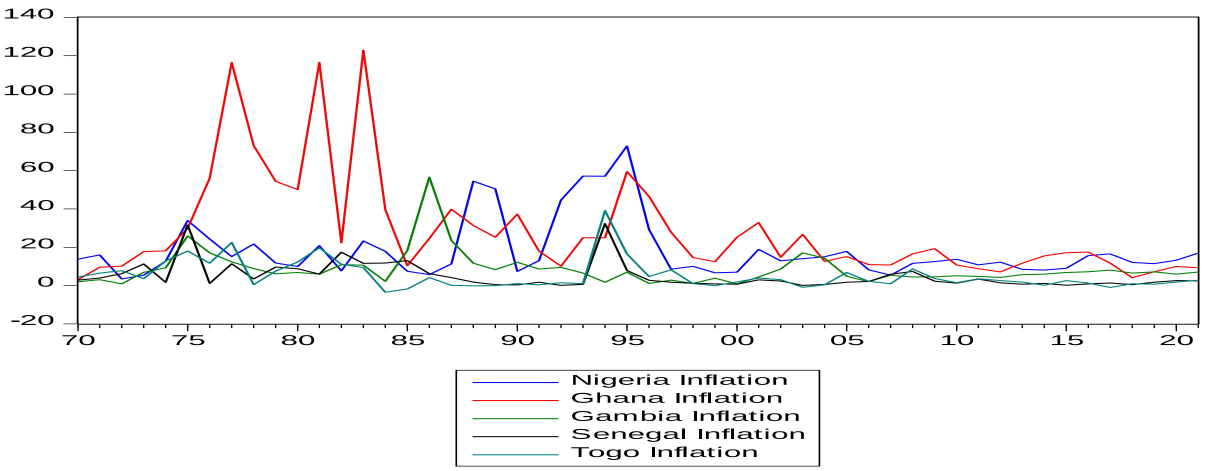

Figure 1 shows that the graphical representation of Inflation rate in West Africa Countries from 1970 to 2021 and we can see that Ghana tends to have high peak of inflation rate followed by Nigeria and then Gambia, Senegal and Togo. Although we can see that the pattern of the inflationary rate in the West Africa countries is not stable within the period under review.

Table 8: Predicting inflation rate in West Africa from 2022 to 2029

Year	Nigeria Inflation prediction	Ghana Inflation prediction	Gambia Inflation Prediction	Senegal Inflation Prediction	Togo Inflation Prediction
2022	14.5313	6.89009	5.20799	0.1417	0.473077
2023	14.3939	6.08881	5.08346	-0.03917	0.295726
2024	14.2566	5.28753	4.95894	-0.22003	0.118374
2025	14.1192	4.48625	4.83441	-0.4009	-0.058977
2026	13.9819	3.68497	4.70989	-0.58176	-0.236328
2027	13.8446	2.88369	4.58536	-0.76263	-0.413679
2028	13.7072	2.0824	4.46084	-0.94349	-0.59103
2029	13.5699	1.28112	4.33632	-1.12436	-0.768382
MAPE	76.105	94.557	130.999	431.913	864.932

Source: Author's computation by using E-Views software

Table 8 shows the prediction of the inflation rate in the selected 5 west Africa countries for this study and we can see that Nigeria has the best inflation rate forecast because it has the least mean absolute percentage error compared to the other west Africa countries and the prediction shows that inflation rate will decline in the next either years and other West Africa countries also show that Inflation rate will decline in the next 8 years which is a good economic indication in the nearest future.

Figure 2: Virtualization of inflation rate prediction in West Africa

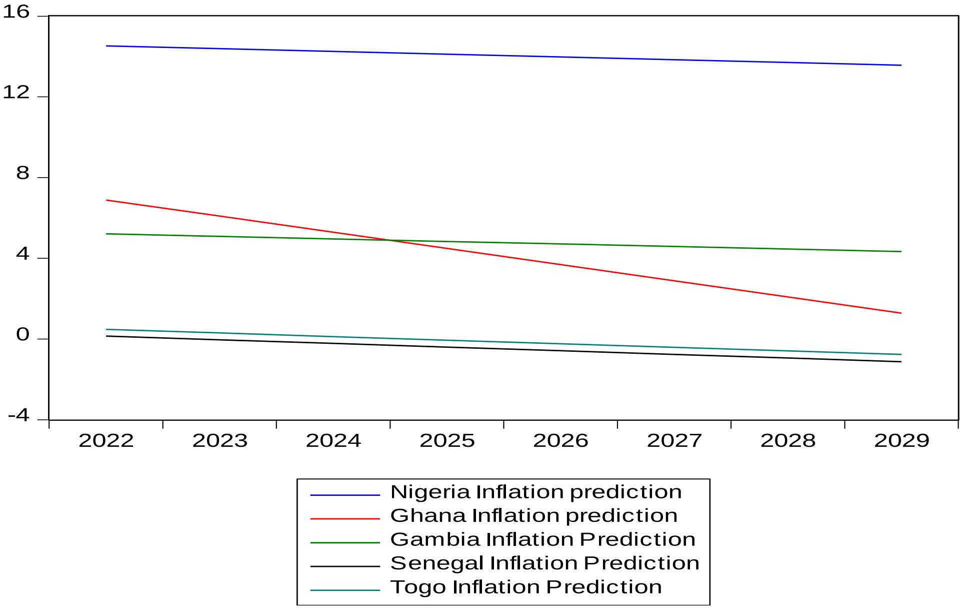

Figure 2 shows the virtualization of inflation rate prediction in West Africa and It can see inflation rate tend to decrease in the next eight forecast years and the future inflation rate is a good economic indication in West Africa which also implies that ARIMA model is a good predictive tool.

Results and Discussion

From the interpretation of the above result, Ghana and Nigeria have the highest inflation rate because they both have the highest mean values (see table 1) and also show the highest peak value (see figure 1). Also, the unit root test using augmented dickey fuller (ADF) was applied to the inflation rate in west African countries under review and it shows that the series are integrated of order one which makes it possible for further time series analysis such as ARIMA to be performed. Meanwhile, ARIMA (1,1,2), ARIMA (1,1,1) and ARIMA (2,1,2) are the best fitted ARIMA models based on the selection criteria which include several significant coefficients, volatility, adjusted R-squared, Akaike Information Criterion and Schwarz Criterion. The prediction of inflation rate shows that all the West African countries under review have a downward trend in the future inflation rate value which is a good positive economic indicator. Nigeria has the best prediction inflation rate values because it has the lowest mean absolute percentage error (MAPE) and this supports the work of Mustapha and Kubalu (2016) that concluded that ARIMA has a better forecasting ability of Nigeria's inflation rate.

Conclusion and Recommendations

The analysis identifies ARIMA (1,1,2), ARIMA (1,1,1), and ARIMA (2,1,2) as the most suitable models for predicting inflation rates in West Africa. Forecasts using Autoregressive Integrated Moving Average (ARIMA) signal a consistent downward trend in inflation rates across West African nations, with Nigeria demonstrating the most accurate predictions, boasting the lowest Mean Absolute Percentage Error (MAPE). This aligns with previous studies affirming ARIMA's superior predictive capabilities over Holt's exponential smoothing (Siyanga, 2016; Nyoni, 2018; Wanjoya&Waitiitu, 2016).

To address these findings, it is recommended that West African governments and central banks implement proactive monetary policies to cushion the future impact of inflation rates. Specific recommendations for financial decisions include:

- Incorporate Nigeria's Reliable Forecasts: Utilize Nigeria's highly accurate inflation rate forecasts as a pivotal input for modeling regional assets and projects.
- Factor in Declining Inflation Projections: Integrate the forecasts of declining inflation rates into estimations of risk-free rates and growth assumptions for more precise financial projections.
- Utilize ARIMA Outputs Strategically: Leverage ARIMA model outputs to inform decisions on payback requirements, hurdle rates, and other financial parameters, facilitating more informed investment strategies.
- Innovate Financial Products: Develop tailored financial products such as inflation-adjusted annuities, aligned with predicted price changes, to enhance stability and relevance in evolving economic scenarios.

Regular updates and extensions of inflation forecasts are critical for comprehensive trend analysis in investment planning as the economic landscape evolves. Policymakers should prioritize structural reforms to reinforce price stability across the region. Implementing these recommendations will fortify financial planning and bolster economic resilience in West Africa.

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BEYOND OIL: NIGERIA'S ECONOMIC RESILIENCE AND LESSONS FROM THE GLOBAL FINANCIAL CRISIS

[1]Wahab Fatai Kayode, [2]Abdulmajeed Tajudeen Idera, [3]Akintade Elizabeth Abidemi, & [4]Jawondo Hamzat Mardiyat

[1]Ahman Pategi University, Patigi, Kwara State, Nigeria.
[2]University of Abuja, FCT, Abuja, Nigeria.
[3]Federal University of Technology Akure, Ondo State, Nigeria.
[4]Kwara State University, Malete, Kwara State, Nigeria.
[1]kayodefatai7@gmail.com
[1]+2348060023726

Abstract

The Global Financial Crisis (GFC) of 2007-2008 had far-reaching effects on economies worldwide, including Nigeria. Despite its geographical distance from the epicentre, Nigeria encountered significant challenges due to its integration into the global financial system and heavy reliance on oil exports. This study reviews literature from 2007 to 2023 to assess the impact of the Global Financial Crisis on Nigeria's economic development, focusing on vulnerabilities exposed and policy responses implemented. Through a combination of empirical analysis and case studies, the study offers valuable insights for future policymaking and strategies to enhance economic resilience in Nigeria. Key findings highlight the varied impact of the crisis, including a sharp decline in oil prices, reduced foreign direct investment, distress in the banking sector, and a slowdown in overall economic growth. Lessons learned emphasise the critical importance of economic diversification, robust financial regulation, banking sector resilience, and long-term investments in infrastructure and human capital. By addressing these challenges, Nigeria can pave the way for sustained growth and development, ensuring preparedness for future global economic disruptions.

Keywords: Diversification, Economic resilience, Global financial crisis, Oil dependence, Nigeria.

Introduction

The Global Financial Crisis (GFC), which unfolded between mid-2007 and early 2009, caused widespread disruptions in international financial markets and banking systems. Before the crisis, Nigeria experienced a period of robust economic growth, primarily driven by its oil and gas sector. As Africa's largest oil producer, Nigeria depended heavily on oil exports, which accounted for approximately 95% of its foreign exchange earnings and nearly 80% of government revenues (Oguntoye & Oguntoye, 2021). From the early 2000s until the onset of the GFC, Nigerian GDP grew at an average annual rate of 7%, supported by substantial foreign direct investment, particularly in the oil and gas industry (Lewis, 2006). However, this economic boom underscored the country's overdependence on a single commodity and its vulnerability to external shocks, particularly those originating in global markets.

The nexus between the GFC and the Nigerian economy is best understood through the lens of its smallness and openness. As a relatively small economy within the global financial system, Nigeria lacked the resilience to absorb external shocks effectively. The openness of its economy, characterised by a high reliance on oil exports and foreign investment, amplified its vulnerability. The collapse in global oil prices during the GFC precipitated a sharp decline in foreign exchange earnings and government revenues, destabilising Nigeria's fiscal and monetary systems. Simultaneously, a contraction in foreign direct investment and capital inflows disrupted key sectors, including oil and gas. The crisis revealed deep structural weaknesses in the Nigerian economy, such as limited diversification, infrastructure deficits, and dependence on volatile global markets, leaving it exposed to the financial turmoil (Akpan, 2019).

Although the GFC originated in the United States, its ripple effects reached Nigeria, highlighting the interconnectedness of global financial systems. Nigeria's experience during the crisis demonstrated the disproportionate impact external shocks can have on economies that are small, open, and reliant on primary commodities. Despite its geographic distance from the epicentre of the crisis, Nigeria faced declines in foreign investment inflows, investor confidence, and access to international financing (Sanusi, 2011). These challenges were compounded by pre-existing structural issues, including corruption, political instability, and underdeveloped infrastructure, which worsened the economic downturn (Wahab, Yusuf, & Umar, 2023).

This study seeks to examine Nigeria's experience during the GFC and assess the policy measures implemented to stabilise the economy. It aims to answer critical questions, including: What vulnerabilities in the Nigerian economy were exposed by the GFC? How did the crisis affect key economic indicators? What role did the Fiscal Responsibility Act (FRA) of 2007, the Excess Crude Account, and the Medium-Term Expenditure Framework (MTEF) play in mitigating the impact of GFC? What lessons can be drawn from Nigeria's experience to enhance economic resilience? By addressing these questions, this study provides insights into the broader implications of external financial shocks on Nigerian economy and evaluates the effectiveness of its crisis response mechanisms.

Statement of the Problem

GFC, one of the most pivotal economic events in modern era, exposed multiple vulnerabilities within Nigerian economy, including dependence on volatile oil prices, financial sector instability, and underdeveloped infrastructure. Nigeria is largely rely on oil, with sector generating over 90% of export revenue and approximately 60% of government income (OPEC, 2022). The GFC led to a sharp decline in global oil prices, dropping from a peak of $133.88 per barrel in mid-2008 to approximately $44.60 per barrel by early 2009 (U.S. Energy Information Administration, 2022). This dramatic fall in oil prices significantly reduced government revenues, exacerbated fiscal deficits, and limited the ability of government to invest in infrastructure and social programs (Baffes, Kose, Ohnsorge, & Stocker, 2015).

Furthermore, the crisis had a devastating impact on the banking sector, revealing deep-seated vulnerabilities including weak corporate governance, insufficient risk management, and a high volume of bad debts. Several banks faced liquidity challenges, prompting the Nigerian bank regulatory agency to intervene by injecting capital into distressed banks and establishing the Asset Management Corporation of Nigeria to manage toxic assets (Luqman, 2015). The global financial crisis exposed the fragility of Nigerian financial sector, emphasising the necessity for enhanced regulatory supervision and comprehensive reforms to ensure long-term stability.

At that time, Nigeria also experienced significant capital outflows, as investors sought safer markets. This led to an estimated $10 billion in capital flight between 2008 and 2009 (Central Bank of Nigeria, 2020). Consequently, the naira depreciated by over 20% against the U.S. dollar, which contributed to exchange rate volatility and inflationary pressures (IMF, 2022). The depreciation increased the cost of imports and reduced the purchasing power of low-income households, further straining the economy.

Moreover, the crisis resulted in a sharp reduction in foreign direct investment (FDI). As reported by the United Nations Conference on Trade and Development, foreign direct investment inflows dropped by 43%, from $8.9 billion in 2008 to $5.1 billion in 2009 (UNCTAD, 2022). This decline severely impacted key sectors such as manufacturing, agriculture, and services, where foreign investment is critical for growth. The reduced FDI inflows contributed to slower economic recovery and increased unemployment, worsening Nigeria's socio-economic challenges.

Notwithstanding the long-standing acknowledgment of the necessity to diversify Nigerian economy beyond oil, progress has been slow (World Bank, 2023). Measures to strengthen sectors such as agriculture, manufacturing, and services have been hindered by factors such as inadequate infrastructure, policy inconsistency, and widespread corruption (Adetuyi, Tarbert, & Harrison, 2023). The global financial crisis underscored the risks of over-reliance on a single commodity and the pressing necessity for more robust economic diversification strategies to build resilience against external shocks.

The economic disruption caused by the global financial crisis also exacerbated socio-economic challenges, especially with regards to poverty and unemployment rates. As reported by the National Bureau of Statistics (2021), unemployment rate surged from 12.3% in 2008 to 19.7% in 2009. Similarly, the World Bank (2023) estimates that an additional 7 million Nigerians fell into poverty during the crisis. These figures highlight the profound impact the crisis had on workforce and underscore the need for policies that promote inclusive growth and create job opportunities, particularly in non-oil sectors. While numerous studies have investigated the global effects of the GFC, the specific mechanism by which it influence the Nigerian economy remain understudied. Moreover, the effectiveness of policy responses, such as monetary and fiscal interventions, regulatory reforms, and diversification efforts, remains underexplored (Dafe, 2019).

Objectives of the Study

This study aims to assess the Global Financial Crisis's impact on Nigerian economic development, with a focus on identifying vulnerabilities, discuss the policy responses undertaken, and the lessons learned from Nigeria's experience.

Literature Rewiew

Global Financial Crisis (GFC) of 2007-2008

The Global Financial Crisis stands as one of the most consequential economic events in contemporary history, leaving a profound impact on economies worldwide. It was triggered by a combination of factors, including the collapse of the housing market bubble, excessive risk-taking by financial institutions, and deficiencies in regulatory frameworks (Tarr, 2010). A key catalyst for the crisis was the implosion of the U.S. housing market bubble, driven by the widespread issuance of subprime mortgages. These high-risk loans were frequently bundled into intricate financial instruments, such as mortgage-backed securities (MBS) and collateralised debt obligations (CDOs), which were then sold to investors worldwide. As housing prices declined and mortgage defaults surged, the value of MBS and CDOs plummeted, causing substantial losses for financial institutions that held these assets. The crisis was further exacerbated by the interconnected nature of global financial markets, which triggered a cascade of institutional failures, widespread panic, and liquidity shortages (Blinder, 2013).

In response, governments and central banks introduced measures to stabilise financial markets and curb further economic decline. Central banks implemented monetary policies, including reducing interest rates and injecting liquidity, to restore confidence and maintain the stability of the financial system (Bernanke, 2015). Moreover, regulatory reforms were enacted to tackle the root causes of the crisis and minimise the likelihood of future systemic collapses (Admati & Hellwig, 2013).

Despite these interventions, the Global Financial Crisis resulted in severe global repercussions, such as economic contraction, widespread unemployment, and prolonged stagnation. Ongoing research continues to examine the long-term impacts of the crisis and assess the effectiveness of the regulatory reforms implemented in its aftermath (Mian & Sufi, 2014).

Vulnerabilities of Nigerian Economy

The interconnected nature of global financial markets allowed the economic disruptions that started in the United States to spread to other regions, including Africa. Financial institutions worldwide, including Nigeria, faced significant losses as a result of their exposure to toxic assets linked to the U.S. housing market, resulting in a liquidity crunch. The crisis spread across Europe, Asia, and other regions, leading to severe economic contractions.
Nigeria, as one of African largest economies, was not shielded from the crisis. Its over-reliance on oil exports, which form a major source of government revenue and foreign exchange, left it particularly vulnerable to fluctuations in global oil prices. During financial crises, a fall in oil prices often exacerbates Nigeria’s fiscal challenges (Okonjo-Iweala & Osafo-Kwaako, 2007).

Studies have identified various weaknesses within the Nigerian economy that were exacerbated by the world financial crisis. For example, exchange rate fluctuations can result in currency depreciation, inflation, and a heightened external debt burden during periods of economic turmoil (Akinbobola & Adebayo, 2018). Nigerian financial sector also faces ongoing issues related to liquidity, non-performing loans, and weak regulatory oversight, which can exacerbate the transmission of global economic shocks (Olokoyo, 2011).

Inadequate infrastructure continues to be a major obstacle for Nigeria, limiting its competitiveness and productivity. Financial crises exacerbate funding constraints, hindering infrastructure development and economic growth (Adesoye & Maku, 2016). Recent studies underscore the necessity of sustainable infrastructure investment to build long-term economic resilience (Adegboye & Iweriebor, 2020; Anago, 2024; Okoro & Emmanuel, 2021). Lessons from the crisis emphasize the importance of robust regulatory frameworks, diversified economic structures, and resilient financial systems to safeguard against future global economic shocks.

Empirical Review

The GFC had an immediate and severe impact on financial system in Nigeria. Sanusi (2010) highlighted how the crisis exposed systemic weaknesses in Nigerian financial system. The sharp drop in crude oil prices led to a liquidity crisis, pushing several major banks toward insolvency. Furthermore, banks had over-leveraged their assets in foreign investments, which plummeted in value during the crisis. The Apex Bank in Nigeria intervened with a ₦620 billion bailout to avert a total collapse of the financial sector. Ilesanmi and Tewogbade (2015) reinforced these findings; attributing part of the crisis to regulatory failures and poor risk management practices in Nigerian banking industry.

The capital markets in Nigeria also suffered significantly, with the Nigerian Stock Exchange (NSE) experiencing a 70% decline in market capitalization during the crisis. Olusegun et al. (2012) found that foreign portfolio investors withdrew their capital in response to global uncertainty, reducing liquidity and investor confidence. Post-crisis, Adebiyi (2014) found that government reforms, particularly in regulatory frameworks and macroeconomic stability, were crucial to the NSE's recovery by 2011.

Several studies explored the broader economic impacts of the crisis on Nigerian GDP and employment. Adegbite and Fapohunda (2012) observed that Nigeria's GDP growth rate dropped from 7.4% in 2007 to 6.0% in 2008 and further to 4.5% in 2009, driven by contractions in the oil sector. The oil price slump reduced government revenue, affecting public sector spending and investment. Oyeranmi (2020) estimated over 1 million job losses across the oil, manufacturing, and construction sectors due to the financial crisis.

Policy responses to the crisis were vital in mitigating its negative effects. Uchendu (2010) evaluated Nigeria's fiscal and monetary interventions, such as the CBN's expansionary policies and fiscal stimulus. Edo (2011) compared Nigeria's responses to other Sub-Saharan African countries, concluding that Nigeria's early intervention and financial reforms were critical in preventing a deeper recession.

The social impacts of GFC in Nigeria, particularly on poverty, have also been explored. Nosike, & Ojobor, (2024) found that the crisis disproportionately affected low-income households, with inflation eroding real incomes. Shchepeleva, Stolbov, & Weill, (2022) noted that the crisis exacerbated inequality, as wealthier individuals were better positioned to weather the downturn.

Materials and Methods

This study adopts a systematic content review methodology to examine the impact of the Global Financial Crisis (GFC) on Nigerian economic development. This approach facilitates the synthesis of diverse perspectives and findings from existing literature, enabling the identification of common themes and the derivation of actionable lessons. By employing a structured and rigorous process, the methodology provides a comprehensive understanding of both the immediate and long-term effects of the crisis. The literature review covers publications spanning 2007 to 2023 to encapsulate the full range of the GFC’s implications. Relevant sources, including peer-reviewed journal articles, conference papers, dissertations, and institutional reports in English, were identified through major academic databases such as Google Scholar, ScienceDirect, Scopus, and ERIC. Keywords such as “global financial crisis,” “world financial crisis,” “Nigerian economy,” and “post-GFC economic recovery in Nigeria” were employed to ensure a broad yet targeted search. Articles that did not directly address the impact of the GFC on Nigeria or fell outside the specified timeframe were excluded. The data collected was analysed using thematic analysis, categorising the findings into three key themes: vulnerabilities, policy responses, and lessons learned. The first theme examines Nigeria’s exposure to global markets and the structural weaknesses that exacerbated its susceptibility to the crisis. The second theme focuses on fiscal and monetary interventions, such as government bailouts and Central Bank of Nigeria reforms, evaluating their effectiveness. The third theme identifies strategies for enhancing economic resilience and mitigating the impact of future crises. The impact of the GFC on Nigeria was assessed qualitatively through indicators such as macroeconomic trends, sectoral impacts, and socioeconomic outcomes.

Results and Discussion

Impact of the Global Financial Crisis on Nigerian Economy

The GFC had a significant impact on the Nigerian economy through various key channels, including falling oil prices, reduced foreign direct investment, capital outflows, exchange rate instability, challenges in the financial system, and a deceleration in economic growth. This section explores the specific mechanisms through which the crisis affected the Nigerian economy, emphasising quantitative data and empirical analysis, with a focus on quantitative data and empirical analysis.

1. **Decline in Oil Prices:** Nigerian economy, which is heavily dependent on oil exports for government revenue, was impacted by the sharp drop in oil prices during the global financial crisis. Data from the U.S. Energy Information Administration (EIA) indicate that the average price of Brent crude oil, Nigeria's primary export, plummeted from $133.88 per barrel in July 2008 to $44.60 per barrel by January 2009. This decline resulted in over a 40% reduction in government revenue during the crisis, as reported by Nigeria's National Bureau of Statistics (NBS). Although the Nigerian government attempted to cushion the adverse effects of falling oil prices through the Excess Crude Account (ECA), the substantial loss of revenue severely limited the government’s capacity to fund public projects (Okonjo-Iweala & Osafo-Kwaako, 2007). Consequently, this worsened unemployment rates and heightened poverty levels across the country.
2. **Reduced Foreign Direct Investment (FDI):** Global financial instability led to reduced capital flows, including FDI into emerging markets like Nigeria. The United Nations Conference on Trade and Development (UNCTAD) reports that Nigeria's

FDI inflows dropped by 43%, from $8.9 billion in 2008 to $5.1 billion in 2009. This reduction in foreign investment stunted growth in key sectors such as manufacturing and real estate, further limiting job creation and private sector expansion.

3. **Capital Flight and Exchange Rate Volatility:** During the crisis, Nigeria experienced significant capital flight as investors withdrew funds, seeking safer assets. The CBN documented capital outflows exceeding $10 billion between 2008 and 2009. Consequently, the Nigerian Naira depreciated by over 20% against the U.S. dollar, driving up import costs and intensifying inflationary pressures.
4. **Banking Sector Distress:** The crisis exposed structural weaknesses in Nigerian banking sector, including an increase in non-performing loans. The Nigerian Deposit Insurance Corporation (NDIC) reported that non-performing loans surged from 6.3% in 2008 to 14.8% in 2009. In response, the CBN intervened by recapitalizing distressed banks, injecting liquidity, and preventing a systemic collapse. Without these interventions, the banking sector might have faced more severe consequences, including a potential financial meltdown.
5. **Trade Imbalances:** The crisis also adversely impacted Nigeria's trade. With reduced global demand, especially for oil, the country's trade deficit widened from $10.5 billion in 2008 to $13.6 billion in 2009. According to the World Bank, export earnings from oil and gas, this constituted a large portion of Nigeria’s exports, decreased by 43% in 2009. This strained the country's foreign reserves and weakened its ability to stabilize the Naira.
6. **Domestic Economic Challenges:** The world financial crisis compounded existing domestic economic issues, such as rising unemployment and poverty. The NBS reports that Nigeria’s unemployment rate surged from 12.3% in 2008 to 19.7% in 2009, while poverty rates escalated, with over 7 million Nigerians falling into extreme poverty during the crisis, as per World Bank estimates.

Policy Responses and Mitigation Strategies

Nigeria responded to the crisis through a series of monetary, fiscal, and regulatory measures aimed at stabilizing the economy and mitigating the negative effects of the crisis. The success of these responses varied, with some efforts yielding positive results and others limited by structural challenges.

1. **Monetary and Fiscal Interventions:** The CBN implemented several monetary measures to stabilise the financial system and foster economic recovery during the World Financial Crisis of 2007–2008. These included interest rate adjustments to manage inflation and encourage borrowing, as well as liquidity injections to ensure the stability of financial institutions and enhance lending activities (Ogunniyi & Akam, 2020).

   The Fiscal Responsibility Act (FRA) of 2007 was instrumental in promoting prudent fiscal management during the crisis. The Act established guidelines for sustainable borrowing, budgetary transparency, and efficient resource allocation. By ensuring that public expenditure adhered to these principles, the FRA helped the government manage its fiscal operations more effectively despite revenue shortfalls.

   The Excess Crude Account (ECA) was another critical policy tool. Created in 2004, the ECA served as a savings mechanism to cushion the economy against oil price volatility. During the GFC, the government utilised funds from the ECA to supplement budget deficits and finance critical public projects. This intervention temporarily stabilised the economy, though the depletion of the account highlighted the vulnerability of over-reliance on oil revenue.

The Medium-Term Expenditure Framework (MTEF) provided a structured approach to fiscal planning during the crisis. By aligning government expenditure with projected revenues over a three-year period, the MTEF facilitated a more strategic allocation of limited resources. It also promoted fiscal discipline and prioritised funding for essential sectors to aid economic recovery.

2. **Regulatory Reforms:** In response to the banking sector's distress, Nigeria implemented regulatory reforms aimed at improving supervision, risk management, and transparency in the financial sector (Alley, Hassan, Wali, & Suleiman, 2023). The CBN's establishment of the Asset Management Corporation of Nigeria (AMCON) was critical in acquiring non-performing loans and preventing bank failures. These regulatory measures helped rebuild confidence in the financial system.
3. **Economic Diversification Initiatives:** Efforts to diversify Nigeria's economy were accelerated in the wake of the global financial crisis. The government initiated programs focusing on agriculture, manufacturing, and services to reduce dependence on oil (Kalagbor, & Harry, 2021). However, structural challenges such as inadequate infrastructure, policy inconsistency, and corruption impeded progress in these sectors.

Case Studies

These case studies illustrate the impact of the global financial crisis on specific sectors and regions within Nigeria and assess the effectiveness of the corresponding policy responses.

1. **Banking Sector in Lagos:** At the time of the crisis, Nigerian banks faced liquidity problems and non-performing loans, particularly those with exposure to international financial markets. The CBN's interventions, including recapitalization and liquidity injections, prevented widespread bank failures and stabilized the financial sector.
2. **Oil and Gas Sector in the Niger Delta:** The crisis exacerbated existing socio-economic challenges in the oil-dependent Niger Delta, including poverty, environmental degradation, and conflict. Despite policy efforts such as the Nigerian Content Development Act, the region continued to experience underdevelopment and social unrest due to continued reliance on oil revenue.
3. **Agricultural Sector in Northern Nigeria:** In Northern Nigeria, the global financial crisis negatively impacted agricultural productivity by reducing demand and commodity prices. Government interventions, such as the Agricultural Transformation Agenda (ATA), helped mitigate some of these effects, though challenges like inadequate infrastructure and land tenure issues persisted.

Key Lessons from the Global Financial Crisis

Several important lessons can be drawn from Nigeria's experience during the financial crisis as follows:

1. **Economic Diversification is Crucial:** Nigeria's heavy dependence on oil revenue made the economy vulnerable to global shocks. Diversification into agriculture, manufacturing, and services remains essential for long-term stability.
2. **Strengthening Financial Regulation:** The crisis highlighted the necessity of strong financial regulation to mitigate systemic risks. Regulatory bodies must continue strengthening supervision and risk management to safeguard financial stability.
3. **Building Resilience in the Banking Sector:** Ongoing reforms aimed at improving governance, risk management, and transparency is critical in preventing future crises.

The promotion of financial technology (fintech) innovations can further enhance the banking sector's resilience.

4. **Sustaining Economic Stability:** Prudent macroeconomic policies, including counter-cyclical fiscal management and the maintenance of foreign reserves, are vital in building economic resilience against future shocks.
5. **Investing in Infrastructure and Human Capital:** Developing infrastructure and human capital is key to sustaining economic growth. Nigeria must prioritize investments in critical infrastructure and skills development to enhance productivity and reduce poverty.

Conclusion

This study provided an in-depth analysis of the impact of the global financial crisis on Nigerian economy, with a focus on the key economic challenges it triggered and the effectiveness of the policy responses. Despite Nigeria's geographical distance from the crisis epicenter, its reliance on oil exports and integration into global financial markets left it highly vulnerable. The global financial crisis exposed structural weaknesses within the Nigerian economy, such as oil dependence, financial sector fragility, and poor infrastructure.

Through case studies and empirical data, this research highlights the need for more robust diversification strategies and stronger financial regulation to reduce Nigeria's susceptibility to future global economic shocks. Effective economic management, coupled with reforms that address structural deficiencies, is critical for building a resilient and sustainable economy.

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GLOBAL MARKETING AND ITS IMPACT ON BLUE ECONOMY TO INDUSTRIAL GROWTH IN YENAGOA BAYELSA STATE.

Raymond Oti (Doctoral Student), Ebiye George (Doctoral Student) & Afia, Imeh Paul (Doctoral Student)

[1,2,3]Department of Marketing, Faculty of Management Science, Ignatius Ajuru University of Education, Port Harcourt, Rivers State
[1]08030502145, [2]08163142671, [3]07060643476
[1]drraymondtimioti@gmail.com, [2]imehafia@yahoo.com

Abstract

The blue economy is increasingly recognized as a catalyst for sustainable industrial growth, especially in regions with rich marine and aquatic resources. This study investigates the role of global marketing in advancing Yenagoa's blue economy in Bayelsa State, Nigeria, and its potential to drive industrial growth. Using a mixed-methods approach, quantitative surveys and qualitative interviews were conducted across fisheries, shipping, and tourism sectors.The findings reveal limited global market integration, with only 25% of businesses engaged internationally, compared to 75% operating locally or regionally. Key barriers include inadequate port infrastructure, high marketing costs, and limited digital marketing expertise. Despite these challenges, businesses participating in international markets reported substantial gains, including improved brand recognition, increased export revenues, and enhanced industrial growth potential. The study highlights the untapped potential of global market integration for Yenagoa's blue economy. To unlock this potential, targeted policy measures are essential, including modernizing infrastructure, fostering digital literacy, and creating trade-enabling environments. By addressing these challenges, Yenagoa can position its blue economy as a driver of sustainable industrial growth and global competitiveness.

Keywords: Blue Economy, Global Marketing, Industrial Growth, Marine Resources, Sustainability

Introduction

The blue economy is defined as the sustainable use of ocean and marine resources for economic growth, improved livelihoods, and the maintenance of ecosystem health (United Nations, 2021). It encompasses a broad range of economic activities that rely on ocean resources, including fisheries, aquaculture, maritime transport, renewable energy, and tourism. These sectors have the potential to provide employment, generate income, and support livelihoods, especially in coastal regions like Yenagoa, Bayelsa State, Nigeria. The blue economy aligns with sustainable development principles by promoting economic activities that preserve ocean health and foster long-term resource management.

In coastal areas like Yenagoa, which is located in the Niger Delta region of Nigeria, the blue economy presents vast opportunities for industrial growth. Yenagoa is strategically located along the Atlantic coastline, with access to abundant marine and natural resources, including fisheries, oil and gas reserves, and untapped potential in marine tourism. Sectors such as fisheries and aquaculture are critical to food security and livelihoods in Bayelsa State, and they have the potential to drive significant economic growth. Additionally, shipping and marine transportation play key roles in trade, both domestically and internationally. The development of these industries within the blue economy can lead to substantial improvements in income levels and employment opportunities.

Despite these advantages, Yenagoa's blue economy has not fully reached its industrial potential. There are several factors contributing to this underperformance. One major challenge is the weak infrastructure in the region. Port facilities, roads, and digital connectivity are underdeveloped, making it difficult for businesses in the blue economy sectors to operate efficiently or scale their operations to meet the demands of global markets (Adebisi & Akinwale, 2021). For instance, limited access to modern cold chain logistics hampers the fisheries sector's ability to export products internationally, leading to significant post-harvest losses.

Moreover, poor access to global markets is another key factor that limits the growth of Yenagoa's blue economy. Many businesses in the region lack the ability to engage with international buyers, partly due to insufficient knowledge of global trade regulations, export standards, and marketing strategies. This creates a disconnect between the wealth of resources available locally and the global demand for sustainably sourced marine products. In the context of a globalized economy, the ability of local businesses to integrate into international markets is crucial for achieving growth and competitiveness.

Global marketing, which refers to the planning, production, and promotion of products and services across international boundaries, plays a critical role in enabling regions like Yenagoa to fully participate in the global economy (Kotabe & Helsen, 2022). Effective global marketing strategies can help businesses in the blue economy sectors reach wider markets, increase brand visibility, and attract foreign investment. For example, branding and certification of sustainable seafood products could open up new markets in Europe and North America, where consumer demand for environmentally friendly products is growing. Digital marketing platforms, such as social media and e-commerce, also provide low-cost avenues for promoting local tourism, attracting international tourists to explore the natural beauty of the Niger Delta coastline.

However, the success of global marketing strategies is contingent on having a robust policy framework and infrastructure in place. In Yenagoa, policy weaknesses are a significant hindrance to the development of the blue economy. For example, there are limited government initiatives aimed at supporting SMEs in the blue economy sectors to access international markets. Additionally, the lack of trade agreements or export incentives specifically targeting blue economy industries has limited the region's ability to compete on the global stage (Oyelaran-Oyeyinka, 2021). Without comprehensive policies that address these gaps, local businesses struggle to scale their operations and tap into global markets, despite the abundance of natural resources.

Sustainability is another critical aspect of the blue economy that global marketing can enhance. The global demand for sustainable and eco-friendly products is rising, especially in industries such as fisheries, where consumers are increasingly concerned about overfishing and marine degradation (Andaiyani & Cahyadi, 2024). Adopting sustainable practices and certifying products as eco-friendly can increase the competitiveness of Yenagoa's blue economy industries in the global market. For instance, global marketing strategies that emphasize sustainability, such as promoting locally sourced and sustainably harvested seafood, can attract environmentally conscious consumers and foreign investments.

Despite these opportunities, Yenagoa's blue economy faces challenges related to technical expertise and capacity building. Many businesses in the region lack the skills necessary to adopt and implement global marketing strategies effectively (Muigua, 2023). Training and education in areas such as digital marketing, export management, and sustainability standards are necessary to build the capacity of local businesses to compete in international markets. Moreover, enhancing the technical skills of local entrepreneurs and workers will ensure that the region's blue economy can meet the standards required for global trade.

The current underperformance of Yenagoa's blue economy is not solely a result of weak infrastructure or market access; it is also rooted in the region's limited ability to engage in global marketing (World Bank, 2017; Cisneros-Montemayor et al., 2021). By strengthening the marketing capabilities of blue economy industries and improving access to international markets, Yenagoa has the potential to significantly enhance its industrial growth. The objective of this study is to examine how global marketing strategies can facilitate the integration of Yenagoa's blue economy into the global economy. This integration aims to drive sustainable industrial development and enhance livelihoods in the region.

Conceptual Framework

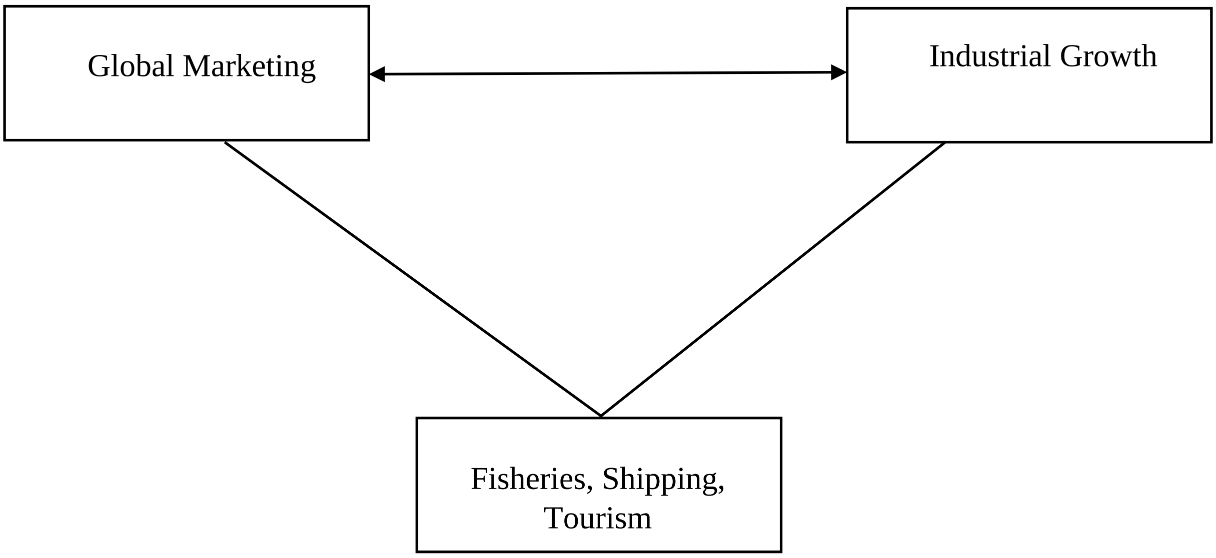

Fig.1.1: Framework showing the relationship between global marketing and its impact on blue economy to industrial growth.

Literature Review

The Concept of the Blue Economy

The concept of the **blue economy** is often defined as a model that promotes sustainable and equitable economic growth through the utilization of ocean-related resources. It encompasses sectors such as fisheries, aquaculture, coastal tourism, renewable energy, and marine transport, all of which must contribute social and economic benefits while ensuring the protection and restoration of marine ecosystems (World Bank, 2021). This definition underscores the importance of sustainable development**,** ensuring that the benefits derived from ocean resources do not come at the cost of environmental degradation.

The International Union for Conservation of Nature (IUCN) offers a more nuanced framework for the blue economy, which can be viewed from three perspectives. The first, the **maritime sector** or "brown blue economy," focuses on traditional maritime activities like fishing, shipping, and offshore energy production, typically following conventional economic models. A second perspective, the sustainable blue economy, emerged from the 2012 Rio+20 Summit and emphasizes activities aligned with sustainable development goals. This version of the blue economy integrates sustainability, inclusivity, and environmental protection into ocean-related industries (IUCN, 2021). Finally, the regenerative blue economy extends beyond sustainability, advocating for the active restoration and regeneration of marine and coastal ecosystems. It also emphasizes social inclusion and the empowerment of coastal communities, positioning the blue economy as a key player in addressing challenges like climate change and biodiversity loss (IUCN, 2021).

In addition, the United Nations highlights that the blue economy should provide social and economic benefits for both current and future generations while restoring, protecting, and maintaining the diversity, productivity, and resilience of marine ecosystems. Activities within this framework must be based on clean technologies, renewable energy, and circular material flows, which aim to reduce waste and promote the recycling of materials (UN, 2021). The Food and Agriculture Organization (FAO) **further** expands the blue economy's scope by focusing on sustainable practices within marine industries such as fisheries**,** aquaculture**,** and maritime transport**.** The FAO stresses the importance of adopting sustainable fishing and aquaculture techniques to ensure the long-term viability of these industries (FAO, 2021).

Global Marketing in the Blue Economy

Global marketing involves creating a cohesive strategy that enables businesses to participate in international trade. This includes understanding consumer needs in different markets, leveraging digital marketing platforms, and building global brand awareness (Kotler & Keller, 2020). For blue economy industries, global marketing provides a means to expand market access, attract foreign investment, and boost export revenues. Effective global marketing strategies can help local industries in Yenagoa tap into the growing demand for sustainable products and services in the global marketplace (OECD, 2020).

Challenges in Accessing Global Markets

Despite the opportunities offered by global marketing, many blue economy industries in developing regions face significant barriers to accessing international markets. These barriers include poor infrastructure, limited technical expertise, and inadequate regulatory frameworks. Studies show that countries and regions with underdeveloped infrastructures are often unable to meet the standards required by international markets (Adebisi & Akinwale, 2021). In Yenagoa, the lack of modern ports, shipping facilities, and digital platforms limits the region's ability to export its marine resources and participate fully in the blue economy.

Role of Policy in Supporting Global Marketing

Governments play a key role in facilitating the integration of local industries into global markets. Policy support is crucial in areas such as infrastructure development, trade agreements, and incentives for innovation. In the case of Yenagoa, government policies aimed at improving port facilities, enhancing digital marketing capabilities, and providing access to international trade platforms could significantly boost the region's blue economy (Oyelaran-Oyeyinka, 2021).

Empirical Review

Several studies have explored the relationship between the blue economy and industrial growth in coastal regions, with a focus on how marine and aquatic resources contribute to sustainable economic development**.** World Bank (2021**)** emphasizes that the blue economy, when managed sustainably, can be a significant contributor to economic growth, particularly in sectors such as fisheries**,** aquaculture**,** marine transportation**,** and tourism**.** In countries such as Indonesia and the Philippines, for instance, investments in the blue economy have directly resulted in increased exports, higher employment rates, and improved livelihoods in coastal areas (World Bank, 2021).

A study conducted in South Africa also highlight the role of the blue economy in driving industrial development, with particular emphasis on marine transportation and port development**.** According **to** Raubenheimer and McGregor (2020)**,** investments in port infrastructure and marine services in South Africa have led to substantial improvements in export capacities and regional industrial growth. Similarly, Adeyemo (2019) argues that regions that have effectively integrated their blue economy into national development plans experience greater industrial growth due to the increased capacity to export marine resources and attract foreign investment. These studies suggest that coastal regions like Yenagoa could see similar benefits if they fully harness their blue economy resources and align them with global marketing strategies.

A study by He et al., (2021) found that in regions with a strong blue economy, the adoption of global marketing strategies significantly increases the visibility of local products in international markets, leading to higher export revenues and foreign investment. For instance, in Norway and Iceland, where the seafood industry is a major component of the blue economy, global marketing strategies such as certification of sustainable seafood and digital marketing campaigns have been key drivers of export growth (He, et al., 2021). These countries have successfully marketed their seafood products as eco-friendly and sustainable, which appeals to the growing global demand for environmentally responsible products.

Similarly, Lillebø et al., (2020)**,** in their study on the Mediterranean region, highlight the importance of branding and international marketing in promoting **marine tourism** as part of the blue economy. They found that regions that develop strong marketing campaigns showcasing their marine biodiversity and eco-tourism opportunities tend to attract more international tourists, which in turn boosts industrial growth in the tourism and hospitality sectors. This is particularly relevant for Yenagoa, which has the potential to develop its coastal tourism industry as part of its blue economy strategy.

According to Ojo and Fapohunda (2021)**,** many SMEs in the blue economy sectors of West Africa struggle with the high costs associated with global marketing, such as branding, certification, and participation in international trade fairs. Their study, which focuses on the challenges faced by fisheries and aquaculture industries in Nigeria and Ghana, reveals that only a small fraction of businesses can afford to implement global marketing strategies, which limits their ability to compete in international markets.

Moreover, Adebayo and Ayodele (2020) found that poor infrastructure, particularly port facilities and logistics networks**,** further hinders the global marketing efforts of blue economy businesses in Nigeria**.** Without adequate infrastructure, it is difficult for businesses to meet international export standards, which reduces their competitiveness in global markets. This is a significant challenge in Yenagoa, where limited port facilities and unreliable transportation systems make it difficult for businesses in the blue economy to scale their operations and engage in global trade.

In the Caribbean**,** Murray et al., (2019) conducted a study on the role of digital marketing in promoting the blue economy, particularly in the tourism and fisheries sectors. Their findings indicate that digital marketing platforms, such as social media and e-commerce websites, provide a low-cost solution for promoting blue economy products and services. However, the adoption of these technologies is often limited by the lack of digital literacy and technical skills among SME owners. This is a common issue in many developing regions, including Yenagoa**,** where businesses may lack the expertise needed to implement effective global marketing campaigns.

Theoretical Frameworks

This study is grounded in two main theoretical frameworks: Porter’s Competitive Advantage Theory and the Resource-Based View (RBV).

Porter’s Competitive Advantage Theory suggests that regions or industries gain a competitive edge through the efficient use of their resources, innovation, and strategic market positioning (Porter, 1985). In the context of Yenagoa’s blue economy, this theory helps explain how global marketing strategies can enhance the region's competitiveness in global markets.

The **Resource-Based View (RBV)** emphasizes the importance of leveraging unique regional resources to achieve sustainable competitive advantage (Barney, 1991). For Yenagoa, its rich marine resources offer a distinctive advantage, but without the appropriate global marketing strategies, this potential remains underutilized.

Materials and Methods

Research Design
This study employs a mixed-methods approach to gather data on the blue economy sectors (fisheries, shipping, and tourism) in Yenagoa. The research includes both quantitative surveys and qualitative interviews.

Variables and Measurement
Independent Variables:
- **Government Policies**: Measured through questions on the policies affecting business operations in the sectors.
- **Infrastructure Quality**: Measured via a Likert scale assessing satisfaction with local infrastructure.
- **Environmental Factors**: Measured by self-reporting on the importance of environmental sustainability.

Dependent Variables:
- **Business Performance**: Assessed by self-reported revenue growth and market share.
- **Sustainability Practices**: Measured by responses on environmental initiatives like waste management and resource efficiency.

Instrument Source and Validity & Reliability
The survey instrument was self-constructed to align with the research objectives. It was reviewed by experts in the blue economy for content validity. Construct validity was tested through pilot testing, and reliability was ensured with a Cronbach's alpha of 0.80 from the pilot survey, indicating acceptable consistency.
For the interviews, a semi-structured guide was used, developed from expert input and pre-testing.

Sample Size and Sampling Techniques
Sample Size for Businesses:
- **Population Estimate**: An estimated 300 businesses operate within the blue economy sectors in Yenagoa.
- **Sample Size Calculation**: Using a 95% confidence level and 5% margin of error, the sample size was calculated to be 100 businesses.
- **Sampling Technique**: A stratified random sampling technique was employed to ensure representation from each of the three sectors: fisheries, shipping, and tourism.

Sample Size for Stakeholders:
- **Target Population**: Approximately 30 potential stakeholders, including government officials, industry leaders, and marketing experts in Yenagoa.
- **Sampling Technique**: Purposive sampling was used to select key individuals with significant expertise and experience in the blue economy.
- **Sample Size Justification**: A total of 10 stakeholders was chosen based on data saturation, ensuring comprehensive insights into the challenges and opportunities within the blue economy sectors.

Sampling Technique
This study utilizes two primary sampling techniques: stratified random sampling for selecting businesses in the blue economy sectors, and purposive sampling for identifying stakeholders with expertise in coastal region industries.

Stratified Random Sampling for Businesses

A stratified random sampling technique was used to select businesses across the blue economy sectors in Yenagoa. This approach ensures that each sector—fisheries, shipping, and tourism—is adequately represented in the sample. Stratified random sampling is particularly suitable in this context, as it allows for proportionate representation based on the relative size of each sector in the population, which in turn enhances the generalizability of the study findings.

Population Estimate:

- **Fisheries**: The fisheries sector in Yenagoa is a significant part of the local economy. Based on estimates from the Bayelsa State Ministry of Fisheries and local business directories, there are approximately 1,500 businesses operating within this sector in Yenagoa. These range from small-scale fishers to larger commercial fishing operations (Bayelsa State Ministry of Fisheries, 2022).
- **Shipping**: The shipping and logistics sector, influenced by Yenagoa's coastal location, has an estimated 200 businesses, including those engaged in port services, shipping companies, and logistics firms. This estimate was obtained from the Yenagoa Port Authority (Yenagoa Port Authority, 2022) and local business organizations.
- **Tourism**: The tourism industry, although smaller than fisheries and shipping, is rapidly growing. There are approximately 150 businesses involved in hospitality, travel agencies, and other tourism-related services in Yenagoa, according to the Yenagoa Tourism Development Corporation (Yenagoa Tourism Development Corporation, 2023) and local tourism reports.

Sample Size Calculation:

For a total sample of 100 businesses, the stratified random sampling method divides the sample proportionally to the size of each sector:

- **Fisheries**: 50 businesses (50% of the total sample).
- **Shipping**: 25 businesses (25% of the total sample).
- **Tourism**: 25 businesses (25% of the total sample).

This ensures that each sector is appropriately represented in the study, allowing for sector-specific insights.

Sampling Process:

The sample was selected through a random process within each sector, ensuring that all businesses within each stratum had an equal chance of being selected. This method eliminates bias in the selection process and guarantees that each sector’s characteristics are accurately reflected.

Purposive Sampling for Stakeholders

For the qualitative component of the study, purposive sampling was employed to select key stakeholders who possess expertise in global marketing and industrial growth in coastal regions. This non-random technique is appropriate for qualitative research, as it ensures that participants with the most relevant experience are included.

Stakeholder Population:

- **Government Officials**: Key government officials involved in policies related to the blue economy sectors in Yenagoa. There are approximately 5–10 officials who oversee economic activities in fisheries, shipping, and tourism, including those from the Bayelsa State Ministry of Commerce and the Ministry of Fisheries (Bayelsa State Ministry of Commerce, 2022).

- **Industry Leaders**: Influential leaders from the blue economy sectors, including business owners, executives, and managers, with 15–20 industry leaders identified through consultations with local business chambers and industry associations.
- **Marketing Experts**: Professionals with expertise in promoting coastal industries, estimated at around **5–10 experts** in marketing within the tourism, fisheries, and shipping sectors.

Sample Size Justification:
A total of 10 stakeholders were selected for in-depth interviews. This sample size is based on the principle of data saturation in qualitative research, where interviews continue until no new information or themes emerge. Previous research has shown that 10–15 interviews are typically sufficient to reach saturation in qualitative studies (Guest, Namey, & Mitchell, 2013).

Sampling Process:
Stakeholders were selected using purposive sampling based on their roles in government, industry, and marketing. This ensured that individuals with a deep understanding of the blue economy in Yenagoa were included, providing valuable insights into the challenges and opportunities in the sectors studied.

Results and Discussion

Table: 1. Frequency Table: Market Integration

Market Integration	Frequency	Percentage
International Market	25	25%
Local/Regional Market	75	75%
	100	100%

Source: *(Researchers Computation, 2024)*

Interpretation: The frequency table shows the distribution of businesses based on their market integration, revealing that 25% of businesses are engaged in international markets, while 75% focus on local or regional markets. This suggests that the majority of businesses are operating within a limited geographic scope, primarily targeting their immediate surroundings or neighboring areas. The relatively low percentage of businesses participating in international markets indicates that many are missing out on the potential benefits of global market access, such as higher revenue growth, increased brand recognition, and opportunities for market expansion. Given this, there is a significant growth potential for businesses if they were to expand their marketing strategies to include international markets. By entering global markets, businesses could access new customer bases, increase their sales, and enhance their visibility on a much larger scale.

These findings imply that there is a need for strategic initiatives aimed at encouraging businesses to explore international markets. This could include improving infrastructure, enhancing digital marketing skills, and providing better access to global trade platforms, which would reduce the barriers for businesses seeking to expand beyond local or regional markets.

Table: 2. Cross-tabulation to Examine Relationships between Global Marketing Practices and Business Growth Indicators

Market Integration	Brand Recognition Improved	Export Revenues Increased	Industrial Growth Potential
International Market	25 businesses (100%)	25 businesses (100%)	25 businesses (100%)
Local/Regional Market	50 businesses (67%)	30 businesses (40%)	60 businesses (80%)

Source: *(Researchers Computation, 2024)*

Interpretation: The cross-tabulation table reveals the relationship between market integration and various business growth indicators, such as brand recognition, export revenues, and industrial growth potential. Among businesses with international market integration, all 25 businesses (100%) reported improvements in brand recognition, increased export revenues, and a strong potential for industrial growth. In contrast, businesses focusing on local or regional markets showed varied results. While 67% of these businesses reported improved brand recognition, only 40% saw an increase in export revenues, although 80% recognized strong industrial growth potential.

The data indicates a strong association between international market integration and improvements in brand recognition and export revenues. Businesses that are actively engaged in international markets experience the greatest benefits in these areas, suggesting that global exposure significantly enhances their competitiveness and visibility. However, even businesses focused on local or regional markets demonstrate potential for industrial growth, as evidenced by 80% of them recognizing opportunities for expansion within their industries. This implies that, despite their limited international reach, local/regional businesses can still contribute to overall industrial growth, and with the right strategies, they could potentially leverage global markets to enhance their performance further.

Qualitative Data Analysis

The qualitative data from the interviews was analyzed using thematic analysis, a widely used method for identifying and interpreting patterns within textual data.

Findings

This study reveals critical insights into the integration of Yenagoa's blue economy into global markets and its associated challenges and opportunities. First, the data highlights low participation in international markets**,** with only 25% of businesses having a presence in global markets, while the majority (75%) operate within local or regional boundaries. This limited global integration points to missed opportunities for accessing wider customer bases, enhancing revenue, and building brand recognition.

Key barriers to global market participation were identified, including inadequate port infrastructure, high costs associated with marketing to international audiences, and limited access to global trade platforms. Additionally, businesses face challenges such as insufficient digital marketing skills and a lack of policy and institutional support to facilitate their expansion into global markets. Despite these challenges, there is significant growth potential within the blue economy. Businesses engaged in international markets reported notable improvements, including a 100% increase in brand recognition, export revenues, and perceived industrial growth potential. These findings underscore the transformative potential of global market integration, suggesting that businesses in the blue economy can achieve substantial economic and industrial benefits when equipped with the right tools, strategies, and infrastructure.

Policy Implications

The findings call for targeted policy interventions to overcome existing barriers and unlock the full potential of Yenagoa's blue economy. The following policy recommendations are proposed:

1. **Infrastructure Development**: Addressing infrastructural barriers is a critical priority. Investment in modernizing port facilities and improving shipping logistics is essential for enabling seamless participation in international markets. Additionally, the development of reliable digital infrastructure will support businesses in leveraging online platforms for marketing and trade.
2. **Capacity Building Programs**: Training initiatives focusing on global marketing strategies and digital literacy are crucial for enhancing the competitiveness of local businesses. Workshops, mentorship programs, and partnerships with international marketing organizations can equip businesses with the skills needed to navigate and succeed in global markets.
3. **Financial Incentives for Innovation**: The government should implement incentive schemes, including grants, tax benefits, or subsidies, to encourage businesses to adopt sustainable practices and expand their operations into international markets. These measures will lower the financial barriers to entry and promote innovation within the blue economy.
4. **Facilitation of Trade Partnerships**: Collaborations with international organizations and trade bodies can improve market access for Yenagoa's blue economy products. By negotiating trade agreements and reducing tariffs, the government can create a favorable environment for local businesses to expand globally.
5. **Promotion of Digital Trade Platforms**: Introducing or integrating with global e-commerce and trade platforms will help local businesses showcase their products to a broader audience, reducing reliance on physical infrastructure and enabling cost-effective market entry.

Conclusion

The findings highlight the significant potential of global market integration to transform businesses in Yenagoa, Bayelsa State, particularly within the blue economy. Businesses that engage in international markets consistently report substantial improvements in brand recognition, export revenues, and industrial growth, highlighting the competitive advantages of global exposure. However, the current state, where 75% of businesses operate solely in local or regional markets, reveals untapped opportunities for economic growth and innovation. Despite the advantages of international market integration, several barriers hinder the region's progress. These include inadequate infrastructure, limited expertise in digital marketing, and constrained access to global trade platforms. Addressing these challenges is crucial for unlocking the blue economy's full potential, which encompasses industries such as fisheries, coastal tourism, and shipping. The findings further reveal that while local and regional markets offer stability and industrial growth opportunities, global markets present a pathway to enhanced revenue generation, broader customer bases, and sustainable long-term expansion. To achieve sustainable industrial growth and global market penetration, Yenagoa must adopt targeted policy measures. These should focus on improving infrastructure, fostering digital literacy, and creating an enabling environment for businesses to access international trade opportunities. By doing so, the region can ensure inclusive and sustainable economic growth, leveraging the blue economy as a cornerstone of development.

Policy Recommendations

1. The government should prioritize modernizing ports, improving road networks, and establishing efficient logistics systems to facilitate global trade. Additionally, investments in reliable digital infrastructure are necessary to support e-commerce and digital marketing initiatives.
2. The government should **e**mpower businesses with the skills to navigate and leverage global digital platforms through targeted training programs.
3. The government should **p**rovide financial incentives such as grants, tax reductions, or subsidies to businesses adopting sustainable and eco-friendly practices.
4. The government should actively collaborate with regional and international organizations to create trade corridors, reduce tariffs, and facilitate smoother export processes.
5. The government should **i**ntroduce policies that encourage businesses to target international markets, such as export financing schemes, simplified trade regulations, and marketing support for global promotions.

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IMPACT OF ENTREPRENEURIAL PASSION AND PERCEIVED BEHAVIORAL CONTROL ON ENTREPRENEURIAL INTENTION AMONG UNIVERSITY STUDENTS

[1]Suleiman Usman, [2]Prof Zainab Dabo, [3]Dr Hashim Yusuf & [4]Prof Maryam Abdu

[1]Department of Business Administration, Ahmadu Bello University Zaria
[2,3,4]Department of Business Administration, Kaduna State University

Abstract

The study explores the impact of entrepreneurial passion and perceived behavioral control on entrepreneurial intention among university students. The target population for this research are 300 level students from Ahmadu Bello University, with a total 431 students across the Faculty of Management Science from department of Business Administration, Banking and Finance, Accounting, Marketing, Insurance and Actuarial Science. The study employed a simple random sampling technique as the chosen method for selecting the sample. Data analysis and hypothesis testing were conducted using partial Least Square structural equation model. The findings highlight the complex process of forming entrepreneurial intentions, where internal factors such as passion and external influences like perceived behavioural control work together to shape individuals' entrepreneurial aspirations. These insights offer valuable implications for policymakers, educators, and aspiring entrepreneurs aiming to create a supportive environment for entrepreneurship.

Keyword: Entrepreneurial passion, perceived behavioral control, entrepreneurial intention

Introduction

Researchers and policymakers worldwide have increasingly focused on understanding students' intentions to engage in entrepreneurship because of its recognized impact on economic growth and development (Stoica, Roman & Rusu, 2020). Entrepreneurship development is regarded as a crucial factor in promoting economic well-being in many countries. Notably, the success stories of the United States and China underscore the critical role entrepreneurship plays in driving economic prosperity (Morrison, 2019; Yu, 2020). In developing economies such as Nigeria, entrepreneurship is vital for job creation and innovation (Mahmoud et al., 2020). Global attention to students' inclination towards entrepreneurship reflects its potential impact on national expansion and progress (Voda & Florea, 2019). However, a significant challenge exists in translating entrepreneurial intention into action. Despite expressing a desire to engage in entrepreneurship, there is a notable gap between intention and action, prompting questions regarding the factors that hinder this transition.

The urgent need to address the rising concern regarding the low inclination of youth towards entrepreneurship necessitates this study. The Guess Global Report (GGR), which analyzed the entrepreneurial aspirations of university students across 58 countries, including Nigeria, and surveyed more than 267,000 students, revealed that only 17.8% of the students intended to pursue entrepreneurship immediately after their studies, with 32.3% planning to do so five years after graduation (GGR, 2021). Nigerian universities and polytechnics annually admit approximately two million students and produce approximately 600,000 graduates (University World News, 2021). The government and private sectors are struggling to provide sufficient job opportunities for this growing number of graduates.

According to World Bank data, the percentage of unemployed Nigerians with advanced education was 13.69% in 2016, which increased to 15.3% in 2019. The KPMG projects that unemployment will remain a significant challenge in 2023 due to limited private sector investment, low industrialization, slower-than-required economic growth, and the inability of the economy to absorb five million new entrants into the Nigerian job market annually (KPMG, 2023). These factors collectively underscore the pressing issue of low entrepreneurial intention among Nigerian students. In the African context, particularly in Nigeria, entrepreneurial intentions have heightened in significance (Ezeh, Nkamnebe,and Omodafe, 2020). Africa, as indicated by the Global Entrepreneurship Monitor (GEM, 2022), has boasted high rates of entrepreneurial intention, with Nigeria exhibiting a substantial surge in the past decade. Entrepreneurial activity accounts for approximately 35% of Nigeria's GDP, emphasizing its pivotal role in economic development (CBN 2022).

Entrepreneurial intention represents the intent to establish a new venture as well as opt it as an alternate career to formal employment (Yi, 2020). According to Ladd, Hind and Lawrence (2019), entrepreneurial intention is a kind of intentional behavior that is perceived and undertaken by university students to formulate a new business after completion of their studies. In view of the significance, several antecedents have been identified to examine their potential influence on one’s entrepreneurial intention, most of which generally investigated the preexisting entrepreneurs and already established business (Grine, Fares, and Meguellati, 2015), while literally overlooked a large segment of potential entrepreneurs i.e. university students and graduates who are considered as prime resource of future entrepreneurs (Gallant, Majumdar, and Varadarajan, 2010).

By considering the afore-mentioned aspects, one key factor to determine one’s entrepreneurial intention and behaviour is entrepreneurial passion (Murad et al., 2021; Neneh, 2019). Individuals’ high degree of entrepreneurial passion to provide innovative business solutions to customers and society, identified as foundation of having entrepreneurial behavior and intentions (Cardon & Kirk, 2015). Previous literature has also indicated that passionate entrepreneurs are more prone and committed to recognize novel opportunities for start-ups, which is an integral component of entrepreneurial intention (Jarvis, 2016; Murad et al., 2021). Therefore, entrepreneurial passion has increasingly been acknowledged as a vital attribute in understanding of how entrepreneurial intention could be developed among individuals (Biraglia and Kadile, 2017).

H01: Entrepreneurial Passion does not significantly affect entrepreneurial intention
H02: Percieved Behavioural Control does not significantly affect entrepreneurial intention

Literature Review

Entrepreneurial intention

Entrepreneurial intention is the choice of a person's activity because they feel attracted, happy, and eager to entrepreneurship. The emergence of this interest is usually marked by the urge or motive, attention, pleasure, ability, and suitability or suitability. According to Hurlock (1993), the intention is an impetus arising from within a person to do what they want, and they are free to choose. Fu'adi (2009) revealed that the interest in entrepreneurship is the willingness to work hard and diligently to achieve the progress of its business, the willingness to bear the various risks associated with doing business, it is a willingness to take new paths and ways, the willingness to live frugally, the willingness of learning they experienced.

Entrepreneurial intention is a desire, interest, and individual willingness through the ideas they have to learn, know and prove further about entrepreneurship (Yadewani & Wijaya, 2017). Entrepreneurial intention is defined as a mental state that makes a person invest a lot of attention, energy and time to achieve certain goals, namely becoming an entrepreneur (Bird, 1988). According to Krueger (2000), stated entrepreneurial intention is a person's commitment to implement entrepreneurial activities in the future.

Entrepreneurial passion

Passion as an important feature to trigger or drive human behavior is studied widely across disciplines and domains including entrepreneurship. It has been defined in several ways and share common themes such as intense positive feelings Cardon, Et al., (2009), and strong inclination Vallerand, Houlfort, and Forest, (2014) toward certain objective, goals or activity. Given that, entrepreneurial passion refers to individuals' "intense positive feelings experienced by engagement in entrepreneurial activities with roles that are meaningful and salient to the self-identity of the entrepreneur" (Cardon et al., 2009, p. 517). Cardon, Post and Forster (2017) argued that entrepreneurial passion motivates people to identify new opportunities and provide innovative solutions in the form of establishing a new venture. Entrepreneurial passion is "an attitude that encompasses a range of activities and thought processes…... it is not centered on a particular task or market but rather is a holistic sense of being within an individual" (Ratten & Miragaia, 2020, p. 62).

Perceived behavioral control

The conceptualization of perceived behavioral control has undergone systematic refinement since Ajzen (1985, 1991) identified it as a central element of the theory of planned behavior. In its current form within the reasoned action theory, perceived behavioral control refers to "people's perception of the degree to which they are capable of, or have control over, performing a given behavior" (Fishbein & Ajzen 2010). It is conceptually equivalent to self-efficacy (Bandura 1977, 1986, 1997), defined as "a judgment of one's ability to organize and execute given types of performances" (Bandura 1997, p. 21). When individuals believe they can perform a behavior, they are more likely to attempt it, dedicate effort, and persist in their efforts (Ajzen 2002; Bandura 1997; Bandura and Locke 2003). These effects may have a physiological basis, as research indicates that low perceived control over behavior diminishes brain activity associated with motor preparation, a critical process preceding and enabling the execution of behavior (Rigoni et al., 2011).

Relationship between Entrepreneurial Passion and Entrepreneurial Intention

The study of Neneh, (2022), on the relationship between entrepreneurial passion and entrepreneurial intention by developing a moderated mediation model. This study investigated whether entrepreneurial self-efficacy mediates this relationship. The study examines whether the social support moderates this mediation model by conducting a moderated mediation analysis. Using a sample of 500 valid responses from university students, the study established that firstly, entrepreneurial passion positively affects entrepreneurial intention and entrepreneurial self-efficacy. Secondly, the indirect effect of entrepreneurial passion on entrepreneurial intention through entrepreneurial self-efficacy was significant and positive. Thirdly, social support had a positive and significant influence on entrepreneurial intention, while the indirect effect of entrepreneurial passion on entrepreneurial intention through entrepreneurial self-efficacy was moderated by social support

Endhy et al., (2022) examined needs of creating entrepreneurs in Indonesia, the government encourages the people in Indonesia in becoming entrepreneurs. As a way to learn entrepreneurship, formal studies through university becomes one of the way in doing that. The study investigate how the role of entrepreneurial passion and creativity work in affecting the students' entrepreneurial intention. Another factor used in this research is the self-efficacy that works as the mediator from the entrepreneurial passion and creativity to the entrepreneurial intention. The research specifically focuses on Ciputra University students, seen as a potential incubator for entrepreneurs. Paper-based questionnaire is distributed to the entire sample and is using 5-point Likert-scale measurements. Data are analysed using the Partial Least Square. The result demonstrates that entrepreneurial passion and creativity have strong positive relationships towards the entrepreneurial intention. On the other hand, similar results do not appear when it goes from the both entrepreneurial passion and creativity mediated by self-efficacy towards the entrepreneurial intention. The findings advance the understanding of nascent entrepreneurship phenomenon within new undergraduate students of entrepreneurial-based university.

Relationship between Perceived Behavioral Control and Entrepreneurial Intention

Vamvaka et al., (2020) applied the theory of planned behavior to explore gender-related differences in the levels and interrelationships among attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention. Using multi-group structural equation modeling, they analyzed these constructs as latent variables inferred from multiple indicators. The study involved 441 Greek undergraduate information technology students in tertiary education. The findings revealed that attitude comprises two dimensions: instrumental and affective; perceived behavioral control includes perceived self-efficacy and perceived controllability; and entrepreneurial intention is best captured by three components: choice intention, commitment to entrepreneurship, and nascent entrepreneurship. The results highlighted that affective attitude and perceived self-efficacy are the most influential predictors of entrepreneurial intention, emphasizing the significance of emotions in entrepreneurship. Furthermore, the study found that the connection between commitment to entrepreneurship and nascent entrepreneurship is stronger in men than in women. By considering nascent entrepreneurship as a proxy for entrepreneurial behavior, this suggests that gender moderates the transition from entrepreneurial intention to action.

Otchengco and Akiate (2021) examined the relationship between tricycle drivers' personal attitudes, perceived behavioral control, and their entrepreneurial intentions, while also investigating whether this relationship is influenced by structural support. The study surveyed 349 randomly selected tricycle drivers in the Philippines. Using structural equation modeling, the researchers found that higher levels of perceived behavioral control and positive personal attitudes were associated with stronger entrepreneurial intentions. Additionally, the results indicated that perceived structural support moderates the effect of perceived behavioral control and personal attitude on entrepreneurial intention. Understanding the perceived behavioral control, personal attitudes, and entrepreneurial intentions of specific groups, such as tricycle drivers, provides valuable insights for assessing the viability of government-initiated entrepreneurial programs before implementation, thereby reducing unnecessary time, resource, and effort expenditures.

Theoretical Framework

The study adopted the theory of planned behavior (TPB) is the most used framework in the category of behavioral models (Morgan and Bachrach 2011. Caplescu 2014).

Materials and Methods

The study employed a cross-sectional survey method to gather data. The target population for this research are 400 level students from Ahmadu Bello University, with a total 431, students across the Faculty of Management Science from department of Business Administration, Banking and Finance, Accounting, Marketing, Insurance and Actuarial Science. To determine the sample size the study utilized krejcie and Morgan table (1970), which recommended a sample size of 198. The study employed a simple random sampling technique as the chosen method for selecting the sample. Data analysis and hypothesis testing were conducted using partial Least Square structural equation model. Hence, data was collected during their classes and they were given adequate time of 60 minutes to fill the questionnaire. Before the self-administration of questionnaire, the students were informed the purpose of the research and were assured of its voluntary and confidentiality nature, this according to (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003) will minimizes the effect of common method biases.

Analytical procedure

Before conducting the main analysis, the study ensured that key assumptions, including checks for outliers, normality, and multicollinearity, were met (Hair, Hult, et al., 2021). Once these assumptions were satisfied, the partial least squares (PLS) path modeling approach was employed. This method was chosen because the study's objective was to predict the dependent variable (Duarte & Raposo, 2010), and PLS is a non-parametric technique (Ruiz, 2013). To validate and assess the research model, Hair, et al., (2021) recommended a two-step evaluation process: measurement models (referred to as external models in PLS-SEM) and structural models (known as internal models in PLS-SEM).

Measurement Model

To assess the measurement model in this study, the reliability of individual items for each potential construct, internal consistency reliability (composite reliability), discriminant validity, and convergent validity of each reflective construct were evaluated (Hair et al., 2021). While Hair et al. (2021) suggests an outer loading of 0.70 as a threshold for reliability and acceptability, they recommend deleting an indicator only if its removal improves the construct's AVE or composite reliability. In this study, one item from PC (PC1) was removed due to a loading below 0.70. The remaining 10 items demonstrated reliability with loadings exceeding 0.50

Table 1: Measurement Model

Constructs	Indicator	Outer Loadings	Composite Reliability	Average Variance Extracted (AVE)
Entrepreneurial Intention	EI1	0.58	0.73	0.52
	EI3	0.81		
	EI4	0.63		
	EI5	0.53		
Entrepreneurial passion	EPA1	0.73	0.78	0.55
	EPA3	0.79		
	EPA4	0.70		
Perceived behavioral control	PBC1	0.65	0.78	0.54
	PBC2	0.76		
	PBC3	0.79		

The composite reliability was assessed to evaluate the internal consistency of the reflective constructs, with values ranging from 0 to 1, where higher values indicate greater reliability. All constructs were found to be reliable, as their composite reliability values exceeded the recommended threshold of 0.70. Additionally, convergent validity was confirmed, as all AVE values were above 0.50. To ensure discriminant validity, Duarte and Amaro (2018) recommended using the multitrait-multimethod (HTMT) matrix, which is considered a more robust and sensitive approach for detecting discriminant validity

Table 2: Heterotrait-Monotrait Ratio (HTMT)

Constructs	Entrepreneurial Intention	Entrepreneurial passion	Perceived behavioral control
Entrepreneurial Intention			
Entrepreneurial passion	0.53		
Perceived behavioral control	0.77	0.57	

As can be seen from Table 2 above, the HTMT statistics are given based on the correlation between their reflective construction items. Since the HTMT value is lower than the 0.85 threshold proposed by (Hair et al., 2017), the reflective latent variable of this study has discriminant validity.

Structural Model

After all the requirements of the measurement model are met, the structural model is evaluated. The first part of the structural model evaluation involves the testing of theoretical relationships. Specifically, the direct and moderating effect was assessed on 198 cases using 5000 bootstrap samples (Hair et al 2021).

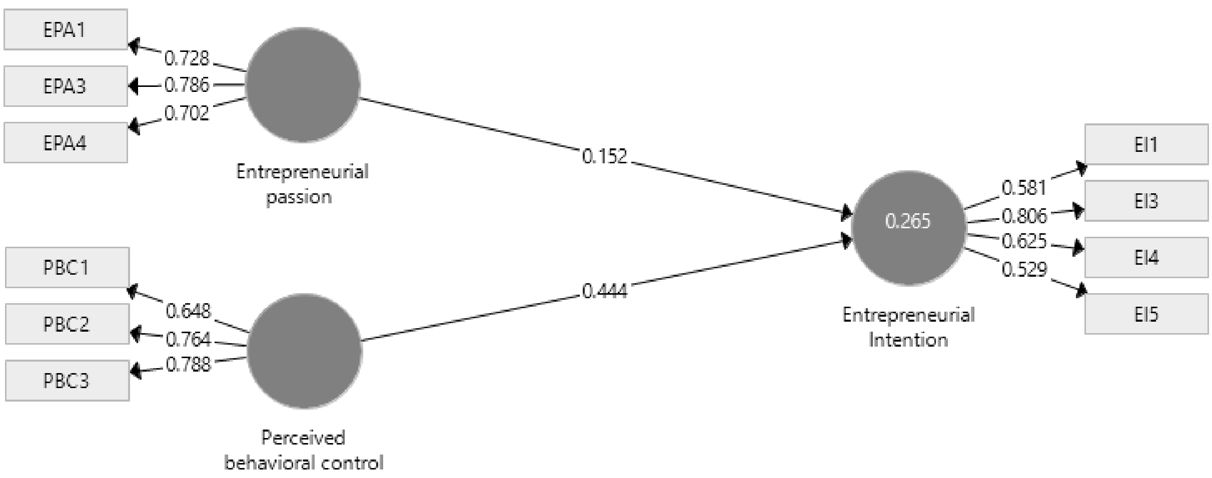
Table 3: Structural Model

Relationship	Beta Values	Standard Deviation	T Statistics	P Values
Entrepreneurial passion -> Entrepreneurial Intention	0.15	0.05	2.81	0.01
Perceived behavioral control -> Entrepreneurial Intention	0.45	0.05	9.69	0.00

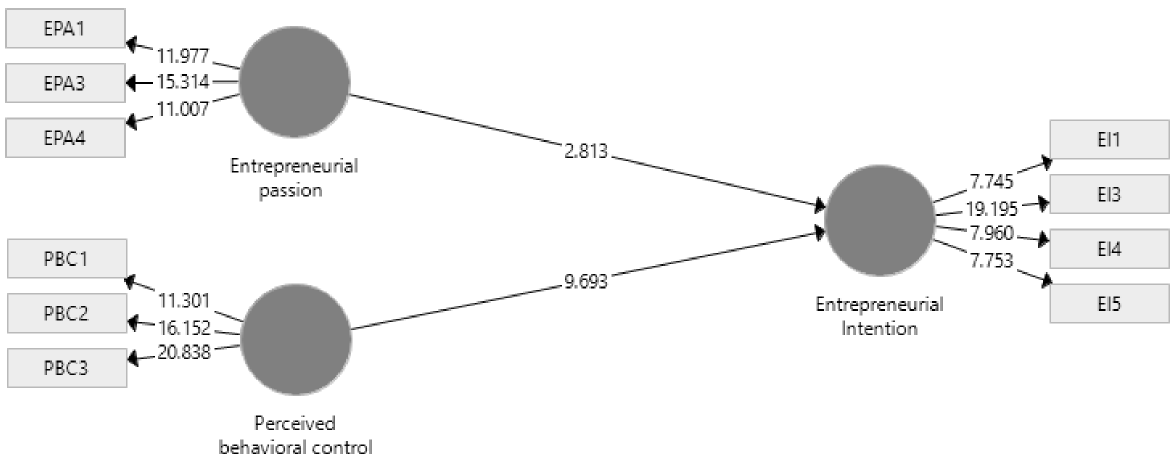
The structural model analysis presented in Table 3 delves into the intricate dynamics underlying entrepreneurial intention. It examines two pivotal factors: entrepreneurial passion and perceived behavioral control. The findings reveal noteworthy insights into their respective influences. Entrepreneurial passion exhibits a positive yet comparatively impact on entrepreneurial intention, as evidenced by its beta value of 0.15 and a T statistic of 2.81, with a p-value of 0.01, indicating statistical significance. This suggests that while entrepreneurial passion contributes to the formation of entrepreneurial intentions, its effect is somewhat nuanced and not as pronounced as other determinants.

Conversely, perceived behavioural control emerges as a formidable predictor of entrepreneurial intention, wielding a substantial influence with a beta value of 0.45 and a notably high T statistic of 9.69, coupled with a p-value of 0.00, signifying robust statistical significance. This underscores the pivotal role that individuals' perceptions of their ability to control their actions play in shaping their intentions to embark on entrepreneurial endeavours. The findings highlight the complex process of forming entrepreneurial intentions, where internal factors such as passion and external influences like perceived behavioural control work together to shape individuals' entrepreneurial aspirations. These insights offer valuable implications for policymakers, educators, and aspiring entrepreneurs aiming to create a supportive environment for entrepreneurship.

Measurement Model



Structural Model



Implication

In theoretical terms, the findings from the structural model analysis presented in Table 3 contribute to our understanding of the psychological determinants underlying entrepreneurial intention formation. The differential impact of entrepreneurial passion and perceived behavioural control highlights the nuanced interplay between intrinsic motivation and external factors in shaping individuals' aspirations towards entrepreneurship. This underscores the importance of integrating multiple theoretical perspectives, such as the Theory of planned behaviour provide a comprehensive framework for studying entrepreneurial intention. Furthermore, the findings suggest avenues for future research to delve deeper into the underlying mechanisms through which passion and perceived behavioural control influence entrepreneurial intention, thereby advancing theoretical knowledge in the field of entrepreneurship studies.

On a practical level, the implications of the study hold significant relevance for policymakers, educators, and practitioners involved in promoting entrepreneurship. Recognizing the pivotal role of perceived behavioral control underscores the importance of designing interventions and support mechanisms aimed at enhancing individuals' perceived self-efficacy, control, and confidence in their entrepreneurial abilities. This could involve implementing tailored training programs, mentorship initiatives, and access to entrepreneurial networks to provide aspiring entrepreneurs with the necessary skills, knowledge, and resources to pursue their entrepreneurial goals. Similarly, fostering an ecosystem that nurtures and celebrates entrepreneurial passion can involve creating supportive environments that encourage creativity, risk-taking, and innovation, while also addressing societal barriers and stigmas associated with entrepreneurship. By aligning theoretical insights with practical strategies, stakeholders can work towards creating a more conducive environment for entrepreneurship, driving economic growth, innovation, and societal development.

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ENTREPRENEURSHIP EDUCATION: A STRATEGY FOR THE DEVELOPMENT OF VOCATIONAL AND TECHNICAL EDUCATION

[1]Ituma Godwin Oyibe & [2]Esheya Samuel Esheya

[1]Department of Technical Education/Automobile Technology, Federal College of Education (Technical) Ekiadolor, Benin-City, Edo State.
[2]Department of Agricultural Economics and Extension, National Open University of Nigeria, Kaduna Campus.
[1]itumagodwin0664@gmail.com, [2]sesheya@noun.edu.ng

Abstract

Graduates of postsecondary institutions are unemployed as a result of the sharp rise in their numbers graduating without employable skills. The necessity for this pool of human capital to acquire or train as entrepreneurs stems from the fact that the public and private sectors are unable to provide enough jobs to accommodate them. As a result, they will develop the abilities and skills necessary to become job producers rather than job seekers. In order to solve this issue, entrepreneurship education was implemented in our postsecondary educational institutions. The development of skills, abilities, and competence that provide recipients initiative, creativity, risk-taking ability, passion, independence, and a business venture vision is known as entrepreneurship education. Graduates who have received entrepreneurship education would be aware of the current company and consider it as a potential alternative. Therefore, in order to address entrepreneurship education concerns for its best performance in Nigeria, this study provides a thorough assessment of the meaning, goals, importance, benefits, characteristics, challenges and strategies for resolving them. Lastly, it was suggested that sufficient advocacy be established regarding the necessity of embracing entrepreneurship education abilities and learning self-reliance skills, as its significance in Nigeria's educational, social, and economic growth cannot be overstated.

Keywords: Education, Entrepreneurship, Challenges, Development, Strategies

Introduction

The French verb entrepreneur, which means "to do something" or "to undertake," dates back to the thirteenth century and is where the word "entrepreneur" emanated. The capacity and willingness to create, plan, and manage a business venture-with all of its unknowns-with the goal of turning a profit is known as entrepreneurship. Profits can be made through entrepreneurship involving land, labor, capital, and natural resources. An essential component of a country's ability to thrive in a dynamic and increasingly competitive global economy is its entrepreneurial vision, which is characterized by exploration and risk-taking. The process of finding novel methods to combine resources is known as entrepreneurship. Ojeifo (2013) defines entrepreneurship as the readiness and capacity of a person or organization to recognize environmental obstacles and take advantage of them, such as a chance to manufacture things and provide services for the general public. According to the aforementioned, entrepreneurship may be defined as the capacity to see possibilities in obstacles and turn them into long-term business endeavors (Akenbor & Esheya, 2022). In addition to skill acquisition, entrepreneurship is defined as formal or informal organized learning that instills in students/trainees the capacity to recognize, evaluate, and take advantage of possibilities in the environment (Jones & English, 2004).

Suleiman (2006) defined entrepreneurship as the willingness and ability of an individual to look for investment opportunities, establish, and successfully run an enterprise. Entrepreneurship has been defined as the ability and willingness to develop, organize, and manage a business venture along with any of its risks to make a profit (Wikipedia, 2019). This means that entrepreneurship usually focuses on starting and operating a business in order to make a profit alone with risks involved. There are dangers associated with starting a business; a large percentage of new companies fail because of inadequate capital, poor business choices, economic downturns, a lack of consumer demand, or a combination of these. According to Uloh, Esheya, and Muhammad (2024), this circumstance necessitates entrepreneurship education for the entrepreneurs. An entrepreneur is a person who possesses the skills and motivation to launch, manage, and profit from a startup business while taking on the necessary risk. Entrepreneurs are frequently referred to as innovators or sources of new ideas since they replace outdated products with innovative ones and introduce them to the market. An entrepreneur is a force for transformation. Any economy is driven by its entrepreneurs. Entrepreneurs with more education are probably going to make greater contributions to the growth and development of the economy (Esheya, 2018).

Poverty in our nation will be reduced and eventually eliminated by fostering sound and useful entrepreneurship education (Enyekit & Dambo, 2017). Everyone's share of the economic pie is increased by prosperous entrepreneurs. Bill Gates helped start Microsoft in 1975 after creating the first microcomputer's BASIC while still an undergraduate at Harvard. Another businessman that positively impacted millions of lives was Sam Walton, the creator of Wal-Mart (Russel, 2002). Contrarily, education is the process of enhancing people's knowledge and abilities in order to make them beneficial to both the community and themselves (Abari, Mohammed, & Olufani, 2016). Ekpiken and Ukpabio (2015) defined education as the accumulation of information and the culmination of all processes that help an individual develop skills, attitudes, and other behaviors that are beneficial to the society in which he lives. Fasasi and Etejere (2009) opined that youths in the majority of less developed countries struggle to find employment after graduating from school because their education's imparted knowledge and skills are insufficient to prepare them to consider local businesses as an alternative. Additionally, the government and private sectors are unable to accommodate the large number of graduates due to the rapid growth in the school population, which means that some of them remain unemployed until they are in their mid-thirties, and some of them settle for extremely poor conditions in the informal sector (Babalola, 2011).

The unemployment rate has been rising in spite of all the federal and state government initiatives, such as the National Directorate of Employment (NDE), the agricultural sector, and youth empowerment. The National Bureau of Statistics (2022) reports that the jobless rate rose from 18.8% in 2017 to 23.1% in 2022. The study also found that the unemployment rate was higher in the southern region of Nigeria, with between 20 to 27 percent of men and women in the labor force being unemployed, respectively. Compared to 52.6 percent in 2017, 55.4 percent of teenagers aged 15 to 35 are either unemployed or underemployed. The aforementioned circumstance necessitates a plan that would guarantee our economy offers employment opportunities to our growing youth population. Perhaps in order to provide undergraduates with the skills necessary to establish and run a firm, entrepreneurship education has to be introduced in Nigerian educational institutions.

Meaning of Entrepreneurship Education

Training and skill acquisition in entrepreneurship are not the same as entrepreneurship education. Entrepreneurship education is the kind of education that ends poverty. According to Amaehule and Enyekit (2010), entrepreneurship education aims to instill the values of creativity and invention, entrepreneurship, emotion, character, necessary skills, competence, knowledge, attitude, and heart. Developing entrepreneurial abilities for small and medium-sized businesses helps achieve this. The process of starting a firm as an application of both individual and societal development is the focus of entrepreneurship education (Ossai & Nwalado, 2012). A collection of lessons known as entrepreneurship education aids students in gaining the information, abilities, and drive necessary to succeed as business owners. All educational levels, from elementary school to graduate university programs, can offer it.
Entrepreneurship education focuses on the process of establishing a business as an application of both individual and societal development. Entrepreneurship education is a set of teachings that help students acquire the knowledge, skills, and motivation needed to be successful business owners. It can be offered at all educational levels, from primary school to graduate-level university courses (Amusa, Anugwo, & Esheya, 2017). This indicates that entrepreneurship education equips students with the entrepreneurial skills and competences necessary to own and run a business. Giving young people the chance to learn entrepreneurship is a crucial first step in advancing a country's socioeconomic and political spheres, claims Olaniran (2018). This is due to the fact that entrepreneurship education helps young people become active participants and significant contributors to their country's economy, in addition to making it easier for them to launch a firm (Esheya, 2023).

Goals of Entrepreneurship Education

The cardinal goal of entrepreneurship education is to provide students the information, abilities, and drive to become more entrepreneurial in a variety of ways. According to Enyekit and Dambo (2017), the goals of entrepreneurship education are as follows:

- To offer functional education for the youth that will enable them to be self-employed and self-oriented;
- Provide the youth graduates with adequate training that will enable them to be creative and innovative in identifying novel business opportunities;
- To serve as catalyst for economic growth and development;
- To offer tertiary institution graduates with adequate training in risk management to make certain bearings feasible;
- To reduce high rate of poverty;
- Create employment generation;
- Reduce in rural-urban migration;
- Provide the young graduates with enough training and support that will enable them to establish a career in small and medium sized businesses;
- To inculcate the spirit of perseverance in the youth and adults which will enable them to persist in any business venture they embark upon, and
- Create smooth transition from traditional to modern industrial economy.

Importance of Entrepreneurship Education

Several studies have shown how crucial entrepreneurship education is in helping graduates develop an entrepreneurial attitude. Kolvereid and Moen (1997) found that students who completed an entrepreneurship course or majored in entrepreneurship were more likely to launch their own company. They also exhibited more entrepreneurial behavior than other students who had not been exposed to entrepreneurship studies. According to Ibrahim and Soufani (2002), schools and the educational system have a big influence on how entrepreneurial traits are developed. The study demonstrates that entrepreneurship education can be beneficial, but it makes no claims about its ability to create entrepreneurs on its own.

The significance of entrepreneurship education in today's society has thus been emphasized by the numerous studies that connect it to the growth of entrepreneurship and entrepreneurs. These results also highlight the necessity of teaching entrepreneurship at the higher education level in Nigeria, which aims to catch up to other nations in terms of innovation sooner. One useful goal for fostering an entrepreneurial culture among students is early exposure to entrepreneurship education. Anyone or perhaps a nation that needs more job providers than job searchers could benefit from this early exposure. Accordingly, entrepreneurship education will accomplish the following goals:

- Full employment for the youths,
- Technological advancement and economic development,
- International economic and political independent,
- Provide trained manpower in the applied sciences, technology and business particularly at craft, and advanced craft and technical levels,
- Reduction of crime and social vices,
- Effective supervision and administration of vocational programmes and institutions by vocational experts,
- Provide the technical knowledge and vocational skills for agricultural, commercial and economic development,
- Give trained and imparts the necessary skills to individual who shall be self-reliant economically (Ojeifor, 2013).

Specific Importance of Entrepreneurial Education to the Girl Child

Although entrepreneurship-focused education can benefit all students, it is most likely to benefit girls, particularly those in middle and high school. There is a gender gap in practically every field as a result of the underrepresentation of competent women in leadership roles. Girls can learn to take greater chances, embrace their competitive side, and hone their leadership abilities through entrepreneurship education. When used in a single-sex classroom, it can be particularly successful since it allows girls to explore their interests and passions without being constrained by societal pressure or gender preconceptions. Nigeria has a startlingly high percentage of prostitution these days, but entrepreneurial education may assist to improve the issue, particularly for girls.

Benefits of Entrepreneurial Education

According to Alex, Ike and Ikeme (2012), the benefits of entrepreneurship education include the following;

- It gives people skills of business management;
- Improves business start- up plan and management;
- Increases level of economic competition among people;
- Creates employment opportunities for people;
- Makes students develop interest in school subjects and aids the realization of general goal of education;
- Understands essential steps in starting a business;
- Enhance awareness of career and entrepreneurial options;
- Understanding of basic financial concepts and management;
- Increases awareness of social responsibility and entrepreneurial contributions to the society; and
- It develops students' creativity and increases their performance in schools.

Besides, there are five main benefits of entrepreneurship education for students which includes:

1. **Gets pupils ready for an unpredictable future**: We are living at a time of unparalleled technology and geopolitical change. The future of today's pupils is unpredictable and full of intricate social, environmental, and global challenges. By 2055, half of today's labor tasks may be automated, according to the World Economic Forum's Future of Jobs Survey. This would present entirely new roles, duties, and problems for the workforce of the future. As a result, we are unable to precisely forecast what knowledge our graduates will require. Programs that emphasize entrepreneurship give students vital life skills that will help them deal with this unpredictable future. These abilities include empathy, problem-solving, teamwork, and the ability to accept failure as a necessary component of personal development.
2. **Allows for creativity and teamwork:** As standardized testing has proliferated in public schools, there are fewer and fewer chances for kids to come up with new ideas and work together. Entrepreneurship fosters invention, creativity, and teamwork. These qualities will benefit your child well beyond middle and high school and are highly regarded by the world's best universities.
3. **Teach problem identification:** Before learning how to solve problems, students must learn how to recognize them. While problem identification has not been taught in schools for decades, problem solving has. Presenting pupils with problems that have already been precisely described by someone else is the traditional method of teaching problem solving. Problems in the actual world can only be resolved after they have been accurately recognized and explained. Children who receive entrepreneurship education learn how to recognize difficulties they have never faced before, which is a valuable talent in the world of tomorrow.
4. **Develops grit:** According to Angela Duckworth, a psychology professor at the University of Pennsylvania, who wrote the best-selling book "Grit," grit may be the most crucial element in an individual's long-term success. Grit, in Duckworth's opinion, is the result of enthusiasm and persistent perseverance used to attain long-term goals. More enthusiasm and consistent perseverance are needed for the challenging and unpredictable path of entrepreneurship than for most other pursuits. Because of this, entrepreneurship-focused programs are perfect for helping Nigerian students who are still learning the basics of business improve their grit.
5. **Improves the world**: With the aid of their goods and services, entrepreneurs aim to address needs, alleviate pain spots, and solve problems. They have an innate desire to

change the world and improve it. Students that take part in entrepreneurial programs are prepared to alter the world as well as build their own destiny.

Characteristics of Entrepreneurship:

History has shown that not all entrepreneurs are successful. Some of the definite characteristics that make entrepreneurship successful are discussed below according to BYJU'S Learning Program (2023):

- A key component of being an entrepreneur is having the courage and ability to assess and take risks, as starting a new business carries a significant risk of failure.
- **Innovation:** To come up with new ideas, launch a business, and make money from it, an entrepreneur must be highly innovative. Change can take the form of a new product that is introduced to the market or a process that accomplishes the same goal in a more cost-effective and efficient manner.
- **Leadership and vision:** An entrepreneur needs a strong vision for his new business in order to succeed. However, many workers and resources are needed to make the notion a reality. Since leaders teach and direct their staff members toward the proper route of success, leadership quality is crucial in this situation.
- **Open-Minded:** Every situation in business can be viewed as an opportunity to further the company's goals. For instance, Paytm took advantage of the circumstance and experienced significant growth during this period after realizing the seriousness of demonetization and the increased need for online transactions.
- **Adaptable:** An entrepreneur ought to be adaptable and willing to adjust as circumstances demand. A businessperson who wants to succeed must be able to adapt to changes in their product and service as they arise.
- **Know Your Product:** A business owner should be knowledgeable about the products that are offered as well as the most recent market trends. It is crucial to determine whether the current product or service satisfies market demands or if some adjustments are necessary. An essential component of entrepreneurship is the ability to take responsibility and adapt as necessary.

Challenges in Implementing Entrepreneurship Education in Nigeria

Nigerian universities have received varying degrees of assistance for entrepreneurship education. Nonetheless, a sizable portion of these universities still have difficulty effectively incorporating entrepreneurship instruction (Ogwu, 2019).

1. **Coming up with the appropriate idea:** You must have a workable, profitable company strategy before your venture will succeed. It all begins with your idea. Does your company have anything valuable to offer? Does your company have a target market? Building a business that can be sustained for years to come is a challenge for many novices. Pay attention to the service or product you plan to provide and how it might help your target market.
2. **Lack of Funding**: While entrepreneurship education is promoted by many organizations, students may not be able to assume the financial responsibility required to run their business successfully, leaving them as sole proprietors who do all the work themselves and do not need to hire staff. If your objectives include hiring a team or expanding offices and locations, you will need to find a way to raise money in order to expand.
3. **Hiring and managing employees:** Hiring and managing employee is another factor militating against entrepreneur. Assuming you have the financial resources to hire and

manage a team, the next hurdle comes with finding the right people to work with you. You may find low- cost employees or contractors, but will their work be the kind of quality you are looking for? One of the problems entrepreneurs face is hiring top-talent employees who still fit within their budget.

4. **Time management:** Especially in the early phases of a company, entrepreneurs frequently juggle several responsibilities. You are actively involved in the process from the time you decide to create your company to the actual management of your enterprise. It can take longer than anticipated, and burnout is a problem for many businesses. It can be difficult for them to strike a healthy balance between their personal and professional lives.
5. **Marketing and sales**: You are now in charge of marketing and promotion, just like you are with every other area of your company. To let clients know what you have to offer and where to locate you, you must spread the word about your product or services. A good market plan requires a great deal of strategy and time to build. This part of being an entrepreneur can be frightening and intimidating for those who lack marketing or sales experience.
6. **Competition:** Many businesses are overrun with people vying to become specialists in their industry because of the sheer volume of commerce that exists today. Regardless of the company model you choose, it is critical to recognize the competitors you will encounter. Your competitors and your approach to standing out from the crowd will unavoidably change as the business expands.
7. **Adapting to change**: One aspect of business ownership is the capacity to adjust to shifts in your sector or industry. These modifications may take the shape of evolving consumer demands, market dynamics, or technology breakthroughs. To be competitive, entrepreneurs must be aware of market trends and prepare for future developments.
8. **Managing Finance:** Many small business owners lack experience with cash flow and financial management unless they have a background in finance. It is a difficult part of becoming an entrepreneur because it is difficult to monitor your profitability and spending. You run the danger of damaging the finances of your company if you don't have the right information or advice on how to handle your money.
9. **Other factors** such as corruption, public attitude to entrepreneurship, public perception to entrepreneurship education, unavailable fund for teachings in practical terms for entrepreneurial education and start up and expansion of business ventures, inadequate facilities or equipment, and poor enabling environment for business are among the factors mitigation against entrepreneurship education in Nigeria (Esheya, 2021).

Strategies for Resolving these Challenges

Here are some strategies to assist you overcome some of the most typical problems that entrepreneurs encounter.

1. **Planning and research**: Before starting a business, conducting research is one of the finest strategies to get ready. No matter how eager you are to launch your company, having a strong business plan will help you stay on course. You want to approach this endeavor with a sense of assurance and security with your marketing plan, as well as the ability to recognize your priorities, potential weak points, and solutions to overcome these obstacles. Having a backup plan, or even a backup plan C, is a smart idea in case you need it. With your business, you never know what kind of issue you

might run into. Here's where problem-solving skills can assist you overcome these obstacles.

2. **Create a strong team:** The most successful CEOs and business owners are influential figures in their sector; they understand the importance of employing highly skilled workers and devote resources to their education and advancement. A key component of being a successful business owner is building a team that supports your company's vision. Spend some time selecting the most qualified applicants for your team; they will serve as your company's representatives and business advisors.
3. **Prioritize and delegate:** Setting priorities for tasks and knowing when to assign responsibility for completing them are essential components of effective leadership in the workplace. Your team is there to help, even if you feel like you can handle everything on your own. There will be more duties and obligations to divide as your company expands. Give yourself permission to assign tasks to team members in order to optimize your time and productivity. Additionally, it might assist you in keeping a healthy balance between your personal and professional lives.
4. **Create a powerful brand and marketing plans:** As we already know, creating a strong brand voice and a solid marketing plan are crucial components of starting a firm. Customers want to relate to the brand and the person behind it, regardless of the services or goods you offer. Make your own distinctive identity and brand that highlights your position in the industry and makes you stand out.
5. **Embrace innovation and change**: Every industry experiences waves of change, therefore it's critical to be abreast of the most recent technological advancements and trends. It is our duty as entrepreneurs to change with the times. As long as you continue to stay relevant to your audience, these adjustments will be worthwhile, even though they may be frightening and require more time and effort.
6. **Choose the appropriate platform for you:** Owning your own company can lead to many amazing career options and be incredibly fulfilling. Will it be difficult? Indeed. Will it need some preparation, time, and research? You wager. Must you do it by yourself? Not at all. With our platform, you can easily and effortlessly manage your clients, take payments, and even communicate them.

Conclusion

It is often known that having transversal skills is becoming more and more important for students as it will improve their employability and independence after graduation. Education in entrepreneurship is well-suited to give students the skills that will boost their employment prospects, such as problem-solving, social interaction, information retrieval and handling, communication, planning, and presentation of skills that can make them employers of labor. This necessitates the proper teaching of entrepreneurship education in vocational and technical institutions in order to train and retrain entrepreneurs for the necessary skills. However, it is advised that people constantly advance their technological and knowledge-based skills in response to the current rapid speed of change; otherwise, there would be economic stagnation.

Recommendations and Implications

Entrepreneurship education is an instrument for change and development and a provider of service-oriented skills, which play a significant role in economic revival for sustainable human capital development. Entrepreneurship and technical education is a vehicle upon which the skills of workforce are built. Without effective implementation of entrepreneurship education, we cannot hope for a future self-reliant graduate with the required skills and flexibility for sustainable human capital development in the global age. It is on the recognition of these needs that the National policy on education places on entrepreneurship skills at the secondary and tertiary institution. Effective utilization of entrepreneurship education and implementation of the programme will inculcate the necessary skills and competencies that would help the youth to be self-reliant. This would lead to the much-desired human capital development in the economy.

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EVALUATING THE POTENTIALS HINDERANCE TO WOMEN ENTREPRENEURSHIP IN SAMARU ZARIA KADUNA STATE NIGERIA

[1]Gora Zitung & [2]Muhammad Hamisu Ya'u (Assoc. Prof.)

[1,2]Department of Economics, Ahmadu Bello University Zaria. Kaduna State
zitungora@gmail.com & almayauhamisu@yahoo.com/mhy@abu.edu.ng

Abstract

Women entrepreneurship has emerged as a significant driver of economic growth, particularly in developing countries like Nigeria. This paper investigates the challenges and contributions of women entrepreneurship in Samaru, Zaria, Kaduna state, Northern Nigeria. The study evaluated the critical role of female entrepreneurs in driving economic growth, job creation, and poverty alleviation in Samaru community. The main objectives of paper are to evaluate the contributions of women entrepreneurs to economic activities in terms of job and income creation, poverty reduction and access to credits, among others. The study adopted descriptive survey research design and collected data randomly through structured questionnaire. The population of the study area are all the key women entrepreneurs in Samaru and the sample size of 85 were randomly selected and chi-square technique was used as estimation technique. The findings reveal that, while women entrepreneurs at Samaru significantly contribute to local economic activities, they encountered numerous challenges that hinder their potentials. Chi-square tests indicated a strong association between access to finance and business income, job and poverty reduction, underscoring the importance of financial resources in enhancing economic outcomes. The paper recommends that, institutional support especially access to funding, training and mentorship to empower women entrepreneurs and foster sustainable economic development in the community.

Key words: Entrepreneur, Entrepreneurial activity, Entrepreneurship, Women Entrepreneurship
JEL Classification: L 25

Introduction

A plethora of theoretical and empirical works have identified the role of women entrepreneurs as a significant driver of economic growth, particularly in developing countries like Nigeria. Small and Medium Enterprises Development agency of Nigeria (SMEDAN) report of 2023 found that women account for close to 50% of the total number of entrepreneurs either as owners or managers. However, the environment in which they operate often limits their potential to grow and expand due to a number of challenges such as access to credit, education and training, cultural and other traditional impediments. SMEDAN (2023) found that women entrepreneurs in Nigeria are faced with some unparalleled challenges which keep them trapped in the informal economy. Some of the hurdles faced by women entrepreneurs in Nigeria according to SMEDAN include, among others, limited deliberate gender-sensitive and responsive business laws and regulations, high costs, complexity and requirements of business registration, inadequate access to markets, poor financial and business development (support) services, insufficient access to the property, education, capital, social protection, and infrastructure (including ICTs), skill deficits, gender-based discrimination and occupational segmentation in the labour market as well as the weak legal and regulatory framework.

In Nigeria, most women operate in the informal sector with a 42.1% and only 13.57% in the formal sector but male account for 86.43% (MFB, 2024). Equally, the above scenario reflects the ratio gap between male to–female in Nigeria. This is not surprising as MFB (2024) also reported that Nigeria as a nation ranks low on gender gap parity with ranking of 123 (with 0.639) out of 146 countries. The access to power and especially scarce resources as a means of capital for start-up and expansion of an existing business concern most often than not is the dividing line between and among entrepreneurs.

However, the Nigerian government has introduced several strategies to address the seeming challenges and strengthen the micro, small, and medium businesses, including creating a Small and Medium Enterprise (MSME) policy in 2007 to promote economic growth and entrepreneurship (SMEDAN, 2023). In line with the federal government of Nigeria's resolved to address the yearnings and aspirations of women entrepreneurship, SMEDAN reported that private sector also initiated and implemented some programs to support government efforts through sensitization, provision of targeted financial products, and capacity building. The above two instances of support initiatives by government and the private sector produced the National MSME Policy (2021–2025) was launched in 2021. Despites these support initiatives; women still face enormous challenges however with different peculiarity depending the geography or environment in which they operate.

It is in the light of the above, this study attempt to examine the nature and characteristics of women entrepreneurs in Samaru, a vibrant local community in Zaria, Kaduna State, serves as a pertinent case study to understand the dynamics and the impact of women entrepreneurship. The area is characterized by a mix of urban and semi-urban economies, with women actively participating in various entrepreneurial activities. The presence of educational institutions in Samaru such as Ahmadu Bello University and Leather Research Institute has fostered a culture of innovation and entrepreneurship among women. However, research has shown that women entrepreneurs in Samaru face unique challenges, including limited access to credit facilities, lack of business management skills, and cultural norms that often prioritize male entrepreneurship. Nevertheless, many women have successfully navigated these challenges, establishing businesses that contribute to the local economy. For instance, studies indicate that women-led businesses in Samaru have positively impacted employment rates and income levels, demonstrating the potential for women entrepreneurs to drive economic growth in their communities (Alabi, 2023).

The main objective of this paper is to evaluate the hindrances faces by women entrepreneurs in Samaru, Zaria, Kaduna state, Nigeria. The specific objectives are to evaluate the specific contrition women entrepreneurs in terms of employment and poverty reduction, Samaru, access to credit, and the survival strategies women entrepreneurs employed in Samaru. For ease of comprehension, the paper is divided into five sections. Section two present the literature review, where relevant literature on entrepreneur, entrepreneurship, entrepreneurial activity as well as women entrepreneurship are discussed. Section three, methodology of the study was indicated while section four elucidates the results findings. The last section presents the summary, conclusion and policy recommendations.

Literature Review

Conceptually, entrepreneurship is term that connote processes of creating and maintaining a business concern by a male or female entrepreneur. Entrepreneurship is a distinct concept and a central factor of economic activity attracted considerable attention of the economists and policy makers. Even though, entrepreneurship promote economic growth through job creation and poverty reduction, yet, economists do not have a general consensus on the subject matter. The new normal in economic thinking across the globe is development of entrepreneurship as an engine of economic growth and development. Young men and women were continuously convinced through different government and non-government initiatives to embark on self-employment. Policies and support were initiated to induce entrepreneurship across the globe. As noted by Holtz-Eakin and Rosen (2004) much of the literature on entrepreneurship focuses on its benefits to individuals in terms of increases in standard of living, flexibility in hours, and so forth not on the general economy-wide benefits in the forms of new products, lower prices, innovations, and increased productivity.

Entrepreneurship as a multi-faceted phenomenon, differences in perception exists in theory, in the academia as well as in the public domain. The theories show different forms of normative considerations, the economists developed variety of opinion in the desirability of government involvement in the market system. These differences informed the difficulty in designing policy toward entrepreneurs is commensurately complicated (Holtz-Eakin and Rosen, 2004).

Women entrepreneurship has emerged as a significant driver of economic growth, particularly in developing countries like Nigeria. As the world increasingly acknowledges the critical role that women play in entrepreneurship, understanding the dynamics and impact of female-led businesses on the economy becomes imperative (Kabeer, 2012). In Nigeria, where socio-economic challenges persist, female entrepreneurs have the potential to contribute significantly to economic growth, job creation, and poverty alleviation. A general conception of a female entrepreneur is that who have majority share in a business. In Nigeria, women are found to show more interest in embarking of numerous businesses as entrepreneurs but are faced with enormous hurdles. According to the National Bureau of Statistics (NBS) report of 2020 shows that women constitute approximately 50% of Nigeria's population but have historically faced significant barriers to entrepreneurship, including limited access to finance, inadequate training, and socio-cultural constraints.

Women entrepreneurs in Nigeria engage in various sectors, including agriculture, retail, and services, which are vital for economic growth. Their contributions extend beyond mere economic metrics; they play a pivotal role in community development and social change. By starting businesses, women not only generate income for their families but also create job opportunities for others, thereby contributing to poverty reduction (Oni et al., 2021). Furthermore, female entrepreneurs often reinvest a significant portion of their earnings into their families' health, education, and welfare, which has a multiplier effect on community development (World Bank, 2019).

Challenges face by Women Entrepreneurs in Nigeria

Despite numerous studies on entrepreneurship in general, the gender-specific challenges, opportunities, and impacts associated with women-led enterprises are often overlooked, limiting a comprehensive understanding of their role in fostering economic development (Brush, De Bruin, & Welter, 2009).Women entrepreneurs face unique challenges, including limited access to capital, education, and networks, which often constrain the growth potential of their businesses (Carter, Shaw, Lam, & Wilson, 2007). These challenges are exacerbated by deep-seated socio-cultural norms that limit women's participation in entrepreneurial activities, especially in developing economies. This is not withstanding the fact that Pareto in 1897, suggested that inequality follows a ubiquitous power law applicable across all time periods and countries. However, (Almirall, Willmott & Cortes, 2023) posit that inequality is multifactorial and often emerges from power dynamics, differential access to scarce resources, or even, sheer serendipity.

Consequently, the full economic potential of women entrepreneurs remains largely untapped. Given the significant role women play in the labor market and as consumers, their exclusion from or limited participation in entrepreneurship represents a substantial loss to economic growth (Minniti & Naudé, 2010). Furthermore, empirical evidence on the direct link between women entrepreneurship and economic growth remains sparse. While some studies suggest that women-led businesses tend to be smaller and less profitable compared to those led by men (Du Rietz & Henrekson, 2000), others argue that women entrepreneurs contribute to the diversification of the economy and foster inclusive growth by creating employment and developing new markets (Hechavarría et al., 2017). In Nigeria, women entrepreneurs are involved in multiple sectors, such as agriculture, trade, and crafts, and play a significant role in both the formal and informal economies (Olumide, 2019). Despite their contributions, women often face obstacles such as limited access to capital, socio-cultural constraints, and educational barriers, making it challenging to scale their enterprises (Nwoye, 2020).

These challenges limit the ability of women to realize their full entrepreneurial potential. The most obvious obstacles include access to finance, socio-cultural constraints, and educational limitations, policy intervention, etc. Despite contributing significantly to the economy, women entrepreneurs are often seen as higher-risk borrowers, primarily due to systemic gender biases, lack of collateral, and lower creditworthiness compared to their male counterparts. Ojo (2019) posit that financial institutions in Nigeria are reluctant to provide loans to women because they are perceived as less capable of repaying loans. Furthermore, most women, especially in rural areas like Samaru, Zaria, lack access to formal banking systems, relying instead on informal savings and lending schemes that offer limited capital for business expansion (Adebayo, 2021).

Socio-cultural barriers also play a crucial role in limiting women's entrepreneurial activities in Nigeria. Traditional gender roles often dictate that women should prioritize family responsibilities, thereby limiting the time and resources they can dedicate to business ventures (Ogunleye, 2020). Cultural norms and values often reinforce the idea that business and entrepreneurship are predominantly male domains, making it challenging for women to assert their presence in competitive sectors. Akinola, (2018) maintained that, women entrepreneurs face resistance from their families and communities when they attempt to break out of these traditional roles, making it difficult to scale their businesses

Low level of education and training among women severely hinder women's entrepreneurial growth, particularly in rural regions. Women in areas like Samaru, Zaria, generally have lower levels of formal education compared to men, which affects their ability to access information, networks, and resources needed for business success (Omotayo, 2017). A lack of business training and financial literacy often results in women mismanaging their resources or being unable to seize larger market opportunities. As entrepreneurship increasingly demands the use of digital technologies and sophisticated business management techniques, the educational gap further marginalizes women from participating fully in Nigeria's evolving economic landscape (Ezeh, 2019).

The Nigerian government and several non-governmental organizations (NGOs) have recognized the importance of women entrepreneurship and have introduced various programs to support women entrepreneurs. These programs typically aim to enhance women's entrepreneurial capacities through financial empowerment programs, vocational training, and mentorship schemes. For example, the National Gender Policy (2007) seeks to provide equal opportunities for women in economic and political spheres, and the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) provides financial support and business development services to female entrepreneurs (Ogundele, 2018).

However, the implementation of these policies and programs has faced significant challenges. Corruption and bureaucratic inefficiencies often prevent funds and resources from reaching the intended beneficiaries, particularly in rural areas like Samaru, Zaria (Adebayo, 2021). Many programs lack proper monitoring and evaluation mechanisms, which limits their effectiveness in addressing the specific needs of women entrepreneurs. Additionally, there is often an urban bias in the distribution of resources, leaving women in rural areas underserved by national programs aimed at fostering entrepreneurship (Ezeh, 2019; Ogunleye, 2020).

Theoretical Literature and Framework

Schumpeter's Theory of Innovation

Joseph Schumpeter's theory, first introduced in his work *The Theory of Economic Development* published on 1911, places entrepreneurship at the center of economic development. Schumpeter argues that entrepreneurs are agents of change in the economy, driving innovation through the introduction of new products, processes, and business models. This innovation leads to "creative destruction," where old industries and methods are replaced with new, more efficient ones, contributing to overall economic growth. In the context of this theory, does women entrepreneurs in Samaru possess these attributes to be able to innovate new business ideas and methods to fashion out new business models as the theory posit?

Human Capital Theory

Human capital theory, popularized by economists like Becker (1964), emphasizes the role of education, skills, and experience in enhancing the productivity of individuals, which in turn contributes to economic growth. From this perspective, women entrepreneurs who acquire education, training, and experience can significantly enhance their productive capacities. Becker (1964) believed that investments in human capital—through education and training—are essential for enhancing productivity. In consideration of this perspective, does women entrepreneurs in Samaru are adequately educated and trained to be able to expand their productivity in the areas they found themselves?

Institutional Theory

Institutional theory focuses on how the rules, norms, and regulations within a society influence entrepreneurial activities. North (1990) argues that institutions—both formal (laws, regulations) and informal (cultural norms)—play a crucial role in shaping economic behavior. When institutions are favorable to entrepreneurship, individuals, including women, are more likely to start and sustain businesses, contributing to economic growth. As this theory posits, various institutional and private initiatives were introduced such as Medium Enterprise (MSME) and the National MSME policy document of (2021-2025) as reported by SMEDAN impacted on women entrepreneurs in Samaru. Are women entrepreneurs in Samaru aware of such public and private sector support initiatives in promoting their optimal potentials in self-reliance?

Gender and Development Theory

Gender and development theory highlights the importance of integrating women into the economic development process to achieve sustained growth. Benería and Sen (1981) and Beneria and Sen (1981) argue that neglecting women in development strategies leads to economic inefficiencies, as half of the productive population is left underutilized. They emphasize that empowering women through entrepreneurship can generate significant economic returns, as women tend to reinvest their earnings into their families and communities, thereby creating a multiplier effect on growth.

The main challenge here is to actually find out whether or not the continued gender initiatives and interventions/programme to support and empower women entrepreneurs through targeted financial support, business (skills) training, mentorship programs, and networking opportunities have any bearings with women entrepreneurs in Samaru. The International Labour Organization (ILO), working with the government at all levels, has also promoted small enterprise development in Nigeria through various initiatives and projects, including the "Promoting Gender Equality and Formalization through Women's Entrepreneurship Development" project in Nigeria (SMEDAN, 2023).

The above theoretical literature was considered as candid framework for this study as each consider and reinforces the essential needs of entrepreneurs especially women.

Empirical Literature

Many empirical evidence abounds presented the enormous contribution women entrepreneurs are making to economic growth and development. Different strands of empirical evidence are found in the literature concerning women's entrepreneurs in Nigeria. Some these studies emphasised economic contribution, financial constraints, educational and cultural impediments, and institutional support. Studies such as (Sajuyigbe & Fadeyibi, 2017; Chukwujekwu, *et al*., 2022; Ukwueze, 2022) conducted empirical investigation using different methods have concluded that women entrepreneurs significantly contribute to economic growth in Nigeria.

Empirical investigation has been identified that women's involvement in income generation tends to boost family income, support children's education, improve health of family members, provide food, build assets for the family, and contribute to general development of economies. (Ukweize, 2022). However, other strand of empirical evidence indicated that women entrepreneurs in Nigeria faces significant obstacles in their pursuits of entrepreneurship drive (Adekola et al., 2015; ILO, 2022). Some of the variables considered by these empirical studies include lack of access to credits, education and training, resilience and consistency in business, cultural impediments, limited access to networking, balancing business and family responsibilities, among others. To buttress the case of lack of access to credit MFB (2024) reported the National Bureau of Statistics in Nigeria states that about 80% of women-owned enterprises fund their businesses from their finances due to difficulties accessing external funding.

However, the different empirical works done on women entrepreneurship are still inadequate to explain the nature and characteristics of women entrepreneurs in all the local communities in Nigeria. There are however few attempts such as the work of Ezeh, 2019; Ogunleye, 2020 who discovered urban bias in the distribution of resources, leaving women in rural areas underserved by national programs aimed at fostering entrepreneurship. Though the emerging indicators in Nigeria shows that women entrepreneurship is having a turn around with the emergence of technology-driven business, growing social enterprises, collaboration and networking, access to financial inclusion and funding through microfinance monipoint, agribusiness as well as wellness and health entrepreneurship (WWB, 2024; MFB, 2024).

Materials and Methods

The research methodology for this study was quantitative in nature because it was more interested with systematic empirical verification of social phenomenon. Quantitative methods to Sambo (2005) used computational, statistical and mathematical process to evaluate social phenomenon of interest. The research design was used to generate information on women entrepreneurs in Samaru community of Sabon Gari local government, Kaduna state, Nigeria. The choice of the survey design was informed due to the need to interact with the respondents directly to understand the nature of the entrepreneurial activities and to understand the hurdles if any, they faced in the course of their business activities. The population of the study area was represented by all women entrepreneurs in Samaru community.

In terms of data collection, primary data was collected from the responses of the women entrepreneurs through self-administered questionnaire. This approach allows for both qualitative and quantitative data collection, enabling an in-depth understanding of the challenges, contributions, and economic impacts of women entrepreneurs in Samaru, Zaria. This method was corroborated by Creswell (2014) maintained that a descriptive survey design is effective for studies aiming to describe, explore, and analyze real-world phenomena.

Regarding the population, the exact number of women entrepreneurs was unknown, this study considered 85 women entrepreneurs in Samaru was considered as the sample of the population. The *data was collected* through random sampling from the target women entrepreneurs who are actively engaged in running businesses in the region. *from the sample size of the population.*

Results and Discussion

This section of this study presents the result and discussion obtained to examine and evaluated the economic contribution of women entrepreneurs, hurdles they faced and the survival strategy adopted. The results are discussed in accordance with the research questions of the study while attempts were made to relate the findings to alternative or supportive views as stated in the literature review. The study developed and distributed 85 questionnaires to women entrepreneurs' respondents in Samaru. Pre-testing of the questionnaire was conducted to ensure clarity and relevance of questions as suggested by (Kothari, 2004). Out of the total number of questionnaires distributed, 72 questionnaires were retrieved which represent (84.7%). It was discovered that 2 which represent (2.4%) questionnaires were faulty and therefore rejected. Therefore, the valid and useful questionnaires to be used became 70, that is, 82.4%. The % rate in this was considered adequate enough and in line with Sekeran and Bougie (2013) that posit 30% of a response by respondents are acceptable for any survey.

Measurement of the variables was done through SPSS in order to give each respondent opportunity to be represented.

Demographic Characteristics of respondents

This section also presents the age, marital status and educational level of all the respondents of the study area.

Table 1: Demographic Characteristics of the Respondents

No	Frequency	Percentage %
Age:		
Under 20	14	19.4
20-30	12	16.7
31-40	24	33.3
41-50	11	15.3
Above 50	11	15.3
Total	72	100
Marital status:		
Single	26	36.1
Married	28	38.9
Divorced	8	11.1
Widowed	10	13.1
Total	72	100
Education:		
Primary	3	4.2
Secondary	17	23.6
Diploma	27	37.5
Bachelor degree	23	31.9
Master degree	2	2.8
Total	**72**	**100**

Source: Field Data, 2024

Table 1 above indicated the demographic characteristics of the respondents in terms of age, marital status and educational level, respectively. Women entrepreneurs in Samaru are seems to be more of Middle Ages, that is, 20-30 and 31-40 that constitute 50% actively engaged in the business. Fewer under 20 (19.4%) and some above 50 (15.3%), respectively

From the study, we observed the marital status of the respondents. 26 of the respondents are found to be single (36.1%), married 28 (38.9%), 8 were divorcee (11.1%), and 10 representing (13.1%) were widows. This means that, women entrepreneurs were mixed, indicating the need to engage in some businesses to earn a living. The implication of this results is that, little institutional support and awareness of institutional programme are not felt by women entrepreneurs in Samaru community.

The table also show case the level of education of the respondents. It was observed that, all the respondents attained some level of education. 3 attended primary school (4.2%), secondary leavers were found to be 17 (23.6%), diploma holders, diploma constitutes the highest 27 (37.5%) while degree 23 (31.9%) and master degree were only 2 (2.8%), respectively.

Major challenges faced by women entrepreneurs in Samaru

This section equally presents the major hurdles women entrepreneurs faced in the course of pursuing their business activities in the study area.

Table 2: Major challenges faced by women entrepreneurs in Samaru

No		Frequency	Percentage
1.	Access to finance	10	13.9
2.	Access to market	8	11.1
3.	Business regulation & training	9	12.5
4.	Family responsibilities	8	11.1
5.	Lack of business training & education	7	9.7
6.	Gender/Discrimination	8	11.1
7.	Competition	5	6.9
8.	Business expansion	6	8.3
9.	Business innovation	6	8.3
10.	Survival	5	6.9
Total		**72**	**100**

Source: Authors field research, 2024

Table 2 above indicated the different challenges women entrepreneurs faced in Samaru community, Zaria. The biggest hurdle was access to credit 10, representing (13,9%), followed by business training 9 (12.5%, respectively. Family responsibilities, market access and gender (11.1%) shows close correlation well as lack of business training and further education (9.7%) indicated constraints in business. Business expansion and innovation share similar trends 6 (8.3%), respectively. Business competition and survival are in the same direction showing close correlation (6.9%). The findings of this study is in line with Kayode, Lekan and Salma (2023), who also discovered numerous hurdles that women faced despite their resilience in business. Kaltume, Ahmed & Bugaje, equally discovered that women entrepreneurs' faces persistent gaps in education and training that negatively affected their entrepreneurial activities.

Institutional Support to Entrepreneurs

In this section, the study also shows the level of institutional awareness and support to women entrepreneurs in Samaru community.

Table 3: Institutional Support (Govt. & NGOs) for Women Entrepreneurs in Samaru

No		Frequency	Percentage
1.	Slightly support	25	34.7
2.	Not supported	25	34.7
3.	Don't know	22	30.6
Total		**72**	**100**

Source: Author field work, 2024

Table 3 revealed the level of institutional (public and NGOs) support to women entrepreneurs in Samaru community. 25 of the respondents believed that there was slight support while another 25 (34.7%) says no support whatsoever from the government of Non-Governmental Organization (NGOs) in the course of their business activities. Another 22 respondents do not know anything about institutional support.

Conclusion

The results of this study show that women entrepreneurship in the study area identified the significant role women entrepreneurs play in creating employment, income, poverty reduction and strategies for resilience in their business undertakings. The paper also demonstrated a nexus between the influences of the institutional support, education and training as sacrosanct to women entrepreneurship expansion and survival in the study area. The study concludes that women entrepreneurs in Samaru, Zaria are actually interested in their businesses and significantly contributing to economic growth in the study area. However, little no institutional support was experienced by the women entrepreneurs in Samaru.

In relation to the findings from the study, it can be concluded that there is a profound influence of women entrepreneurship on economic development in Samaru, Zaria. The study findings indicate that women entrepreneurs are significantly contributing to income generation, employment creation, and overall economic growth. However, these women face notable challenges in accessing finance and institutional support, which negatively impact the sustainability and expansion of their businesses. The results were deduced from the responses of the respondents in the survey administered and analyzed.

Recommendations for Policy Implications

Based on the findings of this study, the policy implications access to capital remains a major challenge for women entrepreneurs, as highlighted by 16.7% of respondents. To tackle this, the government should develop more inclusive financing models that cater specifically to women-owned businesses. Government and private-sector initiatives should work towards providing low-interest loans, grants, and tailored financial products that can help women overcome the capital constraints they face.

With 65.7% of respondents indicating that government and NGO support is inadequate, there is need for increased institutional intervention. Government policies should focus on offering targeted support to women entrepreneurs through business-friendly regulations, tax incentives, and accessible training programs. NGOs can also play a role by providing mentorship, funding opportunities, and advocacy to help women navigate business challenges.

Many women entrepreneurs lack formal business training, which affects their ability to scale and innovate. Structured programs offering training in business management, marketing, financial literacy, and strategic planning should be introduced. Partnerships between local business schools, government agencies, and NGOs can help provide these resources at little to no cost for the women entrepreneurs in the study area.

Respondents highlighted the importance of mentorship and support networks. Establishing community-based mentorship programs can connect experienced entrepreneurs with those in the early stages or start-up of their ventures, fostering knowledge transfer and support. Networking events and platforms can also provide women with opportunities to collaborate, share ideas, and build business relationships.

To ensure equal opportunities for women, there should be stronger policies that promote gender equality in entrepreneurship. This includes enforcing non-discriminatory lending practices, removing barriers to market access, and creating policies that encourage the participation of women in various sectors of the economy**.** Cultural barriers also played key role in inhibiting the potentiality of women entrepreneurs in the study area as such, increased mobilization is necessary to stem out such cog in the wheel of women entrepreneurs.

Business innovation and expansion remain key areas of growth for women entrepreneurs. To facilitate this, innovation hubs and incubation centers should be established to support women with new business ideas and provide them with the tools and resources needed to scale their enterprises. This will encourage entrepreneurship in higher-value sectors like manufacturing and services, contributing to long-term economic growth.

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ASSESSING THE EFFECTIVENESS OF NIGERIA'S MONETARY POLICY IN MANAGING THE LIQUIDITY CRISIS: POST-COVID-19 IMPLICATIONS

[1]Abdullahi Bashir Muhammed

[1]Department of Banking and Finance, Faculty of Management Sciences, University of Abuja
Abuja Nigeria
[1]bash7th@gmail.com

Abstract

The study assessed effectiveness of Nigeria's monetary policy in managing the liquidity crisis after COVID-19. Ex-post facto research design was used and the study covered the period of three years from 2021 to 2023 on monthly basis and this constitute thirty-six observations. The interest rate was captured using maximum lending rate, monetary policy rate using the Central Bank monetary policy rate, the liquidity was measured using loan to deposit ratio and the credit availability was measured using credit to private sector. Data were sourced from Central Bank statistical bulletin. The study adopts vector autoregressive and Autoregressive distributed lag (ARDL) as the estimation technique. It was explicit from the findings that monetary policy rate has positive and significant impact on liquidity in the short run and long run. It was shown from the estimation that interest rate has positive impact on liquidity in the long run but it was found that interest rate has negative but insignificant impact on liquidity in the short run. It was explicit from the estimation that the monetary policy rate has negative impact on credit availability in the long run but in the short run, it has positive but insignificant impact on credit availability in the short run. Interest rate has positive impact on credit availability in the short run and long run. The study concluded that increase in monetary policy rate may attract better return on savings and this invariably could increase the liquidity of the banks. More so, interest rate has both positive and negative impact on liquidity. The study recommended that the central bank of Nigeria should gradually adjust monetary policy rate in order to strike a balance between the liquidity contraction and inflationary pressure in the economy. Also, the CBN should intensify effort to monitor changes in lending practice to prevent excessive tightening of credit conditions in the long run.

Keywords: Credit Availability, Liquidity, Monetary policy rate, Interest rate

Introduction

The COVID-19 pandemic significantly impacted the global economy including Nigeria. The outcome of the outbreak has led to a decline in government revenue, foreign exchange earnings, and total liquidity levels (Adeniran & Sidi, 2021). The structural flaws, including inflationary pressures, budgetary imbalances, and exchange rate volatility, intensified an already long-standing liquidity issue (Olomola, 2020). Liquidity is crucial for banks to finance the acquisition of new assets and make timely payments without incurring unmanageable losses. Thus, Berger and Bouwman (2017) opined that liquidity creation is a key reason why banks exist. Banks create liquidity on the balance sheet by financing relatively illiquid assets such as business loans with relatively liquid liabilities such as transactions deposits. The loans provide bank customers with the necessary funds to make investments, while the deposits deliver liquidity and payment services to the public to make purchase. Banks also create liquidity off the balance sheet through loan commitments and similar claims to liquid funds and this have positive effects on the economy (Berger & Sedunov, 2017). Despite the importance of bank liquidity creation to the economy as a whole, it may also sow the seeds of a financial crisis most especially during the uncertain times, deposits flow into banks, who may lower their lending standards and lend more. This increases on-balance sheet liquidity creation and may generate asset price bubbles that heighten the fragility of the banking sector (Berger & Sedunov, 2017). In view of this, Central banks and other regulatory bodies are responsible for monitoring financial stability and detecting potential threats to the banking industry.

Monetary policy is a primary instrument for establishing economic stability, controlling the quantity, cost, availability, and flow of credit and money in an economy. Nigerian banks showed economic difficulties. Nigerian banks' ability to satisfy short-term obligations was demonstrated by their average robust liquidity balances prior to the COVID-19 epidemic, guaranteeing stability in the face of liquidity ratio of 48% in mid-2019, which was far higher than the regulation minimum of 30%. Effective risk management, compliance with capital adequacy standards, and rigorous regulatory control by the Central Bank of Nigeria (CBN) were the main causes of this robustness. Before the pandemic, the macroeconomic environment was also rather steady, which helped the banking industry maintain financial stability and profitability (Brookings Institution, 2020; Premium Times, 2020; McKinsey, 2020). Nigerian banks made conscious measures to reduce systemic risks, enhance asset quality, and have adequate capital buffers, as seen by the strong liquidity levels. Despite new economic difficulties, such as falling oil prices prior to the pandemic, this strategy allowed them to withstand shocks and maintain loan flows (CBN, 2020).

The banking sector is crucial for economic performance, as it can move money from savings to the deficit sector. The Central Bank of Nigeria (CBN) has been instrumental in resolving liquidity problems and stabilizing the economy through various monetary measures, such as interest rates, cash reserve ratios, exchange rate management, and open market operations (Central Bank of Nigeria, 2021). The effectiveness of targeted credit interventions, special loan programs, and liquidity injections is crucial in boosting the economy, creating jobs, and fostering economic resilience. However, concerns persist over the effectiveness of these measures, particularly in managing the liquidity crisis (Ajakaiye et al., 2022). Key interventions, such as decreasing the monetary policy rate (MPR) and implementing special loan programs for businesses, have shown to be difficult to provide the intended benefits. Expansionary policies, such as reducing interest rates and increasing the money supply, can promote economic growth but also carry the risk of inflation and weakening the currency's value (Ogundele & Yusuf, 2021). In view of this dilemma, vast studies have been documented on the relationship between the monetary policy and liquidity but there is still a gap to be filled as most of the studies measures liquidity as loan to deposit ratio without considering credit availability. Thus, the present studies examine the impact of monetary policy on liquidity. The specific objectives are to; examine the impact of monetary policy on liquidity (ratio of loan to deposit) and investigate the impact of monetary policy on credit availability. In order to fulfil the objective, the subsequent part of the study was organised in the following manner: Section two provides an overview of the existing literature, section three outlines the methodology used in the study, section four delivers the results and discusses the findings, and section five concludes with recommendations based on the study.

Literature Review

Conceptual Review

The goal is to influence economic activity and inflation by altering the money stock, interest rates, and exchange rates. Onouorah et al. (2011) define monetary policy as a monetary authority guideline that limits money supply inflation and promotes economic growth. According to Onyeiwu (2012), monetary policy manages the economy to attain roughly Countries pursuing sustainable economic growth and development want to formalise how money affects the economy. According to Chigbu and Okonkwo (2014), monetary policy is the government's intentional use of money supply, credit cost, credit size, and credit direction to impact economic activity and achieve macroeconomic stability.

Liquidity The ability to pay debts rapidly is called liquidity. Financial and non-financial companies need liquidity management. The bank must pay its short- and long-term debts and other expenses. Banks and the banking industry employ liquidity to transform assets into cash for payments, according to Agbada and Osyi (2013). Maaka (2013) states that banks must turn current assets into cash to pay down debts. Low current assets make it hard for banks to operate, whereas high current assets suggest a poor return on investment.

Theoretical Review

Analysing how well Nigeria's monetary policy handles liquidity crises, especially in the wake of COVID-19, is made possible by a strong theoretical framework. This analysis is guided by important macroeconomic factors and the ideas that surround them.

Management of the Money Supply and Liquidity

According to the Quantity Theory of Money (QTM), shifts in the money supply have a direct impact on economic activity and price levels. In Nigeria, where post-COVID-19 expansionary policies have sought to create liquidity through a higher money supply, this idea is especially pertinent (Fisher, 1911; Mishkin, 2020). Keynesian Liquidity Preference Theory, which emphasises that money demand results from transactional, precautionary, and speculative incentives, is a useful complement to this. The interest rate-targeting policies of the Central Bank of Nigeria (CBN) are consistent with Keynes's theory, demonstrating how interest rate changes and liquidity management work together to stabilise the economy (Keynes, 1936; CBN, 2021).

External Stability and Exchange Rates

An important factor in Nigeria's monetary measures to stabilise foreign exchange markets after the pandemic is the relationship between interest rates and exchange rate movements, which is demonstrated by the Interest Rate Parity Theory (Dornbusch, 1976). This is supported by the Purchasing Power Parity (PPP) theory, which highlights the importance of inflation control in maintaining exchange rate stability, which is crucial for Nigeria's oil-based economy (Cassel, 1918).

Control of Inflation

The Phillips Curve illustrates the delicate balance that monetary policy must achieve in order to reduce inflation while preserving employment by explaining the trade-off between unemployment and inflation. Nigeria's post-COVID-19 inflation-targeting initiatives clearly follow this approach (Samuelson & Solow, 1960). Furthermore, the Monetarist View, which Friedman (1968) promoted, highlights the need to limit the expansion of the money supply in order to avoid inflation, highlighting Nigeria's monetary policies to maintain price stability in the face of liquidity issues.

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Stability and Economic Growth

In order to promote growth and stability during liquidity crises, the IS-LM Model sheds light on how monetary policy affects the equilibrium between interest rates and income (Hicks, 1937). Furthermore, Nigeria's credit expansion policies that target productive sectors after COVID-19 are in line with Endogenous Growth Theory, which emphasises the value of technology investment and human capital (Romer, 1986).

Shiftability Theory

The theory claims that banks can buy all the money they need, hence liquidity assets do not need to be kept on the asset side of the balance sheet (Aburime, 2009). Creditworthiness and market confidence may be low during a crisis, making it difficult for a bank to get capital. However, liabilities—market funds, deposits, and other creditors—provide liquidity for a healthy bank. This theory states that a bank's liquidity is retained if its assets can be sold to investors or lenders. This view suggests that if the Central Bank and discount rate allow a bank to sell assets, it may boost its liquidity. The market can buy the asset at a discount. This idea holds that a bank's assets' transferability, marketability, or shiftability guarantees liquidity. This argument claims that a bank's highly marketable securities provide liquidity. This will enhance the liquidity creation in the economy. This theoretical framework offers important insights into the relationship between monetary policy, liquidity management, and economic stability by fusing well-established macroeconomic concepts with Nigeria's particular post-pandemic situation.

Empirical Review

Rathnayaka et al., (2024) assessed how COVID-19 affected monetary policy and macroeconomic indicators in OECD nations between 2020 and 2023. Using a Panel Autoregressive Distributed Lag (ARDL) model, they discovered that while unemployment rose, lower interest rates during the pandemic considerably slowed both output and inflation drops. These results highlight how important monetary policies are to the post-crisis recovery of the economy. Using time series data and the 3SLS model, Ruslan et al., (2023) investigated how credibility, output stability, and inflation interacted with monetary policy responses in Indonesia. Their findings demonstrated the delayed impact of price rises on demand and the convergence of macroeconomic indicators with the credibility index of the monetary authority, underscoring confidence in monetary policy operations. Haijuan et al. (2022) used fixed effects (FE), random effects (RE), and two-stage least squares (2SLS) regression models to investigate how COVID-19 affected bank performance in rising Asian nations. They discovered that, although the effect lessened during the crisis, GDP and bank size had a beneficial impact on banking performance both before and after the pandemic.

Ufuk et al., (2021) examined fiscal and monetary policy reactions to the COVID-19 epidemic in Turkey using a dynamic stochastic general equilibrium (DSGE) model. The results highlighted the complementary nature of fiscal and monetary policies in developing nations by showing that direct fiscal interventions were superior to monetary measures in reducing economic effects. Almutairi (2021) examined Kuwaiti conventional and Islamic bank financial data from 2019 to 2020 (before and after the pandemic) to determine their impact on COVID-19. Financial analysis of financial reports was used to analyse financial leverage, profitability, and liquidity measures of 14 Kuwaiti conventional and Islamic banks. The study revealed that the epidemic hurt Kuwait's conventional and Islamic banks, the economy's first line of defence during lockdowns and quarantines. Additionally, debt, financial leverage, return on equity, and return on investment had significant effects.

Wuave et al., (2020) studied Nigerian banks' 2010–2018 financial performance and liquidity management. The study uses secondary data from five Nigerian stock exchange-listed banks. Liquidity ratios (LQR), loan to deposit ratios (LDR), cash reserve ratios (CRR), and deposit ratios (DR) are used to measure liquidity management, while ROA, ROE, and NIM measure profitability. The study estimates the model and chooses a fixed effect vs. random effect model using Hausman test and panel regression analysis. The study found that DMB's liquidity ratio favourably affects its ROE, ROA, and NIM. Nigerian banks should establish effective risk management and governance systems. Ali et al., (2023) explored whether Pakistan's conventional banks respond to monetary policy with liquidity. Secondary data comes from Thomson Reuters financial data streams. Yearly time series data is collected from 2000 to 2021. By funding illiquid assets with liquid liabilities, conventional banks create liquidity. The study's fundamental linear regression econometric model examined how monetary policy influences liquidity production using the estimated amount. The study found that monetary policy boosts Pakistan's liquidity. The State Bank of Pakistan sets the monetary policy rate to control traditional bank liquidity.

ARDL bounds testing was used by Didigu et al., (2022) to evaluate the connection between Nigerian financial stability and monetary policy between 2007Q1 and 2021Q4. According to their findings, banks stability was much improved by higher cash reserve ratios, liquidity ratios, and monetary policy rates. Price-based and quantity-based monetary policy methods were examined by Bala-Keffi et al., (2022) for the management of bank liquidity in Nigeria from 2008 to 2020. They came to the conclusion, using the ARDL limits test, that quantity-based tools had an impact at lags, while price-based instruments, like the monetary policy rate, had significant short- and long-term effects on liquidity management. Oparah and James (2019) used the Banking Industry Financial Soundness Index (BIFSI) to examine how monetary policy affects financial stability. Their findings indicated that monetary policy and stability have a strong, long-term link, with exchange rates and open market activities serving as the most efficient transmission routes. The impact of monetary policy tools on the Nigerian capital market was investigated by Echekoba et al., (2016). They discovered no meaningful relationship between market performance and monetary policy rates using ARDL modelling, indicating the necessity for more flexible policy measures that take macroeconomic factors like liquidity ratios into consideration. These empirical studies—both foreign and Nigerian—emphasize the various effects that monetary policy has on different locations and economic systems, highlighting the complexity of its function in managing economic stability and liquidity during crises.

For 35 years from 1984 to 2018, Alalade et al., (2020) used a time series data set of all deposit money banks from the Central Bank of Nigeria Statistical Bulletin (2015). Deposit money banks' total credits and net worth were examined in relation to loan-to-deposit ratios, cash reserve ratios, lending rates, and liquidity ratios. The stationarity test determined the Autoregressive Distributed Lag and Ordinary Least Square methods. A long-term and short-term net worth model and total credit and net worth logs were calculated. It was found that monetary policy variable—cash reserve ratio, lending rate, loans to deposit ratio, and liquidity ratio—had no statistically significant long-term effects on net value. Short-term changes in the liquidity ratio, loans to deposit ratio, and cash reserve ratio from past years affected the log of net worth in the current year. Loans-to-deposit and liquidity ratios have a positive and strong long-term impact on total credit performance. Cash reserve ratio caused severe damage over time. The short- and long-term loan rate was negligible. Short- and long-term financial performance of deposit money institutions can be described by monetary policy, according to the study. Chinweuba and Adolphus (2019) explored how monetary policy rates affect banks' liquidity options using aggregate time series data and the Autoregressive Distributive Lag. Treasury bills rate, monetary policy rate, and cash reserve ratio are considered; liquidity ratio represents banks' liquidity choice. The sample includes 1981–2018 annual data. The results show that the cash reserve ratio, monetary policy rate, and treasury bill rate do not statistically affect bank liquidity. The cash reserve ratio has a positive and significant effect at 5%, while Treasury bill rates and monetary policy have no discernable effect on bank liquidity. There are no lags between monetary policy rates and bank liquidity ratios.

Nwoko et al. (2019) examined how monetary policies affect Nigerian financial institutions' liquidity management. The study examined how Treasury bills and the minimum rediscount rate affected financial institutions' liquidity management. Studies employed Expo-factor research designs. Research employed multiple regressions to evaluate hypothesis and secondary data. The results revealed that Treasury bills and the minimal rediscount rate improved financial institution liquidity management. Bank liquidity management methods strongly influence regulatory transmission and application, according to study. Through the trade-off between lending and holding liquid assets, central banks affect the loanable funds supply and the economy. To avoid bank suffering, the report encouraged financial institutions to follow Nigerian central bank norms. Onyekwelu et al., (2018) examined how liquidity affects Nigerian deposit money banks. Five banks were sampled for the study. Ten years of secondary data from companies were collected from 2007 to 2016. Data was analysed using multiple regression. Liquidity positively and considerably affects bank profitability ratios and return on capital employed. According to study, advanced economies' techniques should be replaced. In 2018, Adeniyi et al., explored how monetary policy tools affect Nigerian deposit money institutions' loans and advances 1981 to 2016. The study used Toda and Yamamoto Granger non-causality model. The results showed that fundamental adjustments to monetary policy improved Nigerian Deposit Money Bank loans and advances. The data showed a reciprocal association between MPR and Nigerian deposit money bank loans and advances. MPR was crucial for Nigerian Deposit Money Bank loans and advances. The cash reserve ratio (CRR), inflation rate (IFR), liquidity ratio (LR), and broad money supply (LM2) did not affect Nigerian Deposit Money Bank loans and advances during the study period. The research found that structural changes to the monetary policy rate and system significantly impact Nigerian deposit money institutions' loans and advances. Thus, the study recommended that monetary authorities stabilise interest rates to increase investor confidence.

Materials and Methods

Ex-post facto research design was used and the study covered the period of three years from 2021 to 2023 on monthly basis and this constitute thirty-six observations. This period was chosen due to the fact the study focused on post Covid-19 period. The interest rate was captured using maximum lending rate, monetary policy rate using the Central Bank monetary policy rate, the liquidity was measured using loan to deposit ratio and the credit availability was measured using credit to private sector. Data were sourced from Central Bank statistical bulletin. The study adopts vector autoregressive and Autoregressive distributed lag (ARDL) as the estimation technique. The study stated both the baseline and ARDL model. The model I specified as:

Liquidity-Monetary Policy Relationship

$$liq_t = c_0 + c_1 mpr_t + c_2 \operatorname{int}_t + u_t \qquad 3.1$$

The ARDL form can be given as:

$$liq_t = b_0 + \sum_{i=1}^{q^1} b_i liq_{t-i} + \sum_{i=1}^{q^2} h_i mpr_{t-i} + \sum_{i=1}^{q^3} g_i \operatorname{int}_{t-i} + w_t \qquad 3.2$$

$$q^1 = q^2 = q^3; i = 1, 2, ..., q^1$$

Credit Availability-Monetary Policy Relationship

$$cr_t = c_0 + c_1 mpr_t + c_2 \operatorname{int}_t + u_t \qquad 3.3$$

The ARDL form can be given as:

$$cr_t = b_0 + \sum_{i=1}^{q^1} b_i liq_{t-i} + \sum_{i=1}^{q^2} h_i mpr_{t-i} + \sum_{i=1}^{q^3} g_i \operatorname{int}_{t-i} + w_t \qquad 3.4$$

$$q^1 = q^2 = q^3; i = 1, 2, ..., q^1$$

Where: liq represents liquidity, cr indicates credit availability, mpr represents monetary policy rate, int indicates interest rate, q is the lag length, to estimate the model, the study conduct, Augmented Dickey Fuller (ADF) unit root was to show the order of integration of the variables and determined if the proposed method of estimation was suitable for the analysis.

Result and Discussion

This section presents the estimation of the model specified in section three and they are discussed in line with previous studies. The Table 1 summarized the descriptive result of the variables of interest.

Table 1 Descriptive Statistics

	MPR	INT	LDR	LCPS
Mean	14.51389	28.04056	61.87544	0.058283
Median	13.50000	28.03000	62.20000	0.061882
Maximum	18.75000	30.73000	64.87443	0.089555
Minimum	11.50000	26.61000	58.39000	0.020264
Std. Dev.	3.125325	0.805087	2.445830	0.025124
Skewness	0.278213	0.832856	-0.072199	-0.198068
Kurtosis	1.310712	4.771726	1.442394	1.533553
Probability	0.093249	0.154770	0.011853	0.159575

Note: MPR represents monetary policy rate, CPS indicates credit to private sector, INT means interest rate and ldr represents loan to deposit ratio.

Source: Author's computation, (2024)

It is explicit that monetary policy, interest rate, loan to deposit ratio and credit to private sector has positive mean value and this simply implies that these variables displayed increasing tendency through the period of investigation. The study also confirms that monetary policy rate has the largest range and this is associated with the largest standard deviation value while credit to private sector has the lowest range and this is associated with the lowest standard deviation value. It can be deduced from the result above that money policy rate is the most volatile variable while credit to private sector is the least volatile among the variables. The scale of skewness with respect to monetary policy rate and interest are positively skewed and this implies that they have large values over a short period, while scale of skewness loan to deposit rate and credit to private sector are negatively skewed and this signifies that the variables exhibit large values over a long period of the sample. The values of Kurtosis for the variables are lesser than 3 and it means the variables are platykurtic that is those variables have fat tail in their distribution pattern in which it's suggesting that there are absence of outliers or larger values except interest rate. In addition, the probability value corresponded to Jarque-Bera statistic with respect to the monetary policy rate, interest rate and credit to private sector are larger than 5 percent, and this implies that the distribution pattern monetary policy rate, interest rate and credit to private sector are normally distributed while the probability value of Jarque-Bera statistic with respect to loan to deposit ratio is lesser than 5 per cent and that implies that the loan to depsot ratio is not normally distributed. The study proceeds to check the stationarity of the variables used. The result is presented in Table 2.

Table 2: Unit root test

Variables	ADF-Statistics	5%-CV	Prob	Int. Order
INT	-5.726851	-2.948404	0.0000	I(0)
LCPS	-1.088456	-2.948404	0.7094	
D(LCPS)	-6.032687	-2.951125	0.0000	I(1)
LDR	-2.003464	-2.948404	0.2841	
D(LDR)	-5.744066	-2.951125	0.0000	I(1)
MPR	-1.484407	-2.948404	0.5296	
D(MPR)	-5.728989	-2.951125	0.0000	I(0)

Source: Author's computation, (2024)

The unit root test is conducted under Augmented Dickey Fuller unit root test which confirm the order of integration of each variable. The null hypotheses is that the series are not stationary. The hypotheses are rejected, if the ADF-statistic is larger than the associated critical value at 5 percent in absolute form or the associated probability value is less than 5 percent (0.05). It is explicit that the associated probability value with respect to interest rate is lesser than 0.05. This simply implies that interest rate is stationary at level under the ADF and this is simply denoted as I(0). In addition, the result shows that monetary policy rate, loan to deposit ratio and credit to private sector are stationary at first difference and this is denoted as I(1) under the ADF. Based on the above result, it implies that there is mixed integration among the variable of interest and the method of estimation will be based on the model specification.

In line the result of the unit root test, the meaningful technique for estimation is the ARDL and Bond test approach to cointegration.

This was conducted to achieve the two objectives set for this study which are monetary policy-liquidity relationship and monetary policy-credit availability relationship. The result of the each objectives are presented in Panel A and B respectively. However, the optimum ARDL model for monetary policy-liquidity relationship is ARDL with order of 1, 3, 3 and it shows absence of serial correlation and it was stable since the blue line fall in between the red lines under the cursive Ramsey Cussum graph. Also, the optimum ARDL model for monetary policy-credit availability relationship is ARDL with order of 1, 3, 2 and it shows absence of serial correlation and it was stable since the blue line fall in between the red lines under the cursive Ramsey Cussum graph. Having confirmed the stability of the ARDL models, the study presents the ARDL Bound Test to cointegration in the Table 3.

Table 3: Cointegration Bound Test Result

	Panel A: Liquidity ARDL (1, 3, 3)		**Panel B: Credit Availability ARDL (1, 3, 2)**	
Test Statistic	Value	K (number of regressors)	Value	K (number of regressors)
F-statistic	4.479337	2	6.169675	2
	Critical value bounds		**Critical value bounds**	
Signif.	I(0)	I(1)	I(0)	I(1)
10%	2.63	3.35	2.63	3.35
5%	3.1	3.87	3.1	3.87
2.5%	3.55	4.38	3.55	4.38
1%	4.13	5	4.13	5

Source: Author's Computation, (2024)

As shown in the Table 4 under the Panel A, the F statistic is 4.479337 is larger than the lower bound I(0) and upper bound I(1) values at 5 percent which are 3.1 and 3.87 respectively. This is good because the value of F-statistic exceeds the upper and lower values. This suggest that the null hypothesis that no level relationship is rejected at 5 percent level of significance and by implication there is existence of cointegrating relationship between monetary policy and liquidity. In addition, the result of the F-statistics is 6.169675 under Panel B which is larger than the lower bound I(0) and upper bound I(1) values at 5 percent which are 3.1 and 3.87 respectively and this implies that there is long-run relationship between monetary policy and credit availability. This serves as a background to test the hypothesis whether there is positive or negative multiplier effects from the set of the covariates to the explained variable in each model. The test result is reported in Table 4 alongside with short run dynamism.

Table 4: Long Run Multiplier Effects and Short Run Dynamism

Long Run Multiplier Effects				
	Panel A: Liquidity		Panel B: Credit Availability	
Variable	Coefficient	Prob.	Coefficient	Prob.
MPR	0.499681	0.0104	-0.007437-	0.0001
INT	0.670463	0.5815	0.025272	0.0288

C	51.17998	0.1420	-0.530169	0.0901
Short Run Dynamism				
D(MPR)	0.257978	0.0734	0.001091	0.0769
D(MPR(-1))	0.349477	0.0673	0.001621	0.0403
D(MPR(-2))	0.461347	0.0199	0.001858	0.0238
D(INT)	-0.016333	0.9536	0.000763	0.5224
D(INT(-1))	-0.137421	0.6467	-0.004617	0.0001
D(INT(-2))	-0.046486	0.8477		
CointEq(-1)*	-0.495855	0.0002	-0.229952	0.0000
Diagnostic Test				
Normality test	0.2424	0.8858	0.708447	0.701718
Serial correlation test	0.848790	0.4421	0.174794	0.8408
Heteroscedasticity Test	0.610294	0.4408	2.661852	0.1132

Source: Author's Computation, (2024)

In Panel A, Table 4 showed the results of short run and long run estimation on the relationship between monetary policy and liquidity. It was revealed that monetary policy rate has positive and significant impact on liquidity while interest rate has positive but insignificant impact on liquidity. This implies that positive multiplier impacts run from monetary policy rate and interest rate to liquidity in the long run. Thus, a 1 percent change in monetary policy rate and interest rate induces liquidity by 50 percent and 67 percent respectively. Evidence from the study indicated that Nigerian liquidity is mostly driven by monetary policy with a strong impact compared to interest rate. In the short run, the study revealed that the current value of monetary policy rate and the previous value at lag one have positive but insignificant impact on liquidity while the previous value of monetary policy at lag two have positive and significant impact on liquidity in the short run. However, the current value of interest rate and the previous value of interest rate at lag one and two have negative but insignificant impact on liquidity in the short run. In addition, the result showed the adjustment parameter of -0.495855 with the probability value of 0 percent. This satisfy the two conditions of error correction term which implies that long run influence runs from money policy rate and interest rate to liquidity, and 49.58 percent disequilibrium is be corrected within a year. That is when money policy rate and interest rate jointly changes by 1percent the liquidity is adjusted by 49.58 percent. The result revealed that the normality assumption is not violated because the associated probability of Jarque bera is larger than 0.05. Nonetheless, the associated probability of serial correlation is larger than 0.05 and this implies that the residual of the model is not serially correlated. More so, associated probability value of chi-statistics under the heteroscedasticity shows that the residual is heteroscedastic. This implies that generalization can be deduced from the estimation.

In Panel B, the Table 4 revealed that the results of short run and long run estimation on the relationship between monetary policy and credit availability. Evidence from the result showed that monetary policy rate has negative but insignificant impact on credit availability while interest rate has positive and significant impact on credit availability. Evidence from the result indicated that interest rate is most driven credit availability compared monetary policy rate in the long run. The result of the short run revealed that the current value of monetary policy rate has positive but insignificant impact on credit availability while the previous value of monetary policy rate at lag one and lag two have positive and significant impact on credit availability in the short run. On the other hand, the current value of interest rate has positive but insignificant impact on credit availability while the previous value of interest rate at lag one has positive and significant impact on credit availability in the short run. Moreover, the result showed the adjustment parameter of -0.229952 with the probability value of 0 percent. This satisfy the two conditions of error correction term which implies long run influence runs from money policy rate and interest rate to credit availability and almost 22.99 percent disequilibrium is to be corrected within a year. That is when monetary policy rate and interest rate jointly changes by 1 percent the credit availability is adjusted by 22.99 percent. Evidence from the result showed the normality assumption is not violated because the associated probability of Jarque bera is larger than 0.05. Nonetheless, the associated probability of serial correlation is larger than 0.05 and this implies that the residual of the model is not serially correlated. More so, associated probability value of chi-statistics under the heteroscedasticity shows that the residual is heteroscedastic. This implies that generalization can be deduced from the estimation.

Results and Discussion

It was explicit from the findings that monetary policy rate has positive and significant impact on liquidity in the short run and long run and this conform with the findings of Ali et al., (2023). This implies that higher monetary policy rate may enhance better return on savings from domestic and foreign investors. This will increase the capital base and the liquidity of the banks. It was shown from the estimation that interest rate has positive impact impact on liquidity in the long run and this contradict with the findings of Alalade et al., (2020). It was found that interest rate has negative but insignificant impact on liquidity in the short run. The implication for this is that increase in interest rate increases the cost of borrowing and this could reduce demand for loan, causing contraction in liquidity within the economy in the short run. However, in the long run, increase in interest rate, encourages saving and this could increase the liquidity in the economy. It was explicit from the estimation that the monetary policy rate has negative impact on credit availability in the long run and this contradict the findings of Chinweuba and Adolphus (2019). The implication of this is that sustained increase in monetary policy rate over the time can reduce overall demand for credit in the economy. Interest rate has positive but insignificant impact on credit availability in the short run and this conform to the findings of Bala-Keffi et al., (2022). This implies that higher interest discourages consumers and business from taking loan and this decline the demand for loan and increases credit availability. Interest rate has positive impact on credit availability in the short run and long run.

Conclusion and Recommendations

The study concluded that increase in monetary policy rate may attract better return on savings and this invariably could increase the liquidity of the banks. More so, interest rate has both positive and negative impact on liquidity. The study recommended that the Central Bank of Nigeria should gradually adjust monetary policy rate in order to strike a balance between the liquidity contraction and inflationary pressure in the economy. Also, the CBN should intensify effort to monitor changes in lending practice to prevent excessive tightening of credit conditions in the long run. One the limitations of the study is that the monetary policy was captured using interest rate and monetary policy rate while other measures such as of money supply, credit ceiling etcerera. In addition, the study failed to check impulse response of liquidity to monetary policy. Thus, further studies should include more measures of monetary policy and their impact on liquidity as well as impulse response of liquidity to monetary policy.

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EXPLORING THE RELATIONSHIP BETWEEN DIGITAL TRANSFORMATION AND SMALL-SCALE ENTERPRISES PERFORMANCE IN ILORIN, KWARA STATE

[1]Olorunlambe Gasali Alabi (PhD) & [2]Bello Abdulganiyu Aremu

[1,2]Department of Marketing, Kwara State Polytechnic, Ilorin
[1]olorunlambealabi@gmail.com
[1]08039411818 & [2]08066075577

Abstract

The swift wave of digital transformation reshaping the global business setting presents both opportunities and hurdles for small-scale enterprises (SSEs), particularly in emerging economies such as Ilorin, Kwara State. This study investigates the correlation between digital transformation and the performance of small-scale enterprise in Ilorin, Kwara State. The main objective of the study is to explore the relationship between digital transformation and business performance within this context. The target population of study consisted of staff from selected small-scale businesses in Ilorin. A survey research design was employed and data was collected from primary source. Convenience sampling technique was used to select a sample size of 143 respondents. A structured questionnaire was the instrument used to gather data, while the Pearson Product Moment Correlation Coefficient was applied to test the hypotheses at 0.05 level of significance. The study found a positive and significant relationship between digital transformation and small-scale business performance in Ilorin. Based on these findings, the study recommends that small-scale businesses organize training programs to enhance the digital skills of their employees and pursue lasting partnerships with ICT firms in digital technology. This strategy is expected to ensure sustained business performance in the long term.

Key words: *Digital transformation, small scale enterprises, and business performance*

Introduction

Digital transformation is a paradigm move that has redefined the operational scenery of businesses globally. With the quick advancement in technology, the integration of digital solutions is no longer a choice but a necessity especially for businesses that seek to stay competitive and relevant (Hat, 2022). Digital transformation involves the adoption of digital technologies to alter existing business models, streamline processes, improve customer experience, and ultimately, enhance organizational performance (Rahman and Tan, 2024).. For small-scale enterprises (SSEs), which often operate with limited resources, embracing digital transformation can provide a significant competitive advantage by enabling them to operate more efficiently, get in touch with new customers, and adapt to changing market demands.

In Nigeria, the role of small-scale enterprises is particularly important SSEs contribute immensely to economic growth by creating employment opportunities, driving innovation, and promoting regional development (Agyemang & Owusu, 2023). They are a key component of the Nigerian economy, representing a large share of businesses and serving as a primary source of revenue for millions. However, despite their potential, many Nigerian SSEs, especially in less urbanized regions like Ilorin in Kwara State, face challenges that hinder their ability to grow and compete efficiently. Limited access to capital, inadequate infrastructure, and a lack of technological expertise are just a few of the hurdles that these enterprises face in their journey toward digital transformation.

In Ilorin metropolis which is a relatively emerging commercial center in Nigeria, the adoption of digital transformation strategies by SSEs is varied and evolving. Some businesses are starting to harness the power of digital tools to improve operational efficiency, while others remain hesitant due to financial constraints and insufficient digital literacy. The extent to which digital transformation can influence the performance of small-scale enterprises in Ilorin is a critical question that warrants exploration, given the transformative potential of digital technologies to drive growth, improve efficiency, and enhance customer engagement.

Digital transformation offers small-scale enterprises numerous opportunities to improve performance metrics. For instance, digital marketing strategies enable these businesses to reach a broader customer base beyond geographical constraints. Social media platforms, e-commerce, and digital payment systems provide cost-effective solutions that are accessible even to enterprises with limited budgets. Additionally, digital tools can enhance operational efficiency by automating routine tasks, reducing manual errors, and improving inventory and supply chain management. The use of data analytics further enables businesses to make informed decisions, predict market trends, and tailor products or services to meet customer needs more effectively.

The journey toward digital transformation is not without challenges. Small-scale enterprises Kwara State and particularly in Ilorin encounter obstacles such as high costs of digital tools, lack of skilled personnel, poor internet connectivity, and insufficient government support. These challenges can impede the ability of SSEs to fully integrate digital technologies into their business operations, potentially limiting the impact on performance. Moreover, the socio-economic characteristics of Ilorin—a city with a blend of traditional and modern consumer bases—necessitate a tailored approach to digital transformation, one that considers the unique needs and behaviors of the local market.

Additionally, the emerging digital technologies, such as cloud computing, mobile applications, data analytics, and artificial intelligence, offer solutions to these challenges by streamlining processes and enabling more informed decision-making. Thus, understanding the effect of these technologies on the operational efficiency of SSEs becomes essential for sustainable growth. Similarly, digital transformation requires businesses to reevaluate and adapt their traditional business models to incorporate technology-driven strategies. This involves changes such as adopting e-commerce platforms, integrating digital payment systems, and leveraging digital marketing tools. These changes in business models have the potential to boost productivity by improving customer reach, reducing costs, and optimizing resource utilization.

Despite the recognized potential of digital transformation, there is limited empirical evidence on its impact on small-scale enterprises in Ilorin, Kwara State. However, This study seeks to bridge this gap by exploring how emerging technologies influence the operational efficiency of SSEs and how changes in business models affect their productivity. Understanding these dynamics will not only provide insights into the benefits of digital transformation but also offer practical strategies for small businesses to thrive in an increasingly digital economy.

Statement of the Problem

The rapid digital transformation sweeping across the global business setting has created both opportunities and challenges for small-scale enterprises (SSEs), particularly in emerging economies like Ilorin kwara state. For SSEs, digital transformation is a powerful tool that can drive operational efficiencies, enhance productivity, and improve market reach. Despite these opportunities, the adoption of digital transformation among small-scale businesses in Ilorin appears to be slow and inconsistent. This may be due to a lack of awareness, inadequate technological infrastructure, and resistance to change. Furthermore, there is limited empirical research on the extent to which emerging technologies and digital business models impact the performance of SSEs in the region.

This gap in knowledge underscores the need to investigate how digital transformation influences small-scale business performance in Ilorin. Specifically, there is a need to determine how the adoption of emerging technologies impacts operational efficiency and how changes in business models affect productivity. Addressing these questions will provide actionable insights for business owners, policymakers, and other stakeholders seeking to leverage digital transformation for sustainable growth in small-scale enterprises.

Objective of the Study

The main objective of the study is to explore the correlation between digital transformation and the performance of small scale businesses in Ilorin, kwara state. More specifically, the study is to determine;

1. the effect of emerging technologies on operational efficiency of small scale businesses in Ilorin
2. the effect of change in business model on productivity of small scale businesses in Ilorin

Research Hypotheses

1. $H_0 1$: there is no significant relationship between emerging technologies and operational efficiency of small scale business performance in Ilorin, kwara state.
2. $H_0 2$: change in business model has no significant effect on small scale business performance in Ilorin, kwara state.

Literature Review

Digital Transformation

Hat (2022) describes digital transformation as a significant overhaul of operations, processes, and the interaction between businesses and their customers. This transformation involves embedding digital technologies across all aspects of a business, fundamentally changing how it operates and delivers value to customers. According to Mastilo (2017), digital transformation utilizes new digital tools to address challenges, while Vaughan (2021) highlights it as a strategy to leverage modern technologies for evolving or reshaping business practices, organizational culture, and customer experiences.

Pihir et al., (2018) view digital transformation as a new paradigm, driven by technological advancements, that sets the stage for new developments in the global market. George, Bonnet, and McAfee (2014) define it as the strategic use of technology to enhance organizational performance substantially, noting that adopting modern technologies can increase productivity, reduce costs, and add business value.Ablyazov et al. (2018) note that digital transformation facilitates the spread of innovative technologies and the integration of digital and physical systems within business activities. Schwertner (2017) adds that digital transformation involves adopting new techniques that improve business performance by moving away from outdated methods. The ultimate goals are to increase organizational efficiency and create business value. Rutihinda (2019) argues that digital transformation goes beyond IT infrastructure changes to include updates in information networks, communication systems, and methods of storing and accessing information.

Small Scale Business

A small-scale business is generally owned and operated by an individual or a small group of people who directly influence its decision-making and maintain a modest market presence with relatively low capital needs (Rahman and Tan, 2024). Small-scale enterprises (SSEs) are typically defined as businesses with limited resources, a smaller workforce, and lower revenue compared to medium or large-scale enterprises. They are usually privately owned and operate with a focus on localized markets. Definitions vary by country and industry, but SSEs often have specific caps on employee numbers or annual turnover to qualify for this classification. For instance, in many contexts, they employ fewer than 50 people and have annual sales or revenue below a certain threshold, which varies by region.

SSEs are critical drivers of economic development, especially in emerging economies. Studies emphasize their role in job creation, poverty reduction, and GDP contribution (Kusi-Sarpong et al., 2023). Small-scale enterprises contribute significantly to national income, particularly in regions with limited large-scale industrial operations (Agyemang et al., 2023). However, SSEs often struggle with challenges such as limited access to financing, regulatory constraints, and market access issues. Recent studies highlight the difficulties of obtaining credit due to stringent requirements by financial institutions, which limit their growth potential (Bediako&Frimpong, 2023). Additionally, regulatory hurdles remain significant, with complex legal requirements acting as barriers to entry and sustainability (Chen et al., 2024).

The adoption of digital tools has transformed SSEs, enhancing operational efficiency, customer engagement, and market reach (Rahman & Tan, 2024). Emerging technologies, such as cloud computing, social media marketing, and mobile applications, have empowered SSEs to operate more efficiently, even in constrained environments (Gonzalez, et al., 2024). Despite the benefits, research shows that many small-scale enterprises are still lagging in digital transformation due to cost and knowledge gaps (Kariuki, et al., 2023).

Business Performance

Many researchers define SME performance by the firm's key outcomes, such as sales growth, investment efficiency, customer acquisition, market share expansion, and returns. These aspects are seen as a "complex series of actions that integrate skills and knowledge" (Hoque, Awang, and Gwadabe, 2018). Hoque et al. (2018) describe SME performance as the profitability of a firm's operations and its ability to meet stakeholder expectations. They further characterize performance as the effectiveness of a firm's management activities, encompassing efficiency, productivity, and growth, and view it as a firm's capacity to achieve satisfactory results.

Fatoki (2019) and Mojekeh et al., (2018) expand on this by distinguishing between financial and non-financial performance indicators. Fatoki (2019) identifies financial measures like profitability, turnover or sales, and market value, alongside non-financial measures such as owner and employee satisfaction, customer satisfaction, and environmental and social performance. Mojekeh et al., (2018) include financial metrics like return on assets (ROA), return on investments (ROI), return on equity (ROE), market share, sales growth, and profitability, while non-financial metrics cover customer satisfaction, employee commitment, innovation capacity, internal process improvement, and service delivery effectiveness. Additionally, Fard and Amiri (2018) categorize SME performance into production, market, and innovation performance

A company's performance can be observed through its marketing performance, which can be measured by operating income, market share growth, and annual sales rate (Yasa et al., 2020). Marketing performance reflects the overall impact of a company's marketing efforts, serving as an indicator of the company's progress. It encompasses the outcomes of all marketing strategies implemented by the business (Chong & Ali, 2022). Strong marketing performance is characterized by three key areas: sales value, sales growth, and market share, all of which contribute to increased company profits (Fatoki, 2019). In their study, Propheto et al., (2020) employed non-financial marketing performance dimensions as outlined by Clark, including market share, service quality, flexibility, customer satisfaction, and customer loyalty. Their research defines marketing performance in terms of new customers acquired, sales growth, and market share. Conversely, the study by Iddris& Ibrahim (2015) measures marketing performance using both financial metrics such as return on investment, sales return, and net income, as well as non-financial metrics like customer satisfaction, customer loyalty, visit-to-sale conversion rate, and e-Marketing sales value.

Theoretical Review

Originally was put forward by Penrose (2009) to explain differences in growth among competing firms. RBT is an influential approach in strategic management. It is employed as a managerial framework to determine vital resources for a firm to achieve a sustainable competitive advantage. Khouri, Motter, &Arnon, (2018) suggested that firms really possess sets of resources that they deploy to gain competitive advantage. The basic idea of RBT is that firms each possess different resources at different levels and qualities. Some of these resources are difficult to copy or substitute (Khouri, et al., 2018). So, it is difficult or nearly impossible for other firms to copy a strategy employed by a competitor. The competitor with the greatest resources should have the greatest competitive advantage in producing and delivering products to market. In other words, this theory suggests that a firm's performance is influenced by its internal resources and capabilities. The Resource-Based View (RBV) theory is highly relevant to your study on the relationship between digital transformation and small-scale enterprises (SSEs) performance in Ilorin, Kwara State. RBV focuses on the idea that a company's internal resources and capabilities are fundamental drivers of its competitive advantage and performance. Digital transformation often requires SSEs to leverage and optimize internal resources, such as technology, human capital, and organizational processes, to remain competitive and improve performance. RBV supports the idea that SSEs that effectively use their digital capabilities—such as e-commerce, digital marketing, and data analytics—can gain a competitive edge, even with limited external resources. By linking these capabilities to performance improvements, the RBV theory helps to validate the strategic importance of digital transformation in resource-constrained settings, making it a foundational framework for analyzing the impact of digital transformation on SSEs' performance.

Empirical Review

Adhitya and Sembel (2020) analyzed how mobile banking technology adoption affected financial and stock performance in Indonesia's major banks. Data from seven banks were statistically analyzed using the F-test, T-test, and regression. Results showed that mobile banking technology adoption influenced return on equity (ROE) and net present level (NPL), revealing mixed links between financial performance and Indonesia's Gross Domestic Product (GDP). However, technology adoption led to improvements in capital adequacy ratio (CAR) and loan-to-debt ratio (LDR).

Mawejije and Lakuma (2019) studied the impact of mobile money on Uganda's financial sector through a descriptive design, using data from the Uganda Bureau of Statistics and the Bank of Uganda. Analyzing data from March 2009 to August 2016 with structural vector autoregression and vector error correction methods, they found that mobile money positively impacted monetary aggregates, the consumer price index, private sector credit, and overall economic activity. The study noted stronger macroeconomic effects when mobile money was used for transactions rather than savings.

In Kenya, Sifunjo, George, Mary, and Ann (2015) examined the connection between mobile banking expansion and financial performance in Kenyan commercial banks. Using a descriptive design and secondary data from sources such as the Kenya National Bureau of Statistics, they found a strong link between mobile banking adoption and financial success, with mobile banking growth associated with higher returns on assets.

The empirical studies reviewed collectively emphasize the significant role of mobile banking technology in shaping the financial and economic performance of various regions. Adhitya and Sembel (2020) demonstrated that mobile banking adoption in Indonesia contributed to key financial metrics like ROE and CAR, albeit with mixed relationships with GDP. Mawejije and Lakuma (2019) highlighted the macroeconomic benefits of mobile money in Uganda, particularly its positive influence on monetary aggregates, credit access, and economic activity, showcasing its stronger impact when used for transactions. Similarly, Sifunjo et al., (2015) underscored mobile banking's positive contribution to financial performance in Kenyan banks, linking its adoption to improved returns on assets. In conclusion, mobile banking technology is a transformative force that not only enhances financial performance but also drives macroeconomic development. Its strategic adoption offers immense potential for fostering financial inclusion and economic stability in developing regions.

Materials and Methods

This study employed a survey research design with a quantitative approach to gain a comprehensive understanding of the relationship between digital transformation and small-scale enterprise performance in Ilorin, Kwara State. The survey research design is appropriate for the study as it allows for the collection of data from a large group of respondents, ensuring a broad perspective on the research topic. The quantitative approach enables the use of numerical data to assess relationships and test hypotheses, providing objective results that can be generalized to a larger population.

The target population for this study comprised owners and employees of selected small-scale businesses in Ilorin, Kwara State. Fifteen small scale enterprises were selected for this study based on their willingness to participate and their use of digital tools and technologies. The selected enterprise are the ones that have been into operation for not less than five year. They are AYS Multi Services, Pebbles Nigeria, Prospect African Food Production (Nig) Enterprise, Self Reliance, Economic Advancement Programme (SEAP), Akintola Consultant Nigeria Limited, Checkmate Geo-System Consult Ltd., Cizar Consultant & Global Investment Company, Dome Ventures., El-Possibilities Synergy, Great Impact Ventures, Jeje Block Industry, Kesmorah& Sons Ltd, Lite Gas, Orbitz Business Solutions, and Pemas Engineers Limited. Given the large size of the population, The accessible population for this study—comprising owners and employees of 15 selected small-scale businesses in Ilorin, Kwara State—was chosen for the fact that the businesses have been in operation for at least five years, indicating stability and a track record of experience with digital transformation processes. This makes them suitable for providing insights into the relationship between digital transformation and small-scale business performance, as they are more likely to have implemented or been exposed to relevant technologies and business model changes. In addition, the selected businesses span a diverse range of industries, including consulting, manufacturing, and services. This diversity ensures a broader perspective on how digital transformation impacts various sectors, enhancing the study's validity and generalizability within the local context.

Convenience sampling technique was employed to select a sample of 150 respondents which are accessible population. From each selected business, ten (10) respondents were chosen resulting into one hundred and fifty (150) respondents. Convenience sampling was chosen due to practical constraints such as time, cost, and accessibility to participants, ensuring that data could be collected from a diverse group of businesses without imposing undue challenges on the study's progress.

Data collection was conducted using a structured questionnaire designed with a five-point Likert scale, ranging from 5 (Strongly Agree) to 1 (Strongly Disagree). This scale was used to capture varying levels of agreement or disagreement with statements related to digital transformation and business performance, allowing for the quantification of respondents' attitudes and perceptions. The structured nature of the questionnaire also ensured consistency across responses, enabling reliable comparison and analysis. Furthermore, the validity of the instrument was ensured through content and construct validity tests. Content validity was assessed by experts in the field to verify that the questionnaire covered all relevant aspects of the research topic. Construct validity was evaluated to ensure that the questionnaire measured the intended constructs of digital transformation and business performance effectively. As for reliability, Cronbach's Alpha was calculated for each construct. A Cronbach’s Alpha value of 0.7 or higher is considered acceptable, indicating that the items within each construct are consistent and reliable.

Data analysis involved testing the hypotheses using simple regression analysis. Regression analysis was chosen as it is suitable for examining the relationship between independent and dependent variables. The significance of the results was determined based on a correlation coefficient above 0.5 and p-values below 0.01, which were set as thresholds for a significant relationship. These criteria ensure that only meaningful correlations are considered, supporting the robustness and reliability of the findings.

Table 1: Data Analysis and Discussion of Findings

Characteristics	**Category**	**Frequency**	**Percent**	**Cumulative percent**
Gender	Male	107	76.1	76.1
	Female	34	23.9	100.0
Age	18 - 25yrs	12	8.3	8.3
	26 - 40yrs	43	30.5	38.7
	41 - 60yrs	48	33.9	72.6
	Above 60yrs	38	27.4	100.0
Highest Qualification	Primary Secondary	12	2.3	2.3
	Tertiary	50	35.6	37.9
		79	62.1	100.0
Length of business Experience	Less than 1 yrs	28	20	94.0 96
	1 – 5 yrs	78	55	98
	6 – 15 yrs	28	20	100
	Above 15 years	7	5	

Source: Author’s Computation *(2023).*

The frequency distribution of the respondents' demographic characteristics is presented in Table 1 above. The data reveals that out of the 141 respondents, 107 (76.1%) are male, while 34 (23.9%) are female. While the number of male respondents exceeds that of females in the selected businesses, it can be inferred that the views expressed in this study represent both genders. The table also provides information on the respondents' age distribution. The majority, 48 respondents (33.9%), fall within the 41-60 age bracket, followed by 43 (30.5%) in the 26-40 age range, 38 (27.4%) aged 61 and above, and 12 (8.3%) in the 18-25 age group. This indicates that the study is predominantly represented by employees within the 41-60 age range, suggesting that most respondents are middle-aged. Finally, the table highlights the tenure of the respondents within their respective businesses. A majority, 78 respondents (55%), have been employed for 1-5 years, followed by 28 (20%) who have been with the company for less than one year or between 6-15 years, and 7 respondents (5%) have been with the company for over 15 years. This implies that the majority of the employees sampled have had a considerable length of service with their organizations.

The frequency distribution of the respondents' demographic characteristics reveals that the majority of respondents are male (76.1%), but the study incorporates views from both genders, with females accounting for 23.9%. also, most respondents are middle-aged, with the 41-60 age bracket (33.9%) being the largest group. This suggests that the study reflects perspectives primarily from a mature workforce. In addition, the majority of respondents (55%) have worked in their current organizations for 1-5 years, indicating a significant representation of employees with moderate work experience.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.895a	.871	.967	1.158

a. Predictors: (Constant): digital transformation
b. Dependant Variable: Performance of Small-Scale Enterprises

Table 3: ANOVAa

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	356.564	1	347.564	263.902	.000b
	Residual	10.536	8	1.317		
	Total	348.100	9			

Dependent Variable: Performance of Small-Scale Enterprises
Predictors: (Constant); digital transformation

Table 4: Coefficients a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5.746	1.464		-3.924	.004
	DT	.856	.082	.985	16.245	.000

a. Dependent Variable: Performance of Small-Scale Enterprises

The regression sum of squares (356.564) is greater than the residual sum of square (10.536), which indicates that more of the variation in the dependent variable is explained by the model. R, the correlation coefficient which has a value of 0.895, indicates that there is a positive relationship between digital transformation and Performance of Small-Scale Enterprises in Ilorin. The R square, coefficient of determination shows that 87.1% of the variation in the Performance of Small-Scale Enterprises is explained by the model. With the linear model, the error of estimate is high, with a value of about 1.158. Coefficient of .856 indicates a positive significance effect of digital transformation and Performance of Small-Scale Enterprises in Ilorin Kwara State, which is statistically significant (16.245). Therefore, the null hypothesis was rejected. Thus, digital transformation has a positive effect on Performance of Small-Scale Enterprises in Ilorin Kwara State.

Testing hypothesis One; there is no significant relationship between emerging technologies and the operational efficiency of small-scale enterprises in Ilorin, Kwara State.

Simple regression was used to examine the effect of digital transformation, measured by emerging technologies, on small-scale business performance, with operational efficiency as the dependent variable. The model summary in Table 3 reveals a correlation coefficient (r) of 0.822, demonstrating a very strong relationship between emerging technologies and operational efficiency which is the independent variable. Additionally, the coefficient of determination (r^2) is 0.675, or approximately 68%. This indicates that 68% of the variation in small-scale business operational efficiency can be attributed to the integration of emerging technologies, while the remaining 32% is influenced by other factors not captured in the model.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Coefficient	Sig
1	.822[a]	.675	.677	.290	1.166	.009

a. Predictors: (Constant): emerging technologies
b. Dependent Variable: operational efficiency

Source: Author's Computation (2023)

Decision Rule: As depicted on the table above, 1% integration of emerging technologies would lead to 16.6% improvement in efficiency As a result of this, the Null Hypothesis is rejected on the basis that the p-value is 0.009 which is less than 0.05 ($P<0.05$). Hence the alternative hypothesis is accepted, that there is significant relationship between emerging technologies and efficiency of small scale businesses in Ilorin, kwara state. This implies that integration of emerging technologies helps small scale businesses significantly in term of efficiency.

Testing hypothesis Two; change in business model has no significant effect on productivity of small scale enterprises in Ilorin, kwara state.

Simple regression was used to explore the effect of digital transformation (measured by change in business model) on small scale business performance (measured by productivity) Table 4 presents the model summary. It shows that the correlation coefficient r is 0.956 which indicates that there exists a very strong relationship between small scale business performance (dependent variable i.e. the variable being predicted) and change in business model which is the predictor or independent variable. It is also clear from the table that the r2 which is the coefficient of determination is 0.913 approximately 91%. This implies that more than two-third of percentage i.e. 91% change in small scale business productivity can be explained by the effective change in business model 9% is explained by other factors that are not captured in the model.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Coefficient	Sig
1	.956[a]	.913	.915	.178	.167	.000

a. Predictors: (Constant), change in business model
b. Dependent Variable: productivity

Source: *Author's Computation (2023)*

Decision Rule: As shown in the table above, a 1% change in the business model leads to a 16.7% change in small-scale business productivity. Based on this, the Null Hypothesis (HO3) is rejected because the p-value is 0.000, which is less than 0.05 ($P<0.05$). Therefore, the alternative hypothesis is accepted, indicating that changes in the business model have a significant effect on the productivity of small-scale businesses in Ilorin, Kwara State.

Conclusion and Recommendations

This study has explored the relationship between digital transformation and the performance of small-scale enterprises in Ilorin, Kwara State. Findings suggest that emerging technologies and changes in business models positively influence business performance. Specifically, the adoption of emerging technologies significantly improves the efficiency of small-scale businesses by streamlining operations, reducing manual tasks, and facilitating faster customer service and product delivery. Similarly, Shifting from traditional business models to more digitally integrated models has led to increased productivity. This shift allows businesses to reach wider audiences, improve customer engagement, and adapt to market demands more swiftly.Based on the findings of the study, the following recommendations were made:

To maximize the benefits of digital tools, business owners and employees should receive regular training on digital skills. This could involve workshops on digital marketing, data analytics, and the use of software relevant to their specific industry.Small-scale enterprises should periodically assess their digital practices and seek ways to innovate their business models to remain competitive.

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IMPACT OF MICROFINANCE BANK SERVICES ON MSMEs PERFORMANCE IN NIGERIA

[1]Aliyu Abdullahi, [2]Muazu Saidu Badara and [3]Muhammed Yazeed

[1]International Centre of Excellence for Rural Finance and Entrepreneurship Ahmadu Bello University, Zaria.
[2]Department of Accounting, Ahmadu Bello University, Zaria.
[3]Department of Business Administration, Ahmadu Bello University, Zaria

Abstract

Despite the importance of MSMEs in Nigeria, they face persistent challenges such as limited access to finance, inadequate operational knowledge, and a lack of strategic support, which hinder their performance and growth potential. This study investigates the impact of microfinance services—credit access, savings, and advisory support—on the performance of Micro, Small, and Medium Enterprises (MSMEs) in Nigeria. Recognizing MSMEs as critical drivers of economic growth, employment, and poverty reduction, this research explores how microfinance services contribute to both financial and non-financial aspects of MSME performance. Using a quantitative research design, data was collected from 255 MSMEs that accessed microfinance services through a structured questionnaire using simple random sampling technique. Descriptive and inferential analyses, including multiple regression, were conducted to examine the relationship between each microfinance service and MSME performance. The findings reveal that credit services have the strongest positive impact on MSME performance, enabling business expansion, asset acquisition, and improved cash flow. Savings services contribute to financial stability, allowing MSMEs to build reserves for operational resilience and reinvestment, while advisory services improve financial literacy and operational efficiency, though to a lesser extent. The study concludes with recommendations for policymakers and microfinance institutions to expand and tailor these services to further enhance MSME performance and, consequently, foster economic development in Nigeria.

Key words: MSMEs Performance, Microfinance Bank Services, Micro Credit, Micro Savings

Introduction

In recent years, Micro, Small, and Medium-sized Enterprises (MSMEs) have emerged as fundamental drivers of economic development, poverty reduction, and job creation globally, especially in developing countries like Nigeria. According to the National Bureau of Statistics (NBS) and the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), Nigeria is home to over 41 million MSMEs, which constitute more than 90% of all businesses in the country (NBS & SMEDAN, 2017). MSMEs contribute approximately 48% of Nigeria’s Gross Domestic Product (GDP) and are responsible for over 80% of employment in the non-agricultural labor force (World Bank, 2020; NBS, 2021). This sector's performance is crucial not only for economic growth but also for improving living standards and alleviating poverty. Despite their significant role, MSMEs in Nigeria face severe financial constraints that limit their growth, survival, and competitiveness both domestically and internationally (Akingbolu, 2020).

One of the most critical challenges for MSMEs in Nigeria is access to finance, largely due to the limited reach and restrictive requirements of traditional banks. The World Bank reports that only about 15% of Nigerian adults have access to formal banking services, and many MSMEs are unable to meet the stringent collateral and credit history requirements set by commercial banks (World Bank, 2020). This financing gap is starkly evident in Nigeria's estimated financing shortfall of about ₦617 billion (approximately $1.5 billion) for MSMEs (Nwibo & Mbam, 2013). With restricted financial access, MSMEs are left vulnerable, often struggling to expand, upgrade, or even sustain operations.

In response to this pressing need for accessible financing, microfinance institutions (MFIs) have increasingly emerged as alternative sources of funding tailored specifically to low-income entrepreneurs and MSMEs. The formal introduction of microfinance in Nigeria began with the Central Bank of Nigeria's (CBN) Microfinance Policy Framework in 2005, which sought to address the lack of credit access by establishing microfinance banks (MFBs) across the country (CBN, 2005). Since the launch of this policy, the microfinance sector has expanded rapidly, with over 900 licensed MFBs across Nigeria as of 2022 (CBN, 2022). These institutions offer a variety of financial services, including loans, savings products, insurance, and advisory services, tailored to meet the specific needs of small enterprises, thereby playing a critical role in promoting entrepreneurship and reducing poverty (Abraham & Balogun, 2020).

The need for this study is justified by several key factors, including the economic significance of MSMEs, the regulatory need for evidence-based policy interventions, and the role of microfinance as a tool for financial inclusion. The economic impact of MSMEs on Nigeria's economy is profound. As highlighted, MSMEs contribute nearly half of the nation's GDP and employ more than 80% of the workforce in the non-agricultural sector (World Bank, 2020). This sector's growth is directly linked to the country's socio-economic well-being. If MSMEs can access adequate financing, they can expand their operations, improve productivity, and increase employment opportunities, thus contributing to the national agenda of poverty reduction and economic diversification (Anigbogu et al., 2014). By understanding the impact of microfinance services on MSMEs, this study aims to offer insights into how targeted financial interventions can strengthen Nigeria's economy.

However, while microfinance services have been widely recognized as a crucial tool for financial inclusion, there remains a problem in understanding their true impact on MSMEs' performance across Nigeria. Although studies suggest that microfinance enhances economic participation, few studies have comprehensively examined the direct effects of microfinance on MSMEs at a national level. Most existing research is regionally or state-focused, limiting the generalizability of their findings (Olowe et al., 2013; Akingbolu, 2020). Thus, a gap exists in understanding the impact of microfinance on MSMEs nationwide, which could yield a more comprehensive view of how microfinance fosters growth, profitability, and job creation across Nigeria's diverse socio-economic landscape.

Furthermore, financial inclusion remains a pressing national priority. According to the 2020 EFInA Access to Financial Services in Nigeria Survey, approximately 36% of adults are financially excluded, with rural and low-income populations disproportionately affected (EFInA, 2020). Since MSMEs are often the primary source of income for these communities, microfinance institutions play a vital role in extending financial services to them, enabling economic empowerment. By examining how microfinance affects MSMEs, this study can provide critical insights into ways to enhance financial inclusion. For instance, findings could inform MFIs on designing financial products that align with MSMEs' operational dynamics, ensuring that even the smallest enterprises benefit from accessible finance.

Although extensive global research highlights the impact of microfinance on poverty alleviation (Morduch, 1999; Khandker, 2005), limited empirical evidence exists in Nigeria addressing its specific effects on the business growth and performance of Micro, Small, and Medium Enterprises (MSMEs). Most Nigerian studies have been region-specific, failing to capture the broader implications of microfinance on MSMEs nationwide (Iheduru, 2002; Ojo, 2009). This study seeks to fill this gap by adopting a nationwide focus, offering a comprehensive perspective on microfinance's role in fostering MSME growth and sustainability across Nigeria's diverse economic and socio-cultural contexts. Drawing from the core microfinance services identified in existing literature—credit access, savings facilitation, and financial advisory support (Ledgerwood, 1999; Armendáriz & Morduch, 2010)—the research explores how these services collectively influence MSME performance, aiming to provide actionable insights for improving microfinance interventions in Nigeria.

1. To Assess the Impact of Microfinance Credit Access on MSMEs' Performance
2. To Evaluate the Effect of Microfinance Savings Services on MSMEs' Performance
3. To Analyze the Contribution of Financial Advisory Services to MSMEs' Performance

Literature Review

Concept of Microfinance Bank Services

Microfinance bank services refer to specialized financial products and services tailored to individuals, micro-businesses, and MSMEs (Micro, Small, and Medium-sized Enterprises) that are often excluded from traditional banking systems. The concept of microfinance was developed as a way to promote financial inclusion, targeting low-income populations and entrepreneurs who lack access to formal banking institutions due to high collateral requirements, complex documentation, and a perceived risk by conventional banks (Robinson, 2001). Microfinance institutions (MFIs) offer a variety of financial services designed to meet these needs, including credit access, savings services, and financial advisory support. These services are critical in Nigeria, where the CBN (Central Bank of Nigeria) established the Microfinance Policy Framework in 2005 to formalize and expand the role of microfinance banks (MFBs) in supporting financially underserved populations, particularly MSMEs (CBN, 2005; Babajide, 2011).

Credit Access

Credit access is the cornerstone of microfinance services and remains one of the most critical aspects for MSMEs in Nigeria. Credit access allows small businesses to secure working capital, invest in new assets, and increase production capacity, thereby facilitating growth and expansion (Olowe et al., 2013). Microfinance banks offer small, flexible loans that often come with less stringent requirements compared to traditional banks, making them more accessible to MSMEs. According to Obamuyi (2018), access to microfinance credit is positively correlated with MSME growth indicators, such as revenue increase, market expansion, and job creation. Research by Ayodeji and Ogunlusi (2020) supports this, showing that MSMEs with access to microcredit were able to enhance productivity and competitiveness, thereby contributing to economic development.

Moreover, studies indicate that microfinance credit is particularly beneficial during economic downturns, as it provides an alternative source of financing for MSMEs that might otherwise struggle to secure funds (Beck et al., 2020). Babajide and Salako (2020) further found that MSMEs with access to microcredit not only experienced higher growth rates but also increased their workforce, underscoring microfinance credit's role in employment generation. Microcredit’s flexibility allows MSMEs to access finance without the heavy collateral requirements typically demanded by commercial banks, thus bridging a critical gap for entrepreneurs and small businesses in Nigeria (Abiola, 2012). This approach to credit provision enables MSMEs to meet immediate operational needs and invest in long-term growth strategies, positioning them for greater sustainability and resilience.

Savings Services

Savings services are another vital component of microfinance, aimed at promoting a culture of savings among MSME owners and helping them build financial reserves. Savings accounts provided by microfinance banks enable MSMEs to secure profits, manage cash flow more effectively, and accumulate funds for future investments. This financial buffer is crucial for MSMEs, especially in an unpredictable economic environment, as it helps them reduce dependency on external debt and enhances their financial stability (Ngehnevu & Nembo, 2010; Ledgerwood & Gibson, 2013). Research by Abraham and Balogun (2020) found that MSMEs with access to micro-savings products were better able to cope with economic shocks, as they had built up savings that could be utilized during times of low sales or economic downturns.

Savings services also foster disciplined financial management practices among MSMEs, encouraging business owners to set aside funds systematically. This approach not only helps MSMEs create capital for growth but also improves their creditworthiness, as consistent savings can serve as an indicator of financial responsibility to lenders (Babajide, 2011). Additionally, Ayodeji and Ogunlusi (2020) emphasize that micro-savings products enable MSMEs to accumulate capital incrementally, which they can reinvest in business improvements, technological upgrades, and market expansion. Savings services thus contribute to the sustainability and long-term growth of MSMEs by encouraging financial prudence and resilience.

Financial Advisory Services

Financial advisory services offered by microfinance banks are essential for equipping MSME owners with the skills and knowledge required to manage their finances effectively. These advisory services often include training on budgeting, record-keeping, financial planning, and strategic business management. By providing guidance on financial literacy, microfinance banks help MSME owners make more informed decisions, optimize resource allocation, and improve operational efficiency (Anigbogu et al., 2014; Zins & Weill, 2016). Financial advisory services are particularly important in Nigeria, where many MSMEs operate informally and lack structured financial management systems. Advisory support can bridge this gap by fostering formalized practices that improve MSMEs’ operational efficiency and financial health.

Research indicates that MSMEs that benefit from financial advisory support demonstrate better cost control and are more likely to use their resources strategically. For instance, Efobi et al. (2014) found that MSMEs receiving financial literacy training from microfinance institutions showed greater proficiency in budgeting and financial planning, resulting in more sustainable business practices. Similarly, a study by Iloh and Chioke (2020) highlighted that advisory services enabled MSME owners to adopt effective cash flow management strategies, reducing the likelihood of financial shortfalls and improving profitability.

In addition to fostering operational improvements, financial advisory services also strengthen MSMEs' ability to handle financial challenges, especially during periods of economic instability. This service empowers business owners to analyze their financial standing critically and plan for the future, allowing them to develop growth strategies that are both realistic and financially sound (Babajide & Salako, 2020). Through advisory services, microfinance banks play a transformative role in enhancing the financial resilience and strategic capabilities of MSMEs, contributing to their long-term stability and success.

Concept of MSMEs Performance

The performance of Micro, Small, and Medium-sized Enterprises (MSMEs) is conceptualized in various ways within the literature, reflecting the multifaceted nature of business success and sustainability. Some scholars define MSME performance primarily through financial metrics such as profitability, revenue growth, and cash flow, emphasizing the economic viability and profit-generating capacity of the enterprise (Akingbolu, 2020; Babajide & Salako, 2020). Others adopt a broader view, incorporating both financial and non-financial indicators, suggesting that MSME performance also includes factors such as customer satisfaction, operational efficiency, and social impact, which are essential for long-term sustainability (Efobi et al., 2014; Ledgerwood & Gibson, 2013). Operationally, MSME performance is often seen as the enterprise's ability to meet strategic objectives, sustain growth, and adapt to market conditions, which can be reflected in diverse measures tailored to capture the complex nature of business performance (Ayodeji & Ogunlusi, 2020). These varying definitions highlight that MSME performance is not solely about financial outcomes but also involves other critical aspects that contribute to organizational resilience and competitiveness.

Financial performance measures are widely used to assess the economic success of MSMEs, offering insights into the enterprise's ability to generate profits, sustain operations, and invest in growth. Profitability is one of the primary financial indicators and reflects the enterprise's capacity to generate income relative to its expenses. It is typically measured through metrics such as net profit margin, return on investment (ROI), and earnings before interest and taxes (EBIT), which indicate the enterprise's ability to cover costs, reinvest in the business, and provide returns to owners (Akingbolu, 2020). In addition to profitability, revenue growth is another essential measure, capturing the rate at which an MSME's income increases over time, which is indicative of market acceptance and customer loyalty (Obamuyi, 2018). Cost efficiency, measured through ratios like the cost-to-income ratio, is equally crucial, as it reflects the enterprise's ability to control expenses while maximizing revenue (Efobi et al., 2014). Lastly, liquidity, which assesses the enterprise's ability to meet short-term obligations, is essential for financial stability and operational continuity, especially in volatile economic environments like Nigeria (Ngehnevu & Nembo, 2010). Access to microfinance services, particularly credit and savings products, can help MSMEs enhance these financial indicators by providing capital for expansion and cash flow management.

Non-financial performance measures complement financial metrics by evaluating other critical aspects of MSME success, such as operational efficiency, customer satisfaction, employee development, and social impact. Operational efficiency is an important non-financial indicator, reflecting the enterprise's ability to use resources optimally to maximize productivity and minimize waste. Key indicators include inventory turnover, labor productivity, and production cycle time, all of which contribute to the MSME's ability to remain competitive in the market (Ayodeji & Ogunlusi, 2020). Customer satisfaction and retention are also vital, as they indicate the enterprise's ability to meet client needs and foster loyalty, which can lead to repeat business and positive word-of-mouth (Ledgerwood & Gibson, 2013). Employee development and job creation are further indicators, as they reflect the enterprise's growth and its contribution to the local economy, particularly in employment generation (Babajide & Salako, 2020). Lastly, social and environmental impact measures highlight the enterprise's commitment to sustainable and ethical practices, which are increasingly relevant in today's business landscape. These non-financial metrics provide a broader understanding of MSME performance by capturing dimensions that contribute to long-term resilience and align with broader socio-economic goals, thus underscoring the holistic nature of MSME success.

Empirical Review

Empirical research on MSME performance underscores the significance of both financial and non-financial factors in determining business success, particularly in developing economies where access to capital and resources is often limited. This section reviews empirical findings on MSME performance as the dependent variable, examining how microfinance services—specifically credit access, savings, and advisory support—impact different dimensions of MSME performance, including growth, profitability, operational efficiency, and resilience. By focusing on MSME performance as the dependent variable, this review highlights how microfinance can directly and indirectly enhance MSMEs' ability to operate sustainably, expand their market presence, and contribute to economic development.

Microfinance Credit and MSME Performance

Numerous empirical studies have documented the positive impact of microfinance credit on MSME performance, especially in facilitating growth and increasing profitability. Obamuyi (2018) examined MSMEs in Nigeria and found that those with access to microfinance credit demonstrated significantly higher performance, particularly in terms of revenue growth, market expansion, and capacity building. Access to credit allows MSMEs to invest in essential growth activities, such as expanding production, increasing inventory, and entering new markets. Similarly, Ayodeji and Ogunlusi (2020) observed that MSMEs utilizing microfinance credit reported an increase in sales volume and profitability, underscoring the role of credit in enhancing financial performance. These findings suggest that credit access, by providing necessary working capital, serves as a catalyst for improved MSME performance across financial dimensions.

Babajide and Salako (2020) further highlighted that credit access impacts job creation and employment within MSMEs, which are also indicators of performance in the context of socio-economic development. They found that MSMEs that accessed credit from microfinance institutions were able to expand operations and hire additional staff, thereby improving their operational capacity and contributing to economic growth. Beck et al. (2020) provided similar insights for MSMEs across Sub-Saharan Africa, indicating that credit supports asset acquisition and production enhancements, which directly improve MSME performance. Collectively, these studies emphasize that microfinance credit plays a crucial role in supporting MSME performance by enabling growth and financial sustainability.

Microfinance Savings and MSMEs Performance

Microfinance savings services have also been shown to have a substantial impact on MSME performance by promoting financial stability and resilience, which are essential for long-term success. Ngehnevu and Nembo (2010) conducted a study on MSMEs in Cameroon and found that those with access to savings services from microfinance institutions were better equipped to manage cash flow, reduce dependence on external debt, and maintain financial stability during economic downturns. This stability allows MSMEs to perform consistently and sustain operations even in challenging conditions.
In Nigeria, Abraham and Balogun (2020) found similar results, noting that MSMEs with access to savings products were more financially resilient and could better cope with temporary revenue declines. Savings services, by offering MSMEs a secure place to accumulate profits, help build a financial buffer that can be used for reinvestment and operational continuity. Additionally, Ayodeji and Ogunlusi (2020) reported that savings accounts enable MSMEs to adopt disciplined financial practices, contributing to improved cash flow management and operational efficiency. This access to savings services, in turn, strengthens MSMEs' financial position and enhances overall performance by providing stability, an essential factor for long-term sustainability.

Financial Advisory Services and MSMEs Performance

Financial advisory services, often delivered in the form of training on budgeting, record-keeping, and cash flow management, are another important determinant of MSME performance. Advisory support can improve operational efficiency, as MSME owners acquire the skills necessary to manage resources effectively and make informed financial decisions. Anigbogu et al. (2014) found that MSMEs receiving advisory support from microfinance institutions demonstrated improved resource allocation, cost control, and strategic planning, which contributed to higher performance across operational indicators. This support is particularly relevant in Nigeria, where many MSMEs operate informally and lack formal management structures, making advisory services a critical element for enhancing performance.

Efobi et al. (2014) also examined the impact of advisory services on MSME performance in Nigeria, finding that those benefiting from financial literacy training reported greater budgeting accuracy, effective cash flow management, and reduced waste. These improvements in operational efficiency lead to higher productivity and profitability, enhancing the MSMEs' ability to sustain performance. Additionally, Zins and Weill (2016) observed that MSMEs with access to advisory services experienced fewer production delays, optimized labor use, and improved quality control, all of which are essential for competitive performance. Thus, financial advisory services play a transformative role in MSME performance by equipping owners with essential skills that foster efficient operations and support strategic growth.

Theoretical Framework

The Resource-Based View (RBV) theory, initially proposed by Barney (1991) and expanded upon by Wernerfelt (1984), posits that a firm's competitive advantage and sustained performance are primarily driven by its unique resources and capabilities. According to RBV, resources that are valuable, rare, inimitable, and non-substitutable (VRIN) provide the foundation for a firm's success and ability to outperform competitors. Valuable resources enable a firm to exploit market opportunities and mitigate threats, while rare resources are possessed by only a few competitors, making them a source of differentiation (Barney, 1991; Peteraf, 1993). Inimitable resources are difficult to replicate, often due to social complexity or causal ambiguity, and non-substitutable resources lack viable alternatives, reinforcing their strategic importance (Grant, 1991). The RBV framework emphasizes that an organization's ability to develop, manage, and optimize these VRIN resources plays a central role in maintaining a sustainable competitive advantage and achieving long-term success. Additionally, RBV suggests that intangible resources, such as knowledge and skills, are often more strategically valuable than tangible assets due to their unique, inimitable nature, and they contribute significantly to a firm's capacity to innovate and adapt to changing environments (Teece, Pisano, & Shuen, 1997; Barney & Clark, 2007).

Applying RBV to this study, microfinance services—credit, savings, and financial advisory support—are conceptualized as critical resources that MSMEs in Nigeria can leverage to improve their performance and resilience. Access to credit, which provides MSMEs with essential capital, is considered a valuable and rare resource, as it enables businesses to expand operations, acquire assets, and increase production capacity (Olowe, Moradeyo, & Babalola, 2013; Obamuyi, 2018). Savings services also play a crucial role in building financial stability and resilience, providing MSMEs with the ability to manage cash flow and create a buffer against economic downturns (Abraham & Balogun, 2020). Furthermore, financial advisory services contribute intangible resources, such as financial literacy and management skills, that enhance MSME owners' ability to make informed decisions and optimize resource allocation (Efobi, Osabuohien, & Oluwatobi, 2014; Anigbogu et al., 2014). Together, these microfinance services meet the VRIN criteria of RBV, as they are not widely accessible through traditional banking channels in developing economies, thus offering MSMEs a strategic advantage in overcoming financial and operational barriers (Akingbolu, 2020; Beck et al., 2020). By equipping MSMEs with both financial and intangible resources, microfinance institutions enable these enterprises to develop competitive capabilities, achieve financial stability, and contribute to broader socio-economic development, aligning with RBV's emphasis on leveraging unique resources for sustained competitive advantage.

Materials and Methods

Research Design

This study employed a quantitative research approach in which the data utilized are numerical. A quantitative research approach is one in which the researcher primarily uses positivism claims for developing knowledge, employs strategies of enquiry such as experiment and survey, and collect data on predetermine instruments that yield statistical data (Creswell & Zhang, 2009). It also, employed survey method as the most appropriate for collecting large amount of data from a given population using self-administered questionnaire. According to (Creswell & Zhang, 2009), survey method comprises cross-sectional and longitudinal studies using either questionnaires or structured interviews for data collection. The population of this study comprises 831 MSMEs that have accessed these services in Alternative Bank, one of the Islamic Banks in Nigeria. The total number of these MSMEs is eight hundred and thirty-one (831). This list of these MSMEs was obtained from the Bank as at 2024. Therefore, the business selected cut across different sectors including; agriculture, wholesale/retail trade, manufacturing, construction, services, transportation among others. A sample is a selection of elements or individual members from a larger body or population (Hair *et al.*, 2017). Hence, given the population size of eight hundred and thirty-one (831) MSMEs, it is very difficult to study all the elements of the population. Therefore, using the Krejcie and Morgan's (1970) table for sample size determination, the sample size for the study is 265. In order to reduce sample size error and also take care of the non-response problem, 30 percent of the computed sample size was added as suggested by Israel (2013). Therefore, 30 percent of the computed sample size was 80, where the original sample size is 265. Thus, the actual sample size of 345 was considered appropriate in this study. The study adopted probability sampling technique to determine the subjects that would be selected out of the entire population. Therefore, simple random sampling technique will be employed in this study because the method is unbiased and gives each member of the population equal chance of being selected (Sekaran & Bougie, 2019). The choice of this procedure by the researcher is due to the fact that, the simple random sampling procedure has the least bias and offers the most generalizability as each and every element can fall within the sample (Sekaran & Bougie, 2019). The data was collected from primary sources because all the data needed for analysis was adequately and conveniently obtained through administering questionnaire to the MSMEs owners-managers in Nigeria using 5-Point Likert scale with an option ranging from '1' Strongly Disagree (SD) to '5' Strongly Agree (SA). This 5-Point Likert scale is most appropriate for this study because of the skills and experience of the respondent (owner-manager of MSMEs) as recommended by (Weijters, Cabooter, & Schillewaert's, 2010). Data analysis is conducted using SPSS statistical software to perform descriptive and inferential analyses. Descriptive statistics, including frequencies, percentages, means, and standard deviations, are used to summarize the characteristics of the sample and the extent of microfinance service utilization. Inferential statistics, including multiple regression analysis, are employed to assess the relationship between the independent variables (microfinance credit, savings, and advisory services) and the dependent variable (MSME performance). Multiple regression is suitable for determining the strength and significance of the relationship between each microfinance service and MSME performance, allowing for an analysis of which services have the most significant impact on performance outcomes.

Results and Discussions

Data Analysis

Table 2: Descriptive Statistics of Microfinance Service Utilization and MSME Performance

Variable	Mean	Standard Deviation (SD)
Credit Service Impact	4.10	0.80
Savings Service Impact	3.80	0.70
Advisory Service Impact	3.50	0.90
MSME Performance	4.00	0.80

The results in Table 2 indicate that MSMEs generally perceive microfinance credit services as having the highest positive impact (Mean = 4.1, SD = 0.8), followed by savings services (Mean = 3.8, SD = 0.7) and advisory services (Mean = 3.5, SD = 0.9). The unidimensional MSME performance score has an overall mean of 4.0, reflecting favorable perceptions of performance among the MSMEs surveyed

Inferential Analysis: Multiple Regression

To examine the relationship between microfinance services and MSME performance, a multiple regression analysis was conducted. The dependent variable in this model is MSME Performance, while the independent variables are Credit Service Impact, Savings Service Impact, and Advisory Service Impact.

Model Summary

The model summary table below provides information on the strength of the relationship between the independent variables (microfinance services) and the dependent variable (MSME performance).

Table 1: Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.79	0.62	0.61	0.5

The model summary shows a strong relationship between microfinance services and MSME performance, with an R value of 0.79, indicating high positive correlation. An R^2 of 0.62 reveals that 62% of the variance in MSME performance is explained by credit, savings, and advisory services, demonstrating substantial explanatory power. The adjusted R^2 (0.61) and a standard error of 0.5 further support the model's reliability in predicting MSME performance.

Table 2: ANOVA Table

Model	Sum of Squares	df	Mean Square	F	p-value
Regression	78.32	3	26.11	104.4	<0.001
Residual	47.68	251	0.19		
Total	126	254			

The F-value of 104.4 ($p < 0.001$) suggests that the regression model is statistically significant, meaning that credit, savings, and advisory services collectively impact MSME performance.

Coefficients Table

The coefficients table provides information on the impact of each independent variable (credit, savings, and advisory services) on MSME performance. This table includes the unstandardized coefficients (B), standardized coefficients (Beta), t-values, and significance levels (p-values) for each predictor.

Table 3: Coefficients

Predictor Variable	Unstandardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (Beta)	t-value	p-value	Decision
Constant	1.2	0.2	–	6	<0.001	
Credit Service Impact	0.45	0.08	0.55	5.63	0.001	Significant
Savings Service Impact	0.3	0.1	0.35	3	0.003	Significant
Advisory Service Impact	0.15	0.07	0.18	2.14	0.033	Significant

The coefficients table reveals that all three microfinance services—credit, savings, and advisory—positively and significantly impact MSME performance. The constant (B = 1.2, p

< 0.001) represents the baseline MSME performance when all predictors are zero. Credit services have the strongest influence, with an unstandardized coefficient (B) of 0.45 and standardized coefficient (Beta) of 0.55 ($p < 0.001$), indicating a substantial positive effect. Savings services also significantly impact performance (B = 0.3, Beta = 0.35, $p = 0.003$), contributing to financial stability. Advisory services, though weaker, still show a positive effect (B = 0.15, Beta = 0.18, $p = 0.033$), supporting operational efficiency. The 95% confidence intervals for each predictor confirm the significance of these effects.

Discussion of Findings

The findings of this study contribute to the theoretical understanding of microfinance's role in MSME development by substantiating its multi-dimensional impact on business performance. The results align with financial empowerment theories, which posit that access to credit and savings facilities directly fosters entrepreneurial growth by mitigating financial constraints (Morduch, 1999; Armendáriz & Morduch, 2010). Furthermore, the evidence of advisory services' positive effect underscores the relevance of human capital theory, emphasizing that financial literacy and operational knowledge are critical for enhancing resource efficiency and decision-making. The study extends these frameworks by demonstrating that the combined influence of credit, savings, and advisory support explains a substantial proportion of the variance (62%) in MSME performance. This reinforces the notion that microfinance services are not standalone tools but synergistic mechanisms that collectively contribute to enterprise sustainability and growth.

Practically, the study underscores the need for microfinance institutions (MFIs) and policymakers to design comprehensive service packages that cater to the diverse needs of MSMEs. Credit services, identified as the most impactful, should be prioritized with flexible terms tailored to the unique needs of different sectors. Savings services, often underutilized, need enhanced promotion through innovative products like matched savings or incentives that encourage financial resilience and reinvestment. The weaker yet significant role of advisory services highlights the importance of financial literacy programs, which should be scaled up and sector-specific to maximize their impact. Policymakers can use these insights to integrate microfinance into broader economic strategies aimed at poverty alleviation, job creation, and inclusive growth. For MSME owners, the findings advocate a balanced utilization of credit, savings, and advisory services to optimize business performance and ensure long-term sustainability.

Conclusion

This study concludes that microfinance services—credit access, savings, and advisory support play a significant role in enhancing the performance of MSMEs in Nigeria. The findings indicate that credit services have the strongest positive impact on MSME performance, providing essential capital that enables business expansion, asset acquisition, and improved cash flow management. Savings services contribute to financial resilience, allowing MSMEs to build a financial buffer for stable operations and reinvestment. Advisory services, although with a smaller impact, are also valuable by equipping MSME owners with essential financial literacy and management skills, thereby fostering operational efficiency and informed decision-making.

Recommendations

Based on the findings of this study, the following recommendations are proposed to enhance the effectiveness of microfinance services in supporting MSME performance in Nigeria:

1. **Enhance Access to Credit**: Microfinance institutions should expand credit services for MSMEs, with flexible and affordable repayment terms to encourage more businesses to utilize these funds for expansion. Credit products tailored to the specific needs of different MSME sectors (e.g., agriculture, manufacturing, and retail) would maximize their impact and ensure that MSMEs in high-growth industries receive adequate support.
2. **Promote Savings Programs for MSMEs**: Savings services should be promoted more aggressively to encourage MSMEs to build financial reserves. Microfinance institutions can design incentivized savings products, such as higher interest rates for business accounts or matched savings programs, to motivate MSMEs to save regularly. This would help MSMEs build financial resilience, ensuring they have the necessary resources during economic downturns or for future investments.
3. **Strengthen Advisory and Training Services**: Microfinance institutions should offer regular advisory services and training programs on financial management, budgeting, and strategic planning to MSME owners and managers. These services should be sector-specific to address the unique challenges in each industry, enabling MSMEs to manage resources efficiently, make informed financial decisions, and improve operational efficiency.
4. **Increase Financial Literacy Initiatives**: Partnering with government agencies and NGOs, microfinance institutions should implement financial literacy programs for MSMEs, particularly in underserved regions. Financial literacy is crucial for ensuring that MSME owners understand how to use credit responsibly, manage savings effectively, and make decisions that align with long-term growth objectives.

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IMPACT OF ELECTRONIC MARKETING AND PERFORMANCE OF SMALL AND MEDIUM SCALE ENTERPRISES IN KANO STATE

[1]Razika Ismail Hassan, [2]Professor Yushau Ibrahim Ango, [3]Dr Rahilatu Ahmad Muhammad & [4]Dr Muhammad Bello Idris

[1]Department of Business Education, Federal University of Education, Zaria
[1,2,3]Department of Business Administration, Kaduna State University
[1]08034334679, [2]08033111933, [3]08036594660, [4]08065513359
[1]razikaih@gmail.com

Abstract
This study reveals that e-mail marketing and online advertising significantly enhance SME performance, demonstrating a stronger effect. These findings align with the Resource-Based View (RBV) theory, underscoring e-marketing as a valuable asset for achieving competitive advantage. The study concludes by recommending that SMEs in Kano State adopt a balanced e-marketing strategy that leverages the strengths of online advertising and e-mail marketing to maximize performance outcomes and secure a competitive edge. The study investigated the impact of e-mail marketing and online advertising on the performance of small and medium enterprises (SMEs) in Kano State, Nigeria, focusing on evaluating how these e-marketing strategies drive business success. The sample size of 437 SMEs was drawn, using proportional sample technique. Using a cross-sectional survey design, data were collected from through a structured questionnaire and analysed using multiple regression.

Keywords: SME performance, E-mail marketing, Online advertising, E-marketing strategies, Competitive advantage

Introduction
Over the years, there has been a general interpretation that SMEs performance contribute to high and stable economic growth that constitutes and sustains prosperity. Any economy that is capable of increasing and propelling the activities of its SMEs to increase performance is more likely to experience high economic development, unlike those economies whose similar activities are decreasing or are more or less stagnant. The economic significance of Entrepreneurship is particularly evident in its ability to generate employment opportunities, spur technological advancement and enhance competitiveness on a global scale. (Adeola etal 2024). The growth and development of any economy are linked to the success of entrepreneurship activities of that particular economy, which consequently lead to better living conditions for citizens of that economy. Small and medium-scale enterprises have a vital role to play in the Nigerian economy; they create jobs, promote sustainable industrialization and innovation, and contribute to economic and social well-being. In order to survive in the current technological business environment, SMEs must deploy different strategies, one of which is electronic marketing strategy.

Electronic-marketing is a complex strategy that involves applying online elements, like a website or an email, e-marketing or traditional marketing communication tools (sales promotion, advertising, and public communication) (Hanani et al., 2020). Increasing revenue and profits, differentiating oneself from rivals, and raising brand awareness are the main objectives of the electronic marketing strategy (Hanani et al., 2020). Because the Internet may boost sales without a company having to grow physically, it is beneficial for international markets. E-marketing is described by (Frost & Strauss, 2016) as the process of creating transactions that satisfy the needs of the business and the person by utilizing a variety of electronic tools, programs, and applications. E-marketing is the process of planning and carrying out marketing activities that specify needs and desires, including creating, distributing, and pricing goods and services. Being beyond the normal strategy, the adoption of an e-marketing strategy amongst entrepreneurs is expected to increase their performance.

Many scholars and researchers have studied the concept of E-marketing and the performance of SMEs, but the impact, effect, and relationship showing the significance with reference to Kano state, Nigeria, need to be given more attention. Also, looking at studies regarding the performance of SMEs, there are few studies that have looked at the impact of E marketing on the performance of SMEs, specifically in Kano state.

The main objective of this study is to examine the impact of marketing on the Performance of SMEs in Kano state. Other specific objectives of the study include;

To assess the relationship between E-mailing and the performance of SMEs in Kano state, Nigeria.
To assess the relationship between online advertising and the performance of SMEs in Kano state, Nigeria.

In line with the above objectives, the following null hypotheses are developed and tested:

Ho1 There is no significant relationship between E-mailing and the performance of SMEs in Kano, Nigeria.
Ho2 There is no significant relationship between online advertising and the performance of SMEs in Kano, Nigeria

Literature Review

Performance of SMEs

Various researchers have reviewed the concepts of performance. On the most basic level, Borman and Motowidlo (2000) distinguish between task and contextual performance. Contextual performance refers to activities which do not contribute to the technical core but support the organizational, social, and psychological environment in which organisational goals are pursued. Hornby (2011) posits that performance is an action or achievement that is considered in relation to how successful it is. This definition shows that performance is synonymous with success. According to Sirilli (2004), the performance of small enterprises is viewed as their ability to contribute to job and wealth creation through enterprise start-up, survival and growth. However, in measuring firm performance, different concepts are used to include sales per employee, export per employee, growth rates of sales, total assets, total employment, operation profit ratio and return on investment.

Electronic Marketing

Organizations continue to strive to develop using all technological strategies, and scholars believe that e-marketing is one of the strategies used to ensure the objectives of any firm are met. E-marketing involves using technology and electronic devices, like computers and mobile phones. Any such marketing idea that utilises an electronic gadget or an internet connection is referred to as e-marketing (Singhal & Gupta, 2022). Electronic Marketing is viewed as a new business practice that is apprehensive with the promotion of goods, services, information and ideas through the Internet and other electronic medium (El Gohary, 2012). E-marketing is becoming the need of this advanced society, so companies are keenly looking towards it and they are anxious to adopt this trending method.

This study, therefore, views E-marketing as buying and selling online using electronic gadgets, which give virtual places and storefronts and create digital value. It can also lead to transactions that fund individual and organizational objectives. It is also a type of advertising that uses digital technology to promote a product.

Empirical Review

Khalid, (2023) investigated the impact of e-marketing on small business enterprises' performance. From a population of 3,250 small businesses in Jordan's capital city of Amman, 344 small businesses were randomly chosen to provide the survey's data. The study employed structural equation modelling (SME) to test its hypotheses. According to the study's findings, E-marketing techniques significantly impacted the firms' performance. The study was not undertaken in Nigeria, thus its outcomes cannot be extended to Nigeria. This underscores the existence of a gap, prompting the necessity for a dedicated study focusing on women entrepreneurs Nigeria to contribute valuable insights to the field.

Ruba, (2022) investigated how Batelco Company in the Kingdom of Bahrain achieved a competitive advantage through e-marketing. By using a straightforward random sample technique, 400 clients were surveyed. A representative sample of the company's consumers was given a questionnaire survey, and the results of that survey will determine the analysis. The research showed that E-Marketing had a highly favourable and noteworthy effect on Batelco Company in the Kingdom of Bahrain, gaining a competitive edge. The major gap of this study is that it is limited to just a company, creating a gap to be filled by this current research.

Ahmed, Hossain, Sadiq & Uddin (2020) conducted a study titled "E-Commerce Integration and SMEs Growth in Developing Economies: A Case Study of Bangladesh." This study focused on exploring the impact of e-commerce integration on the growth of SMEs in the context of a developing economy. The researchers aimed to understand SMEs' challenges and opportunities when adopting e-commerce platforms and how these factors influence their growth trajectories. Employing a qualitative research design, the study conducted in-depth interviews with SME owners in Bangladesh. The findings revealed that while e-commerce integration offered new avenues for market expansion and customer engagement, SMEs encountered barriers related to technological infrastructure, online security, and customer trust.

The purpose of (Njoku & Cyril, 2019)’s study was to determine the effect of e-marketing adoption on the marketing success of small businesses in Abia State, Nigeria. A large number of primary and secondary data sources were used, and a sample size of 369 was determined using the proportion method. The study's stated hypotheses were tested using simple regression in SPSS version 20 at the 0.05 level of significance. The results showed that e-marketing significantly impacts the marketing performance and effectiveness of SMEs in Aba, particularly in profitability, market share, customer satisfaction, sales turnover, return on investment, decreased sales cost, and increased brand equity.

Underpinning Theory

The Resource-Based View (RBV) is a prominent theoretical framework in strategic management that emphasises the strategic significance of a firm's unique resources and capabilities in gaining a sustained competitive advantage (Barney, 1991). According to RBV, a firm's competitive advantage stems from possessing valuable, rare, inimitable, and non-substitutable resources, often referred to as VRIN resources (Peteraf,1993). These resources enable the firm to create value for customers, differentiate itself from competitors, and achieve superior market performance (Amit & Schoemaker, 1993). Valuable resources allow the firm to create value for customers or improve its efficiency. For example, a firm with a patent on a new technology may have a valuable resource that allows it to charge a premium price for its products or services. Rare resources are those that are not possessed by many other firms (Wernerfelt, 1984). For example, a firm with a unique location may have a rare resource that gives it an advantage over its competitors. Therefore, this is hinged on the assumption contained in the Resource-Based View (RBV) theory.

Materails and Methods

The study employed a cross-sectional survey design to examine the impact of electronic marketing on the performance of SMEs in Kano State. This design allows for collecting data from a wide sample of SMEs at a single point in time, offering insights into how electronic marketing influences SME performance and the extent to which entrepreneurial mindset enhances this relationship. The population for this study consists of registered SMEs in Kano State. According to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN, 2021), there are 42,969 registered SMEs across various sectors, including retail, manufacturing, services, and agriculture. SMEs play a significant role in Kano's economy, and e-marketing has been widely adopted to enhance their market reach and operational effectiveness. The sample size was determined using Cochran’s formula, suitable for large populations, to ensure a representative and statistically robust sample:

$$n_0 = \frac{(Z)^2 \times p \times (1-p)}{(\mathrm{e})^2} = 384$$

Where: n_0 = Initial sample size
Z = Z-value for a 95% confidence level (1.96)
p = Estimated proportion of women-owned MSMEs in the population (0.5, to maximise sample size)
e = Desired margin of error (0.05)
Substituting these values:

$$n_0 = \frac{(1.96)^2 \times 0.5 \times (1-0.5)}{(0.05)^2} = 384$$

To account for potential non-responses or incomplete data, the sample size was increased by 20%, resulting in a final sample size of:

$$n = \frac{384}{1 - 0.20} = 480$$

Thus, the study's final sample size is 480 respondents, which provides sufficient statistical power and ensures robust findings.

Thus, the final sample size for the study was 480 SMEs, ensuring comprehensive coverage and robust findings. A simple random sampling technique selected SMEs from the target population. This approach provided each SME an equal chance of selection, thereby reducing bias and enhancing the generalizability of the findings. Simple random sampling was deemed suitable as it allows for a straightforward and effective method to represent the broader population of SMEs in Kano State. Data was collected using a structured questionnaire, which included sections on electronic marketing and SME performance. A five-point Likert scale (1 = strongly disagree, 5 = strongly agree) was utilized to measure respondents' perceptions of these variables, ensuring consistency and reliability in responses. The variables were measured using established scales adapted or adopted from prior studies, as detailed below: E e-mailing online advertising.

E-mailing: Measured by items adapted from Frost & Strauss (2016) and Hanani et al. (2020), capturing aspects of Emailing.

Online Advertising: Adapted from McGrath & MacMillan (2000) and Rauch & Frese (2020), this section evaluates online advertising.

SME Performance (Dependent Variable): Performance was measured using items adapted from Borman and Motowidlo (2000) and Sirilli (2004), which included indicators such as revenue growth, customer acquisition, market share, and operational efficiency.

The questionnaire was pilot-tested with a small group of SME owners to ensure clarity, reliability, and validity, resulting in minor adjustments to improve clarity and relevance.

Validation and Reliability

Content Validity: Ensured through expert review to confirm comprehensive coverage of e-marketing, Online Advertising, and SME performance dimensions.

Construct Validity: Established through factor analysis, showing substantial explained variance for e-marketing (75%), Online Advertising (70%), and SME performance (73%).

Reliability: Cronbach's alpha values, which exceeded 0.80 for each construct, indicated high internal consistency, demonstrating strong reliability in measuring the variables.

Data Analysis

Data analysis involved descriptive statistics, correlation and inferential statistics to test the research hypotheses. Multiple regression analysis was used to examine the impact of electronic marketing on SME performance. The regression model is specified as below.

$SMEPerf = \beta_0 + \beta_1 Em + \beta_2 OA + \epsilon$

Where:

Em = E mailing

OA = Online Advertising

SMEPerf = SME Performance
$\beta0$, $\beta1$, $\beta2$ = Coefficients
ϵ = Error term
This model allowed for testing both the direct effects of e-marketing on performance.

Hypotheses Testing

The study tested the following hypotheses:

$H0_1$: There is no significant relationship between e-mail marketing and SME performance in Kano.

$H0_2$: There is no significant relationship between online advertising and SME performance in Kano.

Results and Discusion

Table 1 Descriptive Statistics

	N	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
SMEPerf	437	3.6934	1.13424	1.286	-.855	.117	.016	.233
Em	437	3.5858	1.10880	1.229	-.649	.117	-.236	.233
OA	437	3.3776	1.16002	1.346	-.347	.117	-.661	.233
Valid N (listwise)	437							

SOURCE: SPSS OUTPUT, 2024

The descriptive statistics in Table 1 provide a concise overview of the variables studied: SME performance (SMEPerf), e-mail marketing (Em), and online advertising (OA), based on data from 437 SMEs. The mean scores for SME performance (3.69), e-mail marketing (3.59), and online advertising (3.38) indicate that these variables are moderately rated by respondents on a five-point scale. This suggests that SMEs in Kano State generally view their performance, e-mail marketing, and online advertising efforts positively, though there remains room for improvement. The standard deviations, which range from 1.108 to 1.160, indicate moderate variability around the mean, suggesting differences in how SMEs rate their engagement with these e-marketing strategies.

The variance for each variable 1.286 for SME performance, 1.229 for e-mail marketing, and 1.346 for online advertising corroborates the moderate variability noted in the standard deviation values, signifying a reasonable spread of responses among SMEs in Kano.
The skewness values for SME performance (-0.855) and e-mail marketing (-0.649) indicate slight negative skewness, suggesting a tendency toward higher ratings for these variables. This slight skew suggests that many SMEs rate their performance and e-mail marketing use above the midpoint, indicating general satisfaction. Online advertising shows minimal skew (-0.347), suggesting a more balanced distribution. Kurtosis values are close to zero for each variable, indicating relatively flat distributions with responses spread around the mean rather than clustering heavily.

The data suggest a generally positive perception of SME performance, with moderate engagement in e-mail marketing and online advertising. The spread and distribution patterns highlight some variation in e-marketing practices and performance across SMEs, which may reflect differences in adoption levels, resource allocation, or strategic focus within Kano's SME sector.

Table 2 Correlations

		SMEPerf	Em	OA
SMEPerf	Pearson Correlation	1	.517**	.275**
	Sig. (2-tailed)		.000	.000
	N	437	437	437
Em	Pearson Correlation	.517**	1	.532**
	Sig. (2-tailed)	.000		.000
	N	437	437	437
OA	Pearson Correlation	.275**	.532**	1
	Sig. (2-tailed)	.000	.000	
	N	437	437	437

**. Correlation is significant at the 0.01 level (2-tailed).

SOURCE: SPSS OUTPUT, 2024

Table 2 presents the correlation coefficients among SME performance (SMEPerf), e-mail marketing (Em), online advertising (OA), and providing insights into the relationships between these variables. The correlations reveal statistically significant associations, which shed light on how different e-marketing strategies may contribute to SME performance.
First, there is a moderate positive correlation between SME performance and e-mail marketing (r=0.517,p<0.01r = 0.517, p < 0.01r=0.517,p<0.01), indicating that higher levels of e-mail marketing usage are associated with improved SME performance. This relationship suggests that e-mail marketing plays a valuable role in enhancing business outcomes, possibly due to its effectiveness in reaching customers directly and fostering engagement. For SMEs in Kano State, this finding underscores e-mail marketing as a potentially impactful strategy for driving business success.

Secondly, SME performance and online advertising also exhibit a positive correlation, though it is weaker (r=0.275,p<0.01r = 0.275, p < 0.01r=0.275,p<0.01). While online advertising is positively associated with SME performance, the relationship is less pronounced compared to e-mail marketing. This may suggest that online advertising, while beneficial, may not contribute as significantly to performance as direct e-mail marketing, perhaps due to varying levels of engagement or investment in advertising. Nonetheless, its positive association indicates that online advertising still holds relevance as a complementary marketing approach.

Lastly, there is a moderate correlation between e-mail marketing and online advertising (r=0.532,p<0.01r = 0.532, p < 0.01r=0.532,p<0.01), suggesting that SMEs utilising one e-marketing strategy are likely to adopt the other as well. This synergy implies that SMEs often incorporate both strategies to enhance their marketing reach, potentially yielding a more integrated and effective approach to customer engagement. The positive correlation between these two marketing strategies points to a combined effect that may amplify the benefits of each when used together. The findings highlight the importance of e-mail marketing in supporting SME performance, with online advertising playing a supplementary role. The moderate association between e-mail marketing and online advertising also suggests that integrated e-marketing strategies could be particularly effective for SMEs in Kano State, providing a balanced approach to improving performance outcomes.

Table 3 Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.850[a]	.722	.721	.77841	.722	564.398	2	434	.000	1.557

a. Predictors: (Constant), OA, Em

b. Dependent Variable: SMEPerf

SOURCE: SPSS OUTPUT, 2024

Table 3 presents the model summary for the regression analysis assessing the impact of e-mail marketing (Em) and online advertising (OA) on SME performance (SMEPerf). The summary includes essential metrics such as RRR, R2R^2R2, adjusted R2R^2R2, and the Durbin-Watson statistic, which together provide insight into the model's effectiveness and reliability.

The RRR value of 0.850 indicates a strong positive correlation between the predictors (e-mail marketing and online advertising) and SME performance. This suggests a high degree of association, meaning that changes in these e-marketing strategies are closely related to changes in SME performance. The R2R^2R2 value of 0.722 shows that 72.2% of the variance in SME performance is explained by the model, specifically through the combined influence of e-mail marketing and online advertising. This high percentage suggests that these two e-marketing strategies are significant contributors to SME performance, underscoring their importance for SMEs in Kano State.

The adjusted R2R^2R2 of 0.721, which accounts for sample size, is nearly identical to R2R^2R2, confirming that the model’s explanatory power is stable and not inflated by sample-specific factors. This indicates that around 72.1% of the variation in SME performance can reliably be attributed to the predictors, supporting the robustness of the model. The standard error of the estimate (0.77841) reflects the average distance of the observed values from the predicted values. This value suggests reasonable precision in the model’s predictions, indicating that SME performance is effectively estimated by e-mail marketing and online advertising.

The F Change statistic (564.398) and its significance level (p<0.001p < 0.001p<0.001) validate the overall model as statistically significant, meaning that the predictors have a meaningful impact on SME performance. This strong F statistic supports the conclusion that the predictors contribute substantially to explaining the variation in SME performance. The Durbin-Watson statistic of 1.557 is close to the ideal range (1.5 to 2.5), suggesting that there is minimal autocorrelation among residuals. This indicates that the observations are largely independent, which strengthens the reliability of the model. The model effectively explains a substantial portion of the variance in SME performance, with e-mail marketing and online advertising demonstrating significant predictive power. These findings highlight the critical role of e-marketing strategies in driving business outcomes for SMEs in Kano State.

Table 4 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	683.970	2	341.985	564.398	.000[b]
	Residual	262.973	434	.606		
	Total	946.943	436			

a. Dependent Variable: SMEPerf
b. Predictors: (Constant), OA, Em
SOURCE: SPSS OUTPUT, 2024

Table 4 presents the ANOVA results for the regression model evaluating the impact of e-mail marketing (Em) and online advertising (OA) on SME performance (SMEPerf). The analysis of variance (ANOVA) assesses the overall fit of the regression model, indicating whether the predictors together significantly contribute to explaining the variation in SME performance. The regression sum of squares (683.970) represents the variation in SME performance that is explained by the predictors, e-mail marketing and online advertising. The residual sum of squares (262.973) captures the variation in SME performance not explained by the model, indicating the error term or unexplained variance.

With 2 degrees of freedom (df) for regression (one for each predictor), the mean square for the regression is calculated as 341.985, derived by dividing the regression sum of squares by the degrees of freedom. Similarly, the mean square for the residuals is 0.606, found by dividing the residual sum of squares by the residual degrees of freedom (434), which accounts for the sample size minus the number of predictors. The F-statistic of 564.398 indicates the ratio of the explained variance to the unexplained variance, showing the overall strength of the relationship between the predictors and SME performance. This high F value, combined with a significance level (Sig.) of 0.000, demonstrates that the model is statistically significant at the $p < 0.001$ level. This result confirms that e-mail marketing and online advertising together have a significant impact on SME performance. The ANOVA results strongly support the model's validity, confirming that e-mail marketing and online advertising significantly contribute to explaining the variation in SME performance among SMEs in Kano State. This further highlights the importance of these e-marketing strategies in influencing business outcomes.

Table 5 Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.160	.076		2.095	.037
	Em	.193	.049	.199	3.947	.000
	OA	.650	.049	.672	13.326	.000

a. Dependent Variable: SMEPerf
SOURCE: SPSS OUTPUT, 2024

Table 5 presents the regression coefficients for the model examining the impact of e-mail marketing (Em) and online advertising (OA) on SME performance (SMEPerf). The coefficients indicate the strength and significance of each predictor's effect on SME performance, allowing for a detailed interpretation of their contributions to the dependent variable. The constant (B = 0.160) represents the baseline level of SME performance when both e-mail marketing and online advertising are at zero. With a ttt-value of 2.095 and a significance level of p=0.037p = 0.037p=0.037, the constant is statistically significant, suggesting that, even in the absence of e-marketing strategies, there is a minimal baseline level of performance.

The coefficient for e-mail marketing (Em) is 0.193 (unstandardized), with a standard error of 0.049. This positive coefficient indicates that, for each one-unit increase in e-mail marketing, SME performance increases by 0.193 units. The standardized coefficient (Beta = 0.199) shows the relative strength of e-mail marketing's impact on SME performance, controlling for other variables. The ttt-value of 3.947 and a highly significant ppp-value of 0.000 confirm that e-mail marketing has a statistically significant positive effect on SME performance.

The coefficient for online advertising (OA) is 0.650, with a standard error of 0.049, indicating that a one-unit increase in online advertising leads to a 0.650 increase in SME performance. The standardized coefficient (Beta = 0.672) shows that online advertising has a stronger effect on SME performance compared to e-mail marketing. The very high ttt-value of 13.326 and a significance level of p=0.000p = 0.000p=0.000 demonstrate that this effect is both large and statistically significant.

Both e-mail marketing and online advertising significantly positively influence SME performance, with online advertising having a substantially stronger effect (Beta = 0.672) than e-mail marketing (Beta = 0.199). These findings suggest that while both e-marketing strategies contribute to SME performance, investment in online advertising may yield a more pronounced impact for SMEs in Kano State.

Test of Hypotheses

Based on the coefficients in Table 5, we can assess and interpret the results of the hypothesis testing for the impact of e-mail marketing (Em) and online advertising (OA) on SME performance (SMEPerf), including the implications of these findings.

For Hypothesis $H0_1$, which posits that there is no significant relationship between e-mail marketing and SME performance, the results show a coefficient for e-mail marketing of 0.193. This indicates that for every one-unit increase in e-mail marketing, SME performance is expected to increase by 0.193 units. With a ttt-value of 3.947 and a significance level of p=0.000p = 0.000p=0.000, this effect is statistically significant, allowing us to reject the null hypothesis ($H0_1$). The positive relationship between e-mail marketing and SME performance implies that e-mail marketing is an effective strategy for improving business outcomes for SMEs in Kano State. As SMEs increase their use of e-mail marketing tactics—such as targeted campaigns, promotional newsletters, or personalised customer engagement—they can expect a corresponding improvement in their overall performance. This finding highlights the importance of integrating e-mail marketing into SMEs' operational strategies to build stronger customer relationships and potentially enhance revenue.

For Hypothesis $H0_2$, which suggests that there is no significant relationship between online advertising and SME performance, the results show a coefficient for online advertising of 0.650. This means that for each one-unit increase in online advertising efforts, SME performance is predicted to increase by 0.650 units. The ttt-value for this relationship is 13.326, with a highly significant ppp-value of 0.000, leading us to reject the null hypothesis ($H0_2$). This finding indicates that online advertising has a particularly strong impact on SME performance, more so than e-mail marketing. The larger coefficient suggests that SMEs could achieve greater performance gains by focusing on expanding their online advertising efforts. For example, increasing online visibility through paid search ads, social media advertising, and display ads could significantly enhance customer reach and engagement, ultimately boosting sales and market share. The results imply that investing in online advertising is likely to yield substantial performance improvements, making it a valuable component of SMEs' marketing strategies.

In terms of implications, these findings underscore the critical role that both e-mail marketing and online advertising play in enhancing SME performance, but with online advertising showing a more pronounced effect. For SMEs in Kano State, an increase in resources devoted to e-marketing strategies, particularly online advertising, could lead to measurable gains in business performance metrics such as customer acquisition, revenue, and brand awareness. However, while online advertising appears to be more impactful, the positive effect of e-mail marketing suggests that a balanced, multi-channel e-marketing approach may provide the most comprehensive benefits. This approach can enable SMEs to reach customers across different touchpoints, strengthening brand loyalty and ensuring consistent engagement.

Overall, these results provide actionable insights for SMEs looking to improve performance through digital marketing. By strategically increasing investments in both e-mail marketing and online advertising, SMEs can position themselves for growth and competitive advantage within the evolving digital marketplace in Kano State.

Discussion of the Findings

The results of this study reveal that both e-mail marketing (Em) and online advertising (OA) significantly impact SME performance (SMEPerf) in Kano State, with online advertising showing a stronger effect. This finding aligns with several empirical studies that have documented the positive influence of e-marketing on business outcomes.

Khalid (2023) demonstrated that e-marketing techniques significantly impacted small business performance in Amman, Jordan, highlighting how e-marketing strategies enhance firm performance through improved customer engagement and market reach. This aligns closely with our study’s findings, as both e-mail marketing and online advertising contributed significantly to SME performance in Kano State. However, Khalid’s study focused on Jordan and did not cover the unique market dynamics of Nigeria, highlighting a gap that this study helps address by focusing specifically on SMEs in Kano. The consistent positive impact across these contexts underscores the generalisable benefits of e-marketing strategies for SMEs, reinforcing the strategic value of these tools in diverse geographical regions.

Ruba (2022) found that e-marketing played a critical role in enabling Batelco Company in Bahrain to achieve a competitive advantage. The significant effect of online advertising in our study similarly suggests that SMEs in Kano State can leverage this channel to enhance competitive positioning. While Ruba’s study was limited to a single company, our research extends these insights to a broader population of SMEs, underscoring that online advertising is an effective strategy not just for larger companies but also for smaller enterprises. This supports the argument that e-marketing strategies, particularly online advertising, can drive substantial gains in competitive advantage by improving brand visibility and customer reach.

The findings also align with Njoku and Cyril (2019), who reported that e-marketing positively impacts SMEs' marketing performance in Nigeria, specifically in areas such as customer satisfaction, market share, and profitability. Similar to their study, our results show that both e-mail marketing and online advertising significantly enhance SME performance in Kano State. The moderate-to-strong effect of these e-marketing strategies aligns with Njoku and Cyril's results, affirming that e-marketing adoption can drive meaningful improvements in business metrics such as sales turnover and brand equity for Nigerian SMEs. This further supports the value of e-marketing in the local context, validating its effectiveness in addressing key business performance metrics for SMEs.

From a theoretical perspective, these findings strongly align with the Resource-Based View (RBV), which emphasizes the strategic importance of unique resources and capabilities in achieving competitive advantage. E-mail marketing and online advertising can be considered valuable, rare, and inimitable resources within Kano's SME sector, as they allow firms to engage customers directly and expand market presence without extensive physical investments. As noted by Barney (1991) and Wernerfelt (1984), these capabilities can enable SMEs to differentiate themselves and enhance performance. The significant effects observed in this study suggest that SMEs in Kano who effectively utilize these digital resources can create customer value, reduce marketing costs, and achieve performance outcomes that differentiate them from competitors. By adopting e-marketing strategies, SMEs are tapping into capabilities that fit the VRIN criteria, validating the RBV framework's relevance to SME marketing strategies in the digital era.

This study supports the empirical evidence and theoretical foundations on the benefits of e-marketing for SMEs. The significant impact of e-mail marketing and online advertising on SME performance in Kano State affirms that these digital resources are essential drivers of competitive advantage and business growth in the Nigerian context. As SMEs continue to operate in increasingly digital and competitive environments, e-marketing stands out as a strategic approach for achieving sustained performance improvements.

Conclusion and Recommendations

This study examined the impact of e-mail marketing and online advertising on the performance of SMEs in Kano State, with the objective of understanding how these e-marketing strategies contribute to business success in this regional context. The findings demonstrate that both e-mail marketing and online advertising significantly enhance SME performance, with online advertising showing a particularly strong effect. These results underscore the importance of adopting e-marketing strategies for SMEs, as they provide effective tools for expanding customer reach, boosting brand visibility, and driving key performance metrics such as sales and profitability.

The study's alignment with previous research and the Resource-Based View (RBV) theory further highlights e-marketing as a valuable, strategic resource for SMEs. E-mail marketing and online advertising serve as competitive assets, allowing SMEs to leverage digital channels for sustained growth and differentiation in the market. These results affirm the potential of e-marketing strategies to meet business objectives, improve performance outcomes, and strengthen SMEs' competitive positioning in Kano State.

It is recommended that SMEs in Kano State adopt an integrated e-marketing strategy prioritising online advertising for its stronger impact, while also utilising e-mail marketing to maximise customer engagement and overall business performance.

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EFFECT OF STRATEGIC SUPPLIERS PARTNERSHIP ON FIRMS PERFORMANCE IN DAIRY PROCESSING FIRMS IN KADUNA: THE ROLE OF DEMAND UNCERTAINTY

[1]Williams Baba Elisha [2]Prof. Kabiru Jinjiri Ringim & [3]Charity Sunday

[1,2] Department of Business Administration, ABU Business School, Nigeria
[3]Federal School of Statistics, Manchok, Kaduna state
[1]elishawilliamsbaba@gmail.com

Abstract

In the current globalized and competitive business environment, companies need to consistently improve their operational processes to maintain performance and drive growth. The thrust of this study was to examine the effect of strategic suppliers' partnership on firms' performance: the role of demand uncertainties in the dairy processing firms in Kaduna and Zaria. The research design used was the survey research where self-administered questionnaires were distributed to 201 respondents who constitute the population at the same time the sample size. Smart PLS 4 was used to test the hypotheses. The findings revealed that, there is a strong positive relationship between strategic suppliers' partnership on firm performance, given (H01: $\beta = 0.536$, $t = 11.653$, $p < 0.001$). Also, the interaction effect of demand uncertainty on the relationship between strategic suppliers' partnership and firm performance is both negative and significant ($\beta = -0.198$, $t = 2.911$, $p < 0.005$). This study investigates the effect of demand uncertainty on the relationship between strategic supplier partnerships and firm performance, specifically in dairy processing firms located in Kaduna and Zaria. The research highlights how demand uncertainty can moderate this relationship, potentially altering the effectiveness of supplier partnerships in enhancing firm performance. The study recommends that, management of the dairy firms should sustain a harmonious strategic relationship with their suppliers to be on top of the game. Similarly, the negative interaction implies that higher levels of demand uncertainty weaken the positive effect of strategic suppliers' partnership on firm performance. This suggests that, management should manage supply chain relationships, especially in uncertain market conditions, to maintain optimal firm performance.

Keywords: Firms, Performance, Strategic, Suppliers Partnership, Demand Uncertainty

Introduction

The growing globalisation and stiff competition in the business environment have compelled firms to intensify and improve their operational activities and processes. These unprecedented and difficult conditions confronting the business world have had its impact on the firm's performance. Consequently, most firms are seeking to improve their performance in any way possible (Konelius, et al., 2021). Firm performance is a critical concept in strategic management, reflecting a company's growth and success; it has consistently attracted the attention of management teams and researchers alike, such that Economists often regard firm performance as a key driver of economic, social, and political progress, particularly emphasizing its significance in the development of emerging economies. The achievements of firms are seen as instrumental in fostering growth within these nations (Kegode, 2021 & Monday, et al., 2015)

The way Firms achieve their goals is crucial. Firm performance entails how well a company meets its financial objectives, such as profitability, returns on investment, and market-focused goals like increasing market share, efficiency, and effectiveness. The activities of firms significantly impact the economies of both developed and developing nations, contributing substantially to the Gross Domestic Product (GDP).The Kenya experience has shown that, their manufacturing sector significantly contributes to the Gross Domestic Product (GDP) (Watiri & Kihara, 2017). The food and beverage sub-sector is the largest within the manufacturing sector, contributing up 22% according to the Kenya Association of Manufacturers (KAM, 2017). Similarly, in Nigeria, manufacturing sector contributed 15.70% to the total GDP in Q1 2023 (NBS, 2023). Similarly, this subsector accounts for nearly 10% of the annual GDP. Manufacturing operations provide about 12% of the labour force in the formal sector of Nigeria's economy and serve as significant indicators of the country's economic performance (Ikegbunam & Onouha, 2023).

Despite their economic contributions, firms continue to face numerous challenges that threaten their survival. Some companies manage to withstand the harsh conditions such as inflation, poor electricity supply, fluctuating exchange rates, intense competition, and inadequate infrastructure, while others do not (Gumel, 2019). The unfavourable business environment has nonetheless resulted in the underperformance or failure of many businesses (Obim & Atsaye, 2020; SMEDAN/NBS, 2017). To corroborate this, the sector's growth slowed in 2020, with a real gross value added decrease of 0.1%, a significant drop from the 2.5% growth in 2019.

Also, the decline in the Kenya economy was mainly due to decreases in the manufacture of beverages, dairy products, and bakery products by 16.7%, 5.7%, and 3.5%, respectively (KNBS, 2021). This growth falls short of the medium-term targets of increasing GDP, employment, and exports by 10%, 13%, and 12.5%, respectively, between 2013 and 2021 (Watiri & Kihara, 2017). Similarly, in Nigeria, in Q2 of 2020, the sector experienced negative growth rate of -8.8%. recovery growth rate indicates that, in 2021 growth rate was 3.4%, in 2022, it dropped to 2.5% and by 2023, it further dropped to 2.2%. It contribution to GDP has also fallen below the global standard to an average of 10% for two decades. The country lags behind with only 6.4% contribution to total export in comparison to Malaysia, Singapore, Japan and China with their contribution of 70.3%, 76.5%, 85.6% and 93.5% respectively.

To ensure profitability, growth, and stability, companies can significantly benefit from effective supply chain management, which acknowledges that a strong supply chain is essential for remaining competitive in both local and global markets. This can be achieved by adopting and implementing SCM practices, such strategic suppliers partnership with customers and suppliers (Basnet et al., 2003; Chand, 2021; Langdon et al., 2021).

Innovation and capability development are vital in a volatile environment. Businesses are compelled to innovate due to competitive pressure and a turbulent business landscape that challenges their performance (Rasib et al., 2021). Therefore, firms must collaborate to develop resilience and remain relevant in the market. Organizations cannot survive in isolation; despite having ample resources, they must make conscious efforts to navigate harsh environments. This entails promotion of strong relationships with other organizations for mutual benefit (Saragih et al., 2020).

Given that firms' performance is often hindered by stiff competition, changing customer preferences, and uncertainties, organizations must collaborate and pool their capabilities and resources to create and sustain a competitive advantage (Gupta, Tan, & Phang, 2018). Many organizations have focused more on their supply chains, realizing that they cannot survive in a competitive market without effective relationships with customers, suppliers, and other entities in the supply chain network (Malik et al., 2023). This highlights the importance of firms integrating their operations with those of their key upstream partners (suppliers) and distributors within the supply chain network to reposition themselves and establish a strong foothold in any turbulent business environment.

A strategic supplier partnership requires an effective connection between suppliers and the organization. These entities must be capable of forming long-term linkages while maintaining a productive relationship with service or parts providers, adding value to all the parties involved (Nag & Ferdausy, 2021). A strategic relationship with suppliers is characterized by a strong, long-term connection between the organization and its suppliers. SSP promotes mutual goal achievement by encouraging shared efforts to solve problems and long-term coordination between parties. Such strategic relationships foster mutual benefits, continual contributions in key strategic areas like market development, technology advancement, and product development (Ali et al., 2017; Amoako-Gyampah et al., 2019). Organizations that embrace the strategic alliance concept can work collaboratively, reducing inefficiencies and wasted time (Li et al., 2006). Thus, the discussion above demonstrates that developing a strategic partnership with suppliers can enhance firm's performance.

Moreover, effective partnerships with suppliers allow large companies to be more responsive and achieve superior operational results. Abdul-Raseeb, Sundram, & Noranee (2021), averred that supply chain innovation becomes the new pre-requisite for the survival of firms in developing capabilities and strategies for sustaining their operations and performance in the market. Therefore, the collaboration between a company and its suppliers is essential for maintaining a responsive supply chain (Letsoin et al., 2023).

Demand uncertainty remains a strong contingency factor which greatly influences the performance of firms (Duncan 1972; Flynn et al., 2016). Demand uncertainty shows the degree with which customers' needs and demands cannot be predicted per time (Chang et al., 2002). It refers to the extent to which the needs of customers change over time (Chang et al., 2002). Firms often times struggles with issues of performance, this is as a result of the fact that customers' demand or test cannot be predicted with certainty. Demand uncertainty (DU) is a form of macro-level uncertainty that greatly influences a company's performance (Flynn et al., 2016). It is one of the external challenges that organizations encounter within the supply chain (O'Leary-Kelly & Flores, 2002).

Findings related to the studies between strategic suppliers' partnership and firms performance are found to have positive and significant relationships (Ekezie and John,2024; Jepchirchir, 2022; Gladson-Nwokah, et al., 2024; Malik et al, 2023; Marie, 2019). However, some studies of (Letsoin, 2023; Quynh & Huy, 2018) found inconsistent result. Thus, inconsistent findings necessitate the introduction of a third variable to moderate the relationship, thus the introduction of demand uncertainty, to moderate the relationship between the variables in line with Baron and Kenny (1986), he asserts that moderating variables are introduced when there is unexpectedly weak or inconsistent relationship between the independent variable and the dependent variable. So, the choice of demand uncertainty as a moderator was to see if the demand uncertainty can dampen or strengthen the relationship between IV and DV. Furthermore, this study uses Resource base theory RBV as an underpinning theory and Contingency theory to support it.

This study seeks to achieve two objectives. Firstly, to determine the significant effect of SSP on FP and secondly, to determine whether DU moderates the relationship between SSP and FP.

This study formulated a null hypothesis as seen below;
H01: Strategic suppliers' partnership does not have significant effect on performance of dairy firms in Kaduna.

H02: Demand Uncertainty does not moderate the relationship between SSP and FP of dairy firms in Kaduna.

Literature Review

Firms Performance

According to Zhou (2021), firm performance refers to the extent to which an enterprise achieves its market, operation, growth and financial objectives within a period of time under a certain internal and external environment. A complete performance management system formulates the objectives of each function, team and employee in line with the company's strategic objectives, and combines them with the external market conditions of the industry. Firm performance management is related to the financial supervision and operation management of enterprises, and leads the high- quality development of enterprises.

Firm performance refers to the attainment of market and financial objectives (Ehiedu & Toria, 2022).Worth mentioning, the continuous improvement of financial metrics including post-tax profit, returns on equity, returns on assets, net income margin, and return on investment is the firms measures of success. Firm performance is a comprehensive measure of a business's ability to effectively utilize both human and material resources to achieve its objectives (Nguyen et al., 2021). This concept encompasses various metrics, reflecting both financial and non-financial elements. By understanding and employing these metrics, firms can gain a holistic view of their performance and make more informed strategic decisions.

A number of factors affect firms performance, these include; asset operation level, solvency and follow-up development ability, however, the level of firm performance is a reflection of the firms' profitability. Various financial metrics can be employed to assess a company's performance, incorporating both subjective and objective measures. Among the objective financial indicators are revenue, return on equity, return on assets, profit margin, sales growth, capital adequacy, liquidity ratio, and stock prices (Zhou, 2021). Subjective measures may include employee commitment and satisfaction, customer satisfaction and loyalty and minimal customer complaints help create sustainable shareholders value (Cumby & Conrod, 2001). Firm performance assessment is not only based on capabilities and outcomes but also from a competitive market perspective. Performance metrics include a variety of financial indicators such as returns on assets, returns on investment, net profit, growth in net profit, sales figures, gross margin, quality performance, productivity ratios, inventory levels, market performance, and financial liquidity. In addition, non-financial measures include the present value of the firm, market share, and innovation performance (Vanessa et al., 2021).

Strategic Suppliers' Partnership

It is essential for companies to seek a competitive advantage by efficiently managing their relationships with suppliers and overseeing their purchasing activities (Ik & Azeez, 2020; Bezecný, et al., 2019). According to Li et al., (2006), Strategic Suppliers' Partnership is a long term and mutual relationship that exists between organizations and their suppliers for the betterment of all. Similarly, the practice of strategic suppliers' partnership in the long-term allows organization to have strong integration and collaboration to achieve sustainable performance (Pramatari & Katerina, 2007). Furthermore, Fauziah et al (2019) opines that Strategic Suppliers' Partnership (SSP) is a pact binding suppliers and buyers to join forces in the production and demand of the products that will eventually boost operations and SC performance. It is worth noting that, Strategic Suppliers' partnership (SSP) allows organizations to function more efficiently with suppliers who are ready to accept responsibility for product success, they share resources and capabilities in an innovative manner.

Partnership as an on-going collaborative relationship between two legally separate organizations, based upon a commitment to the equal sharing of the costs, risks and rewards derived from working together (Qunyh 2018). So, this brings about efficient connection stage between the suppliers and the organization. Strategic partnerships with suppliers increase the efficiency or productivity since they are willing to share the success of the products. A strategic partnership emphasizes direct, long-term association and encourages mutual planning and problem solving effort; it enables companies to work more effectively with a few important suppliers who are willing to share responsibility for thesuccess of the product. An effective suppliers' partnership can be a critical component of a leading edge supply chain management practice (Nkowah, 2024).

Demand Uncertainty

Demand or customer uncertainty refers to that time when the customer taste or desires have change and becomes unpredictable to the organisation (Li & Lin, 2006). Geary et al. (2002) posits that, Demand uncertainty is the gap between actual market demand and the anticipated customer orders within an organization. Similarly, DU refers to the difficulty level in predicting future demand characteristics of the firm's customers (Bernstein & Federgruen, 2005). Demand uncertainty is one of the important environmental factors that can moderate this relationship (Ganbold, 2017). This study goes in line with the above definitions that were almost similar in defining the concept of demand uncertainty, which is a situation where organisations are unable to say or predict with certainty what level of demand of the organisations' product by their customers. If a firm is able to predict the demand of their customers, then such a firm can be sure of absolute performance, but because that is not possible for the firms, it has been a big and challenging performance issues to it. Demand uncertainty shapes corporate decisions. Specifically, as demand uncertainty increases, firms increase their fixed input capacity to avoid substantial congestion at high-demand realizations, resulting in a more rigid short-run cost structure with higher fixed costs and lower variable costs (Xin etal.,`2023).

Empirical Review

Strategic Suppliers' Partnership and Firms' Performance

Strategic suppliers' partnership (SSP) plays a vital role in improving firm performance across several areas, including operational efficiency, competitive advantage and entrepreneurial success. Numerous studies demonstrate a strong positive relationship between SSPs and various performance metrics. Previous studies show that, SSP significantly enhances operational performance the study of (Jepchirchir, 2022) in the food and beverage sector revealed a strong correlation ($r = 0.702$, $p < 0.01$) between strategic suppliers' partnerships and operational outcomes, this shows that firms with strong supplier relationships achieve better efficiency and product quality, leading to lower production costs. Similarly, Gladson-Nwokah (2024) found that strategic partnerships improve focus on key operational areas, allowing firms to utilize shared resources effectively for better reliability and overall performance. Effective communication and collaborative decision-making between suppliers and firms are crucial for achieving these operational successes.

Additionally, SSPs are associated with gaining competitive advantages. Organizations that engage in these partnerships benefit from collaborative planning and problem-solving, which enhance innovation and responsiveness to market changes (Ekezie, 2024; Salami et al., 2024). These partnerships allow firms to share risks and rewards, creating a more adaptable operational environment that meets customer needs efficiently.

Letsoin, Santosa, & Triwulandari (2023), investigated how strategic partnerships with suppliers, customer relationships, postponement strategies, and supply chain responsiveness affect operational performance amid demand uncertainty, specifically within the largest food and beverage firms in Jakarta, Indonesia. The study aims to understand the moderating role of demand uncertainty on the connections between these elements and operational performance. Utilizing a quantitative methodology, data was gathered from 150 employees at the chosen companies through a questionnaire survey. Two hypotheses were formulated employing correlation and regression analyses, with Structural Equation Modelling (SEM) applied to explore the relationships among the variables. Validity and reliability assessments were performed to confirm the measurement tool's quality and the data's integrity. The results indicate that strategic suppliers' partnerships and customer relationships significantly enhance supply chain responsiveness, while postponement has a detrimental effect on this responsiveness. Moreover, supply chain responsiveness is shown to positively impact operational performance. Demand uncertainty positively moderates the relationship between strategic supplier partnerships and supply chain responsiveness, as well as between customer relationships and supply chain responsiveness; however, it negatively influences the relationship between postponement and supply chain responsiveness.

Quynh and Huy (2018) investigated the relationship between Supply Chain Management Practices (SCMPs), competitive advantage, and firms' performance in small and medium enterprises (SMEs) in Vietnam. The research focuses on four SCMP elements which include; strategic suppliers' partnership, customer relationship, level of information sharing, quality of information sharing, and how they impact competitive advantage and firm performance. The key findings showed that Customer relationship (CR) and quality of information sharing (IQ) significantly affect firms' performance. While Strategic suppliers' partnership (SSP) has an insignificant impact on firms' performance but significantly affects competitive advantage and Competitive advantage has a positive and strong influence on firms' performance.

However, the study finds that strategic suppliers' partnership has an insignificant effect on firms' performance. This result contradicts other studies that highlight suppliers' relationships as critical for SCM. A deeper exploration of this anomaly is needed, such as considering cultural or sector-specific factors. Expanding the research scope beyond Ho Chi Minh City to understand regional or cultural differences in SCM practices would make a difference. Also, investigating the causes behind the weak or insignificant impact of certain practices, like strategic suppliers' partnership, to uncover deeper insights into Vietnamese SMEs' supply chains. And exploring qualitative data to complement the quantitative findings and provide richer contextual insights into SMEs' SCM challenges.

Furthermore, Malik, Hassan, and Tufail, (2023), empirically investigated the Impact of Strategic Supplier Partnership in Supply Chain on Organizational Performance in the Fast-Moving Consumer Goods (FMCG) sector of Pakistan. A quantitative approach was employed, utilizing a structured online questionnaire to collect data from 232 respondents representing Karachi-based FMCG companies. Structural Equation Modelling (SEM) was used to test hypotheses. The findings indicate a significant positive relationship between SCMP and firm performance. Specifically, Strategic Suppliers' partnership (SSP) was found to have the greatest impact on firms' performance, followed by information sharing and customer relationship management. The study suggests that prioritizing SSP and information systems could lead to improved firms' performance. The study contributes to the literature by highlighting the importance of SCMP in enhancing firm performance, particularly in the FMCG sector.

Jepchirchir, Ndolo and Wanyoike, (2022) empirically examined Strategic Suppliers' Partnerships and Operational Performance of Food and Beverage Manufacturing Firms in Nakuru County, Kenya. This research is contextualized within Kenya's Vision 2030, which aims to boost economic growth through the manufacturing sector. The sector contributes 10% to the GDP, 13% to formal employment, and 12.5% to exports. Despite its importance, the sector faces challenges such as inadequate raw material supplies, high costs, and slow policy implementation.

The study uses relational exchange theory and employs an explanatory design with a cross-sectional approach. It targets 50 procurement staff members from 9 food and beverage manufacturing firms in Nakuru County, utilizing a census technique to involve all relevant firms. Data was collected via closed-ended questionnaires and analysed using descriptive and inferential methods. Key findings reveal a strong positive correlation ($r=0.702$) between strategic suppliers' partnerships and operational performance. The regression analysis indicates a significant beta coefficient ($\beta=0.459$; $p=0.000$), underscoring the substantial impact of strategic suppliers' partnerships on operational performance. The study recommends that firms focus on building and maintaining these partnerships to achieve cost reduction and efficiency improvements.

However, the relatively small sample size (50 procurement staff) limits the generalizability of the results to other regions or larger populations. The combination of descriptive and inferential statistics is appropriate and robust for this study. The strong positive correlation and significant regression results provide compelling evidence of the impact of strategic suppliers' partnerships on operational performance. The findings clearly indicate that strategic suppliers' partnerships significantly enhance operational performance, justifying the recommendation for firms to focus on these relationships. The study provides a broad recommendation but could expand on specific strategies for establishing and maintaining effective suppliers' partnerships. More practical guidance would enhance the applicability of the findings for industry practitioners.

Gladson, Jaja and Gladson, (2024) empirically studied Strategic Suppliers' Partnership and Competitive Advantage of Bakery Firms in Rivers State. The study investigated the impact of strategic suppliers' partnerships on the competitive advantage of bakery firms in Rivers State. Using a survey research design, data was collected through a cross-sectional survey from a sample of 139 registered bakery firms, selected using a convenience sampling technique.

Multiple regression analysis was used to analyse the data. The findings indicate that strategic suppliers' partnerships positively influence the competitive advantage of bakery firms. The study concludes that effective suppliers' partnerships enhance a firm's efforts to gain a competitive edge. It recommends that bakery firms in Rivers State should continuously employ strategic suppliers' partnerships to improve service delivery, decision-making, cost reduction, and real-time delivery of goods and services.

Demand Uncertainty as a Moderator

Customers today do not only seek greater variety, higher quality, and improved products but they also demand faster and more reliable delivery (Claycomb et al., 1999). However, this does not guarantee that customers can consistently provide their upstream suppliers with predictable demand. Products characterized by significant demand variability, irregular purchasing patterns, rapid innovation, and short life cycles tend to create greater demand uncertainty for upstream suppliers (Chang, et al., 2002). Often, customers may unexpectedly place orders that are double the usual size, which can inadvertently lead to poor delivery performance. This demand uncertainty frequently results in distorted demand information (Lee, et al., 1997). Consequently, fluctuations in demand increase the necessity for companies to adjust their supply plans, manufacturing strategies, and marketing/sales approaches (O'Leary-Kelly, 2002). In the same vain, Gachanja et al., (2022), asserts that any sudden change in customers demand sets in an unexpected behaviour or activities in the firm, thereby distorting the firms' plans or course of action. However, Information sharing and collaboration among different functions allow manufacturers to adjust their manufacturing and marketing/sales strategies, enhancing their ability to respond more effectively to fluctuations in demand or supply (Flynn, et al., 2010). This indicates that an integrated supply chain that emphasizes collaboration can sustain on-time delivery and quickly respond to customer orders, even in the face of significant demand uncertainty.

Conversely, when demand is stable, companies have a greater chance of meeting delivery requirements (Fisher, 1997). This is particularly true for supply chains functioning within a Just-In-Time (JIT) and continuous replenishment framework (Schonberger, 1986; Zipkin, 1991). Through the sharing of real-time information and collaborative efforts, firms within an integrated supply chain can improve the accuracy of their production planning and inventory management in environments with lower demand uncertainty. This suggests that companies, especially those operating in a JIT setting, will achieve better delivery performance when faced with low levels of demand uncertainty, as opposed to high levels. This means the impacts of internal, strategic suppliers' partnership and customer integration on delivery performance will be moderated by demand uncertainty:

Theoretical Framework

The Resource Based View (RBV) Theory underpins the study, the theory is an important framework in strategic management that highlights the crucial role of a firm's internal resources and capabilities as the main factors influencing its competitive advantage and overall performance.The RBV has evolved since its inception in the 1980s, with scholars expanding its applicability and integrating it with other strategic frameworks. For instance, the VRIO framework (Value, Rarity, Imitability, Organization) builds upon the original VRIN criteria by emphasizing the need for firms to be organized effectively to leverage their resources (Sabourin, 2020 & Utami, 2023).

The RBV suggests that companies have distinctive combinations of resources that can result in a lasting competitive advantage. These resources may be tangible or intangible and encompass assets, capabilities, organizational processes, and knowledge. Barney's foundational research in 1991 outlined four essential attributes that resources need to have in order to foster a competitive edge, commonly known as the VRIN framework. Where;

1. Value: Resources must enable a firm to exploit opportunities or neutralize threats in its environment.

2. Rarity: Resources should be unique or scarce relative to competitors.

3. Imperfectly Imitable: Resources cannot be easily replicated by competitors, often due to unique historical conditions, causal ambiguity, or social complexity.

4. Non-substitutable: There should be no equivalent resources that competitors can use to achieve the same benefits.

Similarly, the theory consists of the following assumptions below

1. Resource Heterogeneity: A core assumption of RBV is that firms differ in their resource endowments. This heterogeneity allows some firms to outperform others consistently (Sabourin, 2020 & Utami, 2023).

2. Dynamic Capabilities: The concept of dynamic capabilities has emerged within the RBV framework, highlighting the importance of a firm's ability to adapt and reconfigure its resources in response to changing market conditions (Nicholas, 2009). This adaptability is crucial for sustaining competitive advantage over time.

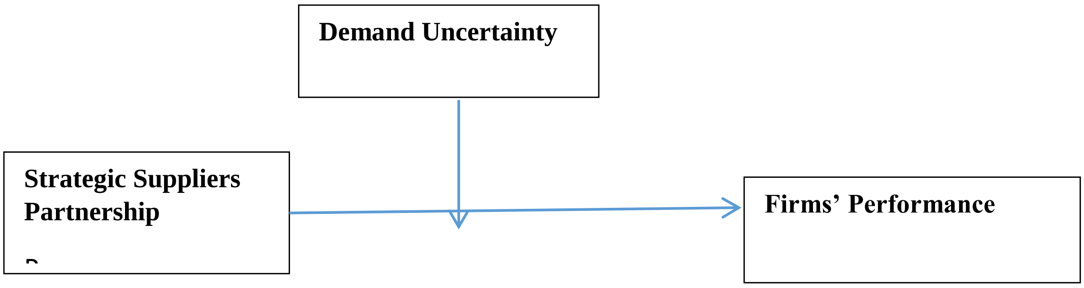
3. Strategic Resource Management: Effective management of resources involves not only possessing valuable assets but also developing new capabilities through learning and innovation (Sabourin, 2020). Firms must continuously assess their resource base and adapt their strategies accordingly.

4. Value Creation: The RBV emphasizes that value creation is not solely about having valuable resources but also about how these resources interact and are configured within the firm (Sabourin, 2020). Understanding these interactions can lead to better strategic decisions.

The Resource-Based View continues to be a crucial theory in strategic management, offering valuable insights into how firms can attain and maintain competitive advantages through efficient resource management. Its focus on internal capabilities and the arrangement of resources continues to shape both academic research and practical strategies in the business world.

Secondly, the study was supported by Contingency theory the theory is an organizational framework that posits there is no universally ideal method for managing or leading a company; rather, the most effective strategy relies on the unique internal and external circumstances. This theory highlights that the effectiveness of management is dependent on the interaction between management practices and situational factors.

Research Model



Materials and Method

This study utilised quantitative research design because the study have tested hypothesis formulated. The research design that was used is the survey research where self-administered questionnaires were distributed to 201 respondents (Standards Organisation of Nigeria, 2024) who constitute the population at the same time the sample size. Similarly, this study used SSP which was measured as one of the dimensions with six (6) items adapted from Li et al., 2004. The adapted items used five-point Likert scale, ranging from 1 denoting strongly disagreed to 5 which is strongly agreed. Similarly, demand uncertainty is measured by adapting the works of (Chen, 2004 & Qi et al., 2011). Six items were used in the work and five-point likert scale ranging from 1 which is strongly disagreed and 5 which is strongly agreed. In addition, the performance measures were adapted from the study conducted by (Spillan, 2006). These authors used 8 items to measure performance in the competitive market environment. In this study, the 8 items were adapted but using five-point likert scale ranging from 1 which is strongly disagreed and 5 which is strongly agreed. More importantly, the measures comprise both financial and non-financial performance indicators that could give the clear picture of actual performance.

Results and Discussion

Preliminary analysis using SPSS 27 was done on the data collected from 201 respondents. From the issued copies of questionnaire, 189 were duly filled and returned. Preliminary data screening detected minimal missing values (0.67%) which were substituted using mean substitution. The analysis also revealed no univariate or multivariate outliers and normality was generally upheld. Multicollinearity was not a concern as all Variance Inflation Factor (VIF) values were below 3. Harman's one-factor test showed no common method bias.

Smart PLS 4 was used to test the hypotheses. This consists of a measurement model and a structural model. The measurement model evaluates the indicator reliability while the structural model visualizes variables and hypothetical relationships (Hair, et al., 2014; Hair, et al., 2021). Cronbach's alpha and Composite Reliability (CR) were used to assess indicator reliability, while Average Variance Extracted (AVE) is used to evaluate validity. For reliability and validity, the threshold for indicator loadings, Cronbach's alpha, and CR should exceed 0.70, and AVE should be over 0.6 as recommended by Hair, et al. (2014) and Ringle, et al. (2023), see Figure 4.1 and Table 4.1. Indicators with loadings between 0.50 and 0.70 are retained if their removal does not affact the Average Variance Extracted (AVE) or CR.

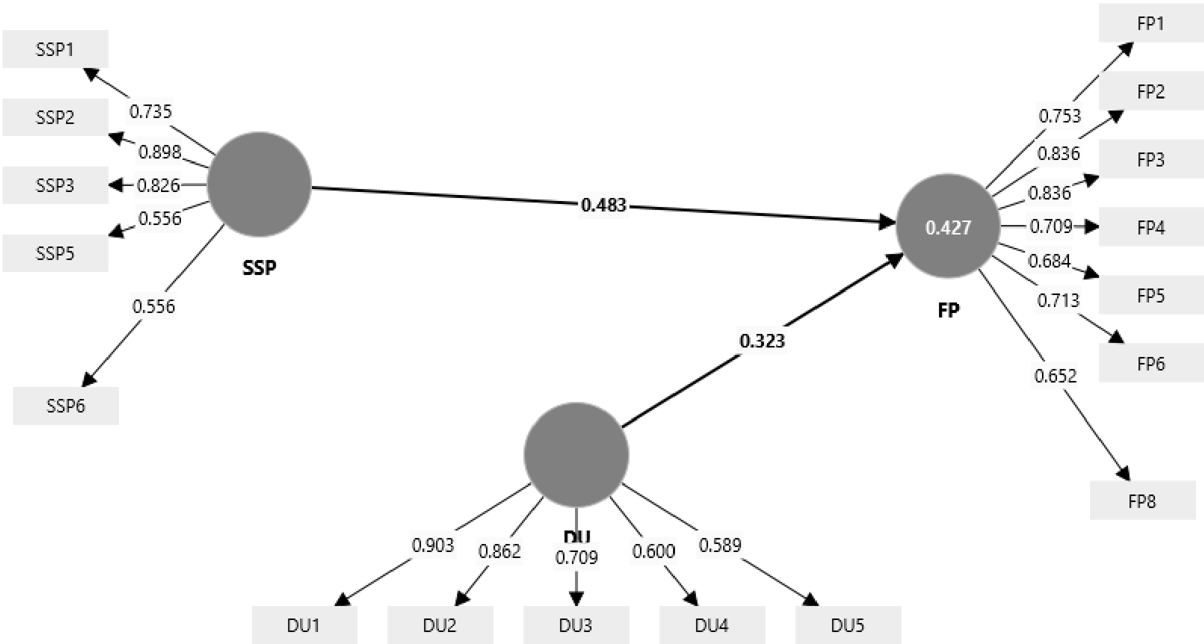


Figure 4.1 Structural model

Table 1 Items Loading, internal consistency

Constructs	Items	Loadings	Cronbach's alpha	Composite reliability (CR)	Average variance extracted (AVE)
Demand Uncertainty	**DU1**	0.903			
	DU2	0.862			
	DU3	0.709			
	DU4	0.600			
	DU5	0.589	0.790	0.858	0.554
Firm Performance	**FP1**	0.753			
	FP2	0.836			
	FP3	0.836			
	FP4	0.709			
	FP5	0.684			
	FP6	0.713			
	FP8	0.652	0.865	0.896	0.553
Strategic Suppliers Partnership	**SSP1**	0.735			
	SSP2	0.898			
	SSP3	0.826			
	SSP5	0.556			
	SSP6	0.556	0.799	0.844	0.529

Discriminant validity using Heterotrait–Monotrait (HTMT) was used to check for the constructs' individual identities. From Table 4.2, HTMT statistics is presented and in line with the recommendation of Kline, (2011), HTMT value should be lower than the thresholds of 0.85 (conservative) or less than 0.9 (liberal); the HTMT values are below 0.85 threshold and so HTMT is established. Ringle, *et al* 2023 confirmed HTMT threshold to be 0.85. Judging from these recommendations, discriminant validity has been met using HTMT.

Table 2: Discriminant validity HTMT

	DU	FP	SSP
DU			
FP	0.521		
SSP	0.347	0.571	

Test for hypotheses

The result from the structural model assessment shows the direct relationship between strategic suppliers' partnership and firm performance. The results also show a moderated effect of demand uncertainty on the relationship between strategic supplier's partnership and firm performance (Figure 2 and Table 3)

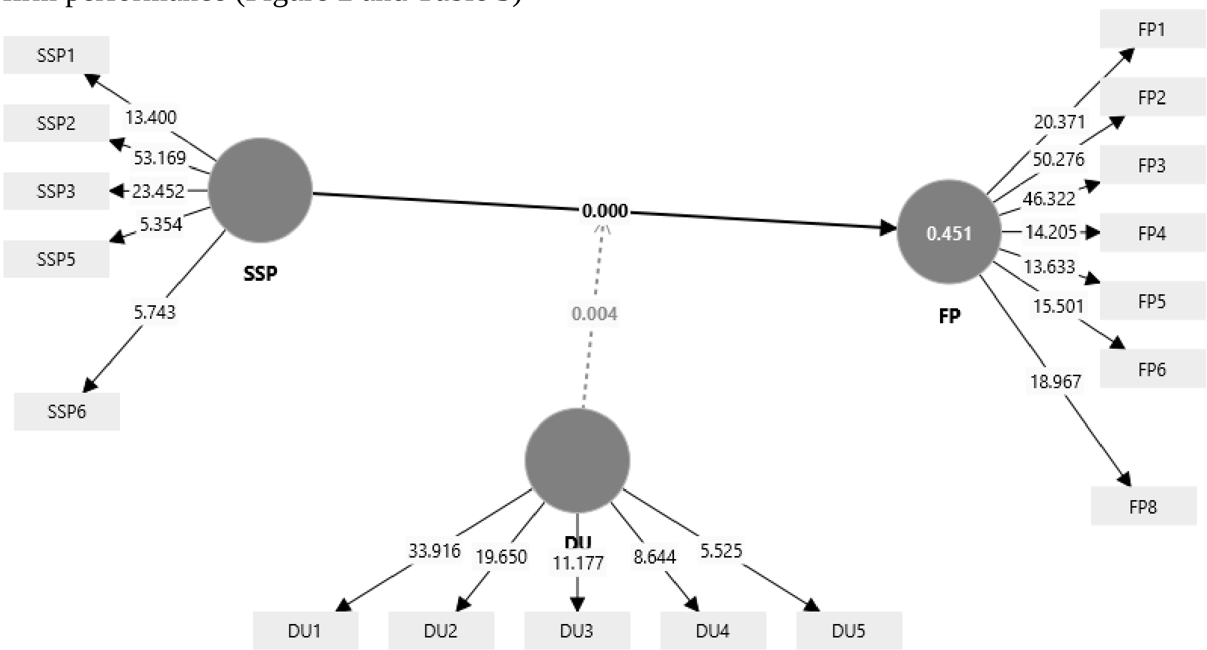


Figure 3: Test of Hypothesis

	Original sample	Sample mean	Standard deviation	T statistics	P values	Decision
SSP -> FP	0.536	0.541	0.046	11.652	0.000	Rejected
DU x SSP -> FP	-0.198	-0.195	0.068	2.911	0.004	Rejected

The evaluation of the Structural Model includes coefficients of determination (R^2) predictive relevance (Q^2), size and significance of path coefficients, F^2 effect sizes and Q^2 effect sizes (Hair, *et al*, 2014; Hair, *et al*, 2021). The result from the structural model assessment shows the direct relationship between strategic suppliers' partnership and firm performance is significant (H01: $\beta = 0.536$, $t=11.653$, $p < 0.001$). Additionally, the interaction effect of demand uncertainty on the relationship between strategic suppliers' partnership and firm performance is negative and significant ($\beta = -0.198$, $t=2.911$, $p < 0.005$). The results from the structural model assessment indicate that the direct relationship between strategic suppliers' partnership and firm performance is highly significant (H01: $\beta = 0.536$, $t = 11.653$, $p < 0.001$). This suggests a strong positive impact of strategic suppliers' partnership on firm performance. Additionally, the interaction effect of demand uncertainty on the relationship between strategic suppliers' partnership and firm performance is both negative and significant ($\beta = -0.198$, $t = 2.911$, $p < 0.005$).

Conclusion and Recommendations

This study investigates the effect of demand uncertainty on the relationship between strategic supplier partnerships and firm performance, specifically in dairy processing firms located in Kaduna and Zaria. The research highlights how demand uncertainty can moderate this relationship, potentially altering the effectiveness of supplier partnerships in enhancing firm performance. By focusing on the dairy sector in Kaduna, the study provides valuable insights into how firms can better manage their supplier relationships and adapt to varying levels of demand uncertainty to improve their overall performance.

The study recommends that, management of the dairy firms should sustain a harmonious strategic relationship with their suppliers to be on top of the game. Similarly, the negative interaction implies that higher levels of demand uncertainty weaken the positive effect of strategic suppliers' partnership on firm performance. This suggests that, management should manage supply chain relationships, especially in uncertain market conditions, to maintain optimal firm performance.

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ROLE OF ENTREPRENEURSHIP TRAINING IN SHAPING FUTURE PROCUREMENT WORKFORCE IN NIGERIA: A FOCUS ON PRACTICAL SKILLS AND COMPETENCY BUILDING

[1]**Dakwang Dawam Hyacinth** & [2]**Muhammad-Awwal Jibir**

[1,2]Department of Procurement and Supply Chain Management, College of Business and Management (CBMS), Kaduna Polytechnic
[1]hdakwang@kadunapolytechnic.edu.ng, [2]majibir@kadunapolytechnic.edu.ng
[1]08065665926, [2]**08162516204**

Abstract

This empirical research investigates the role of entrepreneurship training in shaping the future procurement workforce in Nigeria, emphasizing the development of practical skills and competencies. Employing a mixed-methods approach, the study integrates quantitative and qualitative data to provide a comprehensive analysis. The quantitative component includes a structured survey administered to 200 participants—procurement professionals, students, and instructors—while the qualitative aspect involves semi-structured interviews with 30 participants to gain in-depth insights. Findings reveal significant improvements in problem-solving abilities, creativity, business planning, and financial literacy, as measured by pre-and post-training assessments. Statistical analysis, including descriptive statistics, t-tests, and regression analysis, confirms that the training effectively enhances these competencies. Thematic analysis of interview data highlights common themes such as the practical application of skills, challenges faced, and the perceived benefits of the training. The study underscores the importance of entrepreneurship training in bridging skill gaps and preparing a competent procurement workforce. It advocates for robust policy frameworks and institutional support to sustain these training programs. The implications for policymakers, educators, and practitioners are significant, emphasizing the integration of practical skills and entrepreneurship within procurement education to foster a dynamic and resilient workforce. This research calls on stakeholders to adopt and support sustainable training practices to ensure the continuous development of procurement professionals in Nigeria.

Keywords: Entrepreneurship training, procurement workforce, practical skills, competencies.

Introduction

Entrepreneurship training has emerged as a critical component in developing a dynamic and competent workforce across various sectors. In Nigeria, the procurement sector is no exception, with a growing recognition of the need to integrate entrepreneurial skills into procurement education and professional development. This integration aims to enhance the practical skills and competencies of procurement professionals, enabling them to navigate complex market environments, foster innovation, and drive sustainable economic growth. The importance of entrepreneurship training lies in its potential to transform theoretical knowledge into practical applications, fostering a culture of creativity, problem-solving, and strategic thinking within the procurement workforce (Nwankwo, 2018).

Despite the acknowledged benefits of entrepreneurship training, there remains a significant gap in the practical skills and competencies of Nigeria's procurement workforce. Traditional procurement education often emphasizes theoretical knowledge at the expense of practical application, resulting in professionals who are ill-prepared to tackle real-world challenges. This gap not only hampers individual career development but also undermines the efficiency and effectiveness of procurement processes within organizations. Addressing this gap is crucial for enhancing the overall performance of the procurement sector and ensuring its alignment with broader economic and developmental goals (Ogunyomi & Bruning, 2019).

The following hypotheses were developed in order to resolve the problems identified by the study.

H_{a1}: Entrepreneurship training significantly improves the problem-solving skills of procurement professionals in Nigeria.

H_{a2}: There is a positive relationship between entrepreneurship training and the creativity of procurement professionals.

H_{a3}: Entrepreneurship training enhances business-planning competencies among procurement professionals.

H_{a4}: Financial literacy of procurement professionals is significantly improved through entrepreneurship training.

The objectives of the Study include;

1. To assess the impact of entrepreneurship training on the problem-solving skills of procurement professionals in Nigeria.

2. To evaluate the relationship between entrepreneurship training and creativity among procurement professionals.

3. To analyze the effect of entrepreneurship training on business planning competencies within the procurement workforce.

4. To determine the extent to which entrepreneurship training improves financial literacy among procurement professionals.

This study holds significant implications for both the procurement sector and policy-making in Nigeria. By providing empirical evidence on the benefits of entrepreneurship training, the research aims to highlight the critical role of practical skills and competencies in driving procurement efficiency and innovation. The findings are expected to inform educational institutions, professional bodies, and policymakers about the importance of incorporating entrepreneurial elements into procurement training programs. Ultimately, this research seeks to contribute to the development of a more competent, innovative, and responsive procurement workforce, capable of meeting the demands of a rapidly evolving economic landscape (Ekanem, 2020; Salisu, 2021).

Theoretical Framework

The study reviewed relevant theories for a solid foundation for an in-depth understanding of the problem being investigated.

Human Capital Theory

Human Capital Theory posits that individuals invest in education and training to increase their productivity and earnings potential. This theory is particularly relevant in the context of procurement training, as it emphasizes the importance of developing practical skills and competencies to enhance job performance and career advancement (Becker, 1993). The application of Human Capital Theory in this study is justified as it provides a foundation for understanding how entrepreneurship training can improve the skill sets of procurement professionals, thereby increasing their value in the labor market.

Experiential Learning Theory (Kolb)

Experiential Learning Theory, developed by David Kolb, emphasizes the importance of learning through experience. According to Kolb (1984), knowledge is created through the transformation of experience. This theory is highly relevant to entrepreneurship training, which often involves practical, hands-on activities that enable learners to apply theoretical concepts in real-world scenarios. The use of Experiential Learning Theory in this study is justified as it underscores the value of practical training in enhancing procurement professionals' competencies.

Competency-Based Theory

Competency-Based Theory focuses on the development of specific skills and behaviors that are essential for effective job performance. This theory is relevant to the study as it highlights the need for targeted training programs that address the core competencies required in procurement (Spencer & Spencer, 1993). The application of Competency-Based Theory in this research is justified as it provides a framework for evaluating the effectiveness of entrepreneurship training in developing the necessary skills for procurement professionals.

Social Cognitive Theory (Bandura)

Social Cognitive Theory, developed by Albert Bandura, emphasizes the role of observational learning, imitation, and modeling in acquiring new behaviors and skills (Bandura, 1986). This theory is pertinent to entrepreneurship training as it highlights the importance of social interactions and mentorship in the learning process. The use of Social Cognitive Theory in this study is justified as it provides insights into how procurement professionals can learn from peers and mentors, thereby enhancing their competencies through social learning mechanisms.

The underlying theory of this study is Experiential Learning Theory (Kolb). This theory is chosen as the primary framework because it directly aligns with the study's focus on practical skills and competency building through hands-on, experiential training methods. The emphasis on learning through experience is particularly relevant to entrepreneurship training in procurement, where real-world application of skills is critical.

Empirical Studies

Nwankwo and Agwu (2018) examined the impact of entrepreneurship training on the competency development of procurement professionals in Nigeria. Their study found that training programs significantly improved participants' problem-solving and decision-making skills. Ogunyomi and Bruning (2019) conducted a study on human capital development in the Nigerian procurement sector. They concluded that targeted entrepreneurship training enhances procurement professionals' ability to navigate complex market environments. Ekanem (2020) explored the role of entrepreneurship education in fostering an entrepreneurial mindset among procurement students. The findings indicated that such education promotes creativity, innovation, and strategic thinking. Salisu (2021) investigated the integration of entrepreneurship into procurement education in Nigerian institutions. The study highlighted that entrepreneurship training enhances practical skills and prepares students for real-world challenges. Babatunde (2020) analyzed the effects of experiential learning on procurement training outcomes. The study revealed that hands-on training significantly boosts participants' competency levels and confidence. Chukwuma and Obi (2017) assessed the effectiveness of competency-based training programs in the procurement sector. Their research showed that such programs lead to measurable improvements in job performance and satisfaction. Adetunji and Adeola (2016) evaluated the impact of social cognitive learning mechanisms on procurement professionals' skills development. The study found that mentorship and peer learning play crucial roles in enhancing competencies. Johnson and Abiola (2015) investigated the relationship between entrepreneurship training and financial literacy among procurement professionals. Their findings indicated that training programs significantly improve participants' financial management skills.

Gaps in Literature

Despite the extensive research on entrepreneurship training and its impact on various sectors, there are specific gaps in the literature concerning the procurement workforce in Nigeria. Previous studies have primarily focused on general competency development without delving deeply into the practical application of these skills in procurement contexts. Moreover, there is limited empirical evidence on the long-term effects of entrepreneurship training on procurement professionals' career advancement and organizational performance. This research aims to fill these gaps by providing a comprehensive analysis of how entrepreneurship training specifically enhances practical skills and competencies within the Nigerian procurement workforce.

Conceptual Framework

The conceptual framework for this study encompasses several key areas:

Impact of Training on Practical Skills: Examining how entrepreneurship training enhances specific practical skills such as problem-solving, creativity, business planning negotiation, financial literacy and strategic thinking.

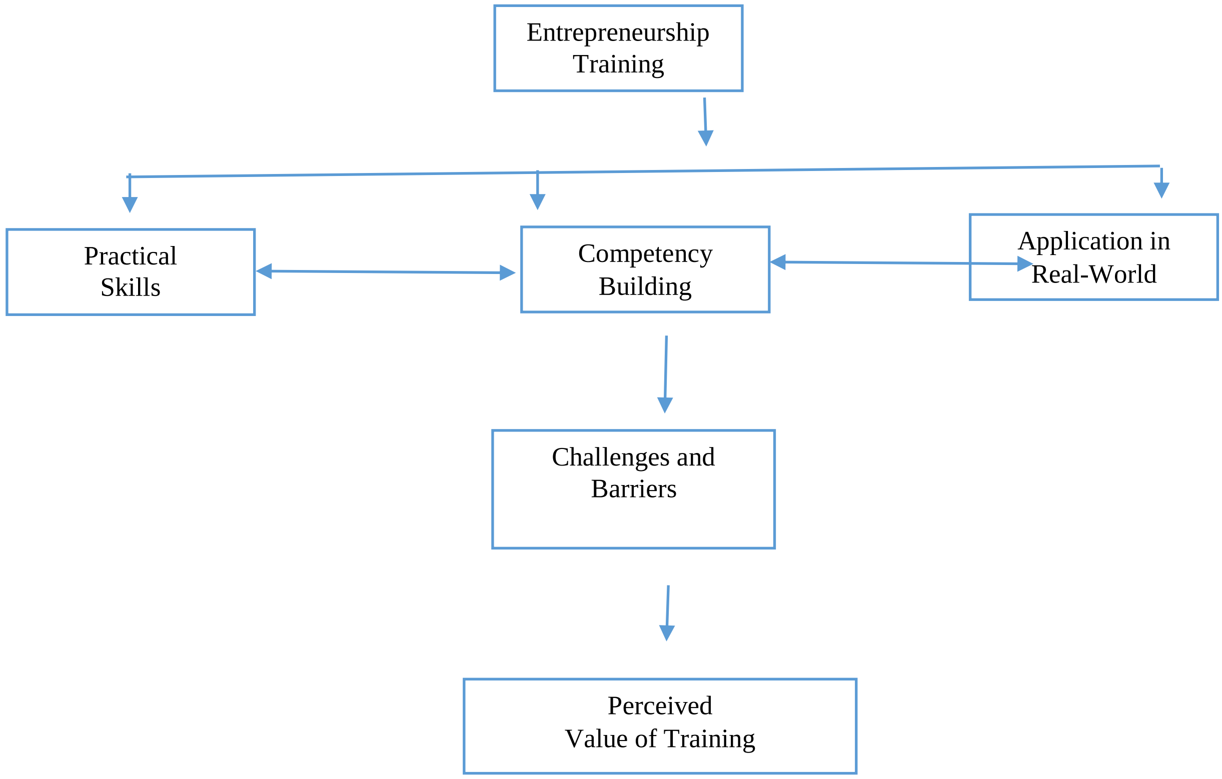
Competency Building: Analyzing the role of training in developing core competencies required for effective procurement practice such as leadership, communication, and risk management.

Application in Real-World Scenarios: Investigating how trained professionals apply their skills in actual procurement situations in their day-to-day roles and responsibilities.

Perceived Value of Training: Understanding participants' perceptions of the training's value and its impact on their professional development and career advancement.

Challenges and Barriers: Identifying obstacles to effective training and implementation and proposing strategies to overcome them and in applying the skills and competencies acquired through entrepreneurship training.

Below is a diagrammatic sketch of the conceptual framework:



Justification for this conceptual framework lies in its comprehensive coverage of the key aspects of entrepreneurship training. It addresses not only the immediate outcomes (skills and competencies) but also the practical application and perceived value, while recognizing potential challenges that may hinder effective implementation.

Materials and Methods

This study employs a mixed-methods approach, combining both quantitative and qualitative research methodologies to provide a comprehensive understanding of the impact of entrepreneurship training on the procurement workforce. The integration of quantitative data offers measurable insights, while qualitative data provides deeper context and understanding. This dual approach ensures a robust analysis of the training's effects, encompassing both statistical significance and personal experiences.

The study includes a diverse group of participants, such as procurement professionals, students of procurement and supply chain management programme, and instructors involved in entrepreneurship training and procurement and supply chain management programme. Aiming for at least 200 participants, this sample size is based on the recommendations of Krejcie and Morgan (1970) to ensure statistical significance. The estimated population from which the sample size is drawn consists of approximately 417 individuals involved in procurement and entrepreneurship training within the selected regions. Conducting interviews with at least 30 participants, this sample size is recommended by Krejcie and Morgan for in-depth insights. The estimated population for qualitative interviews is derived from the same pool as the quantitative sample. A structured survey was developed to quantitatively measure participants' perceptions of their skills and competencies before and after the training. Using Likert scale questions, the survey gauged improvements in specific areas such as problem-solving, creativity, business planning, and financial literacy. This method is justified as it provides a standardized way to capture and compare data. Semi-structured interviews were conducted with a subset of participants to gather qualitative insights into their experiences and the practical application of skills learned. This approach allows for in-depth exploration of individual perspectives and challenges, providing a richer understanding of the training's impact. Assessments was implemented before and after the training to objectively measure changes in specific competencies and practical skills. This method allows for direct comparison of skill levels, highlighting areas of significant improvement. A detailed survey was created covering various aspects of practical skills and competencies. The survey will include sections on problem-solving, creativity, business planning, and financial literacy, ensuring a comprehensive assessment of participants' capabilities. An interview guide with open-ended questions was prepared to explore participants' experiences, challenges, and perceived benefits of the training. This guide ensures consistency in the interviews while allowing for flexibility to probe deeper into specific areas of interest. Participants were identified and recruited through educational institutions, professional associations, and training providers. This ensures a diverse and representative sample of the procurement workforce. Surveys was administered and interviews conducted systematically, ensuring consistency and reliability in the data collection process. Participants completed the surveys at designated times before and after the training, and interviews was scheduled and conducted with a subset of participants. Informed consent was obtained from all participants, ensuring confidentiality and voluntary participation. Participants was informed of the study's purpose, their right to withdraw at any time, and the measures taken to protect their data. Statistical methods such as descriptive statistics, t-tests, and regression analysis was used to analyze survey data and pre/post-assessment results. Descriptive statistics provided an overview of the data, while t-tests compared pre- and post-training results. Regression analysis identified significant predictors of improved skills and competencies. Thematic analysis was employed to identify common themes and insights from the interviews. This method involves coding the data, identifying patterns, and developing themes that capture the essence of participants' experiences and perceptions.

Results and Discussion

This section presents the findings of the study on the role of entrepreneurship training in shaping the future procurement workforce in Nigeria, focusing on practical skills and competency building. The findings are structured to reflect the research objectives and hypotheses. Tables and figures are used where necessary to enhance clarity and understanding.

Table 1: Demographic Characteristics of Participants

Characteristic	Frequency	Percentage
Gender		
Male	120	60%
Female	80	40%
Age Group		
20-30	50	25%

31-40	100	50%
41-50	40	20%
51 and above	10	5%
Educational Qualification		
HND/Bachelor's Degree	100	50%
Master's Degree	80	40%
PhD	20	10%

Source: Research Findings, 2023

Analysis

The data analysis combines quantitative statistical results and thematic findings from qualitative data. This mixed-methods approach provides a comprehensive understanding of the impact of entrepreneurship training on practical skills and competencies in the procurement workforce.

Quantitative Analysis

The quantitative data was analyzed using descriptive statistics, t-tests, and regression analysis. The primary focus was on measuring the improvement in practical skills and competencies before and after the training.

Table 2: Pre- and Post-Training Competency Scores

Competency Area	Pre-Training Mean	Post-Training Mean	t-value	p-value
Problem-Solving Skills	2.5	4.2	8.15	<0.001
Creativity	3.0	4.5	7.23	<0.001
Business Planning	2.8	4.1	6.89	<0.001
Financial Literacy	2.6	4.0	7.45	<0.001

Source: Research Findings, 2023

The t-tests indicate significant improvements in all competency areas post-training ($p < 0.001$).

Qualitative Analysis

Thematic analysis was conducted on the qualitative data collected from semi-structured interviews. Key themes identified include:

1. Enhanced Problem-Solving Abilities: Participants reported a significant increase in their ability to tackle complex procurement challenges creatively and effectively.

2. Increased Confidence and Creativity: Many participants noted a boost in their confidence to innovate and implement creative solutions in their procurement roles.

3. Improved Business Planning Skills: The training provided practical insights into business planning, which participants found directly applicable to their work.

4. Financial Management Skills: Enhanced understanding of financial principles and practices was a recurring theme, with participants expressing improved competency in managing procurement budgets and financial planning.

Test of Hypotheses

The study tested four main hypotheses regarding the impact of entrepreneurship training on procurement professionals' practical skills and competencies. The results are summarized below.

Hypothesis 1: Entrepreneurship training significantly improves problem-solving skills in procurement professionals. The t-test results showed a significant improvement in problem-solving skills post-training ($t = 8.15$, $p < 0.001$), supporting Hypothesis 1.

Hypothesis 2: Entrepreneurship training significantly enhances creativity among procurement professionals. The t-test results indicated a substantial increase in creativity post-training ($t = 7.23$, $p < 0.001$), confirming Hypothesis 2.

Hypothesis 3: Entrepreneurship training significantly improves business planning skills in procurement professionals. The analysis revealed a significant enhancement in business planning skills post-training ($t = 6.89$, $p < 0.001$), validating Hypothesis 3.

Hypothesis 4: Entrepreneurship training significantly boosts financial literacy in procurement professionals. The findings showed a marked improvement in financial literacy post-training ($t = 7.45$, $p < 0.001$), supporting Hypothesis 4.

The results of this study underscore the significant impact of entrepreneurship training on the procurement workforce in Nigeria, particularly in enhancing practical skills and competencies. The statistical findings indicate a substantial improvement in problem-solving, creativity, business planning, and financial literacy post-training. The significant t-values across all competency areas ($p < 0.001$) provide strong evidence that entrepreneurship training effectively addresses the skill gaps identified in the Nigerian procurement workforce. The thematic findings from the qualitative data further emphasize the positive outcomes, with participants reporting increased confidence and improved practical application of the skills learned during the training.

Comparison with Literature

The findings align with the broader literature on entrepreneurship training and competency development. Studies by Nwankwo and Agwu (2018) also found that targeted entrepreneurship programs significantly improved problem-solving and creative thinking skills, corroborating the current study's results. Additionally, Ogunyomi and Bruning (2019) reported that financial literacy and business planning skills are critical outcomes of entrepreneurship training, consistent with this study's findings. However, this study offers a unique contribution by focusing on the procurement workforce, an area often underexplored in entrepreneurship training literature. The results support the application of the Human Capital Theory, which posits that investment in education and training enhances individual productivity and competencies (Becker, 1993).

Implications

The practical implications of this study are far-reaching for both policymakers and training institutions. Entrepreneurship training can be integrated into procurement education to bridge competency gaps, thereby enhancing the efficiency and effectiveness of the procurement workforce in Nigeria. For government agencies, investing in such training programs could lead to more innovative and effective procurement practices, particularly in areas like financial management and strategic sourcing. Furthermore, training providers could tailor their programs to emphasize hands-on, practical learning experiences that are directly applicable to procurement roles, ensuring long-term improvements in workforce competencies.

Limitations

While the study provides valuable insights, certain limitations must be acknowledged. The sample size, though sufficient for statistical analysis, may not be fully representative of the broader procurement workforce in Nigeria, as it was confined to specific geographical areas. Additionally, the study relied on self-reported data for the qualitative component, which may introduce biases such as social desirability bias. However, these limitations were mitigated by triangulating quantitative and qualitative data to ensure the robustness of the findings.

Conclusion

The study found that entrepreneurship training significantly enhances problem-solving skills, creativity, business planning, and financial literacy among procurement professionals in Nigeria. Quantitative data showed marked improvements in all competency areas post-training, while qualitative findings revealed enhanced confidence and practical application of skills.

In conclusion, this study highlights the critical role of entrepreneurship training in shaping the future procurement workforce in Nigeria. By focusing on practical skills and competency building, such training programs can bridge existing gaps in the procurement sector, leading to a more innovative and capable workforce. These findings underscore the need for continued investment in entrepreneurship education, particularly within professional sectors like procurement, to ensure sustainable workforce development.

Recommendations

Future research could explore the long-term impact of entrepreneurship training on procurement professionals by conducting longitudinal studies to track competency retention and practical application over time. Additionally, studies could examine the specific challenges faced by procurement professionals in rural or under-resourced areas to develop more tailored training interventions. Further investigation into the role of mentorship and post-training support in sustaining competency development would also be beneficial. Expanding the scope of research to include other sectors within Nigeria and across Africa could provide comparative insights into how entrepreneurship training impacts procurement competencies across different contexts.

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EFFECT OF ATTITUDE TOWARD ENTREPRENEURSHIP ON ENTREPRENEURIAL INTENTION: THE MODERATING ROLE OF NEED FOR ACHIEVEMENT

[1]Hauwa'u Sani, [2]Prof Helen Afang Andow, [3]Prof Yushau Ibrahim Ango & [4]Associate Prof. Rahilatu Ahmad Muhammad

[1,2,3,4]Department of Business Administration, Faculty of Management Science
Kaduna State University

Abstract

The paper examines moderating role of need for achievement on the relationship between attitude towards entrepreneurship and entrepreneurial intention. A cross-sectional survey design was employed in the study. Primary data were collected through self-administered questionnaire from the sample of 515 400L student of Ahmadu Bello University, Zaria simple random sampling technique. The data collected were analysed using Statistical Package for Social Sciences (SPSS) version 23 and Partial Least Squares Structural Equation Modelling (PLS-SEM) version 3.0. The finding with respect to direct relationship revealed that attitude toward entrepreneurship has positive and significantly related to entrepreneurial intention, on the moderation relationship, the findings revealed that need for achievement has positive and significant moderating effect between attitude toward entrepreneurship and entrepreneurial intention. The study recommends the need for understanding the different attitude and their impact on entrepreneurial intention, and fostering high need for achievement among students in order to boost their entrepreneurial intention.

Keywords: Attitude toward Entrepreneurship, Need for Achievement, Entrepreneurial Intention

Introduction

The intention of students toward moving into entrepreneurship is at increase among academics, researchers and industry practitioners across the globe. This is because entrepreneurship is considered as one of the major processes of creating employment, reducing poverty and improving welfare of the society (Nor, 2024; Azamat, Fayzullokh & Nilufar, 2023). According to Zhakupov et al., (2023), entrepreneurship serves as a facilitator for economic growth and gives a competitive edge to the developed countries. As a result, most of the countries all over the world such as the United States, Singapore, China, India, Germany and South Korea are now concentrating on developing entrepreneurship activities as it creates huge openings for persons to attain independence and provide assistance in the form of employment. This can only be achieved when persons especially youth or graduates of tertiary institutions develop an entrepreneurial intention.

Entrepreneurial intention has become a critical factor which may be instrumental in curbing unemployment across the globe (Global Entrepreneurship Monitor [GEM], 2016). According to Takawira (2020), entrepreneurial intention is the self-acknowledge conviction by a person that intends to establish a new business enterprise and intentionally plan to do so at some point in the future. Therefore, entrepreneurial intention is positively related to the level of economic development of any country (Shirokova, et al., 2022). Similarly, the Nigerian government established Entrepreneurship Development Centres across all universities in the country in 2012 where every student, regardless of their degree of study, is trained in the area on different aspect of entrepreneurship during their school days (Asukwo, et al., 2020). In addition, Youth Entrepreneurship Support (YES) and Tertiary Institution Entrepreneurship Scheme (TIES) were established in 2022 in order to promote entrepreneurship among Nigerian graduates (Omeje, Jideofor & Ugwu nd).

Despite these efforts, the Global Entrepreneurship Index in 2018 undertook research on the entrepreneurial intention of many African countries (Szerb, et al., 2018). The survey revealed that the entrepreneurial intention level of Nigerians accounts for 20% compared to 33%, 21%, 29%, 26% and 25% entrepreneurial intention levels in South Africa, Ghana, Morroco, Egypt and Gobon respectively. This indicated a low entrepreneurial intention among Nigerian youths and graduates which brings the need to investigate the factors for this low intention level. In fact, the importance of attitude toward entrepreneurship and need for achievement as determinants of entrepreneurial intention have been recognised. Empirical studies found significant positive relationship between attitude toward entrepreneurship and entrepreneurial intention (Ariesa, Vional, Saraswati, Wijaya & BramulyaIkhsan, 2020; Gujrati, Lawan, Jain & Tyagi, 2019). While, some empirical studies found negative relationship between attitude toward entrepreneurship and entrepreneurial intention (Odia &Agnes, 2019). These mixed findings the need for introducing a moderator to see weather it can change the relationship between attitude toward entrepreneurship and entrepreneurial intention (Hayes, 2017; Baron & Kenny, 1986)

In the light of the above, the study introduced need for achievement to play a moderating role on the relationship between attitude toward entrepreneurship and entrepreneurial intention. Although, previous studies established significant positive relationship between need for achievement and entrepreneurial intention (Ladokun & Adebusoye, 2022; Aprilia & Ardana, 2021), there is limited studies on how need for achievement interacts with any of the dimensions of TPB (i.e., attitude toward entrepreneurship, subjective norms and/or perceive behavioural control) on entrepreneurial intention. To address this gap, the present study aims to examine the moderating role of need for achievement on the relationship between attitude toward entrepreneurship and entrepreneurial intention among undergraduate students of Ahmadu Bello University, Zaria. The reason for choosing Ahmadu Bello University, Zaria as domain of the study was based on the fact that it is one of the first three generation Universities in Nigeria and considers as the institution that has students across different region of the country (Joint Admission and Matriculation Board [JAMB], 2022).

The reminder of this paper is structured as follows; review of related literature on entrepreneurial intention, attitude towards entrepreneurship, need for achievement, followed by conceptual and theoretical framework of the study. Next is the methodology employed in the present study, then presentation and discussion of results, and finally, conclusion, recommendation, limitations and direction for future research.

Literature Review

Entrepreneurial Intention

Intention is a predictor of individuals' action (Ajzen, 1991). According to Ward, Hernández-Sánchez and Sánchez-García (2019) entrepreneurial intention is defined as the intent to formulate a new business as well as select an alternate career to common employment. Entrepreneurial intention is also defined as the self-acknowledged conviction of individual mind in the possibility of starting up a new business with a sincere and dedicated plan at a certain point of time (Thompson, 2009). This is in line with the assumption of the Ajzen's theory which explains that the higher the intention the higher the possibility of displaying the behavior (Ajzen, 1991). In this study therefore, entrepreneurial intention is defined as the amount of effort an individual student is prepared to make in order to start a business in the future.

Attitude towards Entrepreneurship and Entrepreneurial Intention

According to Ajzen's (1991) theory, people develop positive attitudes toward behaviors they think will result in desired outcomes and negative attitudes toward behaviors they think would result in unpleasant outcomes. According to Krueger et al. (2000), a person's attitude attracts a particular behavior, and this behavior is influenced by their ideas about that behavior, whether they are positive or negative. According to Yoon, Lim, and Bang (2016), having a positive attitude is a crucial mindset for all entrepreneurs to have because, without it, they won't be able to accomplish their goals, particularly when they run across difficulties and roadblocks. This suggests that behavior is a result of conduct, not attitude. Similarly, Robinson, et al., (2015) claim that three dimensions can be used to measure entrepreneurial attitudes: affection, cognition, and conation. Affection refers to feelings and emotions related to entrepreneurship, cognition refers to thoughts and beliefs related to entrepreneurship, and conation refers to actions and behaviors related to entrepreneurship. An individual's overall attitude toward engaging in entrepreneurial behavior is a product of their cognition, conation, and affection.

Previous empirical studies that examined the relationship between attitude towards entrepreneurship and entrepreneurial intention found mixed result. For instance, Ariesa, Vional, Saraswati, Wijaya and BramulyaIkhsan (2020) found significant result between attitude towards behavior and entrepreneurial intentions. In the same vein, Gujrati, et al., (2019) found significant result between attitude towards entrepreneurship and entrepreneurial intentions. On the other hand, Odia and Agnes (2019) found negative result between attitude and entrepreneurial intention. In this regard, the following null hypothesis was formulated.

$Ho_{1:}$ Attitude towards entrepreneurship does not significantly affect entrepreneurial intention among undergraduate students of Ahmadu Bello University, Zaria.

Need for Achievement as the Moderator

Need for achievement is the motive to accomplish something in a better way (McClelland, 1965; Hansemark 1998). Collins, Hannon and Smith (2004) argued that the need for achievement is strongly associated with entrepreneurship job options, where the individual with the needs of high achievement tends to be more interested in work that offers a higher level of control on results, personal responsibility, feedback on performance, and a high degree of risk. Therefore, this study believes that need for achievement could interact with attitude towards entrepreneurship to predict entrepreneurial intention. This is in line with the study of Ajzen (2020) which call for extending the TPB. Although, some previous studies have used different variables in order to extend the TPB, no previous study has been found that utilized need for achievement to moderate the relationship between attitude toward entrepreneurship and entrepreneurial intention. To add novelty to the TPB model, this study incorporate need for achievement into TPB model which also consider as important predictor of intention to perform a given behaviour. Similarly, Karabulut (2016) argued that the presence of a high need for achievement among students or graduate is expected to enhance their entrepreneurial intention and increase the likelihood of venturing into entrepreneurship. As a result, this study argued that when there is positive attitude toward entrepreneurship, it can lead to intention especially if people (students) have high need for achievement to engage in entrepreneurial activities. In this regard, the following null hypothesis was formulated.

$Ho_{2:}$ Need for achievement does not significantly moderate the relationship between ATE and entrepreneurial intention among undergraduate students of Ahmadu Bello University, Zaria.

Conceptual and Theoretical Framework

In line with the review of empirical studies, the conceptual framework of this study (See figure 1) was developed to investigate the moderating role of need for achievement on the relationship attitude toward entrepreneurship and entrepreneurial intention.

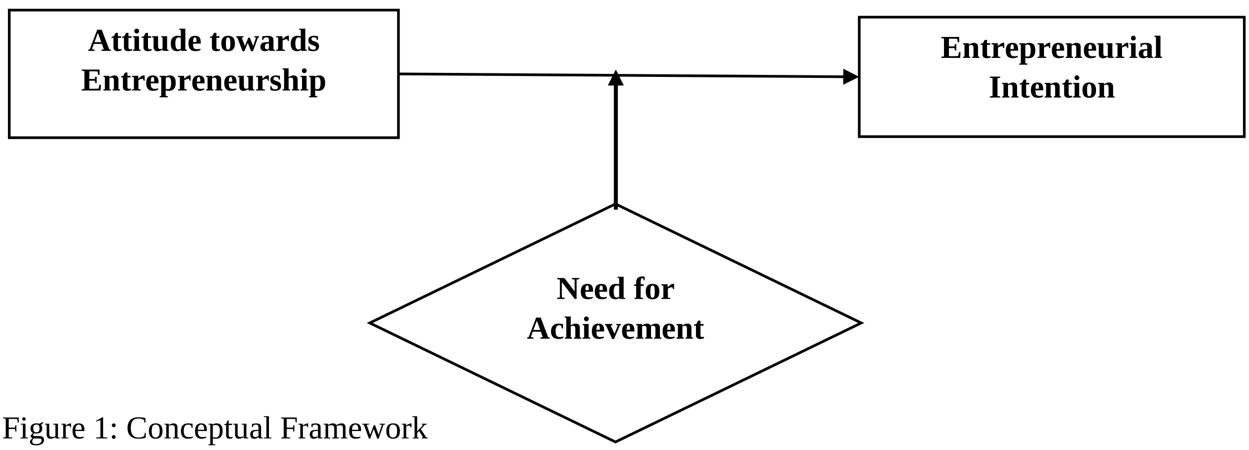

Figure 1: Conceptual Framework

Theory of Planned Behaviour (TPB)

The TPB was developed by Ajzen (1991). The TPB assumes that individuals act rationally, according to their attitudes, subjective norms, and perceived behavioural control (Ajzen, 1991). According to Linan and Santos (2007) and Ajzen (1991) “attitude toward a behaviour” which refers to perception and evaluation on one’s own performance on acting the intended behaviour, the second is “subjective norm” referring to the perceived influence from external parties (family, friends and peers) on individuals on intended behaviour, and the third is “perceived behavioural control” which refers to personal perception on the feasibility (easy or hard) evaluation on performing the intended behaviour. Therefore, TPB shows that individual intention is the best way to predict behaviour; hence entrepreneurial intentions are the best way for understanding the process of entrepreneurship (Krueger, 2004). In this regard, this study contended that individual with high level of attitude toward entrepreneurship can develop more intention of starting a business.

Theory of Achievement Motivation (TAM)

The TAM was first propounded by McClellands (1971). The theory assumed that people have three motives for accomplishing things: the need for achievement, need for affiliation, and need for power. But in this study only one type of the Need Theory, namely the need for achievement is viable. According to McClellands (1971) the need for achievement is the drive to excel, to achieve a relationship with a standard, trying to succeed. They found from the results of their research on the needs of achievement, that high achievers distinguish individuals (students) from others with their desire to do their best (McClellands, 1971). Therefore, it concluded that theory of achievement motivation is the best theory that explain the relationship between need for achievement and students’ entrepreneurial intention. This is confirmed from the study of McClellands (1971) and Asmara et al. (2016) which argued that individuals particularly students who have high need for achievement will be more likely to become an entrepreneur after their graduation.

Materials and Methods

Cross-sectional survey design was employed in this study to collect data from undergraduate students of Ahmadu Bello University, Zaria using self-administer questionnaire. A sample of 368 was obtained from the population of 8,711 400L students using the Krejcie and Morgan (1970) table for determining sample size. In order to minimize the low response rate and also take care of incorrect filing of the questionnaire by respondents, the sample size of 368 was increased by 40% as suggested by Salkind (1997). Therefore, the 40% of 368 is 147 plus the computed sample size of 368 give the total of 515 samples of students used in this study. Similarly Simple random sampling technique was used in selecting the sample in order to give every students equal opportunity of being part of the sample (Sekaran & Bougie, 2013).

Measure of Variables

The variables of this study were adapted from previous studies. Precisely, entrepreneurial intention was measured in this study by six (6) items developed by Linan and Chen (2009). In addition, attitude towards entrepreneurship were measured in this study using five (5) items adopted from Linan and Chen (2009). Lastly, need for achievement was measured in this study by seven (7) items adopted from Cassidy and Lynn (1989). Hence, 5-point liker scale (1 = “strongly disagree”, 2 = “disagree”, 3 = “neutral”, 4 = “agree”, and 5 = “strongly agree”) was used for all the measures of the study

Results and Discussion

Response Rate

A total of 515 questionnaires were distributed to 400L students of Ahmadu Bello University, Zaria. Specifically, 434 questionnaires was return representing 84% of the total questionnaires distributed was return. Then, 29 questionnaires was remove due to outliers and leaving the study with 409 valid questionnaire representing 79% for the final analysis. According to Sekaran (2016) a cross-sectional study may accept a rate of 30%. Therefore, this study has 79% valid response which considered adequate for the analysis.

However, to validate the instrument and test the hypotheses of the study stated in the previous section, this study applies the partial least square structural equation modeling (PLS-SEM) technique through SmartPLS 3.0. This analysis technique is increasingly used in business and entrepreneurship research (Becker, Cheah, Gholamzade, Ringle & Sarstedt, 2023). It was also selected considering its flexibility in estimating complex models involving independent variable, moderator and the dependent variable and for normality violations of data distribution (Hair, Hult, Ringle & Sarstedt, 2017). As this point, the study follows the procedures outlined by Hair et al. (2017) to assess the PLS-SEM. These are (1) measurement model, and (2) structural model.

Measurement Model

The assessment of measurement model involved assessing the individual item reliability, internal consistency reliability, convergent validity and discriminant validity or all the constructs. For the individual item reliability, Hair et al. (2017) suggested 0.40 outer loadings, composite reliability value of 0.70, 0.50 or above for average variance extracted and 0.85 HTMT value for individual item reliability, internal consistency reliability, convergent validity and discriminant validity respectively. Therefore, the result is presented below.

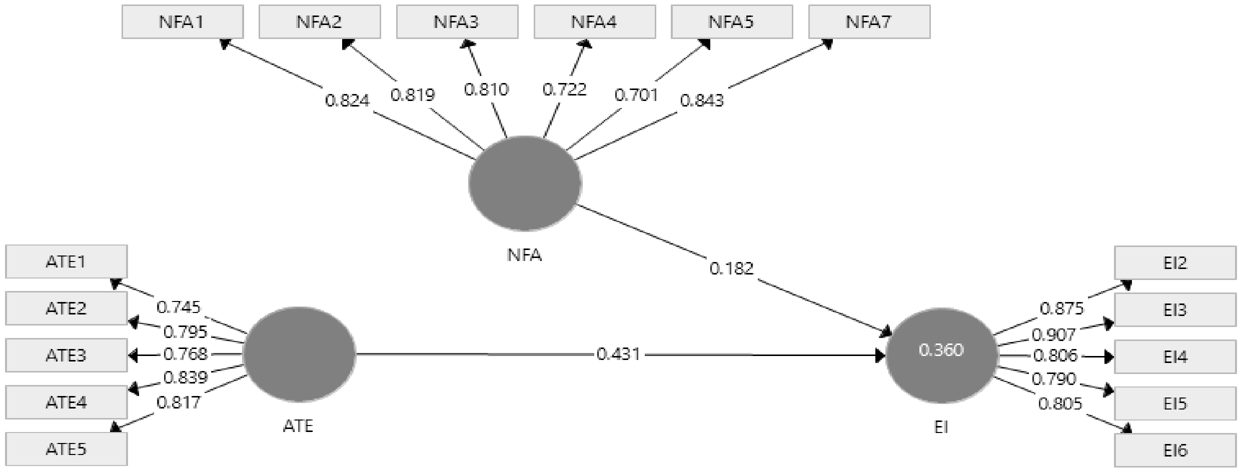

Figure 2: Measurement Model

As shown in figure 2 above, out of 18 items of all the variables of this study, 2 items (i.e., NFA6 and EI1) were deleted because they had outer loadings lower than the suggested threshold and leaving the study with 16 items which was consider valid in the context of this study.

Table 1: Internal consistency reliability and convergent validity for reflective construct (n=409)

Variables	Code	Loadings	CR	AVE
Attitude toward Entrepreneurship	ATE1	0.745	**0.899**	**0.598**
	ATE2	0.795		
	ATE3	0.768		
	ATE4	0.839		
	ATE5	0.817		
Need for Achievement	NFA1	0.824	**0.907**	**0.622**
	NFA2	0.819		
	NFA3	0.810		
	NFA4	0.772		
	NFA5	0.701		
	NFA7	0.843		
Entrepreneurial Intention	EI2	0.875	**0.921**	**0.702**
	EI3	0.907		
	EI4	0.806		
	EI5	0.789		
	EI6	0.804		

Note: CR = Composite Reliability and AVE= Average Variance Extracted

As shown in table 1, study has CR of 0.807, 0.899 and 0.899 for ATE, NFA and EI respectively which are all above the threshold of 0.7 and thus indicating adequate internal consistency reliability. On the other hand, the convergent validity of this study was achieved because all the constructs had AVE value of greater than 0.50 [i.e., ATE (AVE = 0.598), NFA (AVE = 0.622), and EI (AVE = 0.702)].

Similarly, the study used HTMT technique to assess discriminant validity which consider superior compared to the traditional cross loading and Fornell-Larcker criterion as proposed by (Henseler, Ringle & Sarstedt, 2015). Therefore, the result of discriminant validity of this study presented in table 2 showed that the HTMT values of all the constructs are less than the threshold value of 0.85, hence signifying adequate discriminant validity.

Table 2: Discriminant Validity (Heterotrait-Monotrait Ratio (HTMT) (n=409)

Variables	ATE	EI	NFA
ATE			
EI	0.636		
NFA	0.350	0.596	

Note: ATE = Attitude toward Entrepreneurship, NFA = Need for Achievement and EI = Entrepreneurial Intention

Structural Model

The assessment of structural model entails assessing the significant and relevance of path coefficient, model's explanatory power and models predictive power (Hair et al., 2017). Therefore, the present study specifically used PLS bootstrapping procedure with 5,000 bootstrap sample and 409 cases to compute the bootstrapping mean values, standard errors, *t* values, and *p* values (5% significance and 95% confidence levels) of all the path coefficients.

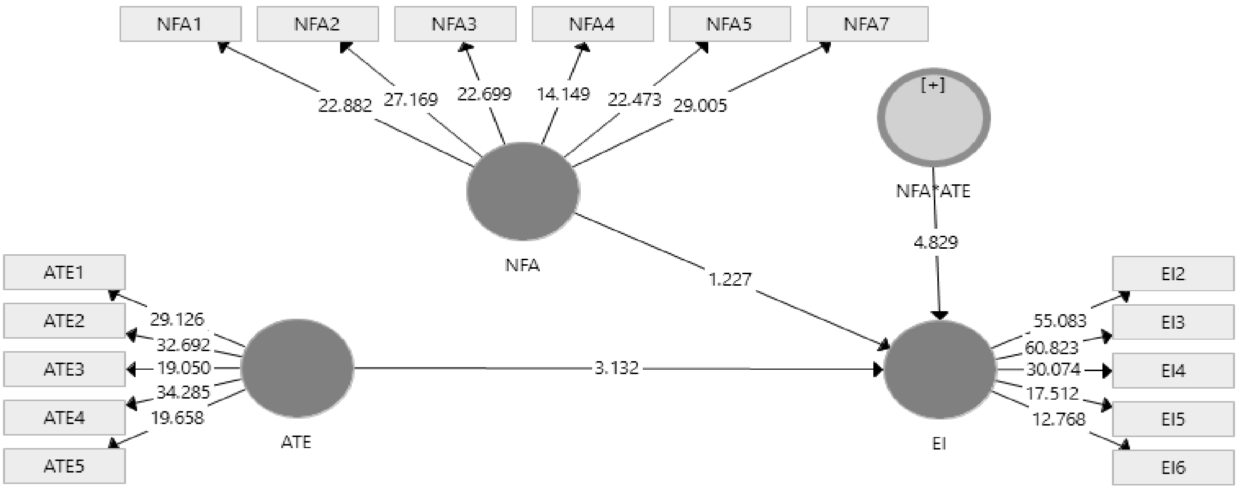

Figure 3: Structural Model

Table 3: Path Coefficient for Direct and Moderation Relationships

Hypothesis	Relationship	Beta	Standard Deviation	T Statistics	P Values	Decision
Ho_1	ATE -> EI	0.395	0.126	3.132	0.002	Rejected
Ho_2	NFA*ATE -> EI	0.103	0.021	4.829	0.000	Rejected

Note: ATE = Attitude toward Entrepreneurship, NFA = Need for Achievement and EI = Entrepreneurial Intention

As shown in table 3 above, the direct relationship between ATE and EI is positive and significant at 5% as confirm from the beta coefficient of 0.395 and P value of 0.002. It means that ATE considered as very important factor for boosting EI and thus provides the basis of rejecting the Ho_1 which state that ATE does not significantly affect EI among undergraduate students of Ahmadu Bello University, Zaria.

Similarly, the moderation relationship between NFA and ATE on EI is positive and significant at 5% as can be seen from the beta coefficient of 0.103 and P value of 0.000. This signifies that NFA and ATE interact to significantly affect EI and hence providing the basis for rejecting the Ho_2 which state that NFA does not significantly moderate the relationship between ATE and EI among undergraduate students of Ahmadu Bello University, Zaria.

Next is the assessment of coefficient of determination, effect size and predictive relevance. The coefficient of determination or assessment of R-square level was assessed in order to evaluate the amount of variance explained by the exogenous variables on the endogenous variable. According to Chin (2010), R^2 values are 0.67, 0.33 and 0.19 for substantial, moderate and weak respectively. The f^2 value provides an overview of the potential effect of exogenous variables on the endogenous variable. The general criterion for evaluating f^2 values of either small, medium and large f^2 values is measured by 0.02, 0.15 and 0.35 respectively (Cohen, 1988). Similarly, the predictive correlation (Q^2) of the external endogenous variable was examined using cross-validated redundancy criteria. Hence, table 5 below shows that ATE and NFA explain 36% (0.360) per cent variance in EI. This means the R^2 value explains by this exogenous variable on the target endogenous variables is moderate. On the effect size, ATE and NFA have small effect size. On the predictive relevance, the Q^2 is greater than zero, its implies that the model of the study has predictive relevance (Duate-Reposo, 2010).

Table 5: *R Square (R^2), Effect Size (f^2) and Predictive Relevance (Q^2)*

Indicators	**R Square**		
EI	0.360		
Indicators	**F2**	**Effect Size**	
ATE	0.135	Small	
NFA	0.090	Small	
Indicators	**SSO**	**SSE**	Q(=**1-SSE/SSO)**
EI	1930,000	1439,456	0.254

Note: ATE = Attitude toward Entrepreneurship, NFA = Need for Achievement and EI = Entrepreneurial Intention

Conclusion and Recommendations

Based on the findings of this study, it's concluded that NFA and ATE are important to EI. In other word, the study concluded that individual students need both NFA and ATE for boosting their EI. Therefore, the study recommends the need for understanding the different attitude and their impact on entrepreneurial intention, and fostering high need for achievement among students in order to boost their entrepreneurial intention.

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MODERATING ROLE OF INNOVATION CAPABILITY ON THE RELATIONSHIP BETWEEN ENTREPRENEURIAL NETWORKING AND SMALL AND MEDIUM ENTERPRISE (SMES) PERFORMANCE: A PROPOSED FRAMEWORK

[1,2,3,4]Fatimah Ibironke Bello, Idris Bashir Bugaje, Sahnun Ladan & Nafiu Muhammad Bashir

[1,2,3,4]Department of Business Administration, Faculty of Management Science
Ahmadu Bello University, Zaria.

Abstract

The issues attributed to poor performance of Nigerian SMEs compared to other developing countries of the world have motivated the researcher to carry out the current study. This paper proposes a conceptual model that highlights the role of innovation capability in affecting entrepreneurial networking and SMEs performance relationships. More precisely, we believe that innovation capability may act as a moderator between entrepreneurial networking and SMEs performance. Also, the study proposes the use ofsimple random sampling technique to collect data from SMEs owner-managers. The PLS-SEM with the aid of SmartPLS 4.0 was recommended to carry out the analysis. Lastly, propositions and directions for future research on SMEs performance are also provided.

Keywords: Entrepreneurial Networking, Innovation Capability, SMEs Performance

Introduction

Over the years, the global concern over the performance and contributions of Small and Medium Enterprise (SMEs) have largely increased by many academic researchers and industry practitioners. This is because SMEs are seen as contributing to a nation's growth and development (OECD, 2017). In developing countries, SMEs are important not only because they create employment but also because they employ unskilled workers, who are overly abundant in these countries. Beside, over 90% of the entire SMEs in the developing countries are in agricultural and non-agricultural sectors, contributing significantly to their GDP (Ugochukwu, Nathaniel & Emeka, 2018).

Given these importance of SMEs, Nigerian government created different programs and agencies aimed at providing financial and non-financial support to SMEs in the country. Some of these programs and agencies include: Small Scale Industries Credit Scheme (SSICS) in 1971; National Economic Reconstruction Fund (NERFUND) in 1990; Small and Medium Scale Enterprises Loan Scheme (SMSELS) in 1997; Small and Medium Enterprise Development Agency of Nigeria (SMEDAN) 2003; Microfinance Institutions (MFIs) 2005; Small and Medium Industries Equity Investment Scheme (SMIEIS) in 2006 and Agric-Business Small and Medium Enterprise Investment Scheme (AGSMEIS) in 2017.

Even though various programs and agencies were created by previous Nigerian government, SMEs in the country perform poorly due to high level of informality, poor infrastructural facilities, frequent public policy changes, inability to access business support services, poor access to finance and lack of bankable and strategic business plan (SMEDAN, 2021; SMEDAN, 2017). This is evidenced from the Global Innovation Index (GII) report in 2021 which indicates that Nigeria was rank as 118th compare to Kenya as 85th and China as 12th out of 132 countries of the world in terms of innovation.

In addition, weak entrepreneurial networking and lack of innovation capability are also considered as challenges attributed to poor performance of Nigerian SMEs (Aladejebi, 2020). Past studies have examined both direct and indirect relationship between entrepreneurial networking and SMEs performance. For example, looking at a direct relationship, studies (e.g., Aladejebi, 2020; Jeje (2020)) found the relationship to be significant while others like (Das & Goswami, 2019; Ojotu, Tsetim & Oguche, 2019) found insignificant relationship between the variables. Following the suggestion of Baron and Keny (1986) for introducing a moderator in order to strengthen the inconsistencies between the independent and the dependent variable. Therefore, this study assumed that innovation capability could strengthen entrepreneurial networking and SMEs performance relationship. This can be achieved through validation of the following null hypotheses;

H01: Entrepreneurial networking does not significantly affect SMEs performance.

H02: Innovation capability does not moderate the relationship between entrepreneurial networking and SMEs performance.

Concept of SMEs Performance

Performance has become vital to the survival of every firm. SMEs performance is defined as the "abilities of the SMEs to harness, integrate and utilise various internal and external resources with timely and right reconfiguration to achieve targeted set of objectives and performance capable of providing employment opportunities, growth of GDP, export and to uplift the standard of living of the society (Pulka, 2019). It is the ability of SMEs to achieve certain results or outputs in its day-to-day business activities (Lonnqqvist, 2004). According to Mandy (2009), SMEs performance is considered to be the outcomes of many activities which constitutes; efficiency, effectiveness, productivity and growth. Therefore, Don (2006) described SMEs performance as the outcomes of a firm's series of actions or activities. Hence, SMEs performance in this study is defined as the ability of the SMEs to achieve its goals and objectives.

Concept of Entrepreneurial Networking

According to Ferguson, Schattke and Paulin (2016) entrepreneurial networking can be described as an important source of support for entrepreneurs who are starting a new business or running an existing one. It refers to the entrepreneur's personal relationships with his/her 'external actors or outsiders (Aldrich & Zimmer, 1986). Therefore, Donckels and Lambrecht (1997) define entrepreneurial networks as organized systems of relationships with customers, suppliers, and other entrepreneurs, with relatives, external consultants and other agents, or potential partners. It implies that entrepreneur's network consists of family, friends, relatives, government and bank officers, customers and supportive institutions, and suppliers of raw materials. Therefore, firms use network relationships primarily to complement their own limited resources (Aldrich & Zimmer, 1986). It can be concluded that networks are a significant factor throughout the entire process of entrepreneurship development. Therefore, entrepreneurial networking in this study is defined as the personal relationships between entrepreneur and other stakeholders in the business.

Concept of Innovation Capability

According to Omar, Aris and Nazri (2016) innovation capability can be described as the ability to continuously transform knowledge and ideas into new products, processes and systems for the benefit of the firm and its stakeholders. It can also be defined as firm ability relative to its competitors, to apply the collective knowledge, skills and resources to innovation activities related to new product, process, services or management, marketing or work organizational system, in order to create added value for the firm and its stakeholders (Hogan, et al., 2011). Equally, firm's innovation capability can also be described as its ability to develop innovations continuously as a response to a changing environment (Olsson, et al., 2010). Moreover, high level of innovation capabilities within the organization will improve the firms' performance (Wu & Sivalogathasan, 2013). Meanwhile, organizations must be innovative to have a competitive advantage by developing new products, processes and novel marketing activities.

Relationship between Entrepreneurial Networking and SMEs Performance

There is different view regarding the relationship between entrepreneurial networking and SMEs performance. For example, Aladejebi (2020) investigated the impact of entrepreneurial networks on the performance of small business in Nigeria. A purposeful sample was used to select respondents. The data collected was analysed using SPSS. The results of the analysis showed evidence of positive and significant impact between of entrepreneurial networks and performance of Small Business in Nigeria.

Jeje (2020) examined the relationship between networking and Performance of Small and Medium-sized Enterprises in Tanzanian. The study adopts both the concurrent nested design and a multi-stage sampling technique and was able to collect data from 161 bakeries throughout Tanzania by using questionnaires. Also, the study carried out 20 in depth interviews from bakery owners/managers and adopted a moderator analysis in confirming that both size and age of the bakery moderate the relationship between networking strategies and bakery performance. Thus, the result of direct relationship between networking and performance of SMEs showed positive and significant.

On the other hand, Das and Goswami (2019) examine the impact of entrepreneurial networks on small firm performance in Kamrup district of Assam. Specifically, the dimensions of entrepreneurial networks used in this study include; network structure (size, density and centrality) and network types (competitive and supportive). A total sample of thirty-five (35) small firms in Kamrup district of Assam was used for the study. Hierarchal regression analysis was conducted to analyse the data collected. The results of the study revealed that network density and centrality have a positive impact on firm performance. However competitive and supportive network is not significant.

In the same vein, Ojotu, Tsetim and Oguche (2019) investigated the impact of networking on the performance of small and medium-sized businesses (SMEs) in Makurdi Nigeria. Specifically, the study focused on the impact of network structure, governance, and content on the success of small businesses The survey research design was chosen for the study because it is simple to use and produces findings quickly. The study's target demographic consists of seven hundred and eight (708) owners/senior management employees from SMEs. The research tool for data collecting was a questionnaire. Multiple regression analysis was used to analyse the data via SPSS. Findings indicate that network structure has a substantial impact on SMEs' performance and network governance has a considerable impact on SMEs' performance. Furthermore, the findings revealed that network content had a considerable impact on SMEs' performance in Benue State.

In summary, the various studies reviewed displayed the significance of entrepreneurial networking in obtaining different financial and non-financial support for start-up or expansion of businesses. However, the results had been inconsistent across studies as to the effect of entrepreneurial networking on SMEs' performance. Following the suggestion of Baron and Kenny (1986) that a moderating variable be introduced where a weak and inconsistent relationship exists, this study investigates the moderating role of innovation capability on the relationship between entrepreneurial networking and SMEs' performance

Moderating Role of Innovation Capability

Innovation capability is one of the important organizational resources that lead to higher performance. Meanwhile, Wu and Sivalogathasan (2013) posit that high level of innovation capabilities within the organization will enhance the firms' performance. Mohammad, Massie and Tumewu (2019) in their study found that innovation capability has significant effect on SMEs performance. Therefore, this study argued that innovation capability can play a vital role in strengthen the inconsistency between entrepreneurial networking and SMEs performance relationship. This is because despite firms has networking with family, friends, relatives, government, bank officers, customers, supportive institutions, and suppliers of raw materials if they don't have innovation capability (i.e., product, process and market) their performance will be low in this present competitive environment. Hence, this study argued that SMEs need both entrepreneurial networking and innovation capability for better performance which will be consider in this present study.

Conceptual and Theoretical Framework

The conceptual framework of this study has three (3) variables (entrepreneurial networking, innovation capability and SMEs performance). Specifically, entrepreneurial networking is the independent variable, innovation capability is the moderator, while SMEs performance is the dependent variable. Thus, the conceptual framework of the study is presented below;

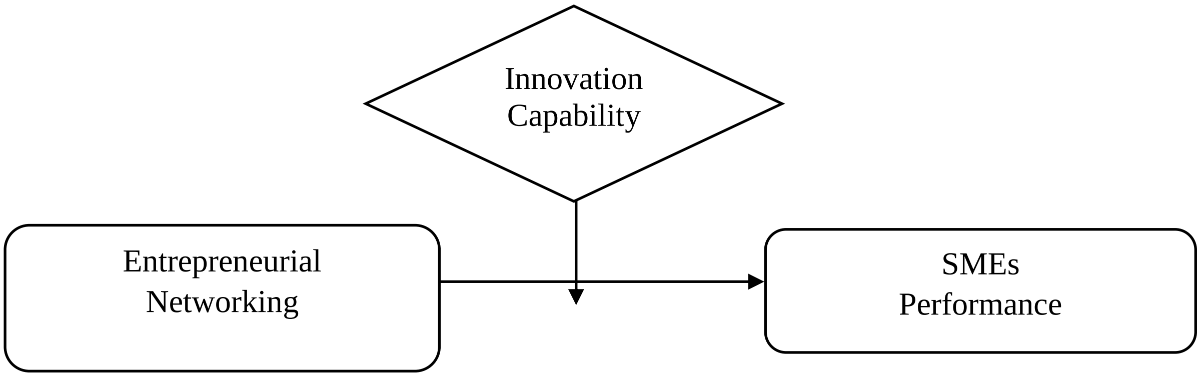

Figure 1: Conceptual Framework

The study employed Social Network (SN) Theory and Resource Based View (RVB) Theory. to explain the relationship between the variables presented the conceptual framework. The social networks theory was developed by Bourdiew (1985) and sought to explain the capability of the network to help the entrepreneur access resources. According to Portes (1998), social networks is the ability of group members to receive economic benefits from social network, and gain access to resources that influence their social interactions, as they relate with other group members. Thus, social network theory postulates that small business owners are the most significant entities within a network. Hence, this study argued that strong relationship between the owner-manager and other stakeholders will lead to higher performance.

The resource-based view theory postulated that different sets of resources and capability that are valuable resources, rareness, inimitable and non-substitutable (VRIN) will yield competitive advantage to a firm (Barney, 1991). This study argued that innovation capabilities is a firm's specific VRIN capability that cannot be easily copy by others and thus will lead to superior firm performance.

Materials and Methods

The study proposed to use cross sectional survey research design in order to collect primary data from SMEs. The population of the study can be collected from authorized regulatory body of SMEs like SMEDAN. Krejcie and Morgan's (1970) table can be used to determine the sample size. Simple random sampling technique can also be employed in selecting the sample. However, the measures of variables can be adopted or adapted from previous literature. Lastly, data collected can be analyze using SmartPLS 4.0.

Conclusion

The main objective of this paper was to propose a conceptual model that highlights the potential moderating role of innovation capability on the relationship between entrepreneurial networking and SMEs performance. While extant research has examined the direct effect of entrepreneurial networking and SMEs performance, the findings from these studies were conflicting and inconclusive. To address this gap in the literature, the present paper suggests the need to identify a moderator variable. Thus, the overall contribution of this paper lies in the identification and incorporation of innovation capability as a moderating variable between entrepreneurial networking and SMEs performance relationships.

The proposed conceptual model (Figure 1) suggests some avenues for possible future research agenda. First, research could propose and test theoretical mechanisms for the postulated effects of entrepreneurial networking and SMEs performance. On second thought, research could develop and test a mediated moderation model in which innovation capability reflects the moderator. Finally, future research could consider a comparative study between the effects of entrepreneurial networking and SMEs performance in Nigeria and other countries.

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MODERATING ROLE ENTREPRENEURIAL BUSINESS NETWORK ON THE MEDIATING EFFECT OF COMPETITIVE ADVANTAGE BETWEEN SMES DETERMINANTS OF SUSTAINABLE PERFORMANCE IN KANO STATE, NIGERIA: A PILOT TEST

[1]Shamsudeen Muazu Salisu, [2]Mohammad Nura Ibrahim Naala, [3]Nasiru Abdullahi [4]Kabiru Jinjiri Ringim, [5]Mustapha Abubakar & [6]Abdullahi Hassan Gorondutse

[1]International Centre of Excellence for Rural Finance and Entrepreneurship, Ahmadu Bello University, Zaria.
[2,3,4]Department of Business Administration, Faculty of Management Science, Ahmadu Bello University, Zaria.
[5]Department of Banking and Finance, Faculty of Management Science, Ahmadu Bello University, Zaria.
[6]Department of Economics and Management Science, Nigeria Police Academy, Nigeria.
ssalisumuazu@gmail.com
+2348033876999

Abstract

This pilot test examines the validity and reliability of the adapted instrument of the study. A sample of 45 copies of questionnaires were proportionally and randomly administered to SMEs operating in the three zones of Kano State (i.e., Kano Central, Kano North and Kano South), Nigeria. The data collected was analysed using Partial Least Squares (PLS) path modelling with the aid of SmartPLS 4.0.9.2. The finding indicates that all the constructs of this study are valid and reliable except for access to ICT which did not achieve convergent validity which might be due to small sample size utilized for the pilot study.

Keywords: Access to Finance, Access to ICT, Competitive Advantage, Entrepreneurial Business Network, Entrepreneurial Orientation,

Introduction

Small and medium enterprises (SMEs) have received a significant global concern among scholars and practitioners to provide significant economic, social and environmental impact at regional and national levels (Styaningrum, Soetjipto & Wulandari, 2020). This is due to the fact that SMEs contributed significantly to the achievement of the Sustainable Development Goals (SDGs) through encouraging inclusive and sustainable economic growth, the creation of jobs, the promotion of sustainable industrialization, the encouragement of innovation, and the reduction of income disparity in developing nations (Endris & Kassegn, 2022; Verma, 2019; Organization for Economic Cooperation & Development (OECD, 2017). According to International Labour Organisation ILO (2019), 70% of employment opportunity in developing countries is generated by SMEs and self-employed individuals. For instance, SMEs in China was estimated to contribute 65% to employment, around 50% of the nation’s tax revenue and more than 60% of Chinese GDP (European Union [EU], SME Centre Report, 2023). Similarly, SMEs in South Africa employed between 50% and 60% of workforce and contribute around 34% of South African GDP (International Finance Corporation (IFC, 2019). Moreover, it is estimated that between 90-95% of all enterprises Nigeria are within the NMSMEs category, and SMEs contribute to about 43.2% of the total employment and less than 10% to the non-agricultural GDP (Small and Medium Enterprises Development Agency of Nigeria (SMEDAN, 2021).

Despites SMEs contributes greatly in the area of employment generation and to GDP of the above mentioned countries, and surprisingly the sector experience higher rate of failure as most of them failed within their first five years in operation which translates to their lack of sustainable performance. For example, International Food Policy Research Institute IFPRI (2020) survey on SMEs in China revealed 18% *failure rate of SMEs in addition,* 61.5% failure rate was recorded in U.K (UK Business Survival Rate Report, 2021); and 70% to 80% in South Africa (University of the Western Cape [UWC], 2024). In Nigeria however, SMEDAN reported that 80% of SMEs fail before their fifth anniversary (Ikpoto, 2023). This implies that the rate of SMEs failure in Nigeria is higher than other mention developing countries and hence translates to their lack of sustainable performance.

Sustainable performance is concern with the practice or integration of economic, social and environmental aspect of performance (Al-Sharafi, et al., 2023). Therefore, SMEs in different countries of the world have started integrating SP practices. For example, OECD corporate sustainability report (2024) state that, businesses representing 98% of the financial sectors in China integrate SP practices compared to 75% in the U.S. in addition, the Global Sustainability Ranking ranked China as 30th, U.S 32th, U.K 16th, South Africa 131th and Nigeria 156th out of 180 countries, thereby indicating issues affecting the sustainable performance of SMEs in Nigeria (Global Sustainable Competitiveness Index [GSCI] Report, 2023).
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In order to provide strategy to address the issue affecting the sustainable performance among Nigerian SMEs, the government introduced Economic Sustainability Plan in 2020 and injected about ₦2.3 trillion to support SMEs sector to sustain their performance (Anam, et al., 2024). Therefore, empirical evidence from the literature identified lack of entrepreneurial orientation, unethical practice in the firms, inadequate access to finance, poor access to information and communication (ICT), lack of competitive advantage and entrepreneurial business network impedes Nigerian SMEs to achieve sustainable performance (Salisu, Naala, Ringim & Abubakar, 2024; Chatti & Majeed, 2022; Adamu, Wan & Gorondutse, 2020; Aigboje, 2020; Mohamad & Chin, 2019). Therefore, these issues need urgent attention particularly in Nigeria where the rate of SMEs sustainable competitive advantage and sustainable performance is very low in order to achieve better sustainable competitive advantage which might assist to increase sustainable performance.

Similarly, several studies such as Adamu, Wan and Gorondutse (2020) proposed different variables like knowledge sharing, ethical sensitivity, access to finance, access to ICT and innovation as SMEs determinants of sustainable performance. But they fail to explain the mechanism through which these variables influence the sustainable performance. In particular, this study proposed a conceptual framework by incorporating competitive advantage to act as mediator between entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT on the sustainable performance of SMEs. This is also in line with the study of Styaningrum, Soetjipto and Wulandari (2020) which established that SMEs can only achieve sustainable business performance through the mediation role of competitive advantage. However since previous studies (*i.e.,* Aidara, et al., 2021; Styaningrum, Soetjipto & Wulandari, 2020) found significant relationship between competitive advantage and sustainable performance, while RBV theory assert that CA does not always leading to achieve SP especially when firms resources can be imitated or become absolete (Barney, 2001; Barney, 1991). As a result, this study adds novelty to the framework by introducing entrepreneurial business network to moderate the relationship between competitive advantage and sustainable performance. Therefore, the main objective of this study is to proposed a conceptual framework on the moderated-mediation of entrepreneurial business network and competitive advantage on the relationship between entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT on the sustainable performance of SMEs in Nigeria

The paper is structured as; reviews of the literature including; SMEs sustainable performance, entrepreneurial orientation and SMEs sustainable performance, ethical sensitivity and SMEs sustainable performance, access to finance and SMEs sustainable performance, access to ICT and SMEs sustainable performance, and how competitive advantage plays a mediating role on the relationship between entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT on the sustainable performance, then how entrepreneurial business network moderate the mediation of competitive advantage between entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT on the sustainable performance. In addition, the conceptual and theoretical framework for the study was proposed and lastly, pilot test has been conducted.

Literature Review

SMEs Sustainable Performance

Sustainable performance is defined as the ability of the organization to achieve its business and increase value for shareholders, taking into account the long-term economic, social and environmental responsibility (Al-Abbadi & Abu Rumman, 2023). According to Hadi and Baskaran (2021) sustainable performance is defined as attaining and upholding economic, environmental, and social performance in any circumstance. Consequently, sustainable performance is when economic, social and environmental performance are all considered (Hui *et al*., 2024). This is good for the society and the environment and provides businesses with a competitive edge as well as economic sustainability benefits (Hui *et al*., 2024). It is concluded that sustainable performance centred on the balanced and synergy associations between the economic (financial), social, and environmental dimensions. These dimensions are termed the triple bottom line approach which emerged as a potential way to define a business's sustainable performance: measuring performance not only in the economic aspect, but also on the social and environmental aspect (Elkington, 1998). In this study therefore, sustainable performance refers to the ability of SMEs to effectively and efficiently integrate economic, social and environmental performance in order to sustain their short-term and long-term business performance.

Entrepreneurial Orientation and SMEs Sustainable Performance

Entrepreneurial orientation can be described as the processes, practices, and decision-making activities that result in new entry (Lumpkin & Dess, 1996). It is the sum of an enterprise innovativeness, proactivity, and risk-taking (Miller, 1983). These dimensions have been widely used in prior studies (Moreno & Casillas 2008; Covin & Slevin 1989). Later, Lumpkin and Dess (1996) added two dimensions; competitive aggressiveness and autonomy. Hence, entrepreneurial orientation has five dimensions: innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy (Lumpkin & Dess, 1996; Miller, 1983). The literature suggests that entrepreneurial orientation is best seen as a unidimensional construct (Covin & Slevin 1989), so this study views entrepreneurial orientation as a unidimensional construct, referring to the organizational behavior that reveals the degree to which SMEs have adopted.

Previous studies have found significant relationship between entrepreneurial orientation and SMEs sustainable performance. For example, Abid, Ceci and Aftab (2023) found reveal a direct positive influence of entrepreneurial orientation on sustainable performance. In addition, Jayawardhana (2021) reveal that entrepreneurial orientation significantly influences sustainability of SMEs. Similarly, study of Amankwah-Amoah *et al.*, (2019) in their study showed that entrepreneurial orientation has positive and significant effect on environmental sustainability.

Ethical Sensitivity and SMEs Sustainable Performance

According to Rest (1983) ethical sensitivity is a fundamental component of ethical action. They argued that ethical sensitivity deal with the ability to identify ethical and moral implications of situation (Lepper, 1996). Notably, there are four basic components that make an individual to behave ethically. These include; moral sensitivity, moral judgement, moral motivation and moral character (Rest, 1983). Moral sensitivity involves interpreting the situation and how people will be affected by possible actions (Iqbal, Hassan & Arshad, 2017). Moral judgement comprises the situation in which a person identifies the best possible course of action (Lepper, 1996). Moral motivation encompasses the situation where a person selects amongst the various possible outcomes and intends to act morally (Iqbal *et al.*, 2017). Moral character contains person implementing and executing the chosen moral course of action (Lepper, 1996). However, several scholars have been defined the concept of ethical sensitivity in many ways and in different field of study. For instance, according to Iqbal *et al.* (2017) ethical sensitivity is the ability to understand ethical characteristics of a situation, the involved actors of situations and the actions that can take place in response to the situation. Similarly, ethical sensitivity in the field of business organization refers to the act of recognizing and understanding ethical aspect of work situations to meet the needs of its stakeholders such as oneself, one’s employer, customers, stockholders, creditors, suppliers, colleagues, competitors, and any other community or group that might be affected by decisions involving ethical issues (Blodgett, et al., 2001). In this study therefore, ethical sensitivity refers to the ability of SMEs to identifies and understand the presence of ethical issues in an organization and making the right decision in evaluating them in a manner that it will meet the needs of its stakeholders.

Preceding empirical studies have also found significant relationship between ethical sensitivity and SMEs sustainable performance. For instance, a study conducted by Tushabe

(2022) in the third-party logistics firms in Uganda revealed a positive and significant relationship between ethical sensitivity and performance. Additionally, Billah *et al.* (2023) found significant and positive relationships between ethical sensitivity and social and economic performance. However, no link was found between ethical sensitivity and environmental performance. Moreover, Adamu *et al.,* (2020) investigate the relationship between ethical sensitivity and sustainable performance of SMEs in Nigeria. The findings of the study indicate a significant positive relationship between ethical sensitivity and sustainable performance of SMEs. In other word, the findings of the study indicate that the practice of ethical sensitivity in SMEs will not only be to improve their economic performance but also to improve both social and environment performance.

Access to Finance and SMEs Sustainable Performance

Adomako *et al.,* (2016) defined access to finance as the accessibility of financial resources either from internal or external sources for the enterprise survival and growth. In other words, Bouri, Breij, Diop *et al.,* (2011) defined access to finance as the availability of financial resources (both internal and external) for SMEs. As a result, internal finance is concerned with raising finances through personal savings, as well as retaining profits and from friends and relatives. However, if the company grows, its finance needs may expand beyond these internal sources. The next source is external finance, which is merit-based and evaluated by financial institutions. There are two main types of external finance: debt and equity. Debt financing entails the purchase of interest-bearing instruments. They are secured by asset-based collateral and have term arrangements, which can be short or long term. The equity component of external funding offers the financier the right to own the business and may not require security because the equity participants will be involved in the business's management (Oguijiuba, Ohuche, & Adenuga, 2004). However, Adamu *et al.,* (2020) defined access to finance as the accessibility of financial capital such as debt borrows and equity for SMEs. In this study therefore, access to finance is defined as the ability of SMEs to access financial capital (internal and external) with minimal or no financial and non-financial barriers.

Extant studies found significant relationship between access to finance and SMEs sustainable performance. For instance, study of Assifuah-Nunoo (2023) found that access to finances has a significant effect on firm sustainability. Equally, study conducted by Tang (2022) in his study found that access to finance is significantly influences small firms' sustainability. Patrick *et al.,* (2021) in their study found that access to finance has a significant effect on business sustainability in central region in Uganda.

Access to ICT and SMEs Sustainable Performance

According to Yao, Peng, Kurnia and Rahim (2022) ICT is broadly defined as a combination of hardware, software, mobile devices, infrastructure, and networks that enable individuals and organizations to capture, store, process, manage and share data. Therefore, access to ICT is the capability of firm to access and use of modern ICTs like GSM, computer, email and internet (Okojie & Omoregbee, 2012). However, it has been argued that not all SMEs have the accessibility of ICT tools such as computers, telephone, network, satellite system, internet, hardware, software as well as other applications due to high cost of installation (Arefin & Tawfiqur, 2021; Sołek-Borowska, 2018). Therefore, this study argues that once SMEs have access to different ICT tools it might have tendency to achieve sustainable performance will be high. Hence, access to ICT in this study refers to the ability of SMEs to locate and use ICT resources such as computing platforms, applications, internet facilities, office mobile phone and all other necessary ICT resources that can assists the enterprises to sustain their long-term performance.

Prior studies found significant relationship between access to ICT and SMEs sustainable performance. Evangelista and Hallikas (2022) indicated that both operational and tactical procurement ICT systems positively influence sustainability practices in PSM. Furthermore, Salisu *et al,* (2024) in their study found that access to ICT is positively and significantly related to sustainable performance of SMEs. However, Bakare, Madukoma and Umar (2022) examined the influence of ICT use on SMEs performance in the North Central geo political zone of Nigeria. The study found that the level of ICT use of SMEs in North Central geo-political zone, Nigeria is low.

Mediating Effect of Competitive Advantage between Entrepreneurial Orientation, Ethical Sensitivity, Access to Finance, Access to ICT and SMEs Sustainable Performance

Even though several researches has established that entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT are positively and significantly related to sustainable performance of SMEs, both theory and empirical evidence provide a clear and logical argument as to why entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT may predict sustainable performance of SMEs. In particular, RBV described by Barney (1991) suggests that competitive advantage might be a fundamental reason why entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT are related to sustainable performance of SMEs. Competitive advantage as discuss earlier refers to the ability of a firm to use its unique resources to create offerings in terms of differentiated product, market sensing, customer and competitor responsiveness better than that of its competitors (Ramaswami *et al.*, 2004). According to RBV theory, an enterprise will gain a competitive advantage when it integrates different sets of unique resources and capabilities which in turn lead to the sustainability of its business. Therefore, the present study argued that competitive advantage may perform a mediating role in the relationship between entrepreneurial orientation, ethical sensitivity, access to finance, access to ICT and sustainable performance of SMEs for the following reasons.

First, the entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT which constitutes the independent variables of this study has found in extant empirical studies to be positively and significantly related to sustainable performance (*i.e.,* the dependent variable). More specifically, Mullens, (2018) investigates the relationship between entrepreneurial orientation and sustainability initiatives in family firms in the south western USA. The findings indicate that entrepreneurial orientation is significantly and positively related to investments in sustainability initiatives. Equally, Adamu *et al.,* (2020) investigate the relationship between ethical sensitivity and sustainable performance of SMEs in Nigeria. The findings of the study indicate a significant positive relationship between ethical sensitivity and sustainable performance of SMEs. Likewise, Patrick *et al.* (2021) analysed the effect of access to finance on sustainability of SMEs in central Uganda. Findings of the study revealed that AF has a significant effect on business sustainability in central region in Uganda. Also, Onileowo and Fasiku (2021) investigate the influence of ICT on financial sustainability of SMEs in Nigeria. The study showed that ICT played an important role in improving the firm productivity, profitability and thus overall financial sustainability.

Second, previous empirical research has also found that entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT are significantly related to competitive advantage (Salisu *et al.,* 2024; Alharbi & Alharbi, 2019; Samoedra & Deni Hermana, 2019; Qosasi, Maulina, Purnomo, Muftiadi, Permana & Febrian, 2019). Also, RBV theory confirms that if a firm integrates different set of unique resources and capabilities such as the independent variables of this study (entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT) will achieve competitive (Barney, 1991). As a result, this study argued that competitive advantage can be achieved if firms are able to integrate entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT as part of their business strategy.

Third, previous studies (*e.g.,* Saputra, et al., 2023) have established a significant relationship between competitive advantage and sustainable performance, while others (*e.g.,* Nguyen, et al., 2021; Sinaga & Gallena, 2018) revealed that competitive advantage has a positive and significant impact on firm performance. But in the case of sustainable performance, very few studies examined the relationship between competitive advantage and sustainable performance. For example, Aidara *et al.,* (2021) found that competitive advantage has significant effect on economic performance (sustainability). In the same vein, Styaningrum, Soetjipto and Wulandari (2020) found that competitive advantage has a significant impact on SMEs' sustainability. On the contrary, RBV theory assert that competitive advantage does not always leading to achieve SP especially when firms' resources can be imitated or become absolete (Barney, 2001; Barney, 1991).

Finally, extant research suggested that competitive advantage mediates the relationship between entrepreneurial orientation, ethical sensitivity, access to finance, access to ICT and sustainable performance of SMEs. For instance, Samoedra and Hermana (2019) contended that competitive advantage mediates the relationship between entrepreneurial orientation and sustainability. They argued that competitive advantage is important to encourage economic, social and environmental initiatives. Similarly, Styaningrum *et al.,* (2020) in their study found that competitive advantage has direct positive effect on sustainability of SMEs and competitive advantage mediates the relationship between intellectual capital and SMEs sustainability. It's suggested by the study that future research should develop a study by looking at other factors to see if it can determine SMEs sustainability, under the mediating role of competitive advantage which this present study intend to develop and explore.

Given the theoretical and extant empirical studies, this study therefore expects competitive advantage to mediate the relationship between entrepreneurial orientation, ethical sensitivity, access to finance, access to ICT and sustainable performance of SMEs in such a way that entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT will be related to competitive advantage, which in turn will enhance sustainable performance. In other word, competitive advantage was introduced to play a mediating role on the relationships between entrepreneurial orientation, ethical sensitivity, access to finance, access to ICT and sustainable performance of SMEs.

Moderating Role of Entrepreneurial Business Networks on the Mediating Effect of Competitive Advantage and SMEs Sustainable Performance

As noted in the preceding section, previous studies examining the relationship between competitive advantage and sustainable performance have reported mixed findings. These inconsistencies suggest the need to introduce a moderator variable to affect competitive advantage and sustainable performance relationships. Hence, the present study suggests entrepreneurial business networks as a moderating variable worthy of incorporation into our proposed model. According to Soda, Usai and Zaheer (2004) entrepreneurial business networks is a business social networking, which helps business people to connect and communicate with other entrepreneurs and managers to expand business interests by forming mutually beneficial business relationships. It involves building a network contact between firm and its suppliers, customers and competitors (Abbas *et al.*, 2019). Therefore, the underlying reason for choosing entrepreneurial business networks to moderate the relationship between competitive advantage and sustainable performance is generally based on the fact that business networking power might determine the survival and the success of SMEs ventures; either it is a new or existing business (Abbas *et al.*, 2019). It also helps SMEs to gain access to different resources which are paramount to the sustainable growth (Minai, Ibrahim & Kheng, 2012). On this note, entrepreneurial business network is likely to play an important role in moderating the relationship between competitive advantage and sustainable performance. It signifies that the interaction between entrepreneurial business network and competitive advantage might likely create sustainable competitive advantage which can assist to achieve sustainable performance.

Similarly, several studies have examined the effect of entrepreneurial business network on sustainable performance. For example, Abbas *et al.* (2019) explored how dynamic capabilities mediate the relationship between entrepreneurial business network and sustainable performance of SMEs. The findings indicated that the entrepreneurial business network had a significant positive relationship with sustainable performance. In addition, Adudu, Terlumun and Kabiru (2021) in their study revealed that business networking has a positive and significant effect on the performance of SMEs.

However, none of the empirical study to the best of the researcher knowledge examined how entrepreneurial business network interacts with competitive advantage to influence sustainable performance. This is particularly essential to determine how entrepreneurial business network could make the weak relationships between competitive advantage and sustainable performance stronger. Therefore, Resource Based View (RBV) theory had a primary contribution in explaining these relationships (Barney, 1991). This is because the RBV theory postulates that the basis for achieving competitive advantage and sustainable performance depends on the firm's ability to utilize the available bundle of valuable intangible and tangible resources such as entrepreneurial business network (Barney, 1991).

Based on the above theoretical and empirical reviewed, this study assumed that relationship between competitive advantage and sustainable performance will be stronger if entrepreneurial business network is high. This signifies that the interaction between entrepreneurial business network and competitive advantage if it became stronger can create sustainable competitive advantage which might increase sustainable performance. In a nut shell, modelling entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT as the IVs in a single model and moderated-mediation role of entrepreneurial business network and competitive advantage on the relationship between these IVs against SP of

SMEs has not been previously explore and thus, serves as great contributions of this present study. In this regard, a conceptual framework (Figure 1) has been developed.

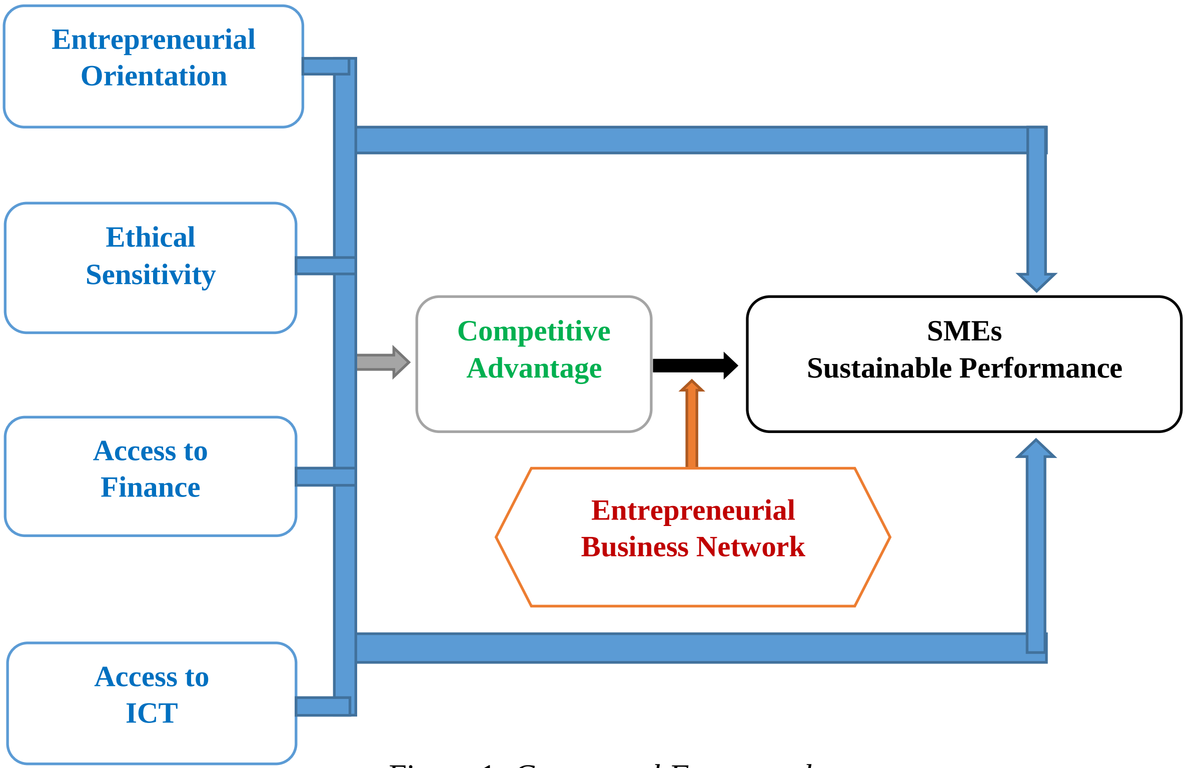

Figure 1: *Conceptual Framework*

The study used two theories to explain the relationship between entrepreneurial orientation, ethical sensitivity, access to finance, access to ICT, competitive advantage, entrepreneurial business network and SMEs sustainable performance. Precisely, Resource Based View (RBV) theory asserted that firms' resources and capabilities can be use to achieve competitive advantage and in some instances leading to achieve SP (Barney, 1991; Wernerfelt; 1984; Penrose, 1959). As such, entrepreneurial orientation, ethical sensitivity, access to finance and access to ICT are considered to be among the resources and capabilities that can be use by the firms to achieve competitive advantage and overall sustainable performance. Moreover, Stakeholder (ST) theory assumed that businesses can only be considered sustainable when they deliver value to the majority of their stakeholders in the decision-making processes (Freeman & McVea, 2001). These stakeholders include; suppliers, customers, competitors, employees, governments, credit lenders, and financiers. The theory also suggests that the true success and sustainability of a firm lies in the satisfaction of all its stakeholders (Friedman, 1970). These serve the basis for using stakeholder theory to explain the relationship between entrepreneurial business network and sustainable performance.

Materials and Method

Pilot Test

To carry out the pilot test, researchers have an option to use 30 respondents or more to examine the validity and reliability of the developed or adapted measures (Fink, 2017). In order to avoid poor response, 45 copies of the study questionnaires were proportionally and randomly administered to SMEs from all sectors operating in the three zones of Kano State (*i.e.*, Kano Central, Kano North and Kano South), Nigeria.

Table 1: Pilot Test: Proportionate Stratified Sampling Frame

S/N	Kano State Zones	Number of Registered SMEs by Zone	Proportionate Sample for each Zone
1	Kano Central	3,453	38
2	Kano North	237	3
3	Kano South	366	4
	Total	**4,056**	45

Source: Compiled by the Researcher, 2024.

As shown in table 1 above, 38 copies of the study questionnaires were proportionally and randomly administered to SMEs owner-managers in Kano Central, 3 copies in Kano North and 4 copies in Kano South using stratified sampling method making the total of forty five (45) questionnaires distributed for the purpose of pilot test. Therefore, the administration of the questionnaires took place between 10th to 24th July, 2024. However, all the forty five (45) questionnaires were duly completed and returned, but only forty one (41) were retained and four (4) of them were removed as a result of none response, indicating a response rate of 91% which is considered suitable for validity and reliability (*i.e.*, assessing the measurement model) analysis of the constructs and its measures.

Reliability and Validity of Constructs and Its Measures

Reliability refers to a test of how consistently a measuring instrument measure whatever concept it is measuring (Bougie & Sekaran, 2019). Therefore, this study employed the use of PLS-SEM through the use of SmartPLS 4.0.9.2 software to assess the measurement model in order to determine the internal consistency reliability, convergent and discriminant validity (Ringle, Wende & Becker, 2022).

Internal Consistency Reliability

The assessment of internal consistency reliability for the pilot test was conducted using composite reliability (CR) as previously suggested by many researchers (*e.g.*, Hair *et al.*, 2022; Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). Therefore, Hair *et al.*, (2022) considered the CR values between 0.70 and 0.90 as satisfactory, while values above 0.90 (and definitely above 0.95) are not desirable. Therefore, table 2 present the results of pilot test with respect to internal consistency reliability.

Table 2: Pilot Test: Internal Consistency Reliability (n=41)

Constructs	Code	Number of Items	CR
Sustainable Performance	SP	14	0.905
Entrepreneurial Orientation	EO	9	0.815
Ethical Sensitivity	ES	6	0.906
Access to Finance	AF	6	0.815
Access to ICT	AICT	7	0.799
Competitive Advantage	CA	12	0.872
Entrepreneurial Business Network	EBN	12	0.745

Note: CR = Composite Reliability

As shown in table 2 above, all the constructs of this study (i.e., SP, EO, ES, AF, AICT, CA and EBN) have achieved internal consistency reliability with CR value above 0.70. This indicates that all the constructs of this study are reliable as confirmed from the pilot study.

Convergent and Discriminant Validity

The convergent validity was assessed using AVE and the recommended threshold is 0.50 (Hair *et al.*, 2022). Therefore, table 3 present the results of pilot test with respect to convergent validity.

Table 3: Pilot Test: Convergent Validity (n=41)

Constructs	Code	Number of Items	AVE
Sustainable Performance	SP	14	0.695
Entrepreneurial Orientation	EO	9	0.575
Ethical Sensitivity	ES	6	0.617
Access to Finance	AF	6	0.569
Access to ICT	AICT	7	0.489
Competitive Advantage	CA	12	0.686
Entrepreneurial Business Network	EBN	12	0.577

Note: AVE = Average Variance Extracted

As shown in Table 3 above, SP, EO, ES, AF, CA and EBN have achieved convergent validity with AVE value above the threshold of 0.50, while AICT do not achieved convergent validity since its AVE value is below the threshold of 0.50 respectively. On the other hand, the discriminant validity was assessed using Heterotrait-Monotrait Ratio (HTMT) in order to determine the extent to which a construct is distinct from other constructs (Henseler, Ringle & Sarstedt, 2015). The recommended threshold of HTMT to ascertain adequate discriminant validity is 0.85 for structural model that have conceptually different constructs or 0.90 for structural model that are conceptually similar constructs (Hair *et al.*, 2022). Therefore, the results of pilot test for discriminant validity are presented in table 4 below.

Table 4*: Pilot Test: Discriminant Validity (HTMT) (n=41)*

Constructs	AF	AICT	CA	EBN	EO	ES	SP
AF							
AICT	0.844						
CA	0.809	0.820					
EBN	0.796	0.775	0.782				
EO	0.689	0.682	0.634	0.767			
ES	0.681	0.831	0.583	0.496	0.612		
SP	0.804	0.796	0.700	0.704	0.668	0.474	

Based on the result discriminant validity presented in table 3.15 above, the HTMT value for all the constructs of this study have achieved discriminant validity since their HTMT value are less than the suggested threshold of 0.85 for conceptually distinct construct, thereby suggesting that the all the constructs of this study possess adequate discriminant validity

Conclusions

In conclusion, this pilot test examines the validity and reliability of the adapted instrument of the study. The finding indicates that all the constructs of this study are valid and reliable except for access to ICT which did not achieve convergent and discriminant validity. The reasons for not achieving convergent and discriminant validity for AICT as one of the constructs of this study might be due to; (1) poor items wording or ambiguous statement of some items, and/or (2) due to small sample size utilized for the pilot study. These issues will be address by; (1) revising the items wording to improve clarity and relevance, (2) collecting large data for the main analysis which will be done in the main analysis.

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EFFECT OF ENTREPRENEURSHIP EDUCATION ON ENTREPRENEURIAL INTENTION: MODERATING ROLE OF NEED FOR ACHIEVEMENT

[1]Abubakar Tijjani Usamat, [2]Ladan Sahnun, Ph.D & [3] Prof. Nasiru Abdullahi

[1]International Center of Excellence for Rural finance & Entrepreneurship
[2]Department of Business Administration, Ahmadu Bello University, Zaria
[3]Department of Business Administration, Ahmadu Bello University, Zaria
[1]abutijjani@gmail.com, [2]sahnunl56@gmail.com & [3]elnasir@gmail.com
[1]07039625733, [2]08036522669 & [3]08039684647

Abstract

Entrepreneurship plays a crucial role in economic development, creativity, firm formation, job creation, and wealth creation. However, one major issue of concern that called for this research to be undertaken is the low number of youth corps members venturing into entrepreneurship after graduation. This concern has grown due to the persistent increase in economic issues, particularly unemployment. Thus the study aim to investigate the effect of entrepreneurship education on entrepreneurial intention: Moderating role of need for achievement in Kaduna state. The population of the study 1120 youth corps member and the sample size 350.The quantitative methods were used based on cross-sectional data. The youth corps member targeted through a random sampling technique. The researcher used a survey questionnaire to attain the responses from respondents. Analysis was carried out using smart PLS 3.0. The result of the study shows that EE, EI was found to be positive significantly. Also the findings provide significant guidelines to policy-makers and university authorities for developing useful Entrepreneurship Education courses to uplift and boost graduate' competencies, skills and knowledge to face today's considerable business and entrepreneurship challenges as well as to pursue entrepreneurial careers to foster higher intention.

Keywords: Entrepreneurship education, entrepreneurial intention, Need for achievement

Introduction

Entrepreneurship plays a crucial role in economic development, creativity, firm formation, job creation, and wealth creation (Otache, Umar, Audu & Onalo, 2019). However, the intention of graduates to venture into entrepreneurship has become a matter of concern globally for entrepreneurship researchers and policymakers. This concern has grown due to the persistent increase in economic issues, particularly unemployment (Garcia-Garcia et al., 2017). The impact of entrepreneurship on advanced countries like the USA, Russia, and Japan has made developing and underdeveloped countries increasingly aware of its importance for economic transformation (Amrita, 2016).

Emerging nations like China, India, Malaysia, and Indonesia have also achieved economic transformation and decreased unemployment rates by prioritizing entrepreneurial development (Adelekan & Tijani, 2017). Despite these advancements, the global unemployment rate reached 6.5 percent by 2020, with youth and women being disproportionately affected (SDG, 2020; United Nations, 2020). The Global Entrepreneurship Report (GEM) reveals varying proportions of entrepreneurs expecting job creation opportunities across different regions. North America stands out, with the highest proportion of entrepreneurs expecting to generate jobs, (29.5%) followed by Asia and Oceania (21.0%), Europe (18.5%), Latin America and the Caribbean, (18.0%),Africa is at (17.0%), (GEM Report, 2019).

However, Africa, including Nigeria, lags behind in terms of entrepreneurship and entrepreneurial intention. Nigeria ranked 101st out of 137 countries in the Global Entrepreneurship Index (GEI), emphasizing the need for improved entrepreneurial outcomes (GEI, 2018). Therefore, this data from GEM is unfavorable for Africa and Nigeria precisely, as the percentage of youth without employment, education or training is well below GEM average, with low motivational index of (1.5x) compare with North America (5.2x) (GEM Report, 2017-2018).

Similarly, Global entrepreneurship index (GEI) spread by the global entrepreneurship and development instituted (GEDI) accumulation index of top African countries for entrepreneurship make positions Tunisia as the continent's leader with 42.4% GEI scores. Botswana, which lead in Sub Sahara Africa (SSA), comes second with 35% South Africa, which rank second in SSS, comes third with 33 % and Namibia rank fourth with 31% (GEI, 2018). Other top African countries are: Morocco with 29% Egypt, 26 % ,Gabon, 25 % Algeria, 24 %; Swaziland, 24 %, Rwanda 21 %, Ghana 21 % , Nigeria, 20 %, and Zambia with 20 %.

Therefore, Nigeria with the 20% relates to Namibia with 31%, entrepreneurial intention is low. Entrepreneurial intention among Nigerian graduates is a matter of concern due to its low levels. Understanding the factors that contribute to entrepreneurial intention is crucial for promoting entrepreneurship and economic growth. Previous research has explored various motivational factors associated with entrepreneurial intention, such as entrepreneurship education (EE) (e.g., Zhang & Cain, 2017; Munir, Jianfeng, & Ramzan, 2019). However, the findings regarding the relationship between EE, and entrepreneurial intention have been inconsistent.

In this study EE is intended to instill an entrepreneurial culture in graduate and, as a result, reorient or realign them away from cultivating a mentality of finding paying jobs after graduation. It aims to develop full-fledged entrepreneurs (Kim, 2017). Similarly, the impact of entrepreneurship education (EE) on entrepreneurial intention has yielded mixed findings. For example looking at the direct relationship, Studies of (Fayomi and Fields, 2016; NiţuAntonie, 2017; Yahya et al., 2019; Letsoalo & Rankhumise, 2020; Pardo-García and Barac, 2020; Laguna-Sánchez et al., 2020; Kisubi et al., 2021). These studies have reported a significant relationship between EE and entrepreneurial intention. However, studies by Ambad and Ag Damit (2016) and Yukongdi and Lopa (2017) found an insignificant relationship between EE and EI.

The inconsistencies identified in previous studies regarding the relationships between EE, and entrepreneurial intention highlight the need to introduce a moderating variable that can strengthen these relationships. Moderation analysis, as suggested by Baron and Kenny (1986) and Hayes (2015), calls for the inclusion of a third variable when there are inconsistencies or gaps in explaining the relationship between two causal variables. Thus, this study aims to address this need by examining the moderating role of need for achievement on the relationships between, EE, and EI.

Literature Review and Theoretical Framework

Concept of Entrepreneurship

Entrepreneurship has a rich historical background, with its roots traced back to 1732 when Richard Cantillon, an Irish economist, used the term to describe individuals who were willing to take financial risks in establishing new businesses (Minniti & Lévesque, 2008). Drucker (1985) defined entrepreneurship as the ability to create something new and unique. McClelland (1961) described entrepreneurs as individuals who manage their businesses and strive for increased productivity driven by a need for achievement. Entrepreneurship plays a vital role in driving economic growth, fostering innovation, and creating employment opportunities (Urbano & Aparicio, 2016). Entrepreneurship involves innovative actions that leverage existing resources to generate new wealth, seize new opportunities, and correct market imbalances (Aima et al., 2020). Mustofa et al. (2019) emphasize that interest in entrepreneurship stems from a love for entrepreneurship and a desire to learn and explore more about it. High interest in entrepreneurship among students can contribute to the development of creative and innovative young entrepreneurs in various fields. Furthermore, students who receive entrepreneurship education from secondary school tend to demonstrate heightened awareness and entrepreneurial tendencies compared to their peers (Mohamed Elias et al., 2016). Therefore, experience with entrepreneurship acts as a facilitator of entrepreneurial intentions among young individuals (Nguyen et al., 2019).

Concept of Entrepreneurship Education

Entrepreneurship education has demonstrated a significant impact on individuals' entrepreneurial perceptions, intentions, and behaviors (Kisubi et al., 2021). Its benefits extend beyond equipping students with entrepreneurial skills and knowledge for future self-employment; it also enhances their marketability and employability in the job market by developing creative, leadership, logical reasoning, and problem-solving skills demanded by employers (Wardana et al., 2020). Additionally, entrepreneurship education plays a crucial role in helping youths develop entrepreneurial skills, attitudes, and behaviors, fostering an understanding of entrepreneurship as a career opportunity, and cultivating positive entrepreneurial identity (Vodă & Florea, 2019). Moreover, it addresses the issue of graduate unemployment prevalent in many countries today (Wardana et al., 2020). Additionally, entrepreneurship education plays a crucial role in helping youths develop entrepreneurial skills, attitudes, and behaviors, fostering an understanding of entrepreneurship as a career opportunity, and cultivating positive entrepreneurial identity (Vodă & Florea, 2019). Moreover, it addresses the issue of graduate unemployment prevalent in many countries today (Wardana et al., 2020).

Concept of Entrepreneurial Intentions

Entrepreneurial intention refers to a conscious state of mind in which individuals direct their attention towards specific entrepreneurial behaviors, making it a crucial predictor of such behaviors (Gunia et al., 2021). It represents a person's desire and willingness to engage in entrepreneurial activities, turning their intentions into actual actions (Vodă & Florea, 2019). Intention plays a key role in understanding human actions and attitudes (Wardana et al., 2020), signifying a person's deliberate plan or conscious decision (Saraih, 2019). In previous research, the concept of entrepreneurial intention has been used to refer to starting a new business or becoming self-employed through starting a new venture or acquiring an existing one. It is widely recognized that intention is the first and most crucial step in the entrepreneurial process (Dheer, 2018). Entrepreneurial intention involves a conscious psychological willingness to engage in entrepreneurial experiences, pursue self-employment, and improve one's conditions by evaluating outcomes and risks (Fuller, et al., 2018). According to Mohamad et al., (2021), entrepreneurial intention involves the exploration of knowledge and resources to start a business, reflecting a personal commitment to a new venture. Several personality traits, including the need for achievement, significantly influence entrepreneurial intentions.

Review of Empirical Study

Entrepreneurship education and Entrepreneurial Intention

Salihu (2016) examined the relationships between entrepreneurship education and tertiary institutions graduates‟ business start-up in North Central Nigeria. The result showed that entrepreneurship education has a significant impact on graduate's business start-up. The study recommended that tertiary institutions and government need to play a more proactive role by devising a strategy to assist the students that indicate their intention to start enterprise while in school and after graduation through an incubator program. Therefore, inculcating entrepreneurship education, culture, values, and norms may spring up graduates' business startup activities.

Kisubi and Bounke (2021), the study mediating role of entrepreneurial self-efficacy in the relationship between entrepreneurship education and self-employment intentions. Results of the study indicate that two predictors significantly influence self-employment intentions. study has demonstrated that EE has a significant and observable impact on an individual’s entrepreneurial perceptions, intentions and behaviours . Also, EE significance extends beyond providing undergraduate students with entrepreneurial skills, competencies and knowledge for them to become self-employed graduates in the future; it also improves their marketability or employability in the job market (Wardana et al., 2020). Entrepreneurial education was stated as a significant predictor of entrepreneurial intentions by Feder & NiţuAntonie (2017), while no significant relationship was found by Ambad & Ag Damit (2016) and Yukongdi & Lopa (2017). We assume that people who attend some form of entrepreneurial education have a higher degree of entrepreneurial intention.
$H0_1$: Entrepreneurship education has no significant effect on Entrepreneurial intention

Moderating role of Need for Achievement

Need for achievement is a drive or strength in self as a basic psychological process of individuals who always prioritize the value of achievement behavior (McClelland, 1986; Owoseni, 2014). Achievement of achievement becomes the driving force for entrepreneurs to engage in physical and mental activities in developing business interests (Entrepreneurial intention) (Phuong & Hieu, 2015). Need for achievement is one of the personality characteristics that encourages entrepreneurs to have entrepreneurial intentions (Remeikiene et al., 2013; Francoise et al., 2017).

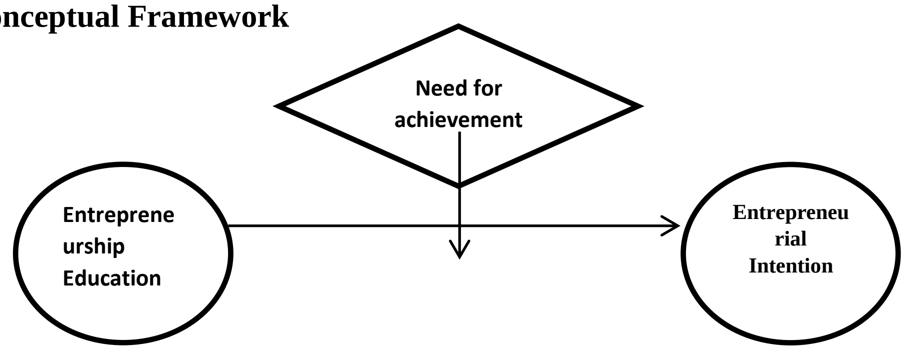
The beginning of entrepreneurial intentions remains essential because it is considered a vital factor during the process of generating new ideas of entrepreneurial start-ups and firms (Vodă & Florea, 2019). Mayasari & Perwita (2018) the factor that plays a role in influencing entrepreneurial intentions is the internal locus of control. A person with the mental behavior of self-entrepreneurship is required to be able to make decisions and not easily give up on achieving his goals, in other words, if someone wants to be an entrepreneur, will try to achieve these goals without never giving up. In psychology, this ability is called the Need for achievement (Akhtar et al., 2020).

The need for achievement is a static personality trait and refers to the desire for accomplishment in a task that involves striving and planning to attain a standard of excellence (Weiner, 1974). Individuals with a high need for achievement tend to seek challenges and independence and prefer working alone or working with other high achievers (Fagenson, 1992). Such individuals desire regular and positive feedback regarding their work progress and experience satisfaction when they receive recognition for their achievements (McClelland, 1987). NFA is considered as a kind of strength that drives the basic psychological process of any individual who wants to go with the value of achievement behavior (Khadeeja, et al., 2017).

Similarly, when individuals receive organizational support to satisfy their need for achievement, they exhibit strong willpower and desire as well as enhanced personal resources and psychological strength (Datu et al., 2018). Jaja (2009) posited that personal motives have been found to be one of the crucial factors responsible for entrepreneurship amongst individual. In the light of the above, the present study introduced NA as possible moderator on the relationship between EE, and EI. In essence, NA is considered as one of the major contributions of this study because it offered more explanations on how EI could be enhance the strength that drives the basic psychological process of any individual who wants to go with the value of achievement behavior. This study assumed that EI that employed NA, and EE strategy in their businesses will attain higher achievement.

H02: Need for achievement does not significant moderate the relationship between Entrepreneurship educations no entrepreneurial intention

Conceptual Framework



The framework aims to provide a theoretical structure that outlines how the variables of interest are interconnected. It proposes that NFA acts as a moderator that influences the relationship between EE, and EI. EE pertains to educational interventions and programs designed to enhance entrepreneurial knowledge, skills, and attitudes. EI represents individuals' intentions and motivations to engage in entrepreneurial activities. The framework suggests that NFA plays a crucial role in moderating the effects of EE on EI. It posits that individuals high in NFA are more likely to exhibit stronger relationships between EE, and EI.

In other words, the impact of EE on EI is expected to be more pronounced among individuals with a high level of NFA.

Theoretical Framework

Theory of Planned Behavior

The theory of planned behavior (TPB) is the foundation of reseach (Ajzen,1988,1991), The TPB was developed by Ajzen (1991) at same time, the theory of Reasoned Action (Fishbein and Ajzen, 1975) inspired the TPB (Ajzen, 1991), the TPB is the theory that has been used in the social and behavioral sciences to explain a variety of phenomena and also to explains people deliberate action, especially in the context of entrepreneurship (George &Ernest, 2017), The rational for using the Theory of Planned Behavior (TPB) is that the intentions of an individual can affect the behavior .However; TPB is one of the most widely used theories in the area of entrepreneurial intention research (Amofah & Saladrigues, 2020).

Given the above theoretical supports, this study applied TPB theory to examine how the relationships between EE, and EI, as well as how NA interact with EE to influence EI which have received little or no attention in previous studies. This study contended that EE, and NA exhibit strong desire as well as enhanced personal resources and psychological strength of individual to venture into entrepreneurship.

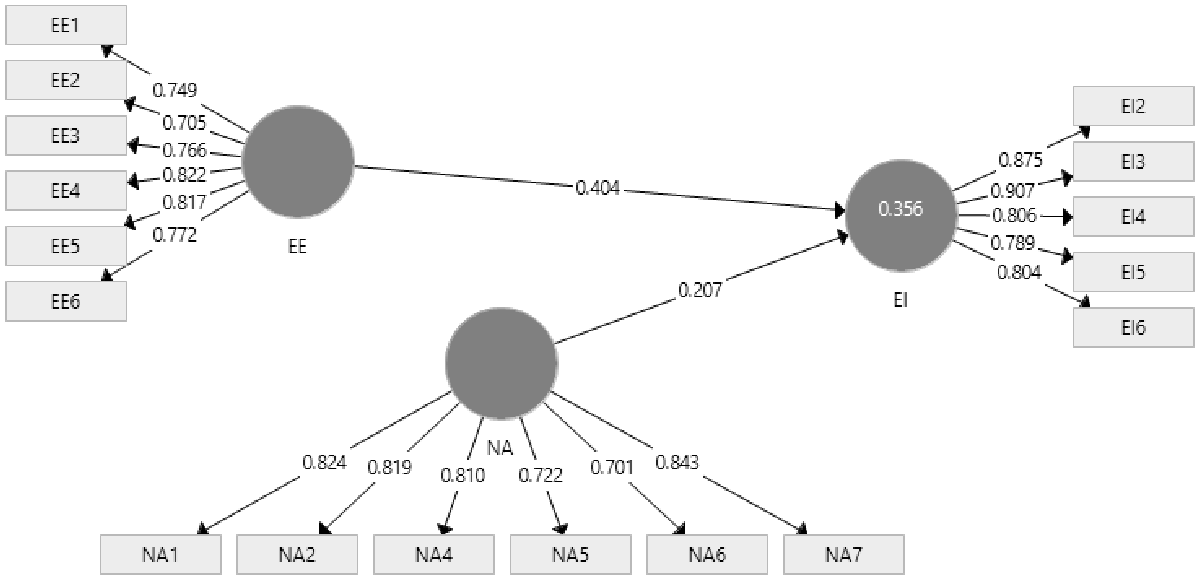
Materials and Methods

The study adopts survey research design which is cross-sectional in nature. This type of research design is used because the information about the variables represents what is going on at only one point in time. The paper obtained Primary data from the population of the study using self -administered questionnaire. The population of the study consists of 1120 batch A corps in orientation camp during the 2021/2022 session where the sample size of 287 obtained from the population using Yamanee formula and 30% was added to the sample size as recommended by Israel (2013) to reduce sample size error and also take care of the non-response problem, this change the sample size to 350. The researchers used corps ideally because they about to engage in the real entrepreneurial behaviour. Kaduna State was chosen as the geographical domain for this study has it was ranked as one of the best states for ease of doing business in 2018 by World Bank Report and KADinvest 2021. The study adoption PLS path modeling since it motivated by numerous features and its widespread use in empirical research within the fields of management and entrepreneurship (Gorondutse & Hilman, 2016).

Result and Discusion

This study used the structural equation modelling (SEM) approach and the significance of using this approach is that it offers more accuracy than other approaches when the small sample size is used (Hussain et al., 2018). This subsection explains the measurement/outer loading of the model. It is part of the SEM model, which describes the relationships among the latent variables and their indicators (Sarstedt, Hair, Nitzl, Ringle, & Howard, 2020). On the other hand, the outer model parameter estimates consist of the loadings (Hair et al., 2019). Figure 1 represent the path model.

Figure 1 Path Model



From the figure 1 it shows the loadings of respective indicators/items for the constructs and hence, it's reported by the reliability and validity, and discriminates validity.

Table 1: Reliability and Validity

Variables	Composite Reliability (CR)	Average Variance Extracted (AVE)
EE	0.899	0.598
EI	0.921	0.702
NA	0.907	0.622

From the figure 1 it shows the loadings of respective indicators/items for the constructs and hence, it's reported by the reliability and validity, and discriminates validity.

Reliability and Validity

This study performs internal consistency composite reliability (CR) to ensure the accuracy of the designed first-order reflective constructs and factor loading to evaluate the reliability of each item (Duarte & Raposo, 2010; Hair, William, J, & E Anderson Rolph, 2016). It also executes the average variance extended (AVE) to evaluate the construct's validity. As illustrated in Table 1, factor-loading values for all informative indicators were above 0.5. It achieves the desired value, which findings supported by several studies (Hair, F., Sarstedt, Hopkins, L., & Kuppelwieser, 2014). The results of constructs achieved desired composite reliability (CR)>0.7 and have gotten accepted AVE value >0.5 as presented in Table 1.

Discriminant validity

The discriminants validity explains how each variable is distinct from each other in the study. The study report in table 2 using Fornell & Larcker, (1981) Criterion

Table 2: Discriminant Validity (Furnel-liker Criteria)

Variables	EE	EI	NA
EE	**0.773**		
EI	0.590	**0.838**	
NA	0.902	0.571	**0.788**

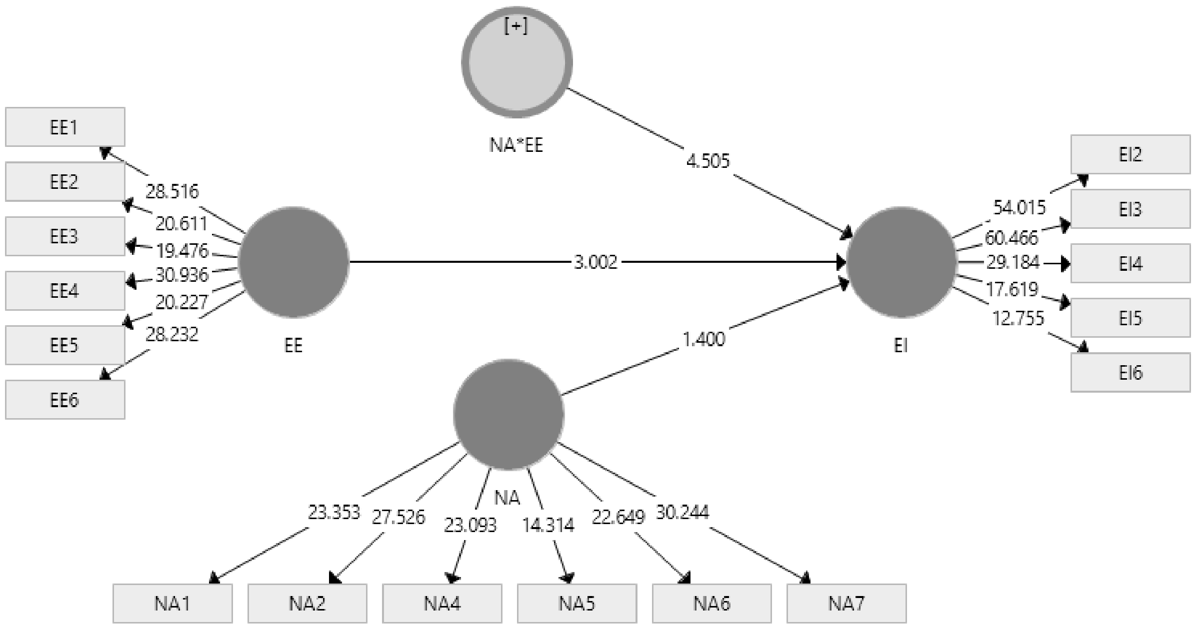
Table 2 show the discriminants validity using Fornell and Lacker criterion for the variable of the study. It indicates that, the diagonal and bold figure shows the square of the AVE and they are above all the correlation of their respective loadings. Thus, the study satisfies this discriminants validity criterion even thus HTMT is more prevalent then furnel-liker criteria and hence we shall check the next criterion

Table 3 Test of Hypotheses

R/Ships	Beta	Standard Deviation	T Statistics	P Values	Decision
EE -> EI	0.376	0.125	3.002	0.003	Rejected
NA*EE -> EI	0.101	0.022	4.505	0.000	Rejected

Table 4 show the procedure for testing the hypotheses and evaluate the significance between constructs (Henseler et al., 2016). The table further clarifies that all constructs in the model are with a critical value of 1.96 for the two-tailed test at significant level $p < 0.05$. Therefore, it supports the following hypotheses:

Assessment of the structural Model/ Inner Loading



This sub section explains about the assessment of structural model. Also, it completes the SEM model, which describes the correlations among the latent variables that make up the SEM model (Hair et al., 2014).

Table 4 summarizes the assessment of the relationship between the constructs (endogenous and exogenous). Results recapitulate that,

H01: Entrepreneurship education have positive and significant influence on entrepreneurial intention (β = 0.517, t-value 9.209 and P value = 0.000).

H02: Need for achievement moderate the effect of entrepreneurship education and entrepreneurial intention positive and significant (β = 0.075, t-value 2.003 and P value = 0.045).

Discussion of findings

Relationship between entrepreneurship education and entrepreneurial intention

Hypothesis one addressed the extent to which entrepreneurship education affect entrepreneurial intention. The Null hypothesis states that "There is no significant effect between entrepreneurship education and the entrepreneurial intention". The result of the study shows that entrepreneurship education was found to be positive (β = 0.376, t-value 3.002 and P value = 0.003) and significantly related with businesses positively. This is in line with the study of Wardana et al., 2020; Tantawy et al 2021). Who found that entrepreneurship education has a significant effect on entrepreneurial intention. This hypothesis expressed that, the higher level entrepreneurship education the more it will affect their positive and significant influence on entrepreneurial intention. This also means that the EE significance extends beyond providing NYSC corps member with entrepreneurial skills, competencies and knowledge for them to become self-employed graduates in the future; it also improves their marketability or employability in the job market (Wardana et al., 2020). The finding relates with the earlier studies (e.g. Feder & NiţuAntonie, 2017; Yahya et al., 2019) which indicates that EE is positively and insignificant related to EI. These empirical findings further provide support for theoretical explanations of TPB theory which postulated that EE Education plays a vital role in determining EI.

Moderating effect of need for achievement between entrepreneurship education and the entrepreneurial intention

Hypothesis two addressed the extent to which need for achievement moderate the effect of entrepreneurship education on the entrepreneurial intention. The Null hypothesis states that need for achievement does not moderate the relationship between entrepreneurship education and entrepreneurial intention. The result of the study shows that the moderating effect of need for achievement between entrepreneurship education entrepreneurial intention was found to be positive and significant (β = 0.101, t-value 2.505 and P value = 0.000).

Several previous studies that focus on need for achievement showed that there is a positive relationship between and entrepreneurial intention (Vodă & Florea, 2019). Mayasari & Perwita (2018) the factor that plays a role in influencing entrepreneurial intentions is the internal locus of control. A person with the mental behavior of self-entrepreneurship is required to be able to make decisions and not easily give up on achieving his goals, in other words, if someone wants to be an entrepreneur, will try to achieve these goals without never giving up and intentions of an individual can affect the behavior . This is in line with the position of the TPB theory.

Conclusion and Recommendation

Based on the finding which reported that entrepreneurship education significantly affects the entrepreneurial intention of youth corps members both government and youth corps member would be able to understand the role entrepreneurship education plays in driving individual towards entrepreneurship to increase entrepreneurial intention as well as setup new business . More so, the finding revealed that entrepreneurship education has significant positive effect on the entrepreneurial intention of students. Findings also go a long way in lending a strategic model of how Nigerian youth corps member can improve their entrepreneurial intention.

Limitations of this study is in the area of design which adopts a cross sectional design future study may address this constraint by conducting longitudinal, the study used only youth corps member in Kaduna state, future study could be conducted on corps members in others State.

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MODERATING EFFECT OF ENTREPRENEURIAL ORIENTATION ON THE RELATIONSHIP BETWEEN ENTREPRENEURIAL COMPETENCY AND SME'S PERFORMANCE IN KADUNA METROPOLIS

[1]Hussaini Shehu Yaro, [2]Aliyu A. Gemu, Ph.D & [3]Auwalu Inusa, Ph.D

[1,3]International Centre of Excellence for Rural Finance and Entrepreneurship,
Ahmadu Bello University, Zaria – Nigeria
[2]Department of Business Administration, Ahmadu Bello University, Zaria

Abstract

This study investigates EO as the moderator of the effect of entrepreneurial competencies, knowledge, skills, and attitudes on SMEs' performance in Kaduna metropolis, Nigeria. From a cross-sectional survey research design, the authors administered structured questionnaires to 493 SME owner-managers and utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis. This study established that the three constructs of entrepreneurial knowledge, skills, and attitudes have significant and positive effects on SME performance. The moderation analysis reveals that EO significantly enhances the direct positive association between enterprising skills and SME performance; however, EO did not enhance a similar impact for the relationship between entrepreneurial knowledge and SME performance or that of entrepreneurial attitudes. The R^2 of 0.731 indicates a high model reliability, and thus emphasizes the relevance of entrepreneurial competencies on SMEs performance. Moreover, Importance-Performance Map Analysis categorises entrepreneurial attitude as the most important attribute where improvement can be made intentionally. The studies provide managerial and policy implications for SME managers and policymakers, a call to appropriately target the development of entrepreneurship and EO-based initiatives to enhance competitive advantage and future stability.

Keywords: Attitudes, Entrepreneurial orientation, Entrepreneurial competencies, Skills, SME performance, Knowledge, Partial Least Squares Structural Equation Modeling (PLS-SEM).

Introduction

SMEs are geared as critical driving forces towards global economic revolution as they are the most probable centres of innovation, employment, and capacity improvement. That 90 % of all businesses globally are SMEs while contributing more than 50% of the global employment (World Bank, 2019). In emerging economies, such enterprises account for up to 40% of an income while their importance is further underlined by the fact that they provide 7 out of 10 formal employment. Performance implications of SMEs do not solely lay in their economic value; instead, they are important sources for social stability and sustaining societies in turbulent markets. Nevertheless, SMEs in Nigeria have numerous constraining factors that adversely affect their growth and performance such as; poor entrepreneurial skills, restricted market opportunity, poor infrastructure, and lack of funds (National Policy on Micro, Small, and Medium Enterprises, 2021–2025 Edition). These constraints informed the need for the study of factors that would possibly improves the performance and competitiveness of SMEs in Nigeria.

Knowledge, skills and attitudes of the entrepreneurs are widely considered to be the factors that have great influence with SMEs' performances. Whereas innovative knowledge prepares the business owners with the knowledge that is necessary for managing and operating on the markets, entrepreneurial skills provide the necessary drive to carry out the operations of the business. Likewise to uncertain environment, which can be characterized by dynamism, an element of entrepreneurial attitude is critical for change and opportunity seeking. But failure to develop these competencies signifies poor performance among the SMEs putting them in a poor position to exploit the available opportunities meant to help them grow. Literature on the effect of entrepreneurial competencies, and its impact on SME performance shows mixed results; some small business studies have reported positive correlations (Nazmus et al., 2022; Jemal, 2020) more negative and weak correlations have also been noted (Muhammed, 2016; Odunowo et al., 2021). These disparities suggest that the moderators of this relation deserves more scrutiny in terms of the contextual antecedents.

Entrepreneurial attitude (EA) refers to a strategic organisational stance entrenched in innovation, proactivity and risk taking. EO has been found to improve SME performance in terms of competitive advantage and the opportunity for firms to adapt to their environments according to Kramoliš & Dobeš (2020) and Kowo, & Akanmu (2021). This interaction between EO and the various competencies may elicit more light on how these factors may affect SME performances simultaneously. Previous researchers have noted that there may be moderators in this relationship consistent with the tenet of Baron and Kenny, (1986) and these needs to be taken into consideration given variability in results herein. As stated earlier, consistent with the present study, this paper incorporates EO as a moderating variable to explain how it strengthens the impact of entrepreneurial competencies on SME performance especially in a Nigerian context constrained by resources.

The study is set in context of SMEs operating in Kaduna metropolis where the moderating role of EO between entrepreneurial competencies (knowledge, skills, and attitudes) and SME performance is examined. Some of the issues posed include; how; EO impacts on the relationship between EC and P and the implication on SMEs in Nigeria. The study results are expected to help policymakers and practitioners, as well as the owners of SMEs themselves, thereby making a significant input to strategies formulated with the view to promoting economic revitalization and sustainable development. This research will fill the gaps of knowledge on the dynamics of EO and the elements of entrepreneurial competencies that can assist in enhancing the performance of SMEs in a competitive context by contributing to the development of a comprehensive performance framework for capturing and understanding EO.

This study investigates the relationship between entrepreneurial competencies and SMEs performance, moderated by EO, and examines its implications for driving business success in Nigeria's challenging economic landscape. The overarching goal is to provide a better understanding of the factors influencing SMEs performance and to propose strategic interventions that enhance their contributions to the Nigerian economy.

Literature Review

The literature review explores key concepts related to entrepreneurial competencies—knowledge, skills, and attitudes—and entrepreneurial orientation (EO). It examines their roles in enhancing small and medium enterprises (SMEs) performance and situates the study within two theoretical frameworks: The Resource-Based View (RBV) and Social Learning Theory (SLT). By reviewing conceptual and empirical studies, the chapter provides a comprehensive foundation for understanding how entrepreneurial competencies and EO influence SME performance.

The Concept of SMEs Performance

SME performance can be defined as the financial and operational success of SMEs in addition to the level of strategic achievement that organisation aims. Theoretical frameworks call for a balanced approach to evaluating performance other than merely the bottom line by including market share, customer satisfaction and internal business processes (Storey 1994; Kaplan and Norton 2019). Therefore, innovation, entrepreneurship, and market orientation emerged as essential factors that influence SME performance according to the latest work (Santos & Brito, 2022).

Performance measures are classified into profitability measures such as ROA, liquidity measures such as current ratio and solvency measures such as debt equity ratio (Beck et al., 2005) and productivity and quality measures (Chen & Wu, 2019). The financial, customer, internal process, and learning and growth perspectives reflect the financial, customer, business process, innovation, and improvement dimensions that complement the perspectives in the balanced scorecard approach taken by SMEs to match their adaptations with the requirements of consumers in the market for sustainable development (Kaplan & Norton, 2020). External factors, including restricted capital, and market access also affect SMEs performance for European SMEs to improve competitiveness, the development of strategies and responses to these contexts is therefore crucial (Stevens et al., 2023).

The Concept of Entrepreneurial Competency

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The Concept of Entrepreneurial Orientation

EO as a strategic organizational posture consist of four dimensions, including innovation, proactivity, taking of risks, and competition (Covin & Slevin, 2019). EO promotes opportunity exploitation and competitive advantage because it leads firms to adopt new opportunities and act upon them promptly (Rauch et al., 2020).

EO antimension's:

Innovation: The capacity to generate new product, services or processes capable of creating value.

Proactiveness: The ability to consider what the future is likely to hold in terms of customer demand and to try and get ahead of it in the marketplace.

Risk-Taking: Venturing into controlled risks for aim at making the most of opportunities (Wiklund & Shepherd, 2021).

This discussion provides a basis for empirical research to begin assessing the impact of EO on SME performance by defining EO as the process of developing internal competencies to match external market demands. As a form of dynamic capability, EO facilitates firms' processes and contributes to the achievement of growth and sustainability goals in conditions of evolving environments (Morris, 2023; Zahra et al., 2022).

Previous literature provides ample evidence on the relevance of EC and EO for SMEs and performance. Whereas entrepreneurial knowledge, skills, attitude knowledge, and skills are the individual decision-making and innovation building blocks of EO, the latter enhances these competencies through promoting a strategic orientation that recognizes how an organization can leverage its internal resources to capitalize on external opportunities. The literature reviewed strengthens the view that the use of the BSC and the Balanced Scorecard and other frameworks of performance measurement require the evaluation of financial performance, operational indicators and strategic measures. Building on the RBV and SLT, the following theoretical propositions enhance the disclosure of the relationship between entrepreneurial competencies and EO in improving SMEs performance. These constructs as pooled together provide the foundations by which they have a combined impact on SMEs success and competitiveness within dynamic markets.

Empirical Review

Therefore, as is evident from empirical analyses, the factors that underpin SMEs that relate to performance improvement are entrepreneurial competencies defined as knowledge, skills, and attitudes. International scholars have established positive links between entrepreneurial competencies and different facets of SMEs performance. For instance, Fabrizio et al. (2011) pointed out that the establishment of leadership competencies, planning competencies and team work competencies increases the SMEs' firm performance in Italy. In the same regard, Jose (2012) revealed that entrepreneurial competencies have a direct impact on firm performance since they enhance organizational competencies among Spanish entrepreneurs and the scope of competitiveness. These results stress the significance of competencies as the general and specific base of operation and strategy in SMEs.

Other research in the Nigerian environment has exposed significant factors enhancing as well as constraining SMEs business developments. The factors that were found to be crucial for the performance of SMEs in Ekiti State include funds education and managerial skills according to Oladele et al., (2014). Bello et al. (2015) also showed that entrepreneurial skills management and funding are the significant predictors of performance in Northern Nigeria and therefore called for organisation capacity enhancement, and increased access to funding. The same applies to Danibrahim et al., (2022) who observed that while there is a systematic influence of entrepreneurial knowledge in Northwest Nigeria's SMEs, entrepreneurial skills and attitudes registered a very low statistical importance. These results speak to the equivocal effects of competency across areas, and so any intervention must be contextualised.

Entrepreneurial orientation (EO) has also received much attention in relation to its effect on SME performance. Several studies have provided a rationale for positive link between EO – innovation, proactivity, and risk-taking and better business performance. Abdul Aziz et al., (2014) suggested the Malaysian SMEs performance is positively affect by EO and pointed out how the measures of performance need to be further developed to capture the impact of EO. In the same manner, Shehnaz and Ramayah (2015) used RDT and RBV to demonstrate how customer and supplier relationships enhance the effects of EO on change maturity levels of SMEs. These findings should be of interest to managers and have implications for theory by showing how EO is a strategic asset that supports competitive advantage.

Studies done in Nigeria established EO as a significant influential factor of performance among SMEs. The works of Ogbo and Okoli (2019) and Ogbari (2019), among others, show how a positive relationship between EO and SME performance could be established and why its application should be considered mandatory for SMEs. Ogbo and Okoli (2019) stressed that EO drives growth and/ or sustainability where it exists in combination with Innovation and Market orientation. However, these studies suggest some directions for improvement, for example, the lack of evidence on industry differences regarding EO and the influence of external macro environment variables.

The interaction between entrepreneurial competencies and EO has recently become a focus of interest in terms of moderator/mediator role of dynamic capabilities and or external environment impact on EO and performance connection. For instance, Juzaimi et al., (2016) established that dynamic capability acts as a moderator that boosts the effect of ECs on performance. Pulka et al., (2020) confirms the propositions by revealing that entrepreneurial competencies and government business support impacting on SME performance are moderated by external environmental factors in the context of Northeastern Nigeria. These results indicate that the associations between competencies, EO, and performance are not as straightforward as prior studies indicated them to be, and appear to be dependent on the dynamism of the context in which the firms operate.

Altogether, the empirical review revealed that entrepreneurial competencies and EO have substantial positive relationship with the performance of SMEs, where the moderating influence varies due to regional, industry, and external factors. However, there are again some gaps as to moderating and mediating variables that underpin these relationships are concerned. To this end, this study aims to fill these gaps through exploring the moderating role of EO on the link between entrepreneurial competencies and SME performance in Kaduna metropolis, Nigeria. This approach therefore seeks to offer practical recommendations to improve on the operations and survival of SMEs in fluid and resource scarce environments.

Theoretical Framework

The Centre Stage the Resource-Based View (RBV) Theory is one of the fundamental theoretical frameworks in the subject of strategic management, as it postulates how a firm's resources and capabilities could be the key to the firm's competitive advantage and performance. Barney (1991) defined that VRIN resources- valuable, rare, inimitable and non-substitutable ones are at the core of sustained competitiveness. Of these resources, the main ones are physical assets and knowledge, which is a human asset. Knowledge is valuable for SMEs because it gives a competitive advantage by explaining where opportunities and threats are in the market, skills help to apply this knowledge to deliver aims and objectives (Grant, 1996; Spender, 1996). Because the RBV highlights the use of unique competencies to enhance organisational performance, the framework has implications for research investigating the link between entrepreneurial competencies and SME performance.

In the context of this study, RBV offers a framework for understanding how knowledge and skills contribute to SMEs performance in Kaduna metropolis. Firms with superior knowledge and skills are more likely to perform better and gain a competitive edge. This study aims to apply the RBV to analyse how these competencies, with VRIN attributes, affect SMEs performance. By collecting and evaluating data on the knowledge and skills of SMEs in Kaduna, the study will provide insights into how these resources can be harnessed for improved competitiveness and sustained growth. The RBV framework not only enriches the theoretical foundation of the study but also provides practical recommendations for enhancing SMEs performance in resource-constrained settings.

This theory known as the Social Learning Theory (SLT) postulates Bandura (1977) posited that learning occurs through watching or observing others which is more effective with approximal learning. SLT believes that people acquire knowledge and knowledge through purpose, modelling positive styles, and practicing via models they observe. In entrepreneurship, this theory fits the notion of how contact with successful role models, contacts, and entrepreneurship ecosystems influence favourable dispositions and actions. The value of focussing on SLT is in analysing how the owners and managers of SMEs adopt the appropriate attitudes and competencies at the ontogenetic level by means of social learning.

SLT can therefore be considered very relevant in evaluating the influence of context on entrepreneurial mind set and SME performance. Obi-Anike et al (2020) and Ugwu and Ezeuduji (2021) show that social norms, entrepreneurial role models, and environmental support affect entrepreneurial competencies and plans. For example, social networks enable knowledge, skills, and emotional support, while modelling in the form of exposure to entrepreneurial models develops positive attitudes to innovation and risk-taking. In this study, SLT will be used to investigate social interaction and network influence on the attitudes and entrepreneurial orientation of SMEs owners and managers in Kaduna metropolis in a bid to understand the relationship between social learning and performance.

Together, the RBV and SLT provide a robust theoretical foundation for this study. The RBV explains the intrinsic role of firm-specific resources and competencies in driving performance, while SLT highlights the extrinsic influence of social interactions and networks in shaping entrepreneurial attitudes. By integrating these theories, the study will explore the interplay between entrepreneurial competencies, social context, and SME performance, offering a comprehensive understanding of the factors that influence business success in Kaduna metropolis.

Materials and Method

The study employed cross-sectional survey research design to examine the moderating role of EO on the established relationship between EC and performances of the SMEs in Kaduna metropolis. Questionnaire surveys are used as the major data collection method to measure the dimensions of the knowledge, skills and attitude of the entrepreneurs, SMEs performance and EO as a moderating factor. This design was chosen for the purpose of capturing the net value-added variables at a point in time making it easy to compare and contrast the various variables.

The population of the study consists of 38,908 SMEs in Kaduna North, Kaduna South, Igabi, and Chikun registered with the Small and Medium Enterprises Development Agency of

Nigeria, SMEDAN as of 2023. These SMEs range from manufacturing, service sector, wholesale, and distribution sectors among others. They concluded that using Kesjie and Morgan's (1970) sample size determination table a minimum sample size of 379 was arrived at. It means that to include non-response, a sample size was raised by 30 percent and this make a total of 493 SMEs who were selected through; cluster sampling technique and proportionate sampling technique so as to get representativeness of the different sector types.

Information was obtained with the help of a structured questionnaire based on existing instruments. To measure SMEs' performance an area four-item scale was used while to assess the knowledge skill and experience of the entrepreneurs seven, eight and seven items scales were adopted respectively. Used ECPP, EO was measured using a 14 items scale, again adopted from Covin and Slevin, (1989). The instrument used a five Likert scale format to measure the extent of agreement of the respondents. Validity and reliability were confirmed through expert examination and also by pilot test with Cronbach alpha for reliability test. Factors were then subjected to factor analysis to ensure that the constructions made were in line with the objectives of the study.

Descriptive analysis was conducted on screening Data check included checking for, missing values, check on outliers and checking normality while PLS-SEM was used in carrying out the hypothesis test. The evaluation of the model through PLS-SEM was rigorous to guarantee the level of reliability, factor loading, and convergence value of all the constructs used in the study. Thus, this methodological approach offers an integrated view of the relationship between entrepreneurial competencies, EO, and SMEs' performance to offer a theoretical and empirical contribution to the field.

Results and Discussion

The study's findings provide significant insights into the relationship between entrepreneurial competencies, entrepreneurial orientation (EO), and the performance of small and medium enterprises (SMEs). Using Partial Least Squares Structural Equation Modelling (PLS-SEM), the study evaluated direct and interaction effects, uncovering the distinct roles played by entrepreneurial knowledge, skills, and attitudes in driving SME performance. Additionally, the moderating effect of EO was analysed, revealing a nuanced interplay between these factors.

An Assessment of a Measurement Model

An assessment of a measurement model involves determining individual item reliability, internal consistency reliability, content validity, convergent validity and discriminant validity (Hair, et al., 2010; Henseler, et al., 2009). Figure 4.2 depicts the results for determining the measurement model of the main effect.

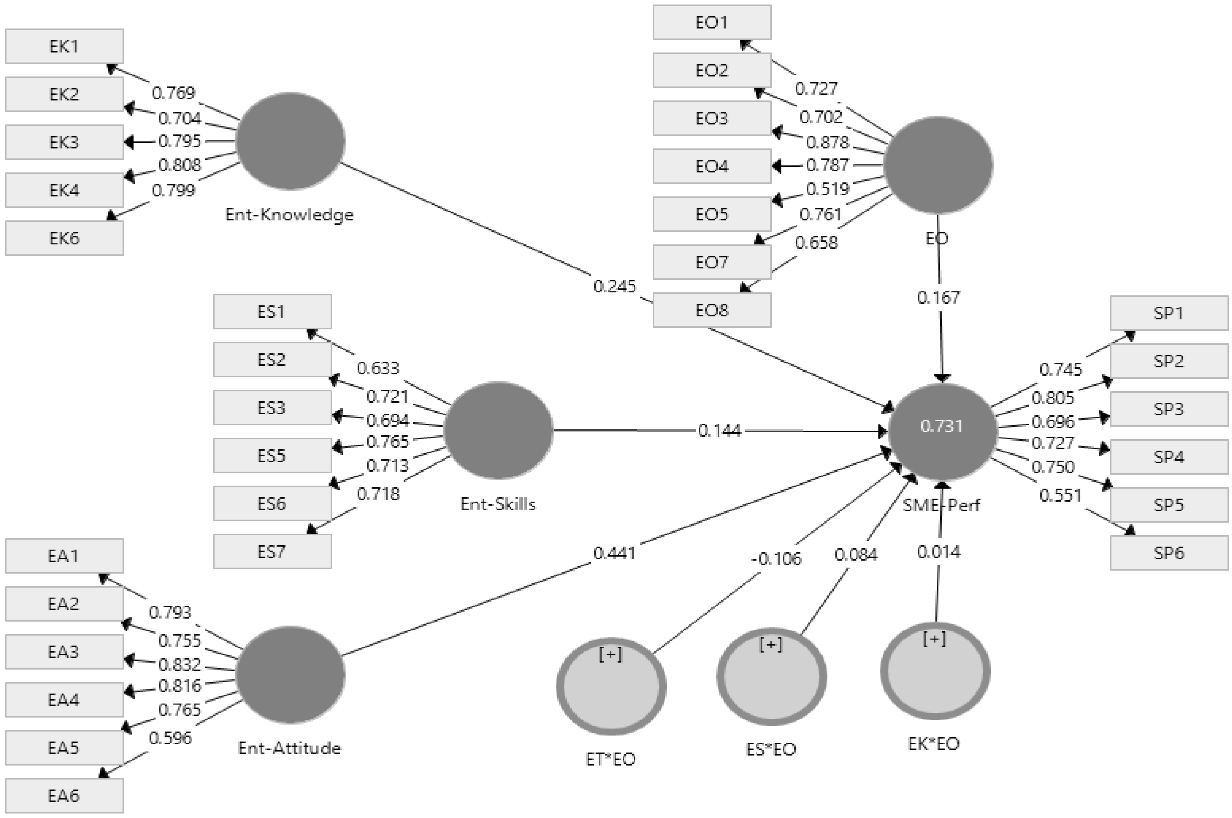

Figure 1, Individual item reliability

Individual item reliability was assessed by examining the outer loadings of each construct's measure (Hair, et al., 2014). Following the rule of thumb for retaining items with loadings between .40 and .70 (Hair, et al., 2014) it was discovered that items were deleted because they presented loadings below the threshold of 0.50. (See Table 1)

Table 1: Loadings of the Indicators

ITEMS	LOADINGS	CA	CR	AVE
EA1	0.793	**0.854**	**0.892**	**0.583**
EA2	0.755			
EA3	0.832			
EA4	0.816			
EA5	0.765			
EA6	0.596			
EK1	0.769	**0.834**	**0.883**	**0.602**
EK2	0.704			
EK3	0.795			
EK4	0.808			
EK6	0.799			
EO1	0.727	**0.846**	**0.884**	**0.527**
EO2	0.702			
EO3	0.878			
EO4	0.787			
EO5	0.519			
EO7	0.761			
EO8	0.658			
ES1	0.633	**0.814**	**0.858**	**0.502**
ES2	0.721			
ES3	0.694			
ES5	0.765			
ES6	0.713			
ES7	0.718			
SP1	0.745	**0.807**	**0.862**	**0.514**
SP2	0.805			
SP3	0.696			
SP4	0.727			
SP5	0.750			
SP6	0.551			

Table 1 presents the loadings of the indicators along with their Composite Reliability (CR) and Average Variance Extracted (AVE) values. The loadings for all indicators are above the recommended threshold of 0.5, indicating that each item significantly contributes to its respective construct. Entrepreneurial Attitude (EA) indicators, such as EA3 (0.832) and EA4 (0.816), demonstrate strong loadings, with a CR of 0.892 and an AVE of 0.583, suggesting high reliability and adequate convergent validity for this construct. Similarly, Entrepreneurial Knowledge (EK) indicators like EK3 (0.795) and EK4 (0.808) show high loadings, with a CR of 0.883 and an AVE of 0.602, reflecting good internal consistency and convergent validity. Entrepreneurial Orientation (EO) indicators, particularly EO3 (0.878), have high loadings and a CR of 0.884 with an AVE of 0.527, also indicating strong reliability and validity. Entrepreneurial Skills (ES) and SME Performance (SP) indicators generally have good loadings, though some items, such as ES5 (0.765) and SP6 (0.551), are slightly lower, which may affect the overall evaluation. The CR and AVE values across the constructs support the robustness of the measurement model, indicating that the indicators effectively measure their respective constructs.

Discriminant Validity

Discriminant validity refers to the extent to which the intended construct is different from other constructs (Wong, 2016). Discriminant validity was assessed by the Fornell and Larcker (1981) criteria of the Average Variance Extracted (AVE). This approach entails coordination of AVE square root with other constructs of interest where AVE is interpreted as an indicator reliability. In other words, discriminant validity of a construct is ensured if the construct's AVE is higher than the correlation between the construct and any other construct. With reference to Step 4 of discriminant validity in tables, all constructs have AVE of more than 0.50 as shown in table 4.7. Moreover, the results presented in Table 4.8 show that loadings of the indicators for each construct are greater than the absolute value of the product of the standard deviations of the corresponding constructs, thus indicating satisfy discriminant validity as per Fornell and Larcker's (1981) test.

Table 2: Fornell-Larcker Criterion

	EK*EO	EO	ES*EO	ET*EO	Ent-Attitude	Ent-Knowledge	Ent-Skills	SME-Perf
EK*EO	1							
EO	-0.23	0.726						
ES*EO	0.761	-0.266	1					
ET*EO	0.832	-0.208	0.819	1				
Ent-Attitude	-0.178	0.567	-0.185	-0.223	0.764			
Ent-Knowledge	-0.204	0.612	-0.214	-0.185	0.666	0.776		
Ent-Skills	-0.252	0.661	-0.19	-0.226	0.645	0.469	0.708	
SME-Perf	-0.197	0.651	-0.169	-0.225	0.395	0.701	0.655	0.717

Note: Diagonal elements (figures in bold) are the square roots of the Average Variance Extracted (AVE) shared between the constructs and their measures. Off diagonal elements are the correlations among constructs

Table 2 displays the Fornell-Larcker Criterion, a method for assessing discriminant validity by comparing the square root of the AVE of each construct with its correlations with other constructs. The diagonal values in the table represent the square root of the AVE for each construct, indicating the amount of variance captured by the construct relative to its correlations with other constructs. For example, Entrepreneurial Knowledge (Ent-Knowledge) has an AVE of 0.776, which is higher than its correlations with other constructs, such as -0.204 with EK*EO and 0.612 with EO, demonstrating satisfactory discriminant validity. Similarly, Entrepreneurial Attitude (Ent-Attitude) has an AVE of 0.764 and shows that its value is greater than its correlations with other constructs like -0.178 with EK*EO and 0.567 with EO, affirming good discriminant validity. The results suggest that each construct is sufficiently distinct from the others, as the square root of AVE for each construct exceeds its highest correlation with any other construct, confirming that the constructs are valid and well-differentiated within the model.

Assessment of Significance of the Structural Model

The next step after developing the measurement model is, therefore, the evaluation of the structural model. This research uses the bootstrapping procedure to establish the level of statistical significance of the path coefficients, which is common PLS approach when evaluating the significance of paths and calculating standard deviations (Hair et al., 2020; Chin, 2010). Bootstrapping is a resampling procedure in which the data is artificially and randomly singled out from the core database, thereby providing a sampling distribution of an estimator by resampling the data having same distribution (Wong, 2016; Good, 2000). To execute this bootstrapping technique, 5,000 bootstrap samples and 210 cases were used as suggested in other higher order SEM for assessing the path significance (Hair et al., 2014; Henseler et al., 2009). The estimates of the structural model are displayed in Figure 4.3 which offers considerations regarding the importance of the path coefficients.

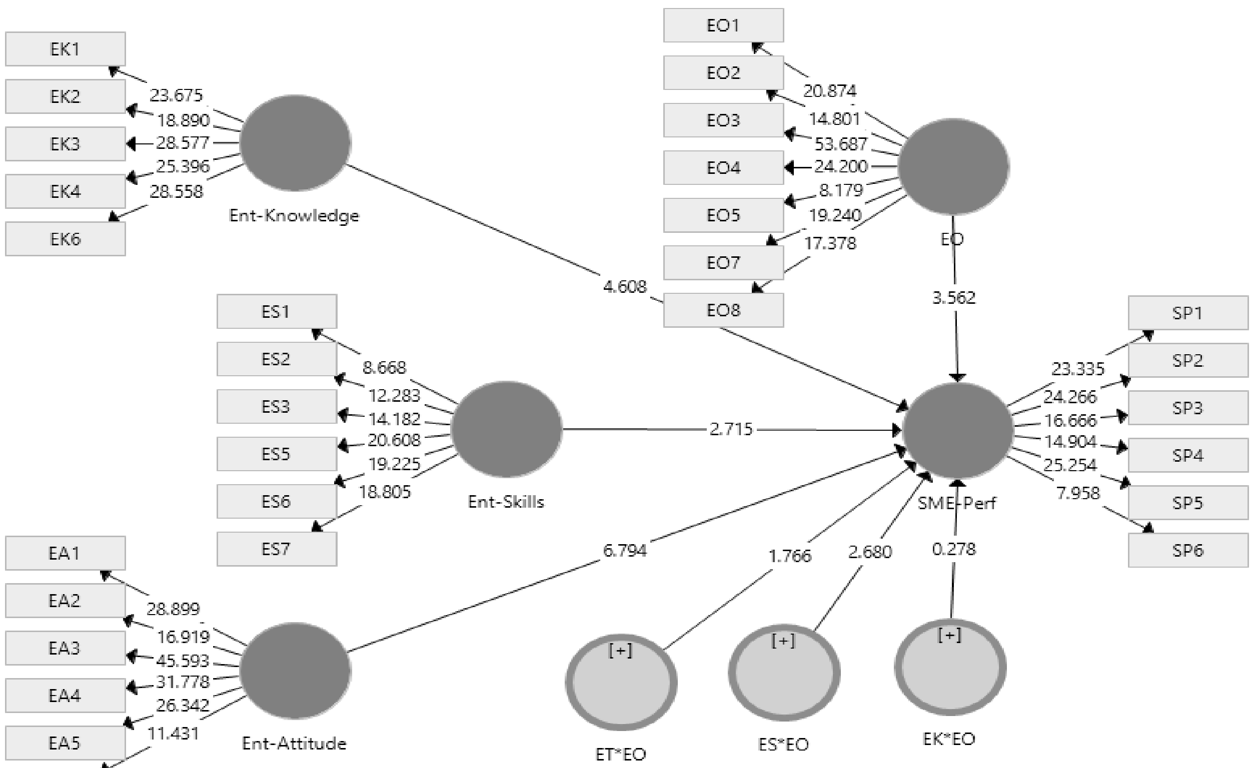

Figure 2: Structural Model for Main Effect

Figure 2 shows the respective indicator loadings and the path coefficients that were used to generate corresponding t-values. Following the determination of these estimates, the bootstrapping mechanism was applied to generate the standard error estimates and the probability values in order to test the study's hypotheses as indicated in

Test of Hypotheses

Table 3: Test of Hypotheses

	Original Sample	Sample Mean	Standard Dev	T Statistics	P Values	Decision
Ent-Knowledge -> SME-Perf	0.245	0.245	0.053	4.608	0	Rejected
Ent-Skills -> SME-Perf	0.144	0.151	0.053	2.715	0.007	Rejected
Ent-Attitude -> SME-Perf	0.441	0.442	0.065	6.794	0	Rejected
EK*EO -> SME-Perf	0.014	0.021	0.051	0.278	0.781	Fail to Reject
ES*EO -> SME-Perf	0.084	0.084	0.031	2.68	0.008	Rejected
ET*EO -> SME-Perf	-0.106	-0.109	0.06	1.766	0.078	Fail to Reject

As indicated in Table 3, the p values of each of the exogenous latent variable were determined through the bootstrap procedure and therefore based on the calculated p values this study tested the hypotheses using the threshold value or level of significance of 5%.

Ent-Knowledge -> SME-Perf: The path coefficient for entrepreneurial knowledge to SME performance is 0.245, with a t-statistic of 4.608 and a p-value of 0.000. This indicates a strong positive effect of entrepreneurial knowledge on SME performance, as the t-statistic exceeds the critical value and the p-value is well below the conventional threshold of 0.05. Therefore, we reject the null hypothesis and conclude that entrepreneurial knowledge significantly influences SME performance.

Ent-Skills -> SME-Perf: The path coefficient for entrepreneurial skills to SME performance is 0.144, with a t-statistic of 2.715 and a p-value of 0.007. This result suggests a positive impact of entrepreneurial skills on SME performance, as the t-statistic is above the critical value and the p-value is below 0.05. Thus, we reject the null hypothesis and determine that entrepreneurial skills significantly affect SME performance.

Ent-Attitude -> SME-Perf: The path coefficient for entrepreneurial attitude to SME performance is 0.441, with a t-statistic of 6.794 and a p-value of 0.000. This result demonstrates a strong positive effect of entrepreneurial attitude on SME performance. Given the high t-statistic and very low p-value, we reject the null hypothesis and affirm that entrepreneurial attitude significantly contributes to SME performance.

EK*EO -> SME-Perf: The interaction effect of entrepreneurial knowledge and entrepreneurial orientation on SME performance has a path coefficient of 0.014, with a t-statistic of 0.278 and a p-value of 0.781. The very low t-statistic and high p-value indicate that this interaction effect is not statistically significant. Therefore, we fail to reject the null hypothesis, concluding that the interaction between entrepreneurial knowledge and entrepreneurial orientation does not significantly impact SME performance.

ES*EO -> SME-Perf: The interaction effect of entrepreneurial skills and entrepreneurial orientation on SME performance shows a path coefficient of 0.084, with a t-statistic of 2.680 and a p-value of 0.008. This result indicates a positive and statistically significant interaction effect, as the t-statistic is above the critical value and the p-value is below 0.05. Hence, we reject the null hypothesis and find that the interaction between entrepreneurial skills and entrepreneurial orientation has a significant effect on SME performance.

ET*EO -> SME-Perf: The interaction effect of entrepreneurial attitude and entrepreneurial orientation on SME performance has a path coefficient of -0.106, with a t-statistic of 1.766 and a p-value of 0.078. Although the path coefficient is negative, the p-value is above the 0.05 significance level, suggesting that the effect is not statistically significant. Consequently, we fail to reject the null hypothesis, indicating that the interaction between entrepreneurial attitude and entrepreneurial orientation does not significantly influence SME performance.

Result and Discussion

Entrepreneurial Competencies and SME Performance

Entrepreneurial knowledge, skills, and attitudes each showed statistically significant and positive effects on SME performance. Entrepreneurial knowledge, with a path coefficient of 0.245 and a t-statistic of 4.608 ($p < 0.001$), underscores the critical role of informed decision-making and strategic planning in improving SME performance. Similarly, entrepreneurial skills (coefficient = 0.144; t-statistic = 2.715, $p < 0.01$) demonstrate the importance of managerial capabilities and operational efficiency. Entrepreneurial attitudes emerged as the strongest predictor, with a coefficient of 0.441 and a t-statistic of 6.794 ($p < 0.001$), emphasizing the importance of positive mindsets, proactiveness, and resilience in navigating business challenges.

Moderating Role of EO

The interaction effects between EO and entrepreneurial competencies revealed varying levels of significance. The moderation of EO on the relationship between entrepreneurial skills and SME performance was positive and significant (coefficient = 0.084, t-statistic = 2.680, $p < 0.01$), suggesting that a proactive and innovative orientation enhances the utility of entrepreneurial skills. In contrast, the interaction of EO with entrepreneurial knowledge and entrepreneurial attitudes did not yield significant effects, with p-values of 0.781 and 0.078, respectively. These results indicate that while EO strengthens certain competencies, its moderating impact is context-dependent and may not uniformly enhance all entrepreneurial attributes.

Model Predictive Power and Implications

The structural model demonstrated strong predictive power, with an R^2 value of 0.731, indicating that 73% of the variance in SME performance is explained by the independent variables and their interactions. Additionally, the Importance-Performance Map Analysis (IPMA) highlighted entrepreneurial attitude as the most critical attribute, with room for improvement in its application. These findings emphasize the need for tailored strategies to leverage entrepreneurial competencies effectively, particularly by fostering attitudes and skills aligned with proactive and innovative business practices.

Conclusion and Recommendations

The findings of this research contribute insights to the theoretical and practical understanding of the factors affecting SME performance with specifications on knowledge, skills, and attitude of entrepreneurs. This research establishes that each of these elements causes a unique impact to the SME performance with the entrepreneurial attitude having the largest impact. Therefore there is need for cultivating a strong entrepreneurial orientation and supporting methods on enhancing these characteristics. However, the study also discovered that some interactions like the entrepreneurial knowledge and entrepreneurial orientation may have insignificant effects on SME performance, this imply that a jack of all trade master of none cannot work.

Practical contributions of the study direct SME managers to foster their entrepreneurial aptitudes and orientations alongside ensuring congruity of the two to their management strategies. Currently, the policymakers should encourage programs that offer complete entrepreneurship knowledge and training for up surging the SME productivity. Thus, concerning these areas, and with reference to the internal resources and capabilities of the organisations in the context of the present study – SMEs, it will lead to the improvement of outcomes and permanent organisational growth. The results enrich the existing body of knowledge to the understanding of certain entrepreneurial factors and their relations with performance which will lay the groundwork for further research and application of the area of SME management.

Therefore, the research establishes that increasing knowledge, skills and attitude to entrepreneurship improves SME performance with attitude having the largest effect on performance. However, some of the interaction such as entrepreneurial knowledge and entrepreneurial orientation do not have significant impact, the overall research results stress the need for strong entrepreneurial approaches and skill set. This has underscored the need for small and medium enterprises to foster on these vital competencies and not negated the belief that providing relevant resources and facilities in those realms will enhance the performance and expansion of those enterprises.

There is need for SMEs to put in place elaborate training directed at enhancing knowledge and skills in entrepreneurship. These programs should cover relevant areas including business management, strategic planning, and finance so as to enable the entrepreneurs who participate in the programs to produce the right inputs that will help to improve the performance of SMEs. Entrepreneurial self and attitudes should be cultivated among SMEs with the help of positive entrepreneurial attitude through the help of mentorship and coaching. This can be by bringing other successful business people to share their experience with new business people for them to change their attitude of thinking to that of growth and strength to persevere.

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THE MEDIATING ROLE OF ORGANIZATIONAL CLIMATE ON THE RELATIONSHIP BETWEEN PERCEIVED ORGANIZATIONAL SUPPORT AND EMPLOYEE PERFORMANCE

[1]Abdulbasit Suleiman

[1]Business Administration, ABU Business School, Nigeria.
[1]abdulbasitsuleiman9@gmail.com
[1]0813130884

Abstract

The decline in employee performance has been a major issue for organizations all around the world, factors that improve employee performance have become a key issue for organizations, researchers, practitioners, and policymakers due to their impact on global organizations and economies. Given the utility company's strategic role in providing electricity and its challenges in delivering reliable services, enhancing employee performance is critical. As a result, the need for this study stems from an examination of element that promotes employee performance in organizations. This study suggests that organizational climate serves as a mediator, enhancing the positive effects of POS on employee performance. The study was underpinned by social exchange theory. Cross sectional survey design was adopted and data were gathered from 461 sample of KAEDCO staff using self-administered questionnaire. Simple random sampling method was used and Results were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), which established that POS has a significant positive relationship with employee performance. However, results show organizational climate mediates the relationship between POS and employee performance. Grounded on the study findings, it was recommended that the KAEDCO should foster a supportive organizational climate, organizations can amplify the positive effects of perceived support, leading to enhanced employee performance. Finally, the limitations of the research and suggestion for future research were given.

Keywords: Organizational Climate, Perceived Organizational Support and Employee Performance.

Introduction

Organizations strive to improve employee performance as a means to achieve their strategic goals. Organizational performance is a significant part of organizational psychology that indicates how well organization's function, it entails bringing together informational, human, and financial resources to attain goals and objectives (Asikhia, 2021). Returns on shareholder investments, financial health, and product market success are all used to measure performance. Employee performance is becoming progressively crucial in organizations, and companies must concentrate on enhancing it in order to boost employee confidence and performance (Chen 2019). However, strategies for boosting employee performance entails frequently optimizing resource utilization, increasing productivity, and accelerating growth. Language hurdles, legislation, regulations, technology limitations, and time zone differences all adds to psychological uncertainty among employees, resulting in underperformance (Muhammed 2020). Furthermore, low energy availability impedes economic growth, and bad infrastructure adds to power outages, resulting in loss of production, revenue, and equipment damage (Avordeh, et al., 2024).

Armstrong (2012) emphasized the importance of employees' quality, dedication, enthusiasm, expertise, and skills in an organization's performance. Guest (1997) argued that HR management can improve employee performance by focusing on people within the organization. Storey et al. (2009) noted that HR policies affect employee attitudes and behavior, leading to improved performance. Organizations achieve high performance through adapting work systems, and optimal performance can be achieved by improving employee performance through the development and implementation of a high-performance culture. Organizational support (POS) is a form of employee trust that companies provide to improve performance by facilitating employee development and awarding. Results of organizational commitment and employee confidence in the organization's appreciation and treatment of their contributions. POS is rewarded if it meets socioemotional needs, awards for increased work effort, and helps employees work effectively.

POS is the support provided by companies to enhance performance by facilitating employee development and awarding. Rhoades and Eisenberger (2002) argued (POS) are a form of employee confidence about organizational commitment to them. Meta-analysis by Rhoades and Eisenberger (2002). Robin and Jugde (2013) claimed that Higher work satisfaction leads to a more positive perception of work, and vice versa. Poor employee performance in areas such as POS is a worldwide problem, found globally, in Africa and Nigeria (Kowalski & Swanson, 2021). Economic pressures and limited resources exacerbate these issues. Organizations such as Google, Safaricom in Kenya, and MTN Nigeria confront distinct issues in sustaining perceived organizational support (POS) influencing employee performance (Adebayo, 2020). Google struggles to keep remote staff engaged, Safaricom has strong client demand and limited resources and MTN Nigeria on the other hand has a low POS because of job uncertainty and low commitment. The Nigerian electrical regulatory authority, NERC, has issued a 60-day revocation notice to Kaduna electrical Distribution Company (KAEDCO) for its infrastructure, work environment, and debts. This incident may result in low morale, decreased productivity, and high turnover rates, potentially impacting overall performance (Rasool, Maqbool, Samma, & Anjum 2019). Therefore, companies should focus on creating a supportive organization that encourages employees to feel supported and enhances performance. POS are employees' perception of how much the organization values their contributions and well-being has been known as a key determinant of performance.

Organizational climate has a substantial impact on the relationship between POS, which influence employee performance. A positive organizational climate instills a sense of belonging and engagement in employees, enhancing their readiness to commit to the organization. Leadership style, communication habits, and policies all have an influence on the organizational climate (Sein, Kunaviktikul & Stark 2021). Positive differences can promote variety, local adaptation, and creativity, whereas negative variations might result in discrepancies in procedures, regulations, and employee experiences (Wales et al 2020). Employee performance is critical for organizations to meet their objectives and reflects organizational policy, strategy, and practice. Employee performance is the sum of all employees' abilities, efforts, and contributions to their organization enhanced output and goal achievement.

This research used the social exchange theory by George Homans in 1958. Relationship between POS, organizational climate, and employee performance can be understood through the lens of social exchange theory (SET). According to SET, employees reciprocate perceived support through behaviors that benefit the organization. However, this exchange process is influenced by the work environment, which acts as a contextual factor that either facilitates or hinders the translation of support into performance. SET with 4 major themes; interdependent interactions, self-interest, rules of exchange, and the formation of interpersonal relationships. It suggests that employees reciprocate organizational support, align their goals with the organizations, and foster fairness and transparency to strengthen trust and commitment (Cropanzano et al., 2017; Blau et al., 2020; Eisenberger et al. 2020 & Ahmed & Nawaz (2021).

It is based on expectations of receiving rewards or benefits, such as material goods, emotional support, or status. The exchange may come with costs or losses such as time, effort, emotional or physical stress, or loss of resources. When KAEDCO employees perceive high organizational support, they are likely to reciprocate with increased commitment and productivity Performance is an important spotlight in public and private organizations. Social Exchange Theory (SET) emphasizes the importance of Perceived Organizational Support (POS), Organizational Climate, and Employee Performance. Research shows that POS improves commitment, motivation, and performance by addressing socio-emotional needs. A favorable organizational climate increases trust and involvement, strengthening the impact of POS on performance. Employees improve their effort and output in return for organizational support. SET suggests that these factors promote mutual gain, fairness, and trust in employee performance (Rhoades & Eisenberger, 2002; Ahmed & Nawaz, 202; Sein et al., 2021; Cropanzano et al., 2017; Blau, 1964; Guest, 1997It also fosters organizational citizenship behaviors and employee well-being, and in sectors like utilities, it directly correlates with employee innovation and service delivery quality. One of the private organizations whose performance is important for the development of the economy in Nigeria is the KAEDCO. A private organization which contributes to the GDP of Nigeria

However, organizational climate mediating this relationship remains underexplored. Kaduna Electricity Distribution Company (KAEDCO) is a pivotal player in the energy sector of Northern Nigeria. The company's success depends largely on its workforce, who are tasked with maintaining infrastructure, addressing customer issues, and ensuring uninterrupted electricity distribution. However, the electricity distribution sector is faced with numerous challenges, including inefficient services, high employee turnover, performance inefficiencies, and low morale have raised concerns. Kaduna Electricity Distribution Company (KAEDCO) is no exception. POS is crucial in enhancing employee performance. Yet, the organizational climate particularly within the framework of KAEDCO, remains underexplored. This paper`s main objectives is to examine how the organizational climate mediates the relationship between POS and employee performance in KAEDCO, with actionable insights to address current challenges.

However, the specific objectives are to:

i. Examine the effect of POS on employee performance;

ii. Examine the effect of organizational climate on employee performance; and

iii. Examine the mediating effect of organizational climate on the relationship between POS on employee performance.

Statement of Hypotheses

The above null hypotheses were formulated based on the empirical literature;

i. Perceive Organizational Support has no effect on employee performance in KAEDCO.
ii. organizational climate has no significant effect on employee performance in KAEDCO.
iii. Organizational climate does not mediate the relationship between Perceive Organizational Support and employee performance in KAEDCO.

Literature review

Employee Performance

Employee performance is crucial to the success of any organization. It denotes the level of productivity, efficiency, and effectiveness with which an employee carries out their tasks and responsibilities. Employee performance refers to the efficiency and effectiveness with which individuals fulfill their job roles. It includes task performance (meeting job expectations) and contextual performance (going beyond assigned tasks to backs organizational environment). As reported by Abbas and Raja (2021) employee performance has a significant impact on organizational effectiveness and can lead to increased productivity and profitability. High employee performance contributes to the achievement of organizational goals, improves customer satisfaction, and increases profitability these were all reported in the studies conducted by McKinsey & Company (2020) and Sturman, Cheramie, and Cashen (2020).

Additionally, employee performance is vital in achieving long-term business goals. Organizations that focus on improving the performance of their employees can create a competitive advantage by supporting them in order to develop a skilled and committed workforce (Hongal & Kinange 2020). Therefore, it is important for organizations to prioritize employee performance management as part of their overall strategy for achieving success. As effective employee performance management can help organizations to achieve their goals and objectives, increase productivity, and retain talented employees (Murphy 2020). Employee performance at KAEDCO encompasses timely fault resolution, energy loss reduction, customer satisfaction, and adherence to regulatory standards. Improving performance metrics requires aligning individual goals with organizational purposes in a supportive and collaborative environment. Operational success at companies like KAEDCO is driven by key performance indicators including prompt fault resolution, energy loss reduction, customer happiness, and regulatory compliance. For this reason, controlling staff performance is essential to long-term company success. It gives a competitive edge and enhances organizational results by cultivating a talented and driven staff.

Perceived Organizational Support (POS)

POS has evolved over time as scholars have explored different aspects of it. In the early 1990s, Eisenberger and colleagues introduced POS and developed a scale to measure it. POS reflects employees' belief that their organization is committed to supporting them. It is grounded in the organizational support theory, which suggests that employees who perceive high organizational support are more likely to reciprocate with loyalty and improved performance (Hayat & Afshari 2021). POS can be influenced by a variety of factors, such as the quality of interpersonal relationships with colleagues and supervisors, the perceived fairness of the organization's policies and procedures, and the provision of resources and support for job-related tasks. Research has shown that employees who perceive high levels of organizational support are more likely to exhibit positive attitudes and behaviours (Detnakarin, Demirdelen and Alrawadieh (2022) stated that the evolution of POS research highlights the importance of creating a positive work environment that values employees' contributions and well-being. Organizations can foster POS by implementing supportive policies and practices, such as providing opportunities for employee development and growth, recognizing and rewarding good performance, promoting work-life balance, and creating a positive work environment that values diversity and inclusivity (Abdullah, Huang, Sarfraz, Ivascu & Riaz 2021). By doing so, organizations can not only enhance employee well-being and job satisfaction but also improve their overall performance and effectiveness. At KAEDCO, POS reflects employees’ perceptions of the company's appreciation of their efforts and its concern for their welfare.

This present research indicates that a supportive work environment (POS) improves organizational performance, motivation, and job satisfaction. Factors such as resource availability, fair policies, and interpersonal interactions contribute to POS. Encouraging professional development, work-life balance, performance recognition, and diversity support can enhance POS. At KAEDCO, equitable compensation, recognition, career advancement, and work-life balance are crucial for employee motivation and loyalty.

Organizational Climate

According to Carlucci, Mura, & Schiuma, (2020), Organizational climate refers to the prevailing atmosphere or mood within an organization, as perceived by its employees. It encompasses the shared beliefs, values, attitudes, and behaviours that shape the work environment and the way people interact with each other. Organizational climate is the collective perception of the work environment. It encompasses dimensions such as trust, openness, innovation, and fairness. A positive climate fosters job satisfaction, commitment, and motivation, which are critical for high performance. Organizational climate can be influenced by various factors such as leadership style, communication patterns, work processes, physical environment, and organizational policies (Gaviria-Rivera & Lopez-Zapata 2019). It can have a significant impact on employee satisfaction and performance, as well as the overall success of the organization. Employees who perceive a positive organizational climate are more likely to be engaged in their work, have higher job satisfaction, and be more productive (Khaskheli et al, 2020).

However, a negative organizational climate is characterized by a lack of trust, poor communication, and high levels of stress and conflict (Manning 2020). It can lead to low morale, absenteeism, turnover, and reduced productivity. Organizational climate can vary across different departments, teams, and levels of the organization. It is important to consider the unique context of each department and team when assessing the organizational climate and developing strategies to improve it (Roscoe, Subramanian, Jabbour, & Chong 2019). By creating a positive and supportive climate, organizations can attract and retain top talent, increase employee engagement and productivity, and ultimately achieve their strategic goals. Organizational climate at KAEDCO represents the shared perception of policies, practices, and leadership style. A positive climate in the electricity distribution sector can include transparent communication, effective conflict resolution, safety measures for field workers, and equitable workload distribution.

One of the key factors influencing its success is the organizational atmosphere. By emphasizing leadership, communication, employee welfare, and an open workplace, KAEDCO can create a favorable atmosphere that draws and keeps talent, boosts output, and guarantees long-term viability. Maintaining a robust and successful business in an industry that demands both operational excellence and employee happiness requires constant monitoring and improvement of this climate.

Mediating Role of Organizational Climate

POS and Employee Performance

Employees who feel valued are likely to perceive their work environment as supportive and engaging. Connection between POS and employee performance was found to be stronger for employees who perceived their jobs as being stressful or demanding. Another review conducted by (Zafar et al, 2021) also found that the relationship between POS and employee performance was stronger when the measure of POS was based on employees' perceptions of the organization's overall supportiveness, rather than on specific support practices or policies.

Enhancing employees' perceptions of organizational support can improve their job satisfaction, commitment, engagement, and safety behaviours, while reducing their intention to leave the company. Organizations that prioritize creating a supportive work environment and valuing employee contributions are likely to see positive outcomes in terms of employee satisfaction, commitment, and performance. In KAEDCO, high POS such as recognition for frontline workers, proper training for technicians, and addressing grievances can create a positive organizational climate. Employees are likely to feel engaged, secure, and motivated in an environment that reflects fairness and collaboration.

Organizational Climate and Employee Performance

Review highlighted the importance of the role of the organizational climate in predicting various work outcomes such as job performance, commitment, and well-being. Authors also identified several gaps and opportunities for future research. Study by Kuczmarski and colleagues (2021) investigated the impact of organizational climate on employee innovation behaviour. The results reveals that a supportive organizational climate, characterized by a strong emphasis on innovation and risk-taking, was positively connected with employee innovation behaviour. Additional study by Dwyer and colleagues (2020) explored the relationship between organizational climate and employee well-being. Results reveals that a positive organizational climate, characterized by supportive leadership, job autonomy, and a sense of belonging, was associated with higher levels of employee well-being. The study highlights the importance of creating a positive organizational climate that promotes employee well-being and reduces workplace stress.

A recent meta-analysis by Schneider and colleagues (2021) examined the relationship between organizational climate and job performance. The results reveals that a positive organizational climate, characterized by a supportive work environment and clear performance expectations, was positively associated with job performance. The study highlights the importance of creating a positive organizational climate that supports employee performance and productivity. Positive organizational climate encourages employees to perform at their best by providing psychological safety, clear communication, and opportunities for growth. It also minimizes stress and burnout, enabling sustained performance. A positive organizational climate will improve KAEDCO employees' capacity to manage stress, maintain focus, and deliver high-quality service. For example, regular feedback sessions and performance rewards can encourage teams to go beyond their assigned roles, improving overall performance.

Mediating Mechanism

Organizational climate mediates the POS and employee performance relationship by translating the perceived support into a favorable work environment that motivates employees to excel. For instance, an employee who feels supported by management may experience greater job satisfaction, which is further reinforced by a climate that rewards high performance and innovation. Organizational climate acts as the bridge that translates POS into high employee performance. For instance, a line worker who perceives KAEDCO as supportive may feel more inclined to report equipment failure es proactively, knowing the company values their input. Similarly, an inclusive climate where employees feel valued can increase job satisfaction and drive productivity.

This study focuses on the relationship between perceived organizational support and employee performance with mediating role of organizational climate in a utility service organization, KAEDCO. It differs from previous research by examining the unique challenges, policies, and employee dynamics within the context. The study builds on the theoretical framework used in previous research, focusing on specific aspects of organizational climate. It employs a mixed-methods approach, combining quantitative survey data with secondary data, to capture a comprehensive understanding of the mediating role of organizational climate. The study also focuses on specific employee behaviors, such as proactive reporting of equipment failures, to provide actionable insights. The study also considers recent trends or changes, such as post-pandemic work environments and technological advancements, to make it timely and relevant.

Materials and Method

The present study utilized quantitative research design because the aim of the study is hypothesis testing or causal research. Also, simple random sampling was used, which is a method used to select a representative subset of individuals or data from a large population, allowing the researcher make inference about the whole population. The population of the study comprises the KAEDCO staff, having 13 area offices and the total population of the staff is 1824 which was revealed by the human resource department as at 2022. Based on Dillman formular was used to determine the sample size to be used of the study. Sample size of 307 was arrive at and in order to mitigate non response rate, 40% was added (Salkind, 2007) making the sample 461 which were distributed. 325 were retrieved of which six were deem unusable, finally 302 questionnaires were used for analysis. This study takes efficiency and effectiveness as measures of employee performance, Employee performance was measured using 5 items also measured in 5point Likert scale adopted from Koopman (2014). Perceived Organizational Support was measured using 9 items also measured in 5-point Likert scale adapted from Eisenberger et al (1986). Finally, Organizational climate measure using scale developed Elsa Pena-Suarez, JoseMuniz, Angela Campillo-Alvarez, Eduardo Fonseca-Pedrero and Eduardo García-Cueto (2013). It consists of 15 items Likert-type these items were scored via a five-point Likert scale ranging from `1` "strongly disagree" to `5` "strongly agree." 4. Results=5 to never=1.

Results and Discussion

Structural model was used to assess individual item reliability, internal consistency reliability and discriminant validity. Sample mean (M), Standard deviation (STDEV), T statistics, P values were used in this study. Firstly, the individual item reliability was assessed by the examination of the outer loadings of each construct`s measure (Hair et al, 2017). The rule of thumb has it that items with loading between 0.40-0.70 should be retained (Hair, et al., 2017).

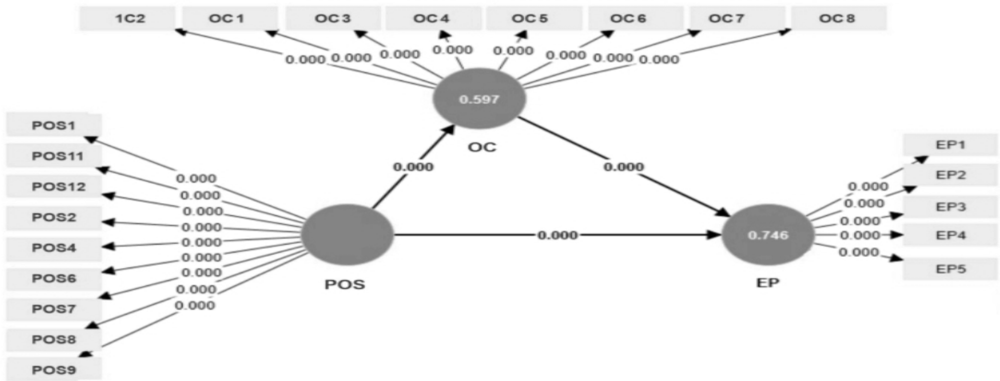

Figure 1: Measurement Model

As can be seen from Figure 1 above, the loadings of the respective constructs meet the threshold of individual item reliability. Secondly, this study employs composite reliability to assess the internal consistency of the constructs. Hair et al (2019) recommended that internal consistency reliability of 0.60 and above is significant. As can be seen in table 1, the internal consistency reliability is adequate because the CR ranges from 0.70-0.93 which is beyond the threshold. Thirdly, this study employed AVE to measure the convergent validity of the constructs. The recommended value of the AVE should be 0.50 or higher, (Hair et al, 2017). Hence, 7 items were deleted out of 29 items leaving the model with only 22 items. This is depicted in the figure 2. As can be seen from Table 1 below, the constructs achieved both convergent validity because the values are above the threshold. Lastly, Fornell-Larcker method was employed to assess discriminant validity. The method compares the square root of the AVE values of the latent variable correlations, and the square root of each construct`s AVE should be greater than its highest correlation with any other construct (Hair et al, 2017). As indicated in Table 2, all the reflective measurement constructs have discriminant validity because the square root of their AVEs are above their correlation with any other construct.

Table 1: Measurement Model: Reliability and Convergent Validity

Construct	Composite Reliability	Average Variance Extracted
Employee performance	0.91	0.539
Perceived organizational support	0.72	0.802
Organizational climate	0.93	0.798

Table 2: Measurement Model: Discriminant Validity (Fornell and Larcker)

	EP	POS	OC
E P	0.735		
POS	0.347	0.896	
O C	0.335	0.883	0.888

Table 3: Hypotheses test for direct and Mediating Relationship

Hypotheses	Relationship	Beta value	SD	T statistics	p-value	Decision
HO_1	POS -> EP	0.065	0.052	11.313	0.000	Reject
HO_2	OC -> EP	0.228	0.048	6.891	0.000	Reject
HO_3	OC x POS -> EP	0.254	0.034	22.980	0.000	Reject

As can be seen in the Figure 1 and Table 3, hypothesis one which stated that POS does not have significant effect on employee performance was rejected (β=0.065, T= 11.313, P < 0.000). Also, hypothesis two which stated that organizational climate does not have significant effect on employee performance was rejected (β=0.228, T= 6.891, P < 0.000). Lastly, third hypothesis organizational climate does not mediate the relationship between perceive organizational support and employee performance was also rejected (β=0.254, T= 22.980, P <0.000) at 5% significance. The coefficient of determination (R^2 value) of this model is 0.746 which indicates that 70% variation in employee performance are explained by the IV and mediating variable. All hypothesis were rejected because the statistical evidence (p-values, β-values, and R^2) strongly supports significant relationships between the variables, invalidating the null hypotheses. This suggests that perceived organizational support and organizational climate have a meaningful and measurable impact on employee performance, both directly and indirectly.

Discussion and Implications of Findings

This research employed PLS-SEM, a robust statistical technique to investigates relationship between variables. Understanding the mediating effect of organizational climate will allow KAEDCO to tailor its support mechanisms to align with the prevailing climate. An organizational climate that fosters a positive, supportive environment can enhance the effect of perceived organizational support on employee performance. Result of the structural model shows that POS has a significant effect on employee performance, implying a positive relationship between POS and employee performance. In addition, Organizational climate has a positive influence on employee performance. Organizational climate's mediating effect introduces a layer of complexity. One plausible interpretation is that a supportive organizational climate may cushion the negative impact of high POS on employee performance. Conversely, a less supportive climate could exacerbate the negative relationship. By actively shaping the organizational climate, KAEDCO can optimize the effectiveness of support initiatives, ultimately influencing employee performance.

Findings of these study shed important light on the connections between employee performance, organizational climate, and perceived organizational support (POS). Employee performance is significantly impacted by POS and organizational climate, both directly and indirectly, as evidenced by the rejection of all null hypotheses. These results are consistent with earlier research that highlighted the crucial mediating function of organizational climate in improving employee outcomes Kassem et al. (2021). Similarly, Obeng et al. (2020) discovered that employee performance is positively impacted by organizational climate, confirming the idea that creating a welcoming and inclusive atmosphere is crucial. However, the mediating effect of organizational climate (β=0.254, T=22.980, P<0.000) was comparatively stronger than the direct effect of POS on employee performance (β=0.065, T=11.313, P<0.000). This departure from research such as Duru (2024), which reported a stronger direct POS- employee performance link, could be attributed to industry-specific factors at KAEDCO, where operational challenges may require additional mediating influences, such as climate, to translate support into measurable performance.

These results strengthen the significance of Social Exchange Theory, which advances the theoretical understanding of employee performance. The findings specifically show that people are encouraged to perform better when they feel valued, a reciprocal relationship that is fostered by perceived organizational support. A layer of complication is added by the mediating function of organizational climate, which implies that in order to have the greatest impact, support needs to be ingrained in a supportive workplace culture. This study also fills in gaps in the literature.
Suggests managers and Policymakers should consider improving organizational climate.

Conclusions and Recommendations

The basic objective of this study was to empirically examine the mediating effect of organizational climate on perceived organizational support and employee performance. Therefore, based on the findings of the study, the following conclusions are drawn. First finding shows that there is significant effect of perceived organizational support and employee performance in Kaduna Electricity Distribution Company, Kaduna State. However, the effect indicates that other factors also play a significant role in determining employee performance. Further research is needed to identify and address these additional influencing factors, it is recommended that KAEDCO should focus on improving organizational support. The second finding showed that organizational climate has a positive influence on employee performance. This emphasizes the importance for organizations to acknowledge and actively manage their climate to enhance employee performance, KAEDCO should delve deeper into understanding the specific dynamics of organizational climate by integrating various aspects of organizational climate. Lastly, third finding revealed that organizational climate mediates the effect of perceived organizational support on employee performance. KAEDCO should focus on creating a supportive organizational climate, environment where employees feel appreciated, supported, and empowered. A supportive organizational climate can mitigate the negative impact of high perceived organizational support on performance, while a less supportive climate can worsen this negative relationship.

Therefore, this paper highlights the critical role of organizational climate as a mediator in relationship between POS and employee performance which offers valuable insights for KAEDCO. By fostering a supportive organizational climate, KAEDCO can amplify the positive effects of perceived support, leading to enhanced employee performance. Future studies can look into these relationships empirically within KAEDCO to validate this conceptual framework and explore potential mediating factors such as leadership style and organizational culture.

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DE-GLOBALIZATION AND NATIONALIST POLICIES: ASSESSING THE SOCIOECONOMIC IMPACTS OF PROTECTIONIST AGENDAS IN A GLOBALIZED WORLD

[1]Nnamdi Emmanuel A. Egwunyenga Ph.D & [2]Nwajei Felix Liberty Ph.D

[1]Department of Business Management, Faculty of Management Sciences, Dennis Osadebay University, Asaba, Delta State.
[2]Department of Business Administration, Faculty of Management Sciences, University of Delta, Agbor, Delta State.
[1]egwunyengaanthony@gmail.com, Egwunyenga.nnamdi@dou.edu.ng,
[2]liberty.nwajei@unidel.edu.ng
[1]08037894464 & [2]08033937197

Abstract

This study explores the phenomenon of de-globalization and the rise of nationalist policies, examining their socioeconomic impacts within the context of an increasingly interconnected global economy. In recent years, protectionist agendas have gained prominence, driven by concerns over economic sovereignty, national security, and the perceived adverse effects of globalization on domestic industries and labor markets. The paper investigates the implications of such policies on trade, investment flows, and global cooperation, while analyzing their influence on inequality, employment, and economic growth. Using a multidisciplinary approach, the study reviews historical precedents and contemporary examples, highlighting both the short-term benefits and long-term risks of protectionism. Key findings suggest that while nationalist policies may offer temporary relief for certain sectors, they often disrupt supply chains, hinder innovation, and exacerbate global economic disparities. The research underscores the importance of balanced strategies that address the legitimate concerns of de-globalization advocates while preserving the benefits of international collaboration. Recommendations for policymakers focus on fostering inclusive globalization, promoting sustainable trade practices, and mitigating the adverse effects of protectionist measures on marginalized populations. This study contributes to the broader discourse on the interplay between globalization and nationalism, offering insights into shaping equitable and resilient economic policies in a polarized world.

Keywords: De-globalization, Protectionism, Nationalist policies, Global value chains, Socioeconomic impacts, Economic growth.

Introduction

In recent years, the global economic landscape has witnessed a shift toward de-globalization, characterized by the resurgence of protectionist policies and nationalist agendas. This shift marks a stark departure from the economic liberalization that defined the late 20th and early 21st centuries. The post-World War II era ushered in a period of intense economic integration, with nations lowering trade barriers, embracing free markets, and participating in multilateral trade agreements. However, the increasing adoption of protectionist measures in various countries signals a reversal of this trend. The implications of this shift are profound, influencing not only international trade dynamics but also Global Value Chain (GVCs), domestic industries, and broader socioeconomic conditions worldwide (Kobrin, 2020; De Marchi et al., 2020).

De-globalization, in its essence, represents the process of reducing economic interdependence between nations. Protectionist policies, often associated with de-globalization, are government interventions aimed at limiting the influence of foreign competition through measures such as tariffs, quotas, and subsidies. These measures are designed to safeguard domestic industries from external competition and protect jobs within the country. Nationalist policies, which prioritize the interests of the domestic economy over international cooperation, have gained momentum in recent years, fueled by factors such as economic crises, rising political populism, and growing concerns over national security. Protectionist measures have been particularly prominent in the context of geopolitical events like the U.S.-China trade war, the United Kingdom's decision to leave the European Union (Brexit), and the global disruptions caused by the COVID-19 pandemic (Evenett, 2019; Grundke & Moser, 2019; World Bank, 2023).

One of the key features of modern globalization is the establishment of global value chains (GVCs), which involve the international fragmentation of production processes. The rise of GVCs has enabled firms to access cheaper labor, resources, and components from around the world, fostering economic growth, innovation, and competitiveness. However, the adoption of protectionist policies threatens to undermine the efficiency and stability of these interconnected global supply chains. Trade barriers increase the cost of cross-border transactions, disrupt the smooth flow of goods and services, and compel firms to reconsider their production and sourcing strategies. As a result, the benefits of specialization, economies of scale, and access to global markets are jeopardized, potentially leading to decreased global competitiveness and reduced innovation. While protectionist measures may appear to offer short-term benefits to domestic industries, they could also lead to longer-term inefficiencies and reduced global economic output (Kano, Tsang, & Yeung, 2020; De Marchi et al., 2020; McWilliam et al., 2020).

The growing trend toward protectionism and de-globalization carries with it significant socioeconomic consequences. In the short term, some domestic industries may experience employment gains, particularly in sectors that were previously threatened by foreign competition. However, these gains are often outweighed by broader economic inefficiencies. Protectionist policies can result in higher consumer prices, as tariffs and trade barriers raise the costs of imported goods. Consumers face fewer choices and higher costs, particularly in countries that rely heavily on imports for everyday goods. This impact is disproportionately felt by lower-income households, who are more vulnerable to price increases (World Bank, 2023; Bown & Irwin, 2019). Moreover, reduced competition from foreign firms could lead to complacency among domestic firms, diminishing the incentives for innovation and efficiency improvements.

From a broader economic perspective, protectionism may hinder long-term economic growth. As the World Bank (2023) notes, the fragmentation of global trade could reduce global economic output by up to 7% over the long run, as trade barriers impede the movement of goods, services, and capital across borders. In addition to reducing trade volumes, protectionist measures may trigger retaliatory actions from other countries, exacerbating trade conflicts and further diminishing global economic cooperation. The European Central Bank (2024) cautions that the fragmentation of global trade results in substantial welfare losses for all nations involved, as it reduces the collective ability to benefit from international trade and cooperation.

The shift toward de-globalization also raises concerns about the broader implications for job markets and employment. Protectionist policies often promise job creation in specific sectors by shielding them from foreign competition. However, this protection is rarely sustainable in the long term. In industries that rely on international trade, such as manufacturing and agriculture, protectionism may lead to job losses as the cost of imports increases, making products less competitive in global markets. Furthermore, the protection of certain sectors may come at the expense of others, leading to a misallocation of resources and reduced overall economic efficiency (Financial Times, 2024). While some workers may experience short-term employment gains in protected industries, these benefits are typically not enough to offset the negative impacts on other sectors of the economy.

Another critical concern associated with de-globalization and protectionism is the potential negative impact on innovation and technological advancement. Exposure to global competition encourages firms to innovate and improve their products and processes in order to maintain their competitiveness. When trade barriers reduce international competition, firms may lose the incentives to invest in research and development, leading to stagnation in innovation. This reduction in innovation can result in a decline in productivity growth and long-term competitiveness (Kobrin, 2020; Constantinescu, Mattoo, & Ruta, 2020a). The loss of technological advancements can also affect the broader economy, reducing the ability of countries to adapt to new challenges and opportunities in the global economy.

While protectionist policies and nationalist agendas may seem attractive in the short term, their long-term consequences are complex and far-reaching. As countries grapple with the effects of de-globalization, policymakers must weigh the immediate benefits of protecting domestic industries against the broader and more enduring costs of economic fragmentation. A nuanced understanding of these impacts is essential for businesses, governments, and international organizations to navigate the evolving global economic landscape effectively. The need for comprehensive strategies to balance national interests with global cooperation has never been more critical as countries seek to adapt to the changing dynamics of international trade and economic relations (Reuters, 2025; European Central Bank, 2024).

Statement of the Problem

Globalization has long been regarded as a cornerstone of economic growth, international cooperation, and cultural exchange. In an ideal global economic framework, countries work together through open trade policies, shared technological advancements, and interconnected value chains to promote mutual prosperity. This interconnectedness fosters efficiency, innovation, and competitiveness, while reducing economic disparities between nations (World Trade Organization, 2022). The liberalization of trade has traditionally been associated with increased market access, lower production costs, and improved living standards worldwide (Gereffi & Lee, 2022).

However, recent years have witnessed a growing retreat from globalization, marked by the adoption of nationalist policies and protectionist agendas. Key events such as Brexit, the U.S.-China trade war, and disruptions caused by the COVID-19 pandemic have prompted countries to reassess their reliance on global supply chains. These developments have led to the imposition of tariffs, trade barriers, and localized production initiatives, creating challenges for global economic integration (Evenett, 2023). Nationalist policies, driven by geopolitical tensions and domestic economic pressures, have further exacerbated these trends, disrupting global value chains and reducing international collaboration.

The gap between the ideal of globalization and the current trend of de-globalization highlights the need for critical assessment. While globalization promotes efficiency and interconnectedness, protectionist measures aim to safeguard domestic economies from perceived external threats. This shift raises critical questions about the socioeconomic impacts of these policies, including their effects on economic growth, employment, innovation, and consumer welfare (Baldwin, 2023). The balance between protecting national interests and fostering global cooperation remains a key challenge in the evolving economic landscape.

Protectionist policies often result in unintended socioeconomic consequences. For instance, while they may offer short-term relief for domestic industries, they can stifle economic growth, increase consumer prices, and reduce innovation over the long term. Trade barriers disrupt the seamless flow of goods and services, affecting businesses and consumers alike. Additionally, industries reliant on global trade face significant job losses, while domestic sectors may see only marginal gains (OECD, 2023). The economic inefficiencies created by protectionism often outweigh its intended benefits, particularly in an interconnected world where global challenges require collaborative solutions.

This study aims to bridge the gap in the literature by providing a comprehensive analysis of the socioeconomic impacts of de-globalization and nationalist policies. By examining the interplay between protectionism and globalization, the research seeks to offer actionable insights for policymakers and stakeholders to navigate this complex and evolving economic environment.

Objectives of the Study

The primary aim of this study is to assess the socioeconomic impacts of de-globalization and nationalist policies in a globalized world, focusing on the implications of protectionist agendas. The specific objectives are to:
1. To examine the drivers of de-globalization and the resurgence of nationalist policies
2. To analyze the effects of protectionist measures on global value chains (GVCs)
3. To evaluate the socioeconomic consequences of protectionist policies
4. To compare the outcomes of protectionist policies with the benefits of globalization
5. To provide actionable recommendations for policymakers and stakeholders

Conceptual Review

Introduction

The conceptual framework for studying "De-globalization and Nationalist Policies: Assessing the Socioeconomic Impacts of Protectionist Agendas in a Globalized World" integrates theoretical and empirical perspectives to explain the drivers, mechanisms, and socioeconomic implications of de-globalization and protectionist policies. It provides a structured approach to understanding how nationalist agendas influence global trade, economic policies, and societal outcomes.

Globalization

Globalization refers to the increasing integration of economies, societies, and cultures through international trade, investment, and information exchange. It has been the dominant paradigm driving economic growth and development since the late 20th century. Drivers of globalization include liberalized trade policies, advancements in technology, and multinational cooperation. Critics argue that globalization has contributed to income inequality, environmental degradation, and economic vulnerabilities (Stiglitz, 2017).

De-globalization

De-globalization describes the reversal of globalization trends, characterized by the reassertion of national sovereignty, reduced international trade, and the reorientation of policies toward domestic priorities. Causes: Economic crises, geopolitical conflicts, the rise of populist movements, and technological shifts (Rodrik, 2020). Manifestations: Trade wars, Brexit, and reshoring of production facilities.

Protectionism

Protectionism involves policies aimed at shielding domestic industries from foreign competition. It is implemented through tariffs, quotas, subsidies, and non-tariff barriers. Objectives: Safeguarding local jobs, enhancing national security, and reducing reliance on global supply chains. Critiques: Reduced trade efficiency, higher consumer prices, and potential retaliation from trade partners (Baldwin, 2020).

Socioeconomic Impacts

The shift toward de-globalization and protectionist policies has widespread socioeconomic implications, including: Economic Growth which is the trade restrictions limit market access, reduce efficiency, and slow growth (Nicita et al., 2021); Employment: While some jobs are protected, others, particularly in trade-reliant sectors, face increased risks; Innovation: Reduced global competition may stifle innovation and efficiency improvements; Consumer Welfare: Tariffs and trade barriers increase prices, affecting low-income households disproportionately (OECD, 2021).

Theoretical Framework
Mercantilism Theory in Relation to De-globalization and Nationalist Policies

Mercantilism is an economic theory that emphasizes the importance of accumulating wealth, particularly in the form of gold and silver, through a favorable balance of trade. Under mercantilist principles, governments prioritize exports over imports, impose protectionist measures (such as tariffs and quotas), and aim to achieve economic self-sufficiency to maintain national power. These ideas resonate with modern trends of de-globalization and nationalist policies, which often focus on safeguarding domestic industries and reducing reliance on foreign trade.
The resurgence of protectionist agendas in a globalized world reflects a neo-mercantilist approach. Countries adopting nationalist policies often aim to: Protect Domestic Industries: Similar to mercantilist priorities, contemporary policies such as tariffs and subsidies are used to shield local businesses from foreign competition (Rodrik, 2018); Achieve Trade Surpluses: Nations may implement trade restrictions to reduce imports while incentivizing exports to

bolster their economies; Reduce Dependence on Global Value Chains: Modern protectionism, like mercantilism, often prioritizes self-sufficiency and economic independence, especially in critical sectors such as energy and manufacturing (Antras, 2020). While mercantilism was more relevant in pre-industrial economies, its principles still influence modern nationalist agendas. For instance, policies advocating reshoring of manufacturing or reducing dependency on foreign goods can be viewed as a continuation of mercantilist ideals. The revival of mercantilist principles in modern policies is a double-edged sword:

Positive Aspects:

Protectionist measures can temporarily protect local industries, create jobs, and address trade imbalances. They may also enhance national security by reducing reliance on foreign entities for critical resources. During crises, such as the COVID-19 pandemic, de-globalization strategies to secure supply chains in essential goods (e.g., medical supplies) were necessary.

Negative Aspects:

In the long term, mercantilist-inspired policies can lead to inefficiencies, as industries lack competition-driven innovation. Protectionism often triggers retaliatory trade measures, weakening international trade systems and cooperation (Baldwin, 2019). It can exacerbate global inequality, as less-developed countries may struggle to integrate into global markets. Although mercantilist-inspired policies may address short-term economic and political concerns, they are unsustainable in an interconnected global economy. Instead of retreating into protectionism, nations should focus on fostering fair and equitable globalization by addressing its negative externalities, such as income inequality and labor displacement.

Empirical Studies on De-Globalization and Protectionism

IMF (2022): Analyzing global trade restrictions from 2018 to 2022, the IMF found that protectionist policies, including tariffs and quotas, contributed to reduced trade volumes and heightened global economic uncertainty. The study highlighted that countries imposing protectionist measures often experienced retaliatory actions, leading to trade conflicts and declining market confidence. Nicita et al., (2021): Using a dataset of global trade flows, the researchers examined the effects of tariffs imposed during the U.S.-China trade war. The findings revealed that while tariffs protected certain domestic industries, they increased production costs for others, leading to higher consumer prices and reduced export competitiveness. Baldwin (2020): This study explored the disruption of global value chains (GVCs) due to rising protectionism. Baldwin demonstrated that tariffs and trade barriers increased transaction costs, prompting firms to relocate production domestically. While this re-shoring boosted local industries in some cases, it also reduced the efficiency gains associated with international specialization.

Antras (2022): Investigating how firms adapted to protectionist policies, Antras found that many companies diversified supply chains to mitigate risks. However, this diversification often involved higher costs, reducing overall productivity and innovation. OECD (2021): The OECD studied the socioeconomic impacts of protectionism, particularly on employment and income inequality. The research showed that while protectionist policies temporarily shielded some domestic jobs, they often led to broader economic inefficiencies, reducing overall employment opportunities and exacerbating income disparities. Autor et al., (2020):

Examining the effects of U.S. tariffs on domestic labor markets, this study found mixed outcomes. While certain manufacturing jobs were protected, industries reliant on imported inputs faced higher costs, resulting in layoffs and wage stagnation. Colantone and Stanig (2019): This research linked protectionist policies to rising populism in advanced economies. Using data from European Union member states, the authors showed that economic disruptions caused by globalization fueled anti-globalization sentiment, driving support for nationalist and protectionist agendas.

Rodrik (2020): Exploring the political economy of de-globalization, Rodrik argued that protectionism often arises as a response to the perceived failures of globalization in addressing domestic economic inequalities. However, the study cautioned that protectionist policies frequently fall short of resolving these inequalities, leading to longer-term socioeconomic challenges. Brexit (Dhingra et al., 2021): The economic fallout of Brexit provided a case study of de-globalization. The researchers found that Brexit's protectionist trade policies led to reduced trade volumes, investment declines, and slower economic growth in the UK. COVID-19 Pandemic (Evenett, 2020): The pandemic intensified de-globalization trends, as countries imposed export restrictions on essential goods. Evenett's study highlighted how these measures disrupted global supply chains and underscored vulnerabilities in international trade networks. Nicita et al. (2021) conducted an analysis of the global economic impact of protectionist policies, finding that widespread tariff increases could reduce global GDP by up to 7%. This result reflects the inefficiency of trade barriers and the loss of comparative advantage, leading to reduced global economic output. The study highlighted that de-globalization not only harmed the countries imposing the tariffs but also led to negative consequences for their trading partners. Baldwin (2020) explored the effects of protectionist measures on employment, noting that protectionism could lead to job creation in some sectors, particularly in industries shielded from foreign competition. However, the net effect on employment was often negative due to the broader inefficiencies introduced into the economy. Sectors that rely on global supply chains and exports are typically hit hardest by trade barriers, leading to job losses and decreased wages. The OECD (2021) reported that tariffs and trade restrictions raise the prices of imported goods, which disproportionately affects low-income households. This results in reduced consumer welfare and increased income inequality. Moreover, studies by Stiglitz (2017) and Baldwin (2020) found that protectionism could undermine innovation by reducing competition and limiting access to new technologies and markets. Innovation and productivity gains are often spurred by international competition, which protectionism stifles.

Conclusion and Recommendations

The revival of de-globalization and nationalist policies in recent years has flashed widespread debate about the socioeconomic impacts of protectionist agendas in an increasingly interconnected world. This review has highlighted the multifaceted dimensions of this phenomenon, exploring its historical evolution, driving forces, and implications for economies, societies, and global relations. At its core, de-globalization represents a shift from global integration to inward-looking policies aimed at prioritizing national interests. The motivations behind this shift are diverse, ranging from economic insecurities and inequality to cultural preservation and political sovereignty. While proponents argue that such policies protect domestic industries, jobs, and cultural identities, critics caution against the risks of isolation, economic inefficiency, and strained international relations. From a socioeconomic perspective, protectionist agendas have profound implications. On the positive side, they can foster domestic economic growth, reduce dependence on foreign markets, and promote local employment. However, these benefits often come at the cost of reduced trade efficiency, higher consumer prices, and limited access to diverse goods and services. Moreover, protectionist policies can exacerbate geopolitical tensions and undermine collaborative efforts to address global challenges such as climate change and public health crises. The globalized world has demonstrated the interdependence of nations, making complete isolation impractical. Thus, while de-globalization may address short-term domestic concerns, its long-term viability and sustainability remain uncertain. Policymakers must navigate the delicate balance between safeguarding national interests and maintaining constructive engagement with the global community.

Recommendations

In light of the findings synthesized in this review, the following recommendations are proposed to guide policymakers, business leaders, and stakeholders in managing the socioeconomic impacts of de-globalization and nationalist policies:

- ✓ Governments should aim to strike a balance between protecting domestic industries and engaging in international trade. Tariffs, subsidies, and other protectionist measures should be employed selectively and strategically to address specific vulnerabilities without disrupting global trade flows.
- ✓ Government of various countries should strengthen social welfare programs to mitigate the negative impacts of de-globalization on vulnerable populations,. This includes providing unemployment benefits, retraining programs, and educational initiatives to equip workers with skills for emerging industries.
- ✓ Governments should prioritize investments in research and development, infrastructure, and education to enhance their industries' competitiveness on a global scale. This approach fosters sustainable economic growth and reduces dependency on protectionist policies.
- ✓ Policymakers should engage diverse stakeholders, including business leaders, labor unions, and civil society, in the decision-making process. Inclusive dialogues can ensure that protectionist measures address the needs of various sectors and minimize unintended consequences.
- ✓ Nations should prioritize multilateral engagements in these areas to ensure collective progress and resilience as well continuously monitoring and evaluating of protectionist policies to assess their effectiveness and unintended consequences..
- ✓ Governments and academic institutions should promote awareness of the benefits and realities of globalization. An informed citizenry can better understand the trade-offs involved in protectionist policies and support balanced approaches.

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EFFECTS OF ENTREPRENEURIAL MINDSET AND ENTREPRENEURIAL COMPETENCE, ON MICRO, SMALL AND MEDIUM ENTREPRISES (MSMEs) PERFORMANCE IN NIGERIA

[1]Bashir Muhammad Sani, [2]Dr. M.I Aminu & [3]Dr. M.N.I Na'ala

[1]WUFEDPOLY, Birnin Kebbi
[2.3]Business Administration, ABU Business School, Nigeria.

[1]Abishir82@gmail.com
[1]O8039711976,[1]09013161633

Abstract

Micro, small and medium enterprises (MSMEs) globally are recognized for the strategic and impactful contribution they make as stimulus for the industrialization of national economies. However, there are growing concerns about the MSMEs poor performance in Nigeria. Hence this study is design to investigate the effects of entrepreneurial mindset (EM) and entrepreneurial competence (EC), on MSME performance in Nigeria. A cross-sectional research design was employed, and data were collected from 500 respondents, representing owner/managers of MSMEs in Kebbi State. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) version 4. The results indicated that both entrepreneurial mindset and entrepreneurial competence have positive and significant impact on MSME performance. In conclusion, this study recommended that the management of SMEDAN, along with government and policymakers, should develop and implement targeted training programs and workshops focused on key entrepreneurial skills such as financial management, strategic planning, and operational efficiency. Local governments, business associations, and educational institutions should collaborate to create educational resources and opportunities that cater specifically to the needs of MSMEs in Kebbi State. Additionally, the study suggested that Future research could explore the impact of contextual factors, such as regional economic conditions and industry-specific challenges, on the relationship between entrepreneurial variables and MSME performance. Investigating how external factors like market dynamics, infrastructure quality, and local regulatory environments influence these relationships. This could provide deeper insights into the varying effects of entrepreneurial mindset and entrepreneurial competence.

Keywords: *Entrepreneurial competence, entrepreneurial mindset, MSME, performance, SMEDAN.*

Introduction

Micro, small and medium enterprises (MSMEs) are globally recognized for the strategic and impactful contribution they make as stimulus for the industrialization of national economies. They are viewed as an integral part of the business background in all economies across the globe. Their important roles in the economy of every nation has continued to be crucial in broadening the sources of national income, improving the competitiveness and economic development (Adeyeye, & Adeyeye, 2021). MSMEs accounts for over 50% of GDP and 60%

of employment worldwide, and are vital for economic growth and innovation (International Trade Centre [ITC], 2021). In developing nations, formal MSMEs contribute up to 85% of total employment and up to 63% of national income gross domestic products [GDP] (OECD, 2021). They contribute to more than one third of GDP and considered as the main source of employment and income generation (Ezeuduji, 2019; World Bank, 2020). Despite the contributions of these MSMEs as the drivers of economic growth and development for many nations, MSMEs globally have continued to suffer from many setbacks (SMEDAN, 2021). The greatest hit is by the fall out of COVID 19 Pandemic which led to the shut-down of many MSMEs. For instance, 70% of the 1,000 MSMEs surveyed by the (International Labour Organization [ILO]) across continents have shut-down operations, 50% have temporarily closed by adhering to the instructions of authorities while the remaining 50% closed due to reduction in orders or more sadly permanently (ILO, 2020). Similar event also happened in India where 10,067 MSMEs were shut-down from 2016-2022 (Soni, 2022). In Nigeria, like other countries, MSMEs have contributed significantly to the country's economy and overall employment. According to report from Small and Medium Enterprise Agency of Nigeria [SMEDAN] (2021), MSMEs contribute about 46% to the nation's Gross Domestic Product (GDP) in nominal terms (SMEDAN, 2017).

However, the contributions of the MSMEs to the Nigerian economy is relatively low compared to other countries. For instance, MSMEs in Singapore, Taiwan, United Kingdom and South Korea and South Africa contribute 49%, 48%, 55%, 50%, 55% and 57% to the GDP respectively (World Bank, 2020). But, MSMEs in Nigeria contribute 46% only (SMEDAN, 2021). Part of the reasons for the drop in MSMEs performance cannot be totally divorced from the open global competitiveness that has had negative impacts on the MSMEs as well as the novel COVIID 19 pandemic which has also taken a serious bite in the number of MSMEs in Nigeria (SMEDAN, 2021; Nkwabi & Mboya, 2019). There is also the need for more collective and sustained actions aimed at creating enabling environment for MSMEs especially as it pertains to funding, capacity building, compliance, infrastructure, technology and markets (SMEDAN & NBS 2021).

Consequently, both government and non-governmental agencies have made financial and non-financial efforts by providing loans and supportive agencies to enhance MSMEs' performance. For instance, in 2020, the African Development Bank Group launched a $3 billion "COVID-19 Rapid Response Facility" to provide financing to MSMEs impacted by the pandemic (African Development Bank Group, 2020). In Nigeria, the Federal Government established the Development Bank of Nigeria (DBN) in 2017 with the principal objective of scaling up small businesses (DBN, 2017). Other initiatives are the establishment of Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) in 2003, Small and Medium Enterprises Credit Guarantee Scheme for MSMEs 2010, Tradermoni Scheme, Ease of Doing Business/PEBEC, Anchor Borrowers Program, Conditional Grant Scheme (CGS), The mandates of these institutions were to promote MSMEs activities so as to enhance their performance (SMEDAN & NBS, 2021).

Despite government interventions and initiatives, the MSMEs performance have continued to become an issue of concern as substantial number of MSMEs in the country are experiencing deteriorating performance (SMEDAN, 2021). Various entrepreneurial factors have been proposed to improve the performance of MSMEs such as entrepreneurial mindset and entrepreneurial competence (EM and EC) which were identified as the inner capabilities that enhance MSMEs' performance in a challenging business environment (Fazal, et al, 2022; Jemal, 2020; Chomba & Nyang'au, 2019; Gray & Starke, 2020).

Although, studies have been conducted on entrepreneurial factors on individual bases (entrepreneurial mindset, competence) and MSME Performance in dynamic business environment (Kimathi, 2020; Chomba & Nyang'au 2019; Adamu & Manuwa 2022; Hariro & Kosim 2022; Jemal, 2020). Yet, there is still paucity of research works that examine how these two factors (EM and EC) in combination affect MSME performance especially in the study area. Moreover, most of these studies have focused attention on SMEs not incorporating the micro enterprises which would give more insight and perspective. Hence, this study sought to fill the identified gap by investigating the combined effects of EM, EC and MSME performance.

Based on the background and statement of problem, the following hypothesis are formulated;

H0₁: Entrepreneurial mindset has no significant effect on MSMEs performance in Kebbi State.

H0₂: Entrepreneurial competence has no significant effect on MSMEs performance in Kebbi State.

Micro, Small and Medium Enterprises

There is no universally accepted definition of Micro enterprise as they are defined differently in accordance with the legislation of different countries with "Micro" dimension of a firm being relative to the size of the economy (Organization of Economic Cooperation and Development 2017). However, employees, assets, sales and loan size within which the enterprise falls are commonly used in defining a firm as Micro, Small or Medium (World Bank, 2020). Micro enterprises within the context of Nigeria are those enterprises with employment size of 3 to 9 persons and a turnover of N3million but less than N25million. These forms of enterprises are the dominant in Nigeria numbering 38, 413,420 or 96.90% of the total 39,654,385 MSMEs existing in Nigeria as at 2020. Small enterprises are those enterprises with 10 to 49 employees and a turnover greater than N25million but less than N100million. Medium enterprises are those employing 50 to 199 employees and a turnover greater than N100million but less than N1billion (National Bureau of Statistics, 2021; Small and Medium Enterprise Development Agency, 2021).

Entrepreneurial mindset

Entrepreneurial mindset is an important factor that enhances the behavior and thinking process of the entrepreneur to match the current situations and strategize the organizational structure, communication system for possible investment success (Jemal, 2020). Research evidence has shown that individuals with entrepreneurial mindset have greater tendencies for better business performance (Kimathi, 2020; Ajor & Joy 2020; Ibrahim & Abu 2020; Aftan & Hanapi, 2018).

Entrepreneurial competency

Entrepreneurial competency is the ability to deal with a variety of issues in the organization. These abilities are represented in planning, problem-solving, analytical skills, and business-related skills such as orientations (Mashavira, 2019). Entrepreneurial competencies refer to the abilities of the owners/ managers of the MSMEs to accomplish responsibilities and tasks by properly utilizing the resources to improve performance (Al Mamun & Fazal, 2018). Entrepreneurial competency is vital to the MSMEs as it is linked to the establishment, survival and growth of the MSMEs (Chomba & Nyang'au, 2019).

Entrepreneurial Mindset and MSMEs Performance

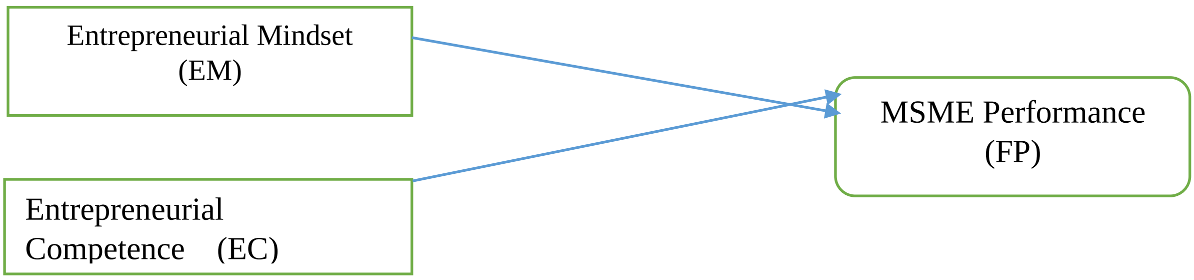
Asenge, Soom and Diaka (2018) examined the effect of entrepreneurial mindset on the performance of small and medium scale enterprises in Benue State. The focus of the research was to measure the entrepreneurs' mindset exhibited through innovativeness, creativity, business alertness and risk taking and how these attributes contributed to the performance of SMEs. A questionnaire was used to collect data from a sample of 250 from a population of 650 MSMEs in Makurdi metropolis which were selected through stratified random sampling method. The study concluded that entrepreneurial mindset or lack of it has a major effect on SMEs performance. Putta (2013) found the existence of a relationship between entrepreneurial mind-set and business enterprise performance and sustainability. Brown (2012), specifically surveyed the view of entrepreneurs on the characteristics that most distinguish them from non-entrepreneurs and found that, entrepreneurial mindset is significantly imperative to business performance. Keerativutisest and Hanson (2017) also reported the significant positive relationship of entrepreneurial mindset with performance in Thailand.

Entrepreneurial Competence and MSMEs Performance

Sarkib, Rabbani and Hawalda (2022) examined the impact of entrepreneurial competencies on the performances of SMEs in Bangladesh. The data were obtained from 115 entrepreneurs by a structured questionnaire. The partial least square structural equation modeling (PLS-SEM) was used. The results revealed that the organizing and leading, learning, relationship, and commitment competencies of entrepreneurs have a meaningful impact on MSME performance. On the contrary, strategic and opportunity competencies have no effect on the performance of MSMEs. Hallyyev (2019) investigated the influence of owner entrepreneurial competencies on business success and the relationship between demographic variables (training, experience, education) and entrepreneurial competencies. Entrepreneurial competencies were operationalized as strategic, commitment, conceptual, opportunity, organizing and leading, relationship, learning, personal, ethical, and social responsibility competencies. Primary data were gathered from businesses in Ankara, Turkey. The sample involves 44 private-sector business owners. Data were analyzed using a simple regression analysis method. The study established that strategic competencies in the form of organizational goals have a direct and significant relationship with business success. Sakib (2022) sought to investigate the impact of entrepreneurial competencies on the performance of SMEs in Bangladesh, employing a structured questionnaire to collect data from 115 entrepreneurs. They used the partial least square structural equation modeling (PLS-SEM) method to establish the causal relationships between various entrepreneurial competencies, including organizing and leading, learning, relationship, commitment, strategic, and opportunity competencies, and SME performance. Their findings deviated from commonly held views in the literature; while organizing and leading, learning, relationship, and commitment competencies were found to significantly influence SME performance, strategic and opportunity competencies did not exhibit any impact. Zahan and Kanti (2014) findings established significant relationship between entrepreneurial competence of managers and firm performance considering parameters: opportunity recognition, organizing, relationship, strategic, commitment and conceptual competencies. However commitment and conceptual competence were not significant. Based on literature review of Tehseen and Ramayah (2015), Competence area need to include strategic, conceptual, opportunity, learning, personal competence and also external integration the relationship can be enhanced particularly with supplier and customer relationship, thus establishing and maintaining external networking is one of the essential factor for the success of business.

Resource Based View

The Resource Based View theory is considered as one of the theories related to firms or business performance. The basis of the theory can be traced back to previous works that stressed on the importance of resources in facilitating firm performance (Penrose, 1959). The resource-based view theory presumes that, the basis for competitive advantage of a firm depends on the firm's ability to utilize the available bundle of valuable resources, which can either be intangible and tangible (Barney, 1991; Rumelt, 1984; Wernerfelt, 1984). Hence, Barney (1991), argued that, resources must be valuable, rare, inimitable and non-substitutable resources and specifically, the Resource Based View emerged as the theory that explains firm performance, which is driven by resources that are heterogeneous rather than market power. Based on Penrose (1959), business firms are bundle of resources that give the firm a competitive advantage. Competitive advantage is defined as the firm's ability to adopt strategies that are value-creative and not simultaneously used by competitors or potential entrants (Barney, 1991). In relating the resource based view theory with this study, the human resources capabilities of the entrepreneurs are considered to be intangible which comprises of their entrepreneurial competence (EC) and mindset (EM) capabilities, judgment and experience which are part of the intangible resources possessed by an entrepreneur and help in achieving business growth and performance, thereby increasing the revenue based and profitability of MSMEs and based on the entrepreneurs skills and creativity, this allowed individual firms or entrepreneurs to be successful and maintain a competitive advantage in their business.
Research Framework



The study is cross sectional in nature and a survey research design was used. This is because the researcher utilized a structured questionnaire administered to the owner/managers of MSMEs in kebbi state. The use of questionnaire is helpful because questionnaire is economical, speedy and the possibility of anonymity and privacy encourages candidates to be willing to respond on sensitive issues, and do so honestly. Population of the study was 5011 from the three senatorial zones in Kebbi states. Using Dillman's (2007) formula to determine the sample size, the sample is 357. Furthermore, the study adjusted the sample size for increased representation adopting Salkind`s (2007) view by increasing the sample size by 40% and make a sample of 500.

Table 1: Proportionate Stratified Sampling

S/N	Senatorial Zones/Districts	Number of MSMEs	Proportionate Sampling (9.98% MSMEs)
1	Kebbi Central	2,426	242
2	Kebbi North	1,218	122
3	Kebbi South	1,367	136
	Total	**5011**	**500**

In selecting study participants, stratified random sampling method was utilized. Owner/managers were grouped into senatorial zones and local governments. Afterwards, proportionate sampling technique was adopted to sample participants.

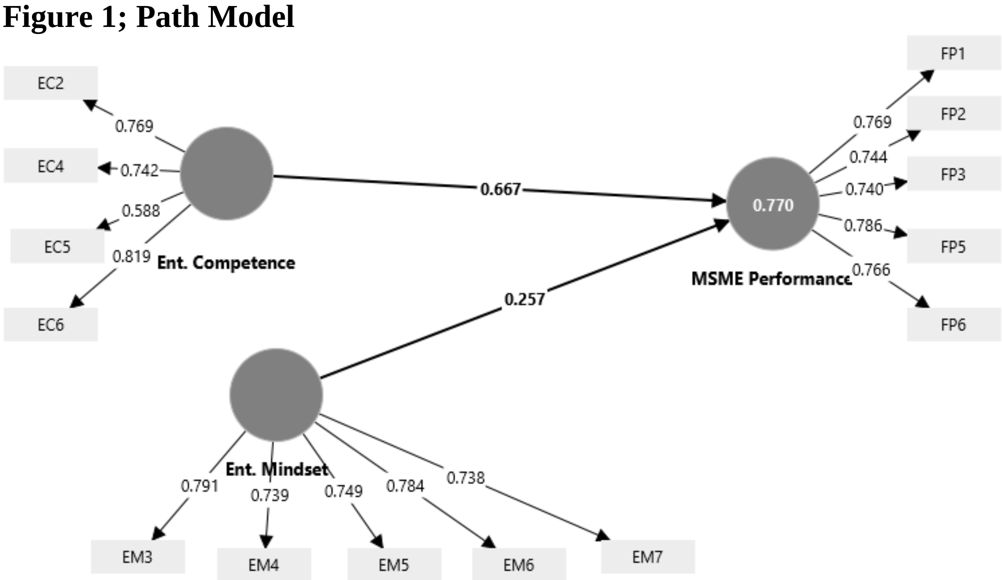
Measurement and Instruments

The Firm performance scale is a 6-item self-report scale developed by Suliyanto and Rahab (2012). For entrepreneurial mindset, the measure consists of six (6) items adopted from Davis, Halls and Mayer (2015) and for entrepreneurial competence, were measured using six (6) items developed by Silveyra et al. (2021). All the variables were using a five point Likert scale ranging from ‘1’ “strongly disagree” to ‘5’ “strongly agree.

Data Analysis Measurement

This study uses the structural equation modelling (SEM) approach. There are three main reasons for using this approach. First, it is appropriate to analyse a related theory to sample size in this study (Frazier et al. 2004). Second, it is helpful to identify the predictive causal relationship (Baron & Kenny 1986). Third, it uses partial least squares (PLS) with confirmatory factor analysis (CFA) to test the hypotheses. The significance of using this approach is it offers more accuracy than other approaches when the small sample size is used (Jöreskog & Wold 1982). This sub section explains the measurement/outer loading of the model. It is part of the SEM model, which describes the relationships among the latent variables and their indicators (Becker et al. 2012). On the other hand, the outer model parameter estimates consist of the loadings (Ringle et al. 2012). Figure 1 represent the path model.

Figure 1; Path Model



From the figure 1 it shows the loadings of respective indicators/items for the constructs and hence, it's reported by the reliability and validity, and discriminates validity.

Reliability and Validity

This study performs internal consistency composite reliability (CR) to ensure the accuracy of the designed first-order reflective constructs and factor loading to evaluate the reliability of each item (Nunnally 1994) It also executes the average variance extended (AVE) to evaluate the construct's validity. As illustrated in Table 1, factor-loading values for all informative indicators were above 0.5. It achieves the desired value, which findings supported by several studies (Hair et al. 2011). The results of constructs achieved desired composite reliability (CR)>0.7 and have gotten accepted AVE value >0.5 as presented in Table 1.

Table 2 Constructs Reliability and Validity

Items	Loadings	CA	CR	AVE
EC2	0.769	0.712	0.822	0.540
EC4	0.742			
EC5	0.588			
EC6	0.819			
EM3	0.791	0.818	0.873	0.578
EM4	0.739			
EM5	0.749			
EM6	0.784			
EM7	0.738			
FP1	0.769	**0.819**	**0.873**	**0.579**
FP2	0.744			
FP3	0.740			
FP5	0.786			
FP6	0.766			

Source: SmartPLS 4.0, 2024

Table 2 shows the loadings of the respective items on their construct, and all the loadings are above 0.5. Also the tables show the Cronbach's Alpha (CA) and composite reliability (CR) which is above the threshold of 0.7 and Average Variance Extracted (AVE) is above the recommended value of 0.5.

Discriminant validity

The discriminants validity explain how each variable is distinct from each other in the study. The study report in table 2 using Fornell and Lacker Criterion.

Table 3 Discriminants Validity Fornell and Lacker Criterion

	Entre-Competence	Entre-Mindset	MSME-Perf
Entre-Competence	**0.735**		
Entre-Mindset	0.724	**0.761**	
MSME-Perf	0.712	0.759	**0.761**

Table 3 show the discriminants validity using Fornell and Lacker criterion for the variable of the study. It indicates that, the diagonal and bold figure show the square of the AVE and they are above all the correlation of their respective loadings. Thus, the study satisfies this discriminants validity criterion and hence we shall check the next criterion.

Table 4 Coefficient of Determination

R Square	**R Square**
MSME Performance	0.770

Table 4 show the R Square value, however, it is acceptable when the R^2 value is less than 0.19 (Chin 1998). Table 3 shows that the R^2 value is 0.77. Therefore, it explains the 77% of the variation in independent variables of the model.

Assessment of Structural Model/Inner Loading

This sub section explains about the assessment of structural model. Also, it completes the SEM model, which describes the correlations among the latent variables that make up the SEM model (Chin, 2010).

Figure 2 Bootstrapping Result of Direct Relationship

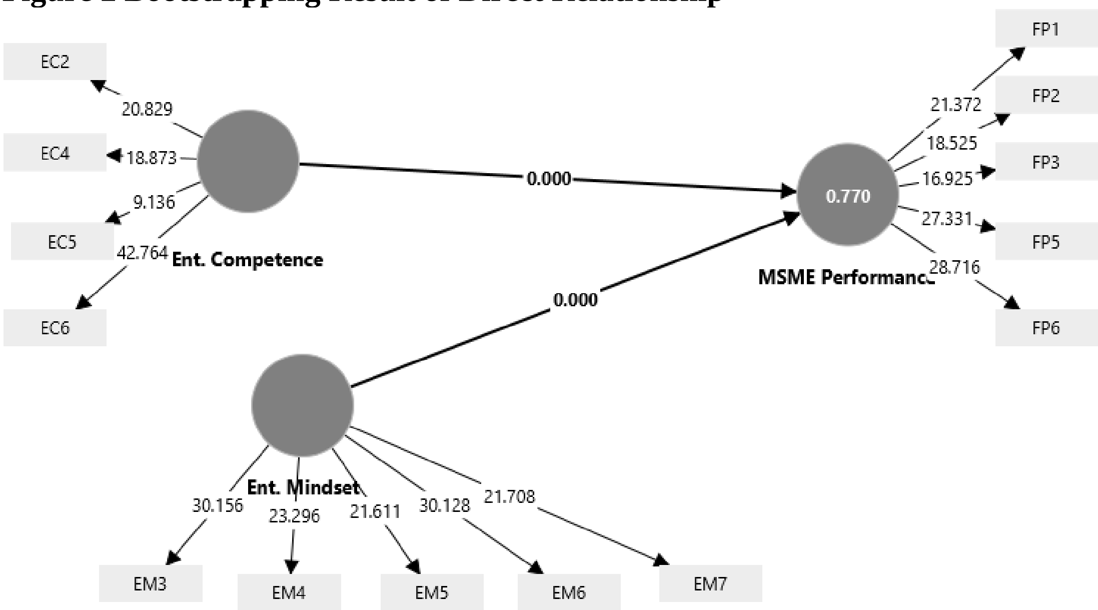


Figure 2 show the result of bootstrapping of the direct relationship between the independent variables and the dependent variable of the study and it show the test of hypotheses. Below is the result of the test of hypotheses in table 4.

Table 5 Test of Hypotheses

Hypotheses	Beta	Standard Deviation	T Statistics	P Values	Decision
EC -> MSME-Perf	0.667	0.042	15.969	0.000	Reject
EM -> MSME-Perf	0.257	0.045	5.772	0.000	Reject

Source: SmartPLS 4.0, 2024

Table 5 show the bootstrapping procedure for testing the hypotheses and evaluate the significance between constructs (Henseler et al. 2015). The table further elucidates that all constructs in the model are with a critical value of 1.96 for the two-tailed test at significant level $p < 0.05$. Therefore, it rejected the following hypotheses.

Discussion

Result show that, entrepreneurial competence has a positive significant effect on MSME performance ($\beta = 0.667$, t-value = 15.969, p-value = 0.000). This means a unit increase in entrepreneurial competence will lead to 66.7% increase in MSME performance. As a result, the second hypothesis ($H0_2$) which stated that entrepreneurial competemce does not significantly affect MSME performance is rejected.
Additionally, entrepreneurial mindset has a positive significant effect on MSME performance ($\beta = -0.257$, t-value = 5.772, p-value = 0.000). This means a unit increase in entrepreneurial mindset will lead to 25.7% increase in MSME performance. Thus, the first hypothesis ($H0_1$) that states that entrepreneurial mindset does not significantly affect MSME is rejected.

Recommendations

Based on the study's findings, the following recommendations are proposed:
1. The study recommends that for MSMEs to develop and implement targeted training programs and workshops focused on key entrepreneurial skills such as financial management, strategic planning, and operational efficiency. Local governments, business associations, and educational institutions should collaborate to create educational resources and opportunities that cater specifically to the needs of MSMEs in Kebbi State.
2. Since entrepreneurial competence was found to significantly enhance MSME performance, improving these skills can lead to better decision-making and more effective management practices, thereby boosting overall business success.
3. Encourage entrepreneurs to adopt a balanced approach that integrates a strong entrepreneurial mindset with practical risk management strategies.
4. Business support programs should provide guidance on how to manage risks and avoid overconfidence, ensuring that ambitious goals do not compromise business stability. The negative impact of an overly strong entrepreneurial mindset suggests that excessive risk-taking can harm performance. Hence, promoting a more balanced approach, entrepreneurs can harness the benefits of innovation and proactivity while maintaining business stability and sustainability.

Implications of the Study

The study contributes to the theoretical understanding of MSME performance by integrating insights from the Resource-Based View (RBV). The findings highlight the critical role of entrepreneurial competence and mindset as valuable resources that significantly enhance MSME performance. This aligns with the RBV's assertion that firms with unique, valuable, and inimitable resources are better positioned to achieve a competitive advantage. Furthermore, the significant positive impact of EC and EM on MSME performance underline the importance of investing in skill development and training programs for entrepreneurs. Local governments, industry associations, and educational institutions can collaborate to provide targeted training that enhances key competencies such as financial management, strategic planning, and operational efficiency. Thereby, equipping entrepreneurs with these critical skills, MSMEs in Kebbi State can improve their ability to navigate business challenges, optimize resource use, and achieve sustainable growth.

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EFFECT OF ACCESS TO FINANCE ON AGRICULTURAL SMES PERFORMANCE IN KADUNA STATE: MODERATING ROLE OF BUSINESS ADVISORY SERVICES

[1]Mansir Tanimu, Ramalan, Prof. Salisu Umar & Prof Nasiru Abdullahi

[1](P18BSBA8183)
[1]Department of Business Administration, ABU Business School, Ahmadu Bello University, Zaria

Abstract

This study examines the impact of access to finance and business advisory services on the performance of agricultural SMEs in Kaduna State, with a focus on the interaction between these variables. Using a quantitative research design, data were collected from agricultural SMEs and analyzed using Structural Equation Modeling (SEM). The results revealed that access to finance positively influences performance, with a performance level of 80% and an importance value of 0.12, while business advisory services have a stronger effect, achieving a performance level of 90% and an importance value of 1.5. However, the interaction between access to finance and advisory services was found to be statistically insignificant, indicating that these factors independently drive SME performance. The study highlights the critical role of business advisory services in equipping SMEs with strategic guidance and technical support to enhance productivity and growth. Recommendations include improving financial accessibility through tailored credit facilities and expanding capacity-building programs to provide business advisory support. These findings emphasize the need for an integrated approach to support agricultural SMEs, contributing to rural development, economic growth, and food security in Kaduna State.

Key words: Access to finance, Business Advisory services, Agricultural SMEs Performance

Introduction

Small and Medium Enterprises (SMEs) play a crucial role in the global economy, accounting for 95% of businesses worldwide and contributing significantly to job creation and GDP. As of 2021, there were approximately 400 million SMEs globally, a number expected to grow to 600 million by 2030 to accommodate the expanding workforce (OECD, 2021). In countries like China and the U.S., SMEs contribute substantially to economic growth, with SMEs representing 91% of businesses in South Africa and 48% of Nigeria's GDP (OECD, 2021; SMEDAN, 2021). However, the performance of Nigerian agricultural SMEs has declined over the years, with the agricultural sector's contribution to GDP dropping from 80% in the 1960s to approximately 23% by December 2022 (NBS, 2022). This decline highlights the underperformance of agricultural SMEs in Nigeria compared to other global counterparts, emphasizing the need for improved access to finance and support services to enhance their contribution to the economy.

Agriculture plays a critical role in Nigeria's economy, particularly in states like Kaduna, where it is a major source of livelihood for many rural households. Small and medium-sized enterprises (SMEs) in the agricultural sector have the potential to significantly contribute to economic growth, food security, and employment creation. However, these agricultural SMEs face numerous challenges that hinder their performance, with access to finance being one of the most significant barriers. According to the Central Bank of Nigeria (CBN), access to adequate financing is essential for the growth and sustainability of SMEs, yet many agricultural SMEs in Nigeria struggle to obtain the necessary funds to expand their operations, improve productivity, or adopt new technologies. This financial exclusion stems from various factors, including high collateral requirements, interest rates, bureaucratic procedures, and lack of awareness about available financing options (CBN, 2020; Oyeku & Oyinloye, 2019).

The challenges of accessing finance are particularly acute for agricultural SMEs in Kaduna State, where the sector remains underdeveloped despite its potential. These businesses often rely on informal sources of finance, such as personal savings or loans from family and friends, which are insufficient to meet their operational needs. Inadequate financial support limits their capacity to invest in modern farming equipment, technology, and human capital development, ultimately affecting their productivity and profitability. Without access to finance, agricultural SMEs are unable to scale their operations or compete effectively in both local and international markets, further exacerbating the challenges of poverty reduction and economic development in the state (Umar et al., 2021).

However, business advisory services (BAS) have been identified as an important tool for helping SMEs navigate these financial challenges. BAS provides essential support, such as guidance on financial management, business planning, and accessing funding sources. In many cases, business advisory services act as intermediaries between SMEs and financial institutions, helping to bridge the gap in understanding and facilitating smoother access to credit facilities. For agricultural SMEs in Kaduna State, BAS can play a crucial role in improving business practices, enhancing financial literacy, and building confidence among financial institutions to lend to SMEs. Previous studies have highlighted that SMEs with access to advisory services are more likely to obtain financing and perform better, as these services equip them with the tools to make informed decisions and present more bankable proposals (Eze et al., 2020; Olanrewaju et al., 2019).

Despite the critical role of access to finance and business advisory services, there remains a limited understanding of how these factors interact and influence the performance of agricultural SMEs in Kaduna State. This study seeks to fill this gap by exploring the effect of access to finance on the performance of agricultural SMEs and investigating the moderating role of business advisory services in improving access to finance and enhancing business outcomes. Thereforeby examining this relationship, the study aims to provide actionable recommendations for policymakers, financial institutions, and SMEs themselves, to create an enabling environment that supports the growth and sustainability of agricultural SMEs in Kaduna State.

Nigerian SMEs face significant challenges that hinder their ability to meet performance targets (SMEDAN, 2022). Over recent years, the agricultural sector's contribution to Nigeria's GDP has been steadily declining, from 26.09% in 2019 to 23% in 2022, reflecting poor performance in comparison to other countries like China, the USA, and South Africa (OECD, 2021). Historically, in 1960, agriculture contributed 80% to Nigeria's GDP, but this has sharply fallen over the decades, highlighting a substantial gap that needs to be addressed. Several empirical studies have pointed to the importance of both tangible and intangible resources in boosting SME performance. Specifically, access to finance (AF) has been found to have a positive and significant impact on agricultural SME performance in studies by Mbuba & Wachira (2019), Badi & Ishangoma (2021), and Myint (2020). However, other scholars, including Fowowe (2017), Olawale & Garwe (2010), and Adebiyi et al. (2017), have reported negative relationships, indicating inconsistencies in findings. These discrepancies underline the need for incorporating Business Advisory Services (BAS) as a moderating factor to enhance the link between access to finance and agricultural SME performance, in line with Baron and Kenny's (1986) mediation theory and the call by researchers to explore non-linear effects (Van Riel et al., 2017).

Despite having access to finance, education, skills, and training, many agricultural SMEs in Nigeria still lack the necessary advisory support that could help them effectively leverage these resources to improve their performance. Business Advisory Services (BAS), such as consultants or business development services (BDS), can play a critical role in helping farmers and SME owners overcome these challenges by strengthening their business capabilities. This support, especially in areas like financial management, business planning, and market access, is vital for enhancing the performance of agricultural SMEs. By providing tailored advice and strategies, BAS can help agricultural SMEs navigate complexities in finance, management, and market integration, leading to better outcomes and contributing to economic growth. As a result, this study aims to examine the relationship between access to finance and agricultural SMEs performance, with BAS playing a moderating role to improve the performance and overall impact on the economy.

In line with the above stated research problems, the following null hypotheses were formulated.

H_{01}: Access to Finance has no significant effect on Performance of Agricultural SMEs in Kaduna state.
H_{02}: Business Advisory Services has no significant effect on Performance of Agricultural SMEs in Kaduna state.
H_{03}: Business Advisory Services does not moderate the relationship between Access to Finance and Performance of Agricultural SMEs in Kaduna state.

Literature Review

Performance

Performance refers to the ability of an organization or firm to effectively utilize its resources, such as assets, to generate revenue and achieve its goals. It involves assessing how well a firm operates in terms of productivity, profitability, and overall efficiency, with comparisons often made across firms or industries (Saidu & Gidado, 2018). According to Eton, et al., (2018), small and medium-sized enterprises (SMEs) play a critical role in driving economic growth, creating jobs, attracting investments, and generating government revenue through taxation. Therefore, it is essential for SMEs to receive proper legal protection and support from all relevant stakeholders to enhance their performance and contribution to the economy.
One key factor that influences SME performance is access to finance. As defined by Adomako, Danso, and Ofori (2016), access to finance refers to the ability of individuals, entrepreneurs, households, and companies to access and utilize various financial services

when needed. Financial access can significantly impact the growth and success of SMEs, as it allows businesses to invest in resources, technology, and expansion efforts. Furthermore, improved access to finance fosters financial inclusion, broadening the scope for economic participation and facilitating the development of the financial sector. This, in turn, contributes to overall economic growth by enabling SMEs to scale up operations, increase their market share, and create jobs (Saidu&Gidado, 2018).

Access to Finance and Performance of Agricultural SMEs

Ndombi and Ngouabi (2022) analyzed the effect of access to credit on the performance of SME's in Congo. The study found contrary opinions on the relationship between accessibility of credit and SME's performance. On the theoretical opinion, there are group of theories that inform on the existence of positive relationship between credit and performance; It is about: the theory of financial intermediation developed by Gurley and shaw and that of hierarchical order stated by (Myers (1984) and Haguma, (2019)) while on the other hand the group of theories that inform the existence of a negative relationship between credit and SME's performance; The theory of information asymmetry, developed by Akerlof (1970) and that of credit rationing, stated by Kedding (2015). On Empirical point, there is also positive and Negative relationship on same credit and SME's performance for instance the works of Gulde et al (2006) and Hifive (2015) revealed a positive relationship while the works of Seeder (2002) and Tioumagneng (2012) revealed a negative relationship between credit and SMEs performance of the Congo.

Udobi, Owoloja, Iyiegbuniwe and Iyiegbuniwe (2020) studied the effect of credit accessibility and the performance of small scale agro based enterprises in Nigeria. The variables used to measure credit accessibility are total credit, Manuel capability usage and Electrical consumption from 1982 to 2016. The study used time series data extracted from CBN statistical bulletin and National Bureau of Statistics (Secondary source Regression analysis were employed to measure the variables short and long run charges of agro based influence on Nigeria Economic growth. The finding reveals that the total credit and manufacturing capacity usage were found to be positively significant; Electricity consumption index was found to be negatively significant. There is an existence of long-run relationship between Aggregate agricultural gross domestic product and other (GAM) and independent variable. The study fails to capture research frame work, no evidence of free regression test were conducted.

Myint (2020) examined the effect of Access to Finance on the performance of SMEs in Myanmar. The study used 300 respondents as sample size. Regression analysis was employed in analysing the data collected. Entrepreneurial characteristics and SMEs support environment have a positive and significant influence of access to finance on SMEs in Myanmar. The study indicated a positive and significant relationshipbetweenAF and FP. However, the study fails to indicate the total population of the study as well as no research design of the study was stated as this could affect the result of the study validity and reliability.

Mbuva and Wachira (2019) studied the effect of Access to finance on financial performance of processing SMEs in Kituicounty. Descriptive research design was employed for the study. The target population was 25 processing SMEs in Kitui where for each firm, the CEO, the Finance manager and Chief accountant were considered as respondent giving rise to a total of 75 respondents. Interview and questionnaires were used to collect data. Data were analysed using SPSS version 20 software. Moreover, inferential statistics at 95% confidence level were used. The result indicated that FP positively and significantly influencing AF in the study. However, the total number of questionnaires administered was not clearly stated in the study, the number of returned questionnaires, the number of interviewee was also not stated as all these factors can affect the statistical inferences of the study.

Fowowe (2017) examined access to finance and enterprise performance; evidence from African countries. The study investigated the effect of AF on the growth of enterprises in African countries.10888 firms across 30 African countries were used in collecting data. Both objective and subjective measures were adopted. The Subjective measures show that AF Constraints exerts a significant negative effect on firms' growth. While the Objective measures shows that firms that are not credit constraints experience faster growth than firms which are credit constraints.

Adebiyi, Banjo and Regin (2017) examined the performance of SMEs in Lagos state: the implications of finance. Survey research designs were adopted. 250 SMEs owners/Operators were hypothesized using Pearson correlation and regression analysis which indicated that there is a relationship between access to finance and firm Performance. Limited information on loan qualification criteria and high interest rates mostly posed a challenge to SMEs in their quest to access finance. Findings reveal that a significant relationship was established in relation to SMEs performance.

Olawole and Garwe (2010) examined the obstacles to the growth of new SMEs in South Africa using principal component analysis approach. The aim of the paper was to investigate the internal and external environmental obstacles to the growth of new SMEs. New business develops, exists and survives in an environment characterised by internal and external factors which impacted negatively to the new business survival. The rate of failure of South African new SMEs is 75% recorded the highest number in the world. 30 variables were identified as obstacles to business which was reduced to 5 clusters and access to finance was considered the most critical (internal factor). However, the study fails to showcase the theoretical framework and validity & reliability of the study has not been tested.

Moderating Role of Business Advisory Services

Business Advisory Services (BAS) play a significant role in enhancing the performance of small and medium enterprises (SMEs), particularly in the context of access to finance. These services are designed to assist SMEs by providing expert advice and guidance on financial management, business planning, and accessing funding. While access to finance is essential for the growth of SMEs, many agricultural SMEs, particularly in emerging economies like Nigeria, often face difficulties in securing adequate financing. BAS helps to address this gap by acting as an intermediary between SMEs and financial institutions. Thus, providing financial literacy, improving business practices, and offering strategies for business growth, BAS can effectively improve the ability of agricultural SMEs to access finance and present more bankable proposals to lenders, thereby increasing their chances of securing financing (Baron & Kenny, 1986). This moderating role of BAS can therefore strengthen the relationship between access to finance and SME performance, making it a crucial factor in improving the overall business outcomes for agricultural SMEs.

Moreover, BAS contributes to the long-term sustainability of SMEs by improving their management practices and market competitiveness. Advisory services are especially important in enhancing the business skills of agricultural entrepreneurs, ensuring that they make informed decisions related to resource allocation, technology adoption, and market positioning. The presence of business consultants and business development services (BDS) helps farmers and SME owners develop efficient operational strategies, adapt to changing market dynamics, and build more resilient businesses. By guiding SMEs on how to leverage available finance for growth and expansion, BAS not only enhances financial access but also supports innovation and productivity improvements, creating a multiplier effect in local economies. This support helps agricultural SMEs thrive by ensuring that they have the knowledge, resources, and advice needed to overcome challenges and compete successfully in both local and international markets (Van Riel, Henseler, Kemeny&Sasovova, 2017; Adebiyi et al., 2017).

Theoretical Framework

The theoretical framework for this study is based on the Resource-Based View (RBV) Theory, which emphasizes that the performance of firms, including agricultural SMEs, is largely determined by the resources they possess and how effectively they utilize them. According to the RBV, resources such as financial capital, human capital, and organizational capabilities are crucial for sustaining a competitive advantage and improving business performance. In the context of agricultural SMEs in Kaduna State, access to finance serves as a critical resource, enabling businesses to expand operations, adopt new technologies, and improve productivity. However, the RBV also recognizes the importance of intangible resources like business advisory services (BAS), which provide guidance on resource utilization, strategic decision-making, and market positioning. BAS act as a complementary resource that enhances the firm’s ability to leverage available financial resources and optimize performance. This theory suggests that agricultural SMEs with both financial access and advisory support are more likely to improve their business outcomes, thereby contributing more effectively to the local economy and achieving long-term sustainability.

Materials and Methods

This study employs a survey research design, which is the most appropriate method for collecting large amounts of data from a given population using self-administered questionnaires. According to Sekaran and Bougie (2016), survey design allows for the collection of information to describe, compare, or explain people's knowledge, attitudes, and behaviors. In this study, a cross-sectional design is used, where data are collected once, allowing for the analysis of the relationship between the variables. This design is deemed suitable due to time constraints and is preferable over a longitudinal approach, which would require multiple rounds of data collection. The population of this study consists of 147 registered agricultural SMEs across Kaduna State, as provided by the Kaduna State Chamber of Commerce, Industry, Mines and Agriculture (KADCCIMA) and the Kaduna State Agricultural Development Project (KADP). A census sampling method was adopted, using the entire population of agricultural SMEs in the state as the sample size.

Data were collected using primary sources, specifically through questionnaires administered to the agricultural SMEs. The questionnaire was designed using a 7-point Likert scale to capture the views of respondents on various issues related to the study. The scale ranged from 1 = "Slightly Disagree" to 7 = "Strongly Agree" to accommodate the experience and expertise of the respondents (Weijters, Cabooter, & Schillewaert, 2010). The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), through Smart PLS 3.8, to examine the relationships among the study variables. PLS-SEM is a widely used multivariate data analysis method that supports the examination of complex cause-and-effect relationships among multiple independent and dependent variables (Hair, Ringle, &Sarstedt, 2011). This approach was selected as it does not assume data distribution and is well-suited for testing theoretical models (Wong, 2010).

Results and Discussion

The assessment of the measurement model is a critical step in ensuring the reliability and validity of constructs in quantitative research, particularly when using Structural Equation Modeling (SEM). The measurement model evaluates the relationships between observed indicators (items) and their underlying latent variables, focusing on reliability, convergent validity, and discriminant validity (Hair et al., 2017). Reliability is assessed through factor loadings and Composite Reliability (CR), where loadings above 0.6 and CR values greater than 0.7 indicate consistency of the indicators. Convergent validity is measured using the Average Variance Extracted (AVE), with a threshold of 0.5 or higher, demonstrating that the construct explains at least 50% of the variance in its indicators (Fornell & Larcker, 1981). Discriminant validity ensures that constructs are distinct from one another, typically assessed by comparing the square root of AVE with inter-construct correlations (Henseler et al., 2015). A robust measurement model provides confidence in the quality of the data and ensures that subsequent structural model assessments and conclusions drawn are valid and reliable for decision-making and theoretical contributions.

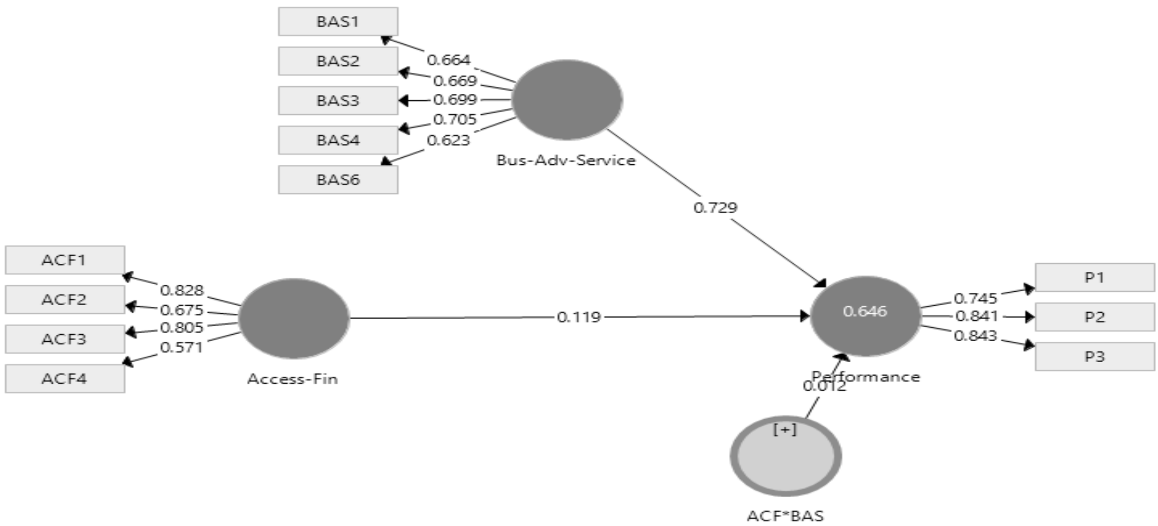

Figure 1, Measurement Model

Table 1: Loadings

Items	Loadings	CR	AVE
ACF1	0.828	**0.815**	**0.529**
ACF2	0.675		
ACF3	0.805		
ACF4	0.571		
BAS1	0.664	**0.805**	**0.552**
BAS2	0.669		
BAS3	0.699		
BAS4	0.705		
BAS6	0.623		
P1	0.745	**0.852**	**0.658**
P2	0.841		
P3	0.843		

The table 1 presents the loadings, Composite Reliability (CR), and Average Variance Extracted (AVE) for three constructs: ACF (Access to Finance), BAS (Business Advisory Services), and P (Performance). The loadings for the items within each construct indicate how well each item represents its respective construct, with most values exceeding the recommended threshold of 0.6, except ACF4 (0.571), which is marginal. The CR values for all constructs—ACF (0.815), BAS (0.805), and P (0.852)—exceed the acceptable threshold of 0.7, indicating strong internal consistency and reliability. Similarly, the AVE values for BAS (0.552) and P (0.658) meet the minimum threshold of 0.5, signifying adequate convergent validity. However, the AVE for ACF (0.529) is marginal but acceptable, indicating that, on average, the items explain over 50% of the variance in the construct. Overall, the constructs demonstrate acceptable reliability and validity for further analysis.
The study test discriminants validity using Funnel and Larker

Table 2: Discriminant validity

	ACF*BAS	Access-Fin	Bus-Adv-Service	Performance
ACF*BAS	1			
Access-Fin	-0.664	**0.727**		
Bus-Adv-Service	-0.579	0.698	**0.742**	
Performance	-0.48	0.614	0.800	**0.811**

The table provides the discriminant validity analysis using correlation values and square roots of Average Variance Extracted (AVE) for the constructs: Access to Finance (Access-Fin), Business Advisory Services (Bus-Adv-Service), and Performance. The diagonal values (in bold, representing the square roots of AVE) are greater than the inter-construct correlations, which confirms that each construct is more strongly associated with its own items than with other constructs. For instance, the square root of AVE for Access-Fin is 0.727, which is greater than its correlation with Bus-Adv-Service (0.698) and Performance (0.614). Similarly, Bus-Adv-Service has a square root of AVE of 0.742, higher than its correlation with Performance (0.800), indicating adequate discriminant validity. The interaction term (ACF*BAS) is uncorrelated with the latent variables, as expected. The constructs meet the criteria for discriminant validity, ensuring that they measure distinct concepts in the model.

Assessment of Structural Model

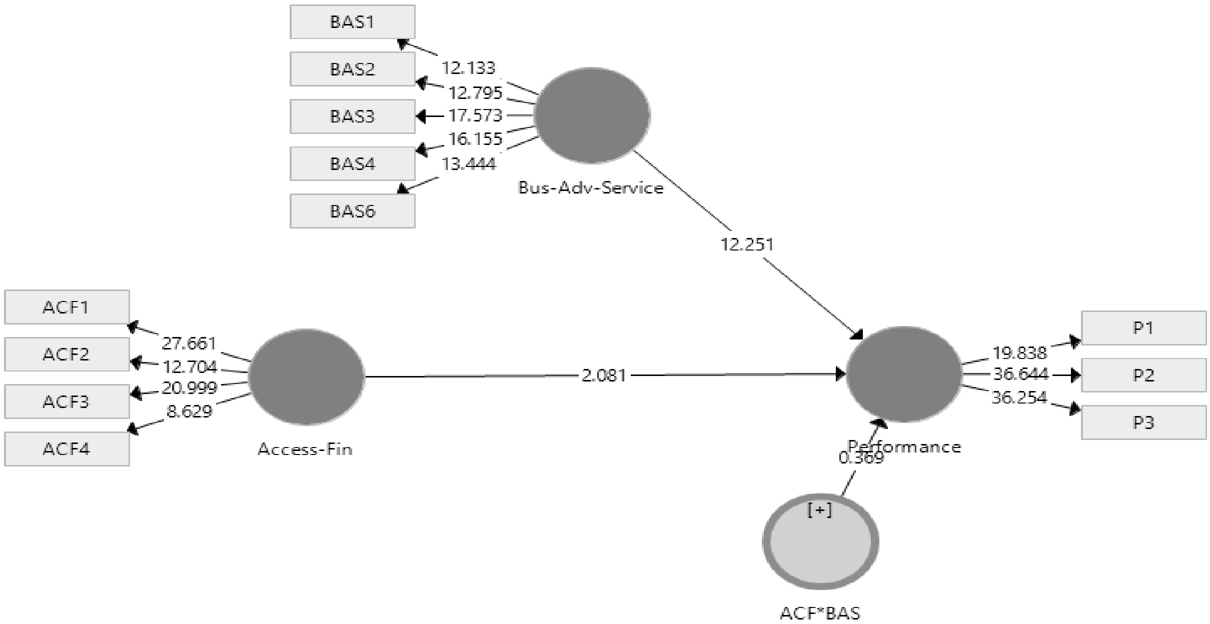

Figure 2 Structural Model

Table 3: Test of Hypotheses

Relationship	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values	Decision
ACF*BAS -> Performance	0.012	0.007	0.032	0.369	0.712	Accept
Access-Fin -> Performance	0.119	0.119	0.057	2.081	0.038	Reject
Bus-Adv-Service -> Performance	0.729	0.727	0.059	12.251	0.000	Reject

$R^2 = 0.646$

Hypothesis 1: Access-Fin → Performance

The direct effect of Access to Finance (ACF) on Performance reveals a moderate positive coefficient (Original Sample = 0.119), indicating that access to finance positively influences the performance of organizations. The T-statistic of 2.081 exceeds the threshold of 1.96, and the p-value of 0.038 is less than 0.05, demonstrating statistical significance. This suggests that better access to finance enhances organizational performance by enabling investments, operations, and strategic growth. However, the hypothesis is rejected because the null hypothesis (no significant effect) is disproven, confirming that Access to Finance has a significant positive impact on Performance.

Hypothesis 2: Bus-Adv-Service → Performance

The impact of Business Advisory Services (BAS) on Performance shows a strong positive coefficient (Original Sample = 0.729), indicating that BAS significantly and positively influences organizational performance. The T-statistic of 12.251, well above the threshold of 1.96, and a p-value of 0.000 confirm a highly significant relationship. These results suggest that providing strategic guidance, mentorship, and advisory support can substantially enhance the operational and financial performance of businesses. As the null hypothesis is disproven, the hypothesis is rejected, affirming the critical role of Business Advisory Services in driving Performance.

Hypothesis 3: ACF*BAS → Performance

The interaction between Access to Finance (ACF) and Business Advisory Services (BAS) was tested to evaluate its effect on Performance. The results indicate a low coefficient (Original Sample = 0.012), suggesting that the interaction term has a negligible positive effect on performance. The p-value of 0.712 and a T-statistic of 0.369 show that the relationship is statistically insignificant. This implies that the moderating effect of Business Advisory Services on the relationship between Access to Finance and Performance is not supported. Therefore, the hypothesis is accepted, meaning that the interaction term does not significantly impact Performance.

Discussion of Findings

The results indicate that access to finance (ACF) and business advisory services (BAS) significantly impact the performance of Agricultural SMEs in Kaduna State, with BAS showing a particularly strong positive influence. The positive relationship between access to finance and performance (p = 0.038) aligns with prior research that emphasizes the role of financial resources in improving productivity and enabling SMEs to invest in modern farming tools and technologies (Beck et al., 2008). Furthermore, the significant effect of BAS on performance (p = 0.000) underscores the importance of providing technical guidance and strategic support to SMEs, as advisory services enhance decision-making and operational efficiency (Harris et al., 2014). However, the interaction effect of ACF and BAS on performance was insignificant, suggesting that while BAS and ACF independently drive growth, their combined influence may not necessarily amplify performance. These findings imply that policymakers and stakeholders should focus on improving access to affordable credit and expanding business advisory programs to boost the growth and resilience of agricultural SMEs in Kaduna State. Enhanced financial inclusion and targeted advisory support can help SMEs tackle operational challenges, optimize resource utilization, and contribute to food security and rural development.

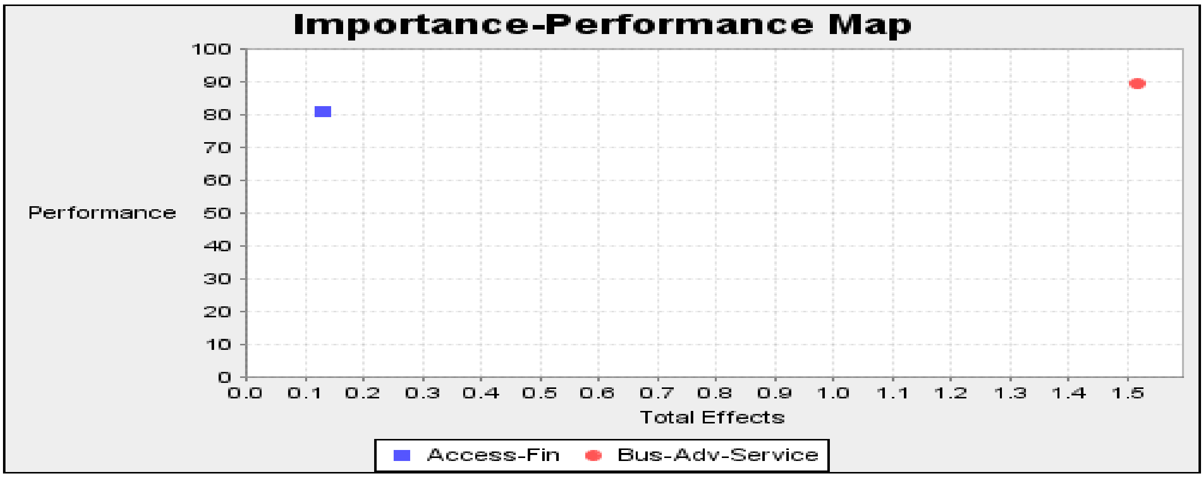

Figure 4, IPMA

Figure 4 illustrates that access to finance has an importance value of 0.12 with a performance level of 80%, while business advisory services exhibit a significantly higher importance value of 1.5 and a performance level of 90%. These findings suggest that while access to finance plays a role in improving SME performance, its overall contribution is relatively moderate compared to business advisory services, which appear to have a more substantial impact. This highlights the critical role of advisory services in equipping agricultural SMEs with the knowledge, skills, and strategic guidance needed to make informed decisions, optimize operations, and enhance productivity. In the context of agricultural SMEs in Kaduna State, the higher importance of business advisory services implies that providing tailored mentorship, training, and technical support may yield greater performance improvements than financial resources alone. Policymakers and stakeholders should therefore prioritize the integration of advisory services alongside financial access to address operational challenges and maximize the performance potential of agricultural SMEs, ultimately driving rural development and economic growth.

Conclusion

This study highlights the significant roles of access to finance and business advisory services in enhancing the performance of agricultural SMEs in Kaduna State. Access to finance enables SMEs to invest in modern tools, expand operations, and improve productivity, while business advisory services provide strategic insights that enhance decision-making, operational efficiency, and overall growth. However, the interaction between access to finance and advisory services did not show a significant effect on performance, indicating that while these factors independently contribute to SME success, their combined effect may require additional conditions to produce synergy. The findings highlight the need for a dual approach that prioritizes both financial accessibility and tailored advisory programs to support agricultural SMEs in achieving sustainable performance.

Recommendations

Policymakers should focus on improving financial inclusion for agricultural SMEs by providing affordable credit facilities, low-interest loans, and flexible repayment options tailored to the agricultural sector. Financial institutions should also collaborate with relevant stakeholders to increase the reach of financing programs, particularly in rural areas. Additionally, expanding the availability and accessibility of business advisory services is crucial. Government agencies and private organizations should develop capacity-building programs that offer practical training on financial management, market access, and the use of technology in agriculture. These initiatives can empower SMEs to optimize their resources, enhance productivity, and navigate challenges effectively, contributing to rural development and food security in Kaduna State.

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THE ROLE OF SAND TIPPING IN DRIVING ECONOMIC GROWTH AMONG LABOR-INTENSIVE SECTORS IN NIGERIA

[1]Abubakar Ado Adamu, [2]Ibrahim Mubarak Isah, [3]Adamu Abubakar Sadiq, [4]Yazeed Muhammed and [5]Tijjani Kaila Ahmed

[1]Kaduna State University, (KASU)
[2,4,5]Ahmadu Bello University, Zaria. Kaduna State
[3]Federal University Dutsinma, Katsina State
[1]wadanlami@gmail.com

Abstract

Sand tipping plays a pivotal role in Nigeria's economy, particularly in labor-intensive sectors such as construction and infrastructure development. This study examines the economic, social, and environmental dimensions of sand tipping in Rogo (Kano State) and Gouro (Kaduna State), utilizing a mixed-methods approach. Quantitative data were collected from 234 respondents, achieving a 78% response rate, while qualitative insights were gathered through interviews and focus group discussions with 14 participants. The findings reveal that sand tipping significantly contributes to local economies, supporting construction projects and ancillary industries, while providing substantial employment opportunities. However, challenges such as low wages, inadequate labor protections, and limited gender inclusion persist. Additionally, unsustainable practices have caused environmental degradation, including riverbank erosion and habitat destruction, with minimal community involvement in decision-making processes. The study emphasizes the need for targeted interventions to address labor conditions, enforce sustainability measures, and foster community engagement. Recommendations include strengthening regulatory frameworks, promoting gender inclusion, and implementing sustainable mining practices to balance economic benefits with social and environmental well-being.

Introduction

Sand tipping, a labor-intensive activity, plays a pivotal role in Nigeria's economic framework, particularly within the informal economy. It involves the extraction, transportation, and distribution of sand, which serves as a critical raw material for the construction and real estate industries. In a developing economy like Nigeria, where infrastructure development is a priority, the demand for sand remains high, making sand tipping an essential contributor to economic growth (Adepoju, 2021). The activity not only supports large-scale construction projects but also sustains numerous livelihoods, especially for unskilled and semi-skilled laborers in rural and urban areas.

Sand, often regarded as the world's most exploited natural resource after water, plays a crucial role in driving global infrastructure and economic development. Globally, the construction industry consumes an estimated 40-50 billion tons of sand annually, driven by rapid urbanization, infrastructure development, and industrial demand (United Nations Environment Programme [UNEP], 2022). This immense demand underscores the significance of sand-related activities, including sand tipping, in meeting the material needs of burgeoning economies. Sand tipping, the extraction, transportation, and distribution of sand, facilitates access to this vital resource, enabling the construction of homes, roads, and industries critical for economic growth.

In Africa, sand tipping holds particular importance due to the continent's growing population and urbanization. According to the African Development Bank (AfDB), Africa's urban population is projected to reach 1.5 billion by 2050, necessitating substantial investment in housing and infrastructure. Nigeria, Africa's largest economy, exemplifies this trend, with its construction sector contributing approximately 3.2% to the GDP in 2023 (National Bureau of Statistics [NBS], 2023). Sand tipping serves as a linchpin in this sector, supplying the raw materials essential for building cities, highways, and bridges that connect rural and urban areas.

However, the burgeoning demand for sand in Africa comes with significant challenges. Reports from UNEP (2022) highlight the environmental and social consequences of unregulated sand mining across the continent, including habitat destruction, riverbank erosion, and the displacement of local communities. For instance, in countries like Kenya and Ghana, unsustainable sand mining practices have caused severe ecological damage, disrupting water supplies and endangering biodiversity (World Bank, 2022). Nigeria faces similar challenges, where the lack of regulatory oversight in the sand tipping industry has led to environmental degradation and health hazards for laborers (Ogbo, Amaechi, & Okonkwo, 2024).

The construction sector, which relies heavily on materials like sand, contributes approximately 3-4% to Nigeria's Gross Domestic Product (GDP) (National Bureau of Statistics [NBS], 2023). Sand tipping forms a critical link in this sector, facilitating infrastructure development such as roads, bridges, and housing. Beyond its direct economic contributions, sand tipping creates employment opportunities, fostering income generation for individuals and households. This has significant implications for poverty alleviation in regions where formal employment opportunities are limited (Olaniyi & Yusuf, 2022).

Despite these challenges, sand tipping continues to provide economic opportunities for millions of Africans. It creates employment for unskilled workers, particularly in rural areas where alternative job opportunities are scarce. For example, sand mining and tipping activities in riverine areas of Nigeria are estimated to employ over 500,000 people directly and indirectly (Ajibade et al., 2020). Furthermore, the economic multipliers of sand tipping extend to ancillary industries such as transportation, equipment rental, and local retail markets, fostering income generation and economic resilience in vulnerable communities.

To maximize the economic benefits of sand tipping while addressing its environmental and social impacts, there is a need for region-specific regulations and global cooperation (Denning, 2024). Governments, industry stakeholders, and international organizations must work together to implement sustainable mining practices, enforce labor rights, and invest in alternative construction materials. Initiatives like UNEP's Sand and Sustainability program offer frameworks for balancing development needs with environmental conservation.

However, the industry is not without challenges. Issues such as labor exploitation, lack of safety measures, and environmental degradation due to unsustainable sand mining practices pose significant concerns (UNEP, 2022). Unregulated activities often lead to health hazards for workers and disrupt ecosystems, affecting local communities (Ajibade et al., 2020; Effiom, & Ansa, 2024). Despite these challenges, the potential of sand tipping to drive economic growth and provide a pathway for upward social mobility cannot be understated. While its contributions to GDP and employment generation are acknowledged, there remain critical research gaps that need to be addressed to fully understand and optimize its economic potential.

Existing studies have highlighted the importance of sand tipping in providing raw materials for the construction industry, a key driver of economic growth in Nigeria. For instance, Olaniyi and Yusuf (2022) found that sand tipping significantly supports infrastructure development projects, which are critical for economic stability and urbanization. However, there is limited empirical evidence quantifying its direct and indirect contributions to GDP across different states or regions in Nigeria. Furthermore, studies often overlook the multiplier effects of sand tipping on related industries, such as transportation, logistics, and equipment leasing, leaving a gap in understanding its broader economic implications.

Sand tipping offers significant employment opportunities, particularly for unskilled and semi-skilled laborers in rural and urban areas. According to Ogbo, et al., (2024) and Ajibade et al. (2020), sand mining activities provide livelihoods for thousands of individuals, directly and indirectly. However, research gaps persist in assessing the quality of these jobs, including wage levels, job security, and working conditions. Additionally, there is scant literature on the gender dimensions of employment in the sand tipping industry, despite anecdotal evidence suggesting that women also play roles in the supply chain, often underrepresented in research.

Sand tipping workers face numerous challenges, including health risks, unsafe working conditions, and environmental degradation due to unregulated practices (UNEP, 2022). While some studies address these issues, there is limited focus on policy interventions to mitigate these challenges and enhance worker safety. Moreover, the perspectives of stakeholders such as landowners, local governments, and environmental advocates are often missing, leaving gaps in understanding the socio-political dynamics that influence the industry.

This study fills a critical gap in the literature by providing a comprehensive analysis of sand tipping's economic impact within Nigeria’s informal economy using a mixed-methods approach. Unlike previous studies that primarily focus on either economic contributions or environmental concerns in isolation. This dual approach enables a more understanding of how sand tipping influences labor dynamics, income generation, and infrastructure development while highlighting key social and environmental challenges. Thus, directly engaging workers, community members, construction stakeholders, and policymakers, this study offers unique primary data that capture both macroeconomic contributions and micro-level realities. The findings contribute to bridging the knowledge gap in informal labor markets, informing policy recommendations for sustainable regulation, worker protection, and economic integration of sand tipping into formal economic planning.

This study seeks to investigate the role of sand tipping in Nigeria’s economy, focusing on its contributions to labor-intensive sectors and identifying ways to address the challenges facing the industry. This study examines how sand tipping drives economic prosperity, focusing on its impact on employment, income generation, and infrastructural growth. By doing so, it aims to provide actionable insights for policymakers, industry stakeholders, and local communities to optimize the economic benefits of sand tipping while ensuring sustainability.

This study is guided by the following research questions

Research Questions

1. **Economic Contributions**
   - i. What is the economic contribution of sand tipping to labor-intensive sectors in Nigeria, particularly in the construction and infrastructure industries?
   - ii. How does sand tipping influence the economic activities of ancillary industries such as transportation, equipment leasing, and local retail markets?
2. **Employment Opportunities**
   - i. What types of employment opportunities are created by sand tipping activities in Nigeria?
   - ii. How do factors such as wages, job security, and working conditions affect the quality of employment in the sand tipping industry?
   - iii. What are the gender-specific roles and challenges faced by men and women employed in sand tipping activities?
3. **Challenges Faced**
   - i. What are the key challenges faced by workers involved in sand tipping, including health, safety, and job conditions?
   - ii. How do unregulated sand tipping practices impact environmental sustainability and local communities?
   - iii. What policy interventions and sustainable practices can address the challenges in the sand tipping industry?
4. **Policy and Regulation**
   - i. What is the role of government regulations and stakeholder engagement in shaping the operations of the sand tipping industry?
   - ii. How can regulatory frameworks improve the socio-economic and environmental outcomes of sand tipping activities in Nigeria?

Literature Review

Sand tipping is a vital economic activity in Nigeria, contributing significantly to labor-intensive sectors such as construction and infrastructure development. It supports the informal economy by creating employment opportunities, particularly for unskilled and semi-skilled laborers in rural and urban areas. Despite its economic benefits, the industry faces challenges, including environmental degradation, labor exploitation, and a lack of regulatory oversight. This review explores the economic, social, and environmental dimensions of sand tipping, identifying research gaps and opportunities for sustainable practices in Nigeria.

Theoretical Framework

The theoretical framework serves as the foundation for understanding the relationship between sand tipping and its economic, social, and environmental implications. This study integrates relevant economic, labor, and environmental theories to provide a comprehensive lens through which the role of sand tipping in Nigeria's labor-intensive sectors can be analyzed. The framework also guides the identification of challenges and policy recommendations.

Theories Supporting the Framework

1. **Resource-Based Theory (RBT)**

The Resource-Based Theory posits that economic resources are critical for competitive advantage and economic development (Barney, 1991). Sand, as a natural resource, is indispensable for Nigeria's construction and infrastructure development sectors. This theory underpins the study by explaining how sand tipping, as a resource exploitation activity, drives economic growth by supplying materials critical for infrastructure projects. However, the theory also highlights the need for sustainable management to avoid resource depletion and environmental degradation.

2. **Labor Market Theory**

Labor Market Theory focuses on the supply and demand dynamics of labor in different sectors of the economy (Becker, 1964). In the context of sand tipping, the theory explains the employment opportunities created by the activity, particularly in rural and urban areas with limited formal job markets. The study leverages this theory to analyze the quality of jobs in sand tipping, including wages, job security, and the informal nature of employment.

3. **Environmental Sustainability Theory**

Environmental Sustainability Theory emphasizes the balance between resource utilization and environmental conservation (Daly, 1996). This theory is relevant to the study as it addresses the environmental challenges posed by sand tipping, such as riverbank erosion, habitat destruction, and pollution. It provides a framework for exploring sustainable sand mining practices and policy interventions to mitigate environmental degradation.

4. **Dual Economy Theory**

The Dual Economy Theory explains the coexistence of formal and informal economic activities in developing economies (Lewis, 1954). Sand tipping predominantly operates within the informal economy in Nigeria. This theory aids in understanding the socioeconomic dynamics of the industry, including its contributions to employment, income generation, and challenges related to informality, such as exploitation and lack of regulatory oversight.

5. Conceptual Model

Based on the integration of these theories, the study conceptualizes the relationship between sand tipping and its economic, social, and environmental dimensions as follows:

- **Economic Dimension:** Sand tipping contributes to GDP, supports construction and infrastructure sectors, and drives ancillary industries. This aligns with the Resource-Based Theory.
- **Social Dimension:** The activity generates employment opportunities but raises concerns about labor rights, job quality, and gender dynamics, explained by Labor Market Theory and Dual Economy Theory.
- **Environmental Dimension:** Unsustainable practices in sand tipping lead to ecological degradation, addressed by Environmental Sustainability Theory.

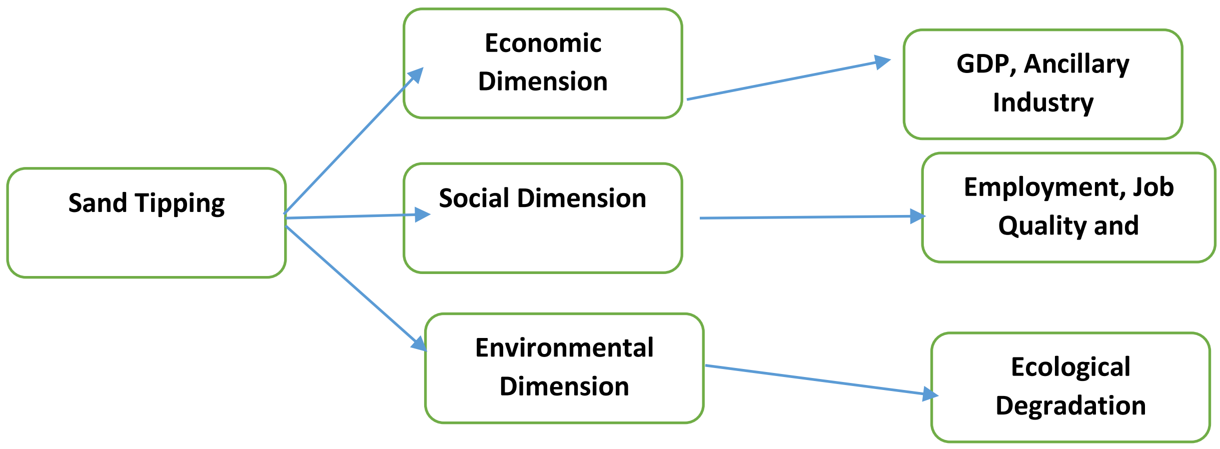

Figure 1, Conceptual model

Research Hypotheses

From the theoretical framework, the following hypotheses can be derived:

1. Sand tipping significantly contributes to the economic growth of labor-intensive sectors in Nigeria.
2. Employment opportunities created by sand tipping are associated with low wages and poor working conditions due to the informal nature of the industry.
3. Unsustainable sand tipping practices have a negative impact on local ecosystems and community livelihoods.

The theoretical framework combines economic, labor, and environmental perspectives to provide a holistic understanding of sand tipping in Nigeria. Therefore, by integrating Resource-Based Theory, Labor Market Theory, Environmental Sustainability Theory, and Dual Economy Theory, the study offers a robust basis for analyzing the multifaceted implications of sand tipping. This framework guides the study in addressing research questions, identifying gaps, and formulating policy recommendations.

Introduction to Sand Tipping and Its Economic Role

Sand tipping, a subset of sand mining, involves the extraction, transportation, and supply of sand—a critical raw material for construction and infrastructure projects. Globally, sand is the second most consumed natural resource after water, with demand driven by urbanization and industrial growth (UNEP, 2022). In Nigeria, sand tipping serves as a vital economic activity supporting labor-intensive sectors such as construction, infrastructure development, and real estate (Olaniyi & Yusuf, 2022). Despite its contributions, the activity has drawn attention due to its environmental and socio-economic implications.

Economic Contributions of Sand Tipping

The construction industry, which relies heavily on sand as a primary raw material, contributes significantly to Nigeria's Gross Domestic Product (GDP). According to the National Bureau of Statistics (2023), the construction sector accounted for approximately 3.2% of Nigeria's GDP in 2023. Sand tipping directly supports this growth by providing the materials necessary for infrastructure projects, including roads, bridges, and housing developments.

Furthermore, sand tipping generates economic multipliers by fostering related industries such as transportation, logistics, and equipment rentals. Ajibade et al. (2020) noted that sand mining activities provide livelihoods for thousands of Nigerians, indirectly benefitting ancillary businesses that depend on the supply chain. However, while these studies acknowledge the economic importance of sand tipping, they fall short of quantifying its regional and sector-specific contributions.

Employment Opportunities in Sand Tipping

Sand tipping is a labor-intensive activity that provides employment for unskilled and semi-skilled workers, particularly in rural areas where alternative job opportunities are scarce (Olaniyi & Yusuf, 2022). These jobs include manual labor for sand extraction, truck drivers for transportation, and supervisors managing operations.

Despite its employment potential, studies highlight significant gaps in job quality. Workers in the sand tipping industry often face low wages, poor working conditions, and job insecurity due to the unregulated nature of the sector (Adepoju, 2021). Furthermore, limited research exists on the gender dynamics of employment in sand tipping, with anecdotal evidence suggesting that women play critical yet underappreciated roles in the industry.

Environmental and Social Challenges

The unregulated nature of sand tipping has led to significant environmental degradation, including riverbank erosion, habitat destruction, and water pollution (UNEP, 2022). These issues not only affect local ecosystems but also threaten the livelihoods of communities' dependent on natural resources. Ajibade et al., (2020) documented cases in Nigeria where unregulated sand mining disrupted local water supplies, exacerbating socio-economic vulnerabilities. From a social perspective, sand tipping workers often endure hazardous working conditions with little to no access to safety equipment or health benefits. These challenges highlight the need for regulatory frameworks to address worker exploitation and environmental sustainability.

Policy and Regulatory Landscape

The absence of robust regulatory frameworks exacerbates the challenges associated with sand tipping in Nigeria. Adepoju (2021) noted that the industry remains largely informal, leaving workers and stakeholders vulnerable to exploitation. International frameworks such as UNEP's *Sand and Sustainability* program offer insights into how sustainable practices can balance economic needs with environmental conservation (UNEP, 2022). However, localized studies and policies tailored to Nigeria's unique socio-economic and environmental contexts are scarce.

Research Gaps

Despite the recognition of sand tipping as an economically significant activity in Nigeria, several research gaps persist. First, the quantification of its contributions to Nigeria's Gross Domestic Product (GDP) and specific sectors remains underexplored. While sand tipping supports labor-intensive industries like construction and infrastructure, empirical studies detailing its direct and indirect economic impacts are limited, leaving a gap in understanding its full economic potential.

Second, there is inadequate research on the employment dynamics within the sand tipping industry. Existing studies often highlight job creation but fail to delve into the quality of these jobs, including wage levels, working conditions, and job security. Additionally, the role of gender in employment remains largely unexplored, even though anecdotal evidence suggests women play significant yet underrepresented roles in the industry. Addressing these gaps could provide a more comprehensive view of the socio-economic benefits and challenges associated with employment in sand tipping.

Lastly, the sustainability and regulation of sand tipping activities are areas that require deeper investigation. Unregulated practices often lead to environmental degradation, including riverbank erosion and habitat destruction. However, comprehensive studies on sustainable sand mining practices and the effectiveness of regulatory frameworks in Nigeria are scarce. Research addressing these issues could guide policymakers and stakeholders in implementing strategies that balance economic benefits with environmental conservation.

Sand tipping is a critical driver of economic activity in Nigeria, supporting labor-intensive sectors and creating employment opportunities. However, its potential is undermined by environmental degradation, poor working conditions, and an unregulated industry landscape. Addressing these challenges requires targeted research, policy reforms, and the adoption of sustainable practices. Future studies should focus on quantifying the economic impact of sand tipping, assessing its socio-environmental implications, and developing actionable strategies for optimization.

Materials and Methods

The study adopted a mixed-methods research design, integrating both quantitative and qualitative approaches to comprehensively examine the economic, social, and environmental dimensions of sand tipping in Nigeria. The research focused on the riverine and mining regions of Rogo in Kano State and Gouro in Kaduna State, known for significant sand tipping activities. Data collection involved structured questionnaires administered to sand tippers, construction stakeholders, and local government officials. A stratified random sampling technique was employed to ensure diverse representation, with a sample size of 300 respondents determined using Cochran's formula for statistical reliability. Additionally, semi-structured interviews with key informants and focus group discussions (FGDs) with workers and community members provided in-depth qualitative insights into employment dynamics, regulatory challenges, and environmental concerns.

The questionnaire statements, interview questions, and focus group discussion (FGD) prompts provide a comprehensive approach to understanding the economic, social, and environmental dimensions of sand tipping in Rogo and Gouro. The questionnaire covers construct such as sand tipping's contributions to GDP, employment opportunities, and environmental impacts, with statements addressing economic benefits like infrastructure support and ancillary industries, social aspects such as labor rights and gender roles, and environmental concerns like riverbank erosion and regulatory frameworks. Additionally, specific statements focus on operational challenges, community reliance, and health risks, ensuring a holistic evaluation of sand tipping's effects.

The interview and FGD questions are tailored for different stakeholders, including sand tippers, construction industry stakeholders, local government officials, and community members. These questions aim to explore operational realities, regulatory challenges, and sustainability concerns. For sand tippers, discussions focus on employment conditions, income, and safety, while community members and leaders provide insights into the environmental and socio-economic consequences of sand tipping. Local government officials address regulatory frameworks and community engagement, and construction stakeholders emphasize sand's role in infrastructure development. Together, these tools enable a thorough analysis of sand tipping's multidimensional impacts and potential improvements.

Quantitative data were analyzed using descriptive and inferential statistical tools, such as regression analysis, to assess the economic contributions of sand tipping to local GDP and employment. SPSS software was used for data processing and analysis. Qualitative data from interviews and FGDs were subjected to thematic analysis to identify recurring patterns related to labor conditions, gender roles, and ecological impacts. This methodology provided a robust framework for addressing the study's objectives and achieving meaningful insights into the sand tipping industry in Rogo and Gouro.

Results and Discussion

Out of 300 questionnaires distributed to sand tipping workers, construction stakeholders, and local government officials in Rogo (Kano State) and Gouro (Kaduna State), 234 were successfully returned, resulting in a response rate of 78%, which is statistically reliable. The demographic profile revealed that 76% of respondents were male and 24% were female. In terms of age, 32% were aged 18-30 years, 48% were 31-45 years, and 20% were above 45 years. Regarding educational background, 25% had no formal education, 38% completed primary education, 27% had secondary education, and 10% attained tertiary education. These statistics provide an inclusive representation of the stakeholders involved in sand tipping activities.

The demographic profile indicates that sand tipping predominantly involves male participants and a significant proportion of unskilled or semi-skilled laborers, highlighting its role in providing employment for underrepresented and less-educated groups. The age distribution suggests the industry attracts a productive workforce, with nearly half of the respondents in their prime working years (31-45 years), emphasizing its importance as a livelihood source for economically active individuals. These findings imply the need for targeted policies to enhance job quality, safety measures, and educational opportunities within the sand tipping sector to maximize its socio-economic benefits.

Assessment of Key Findings from Constructs

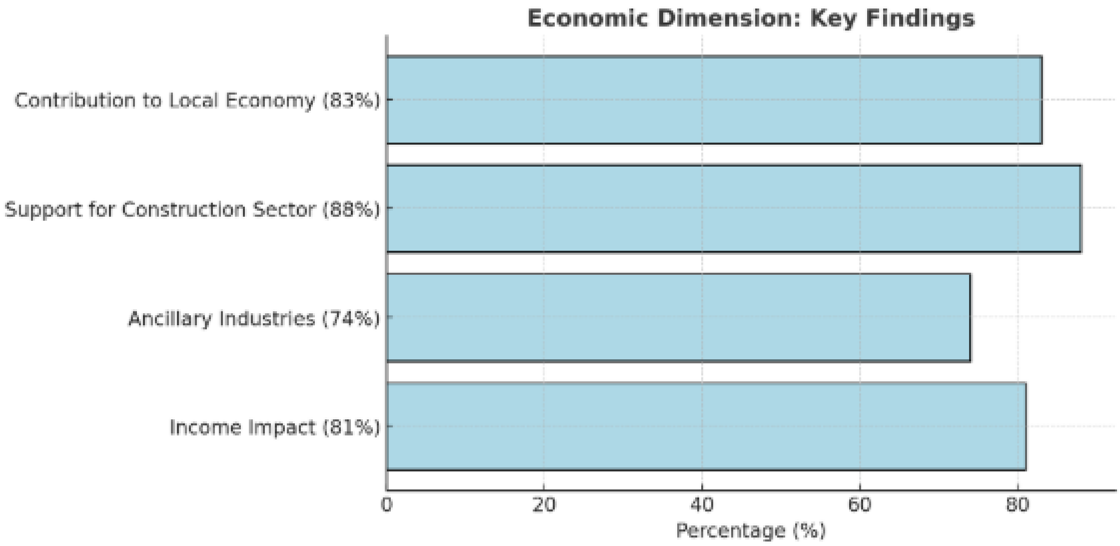

Figure 2, Depiction from hypothesis one

The diagrams in figure 2 illustrating the key findings from the economic, social, and environmental dimensions of sand tipping provide visual support for the research hypotheses derived from the theoretical framework. The economic dimension highlights that 83% of respondents agree sand tipping significantly contributes to the local economy, and 88% emphasize its critical role in supporting construction projects. These findings align with industry and government reports, such as the National Bureau of Statistics (NBS, 2023), which shows that the construction sector contributed approximately 3.2% to Nigeria's GDP, driven by activities like sand tipping that supply essential materials for infrastructure projects. Furthermore, the United Nations Environment Programme (UNEP, 2022) underscores the critical role of sand as a construction material, noting its indispensable contribution to urban development and infrastructure in developing countries, including Nigeria.

Reports by the Nigerian Institute of Town Planners (NITP) also emphasize the reliance on sand tipping for large-scale infrastructure projects, such as road construction and housing developments, highlighting its economic significance. Additionally, studies such as Olaniyi and Yusuf (2022) corroborate that sand tipping fosters growth in ancillary industries like transportation and equipment leasing, reinforcing its role as a driver of economic activity. Together, these findings and reports validate the hypothesis that sand tipping significantly contributes to the economic growth of labor-intensive sectors in Nigeria, emphasizing its pivotal role in national development.

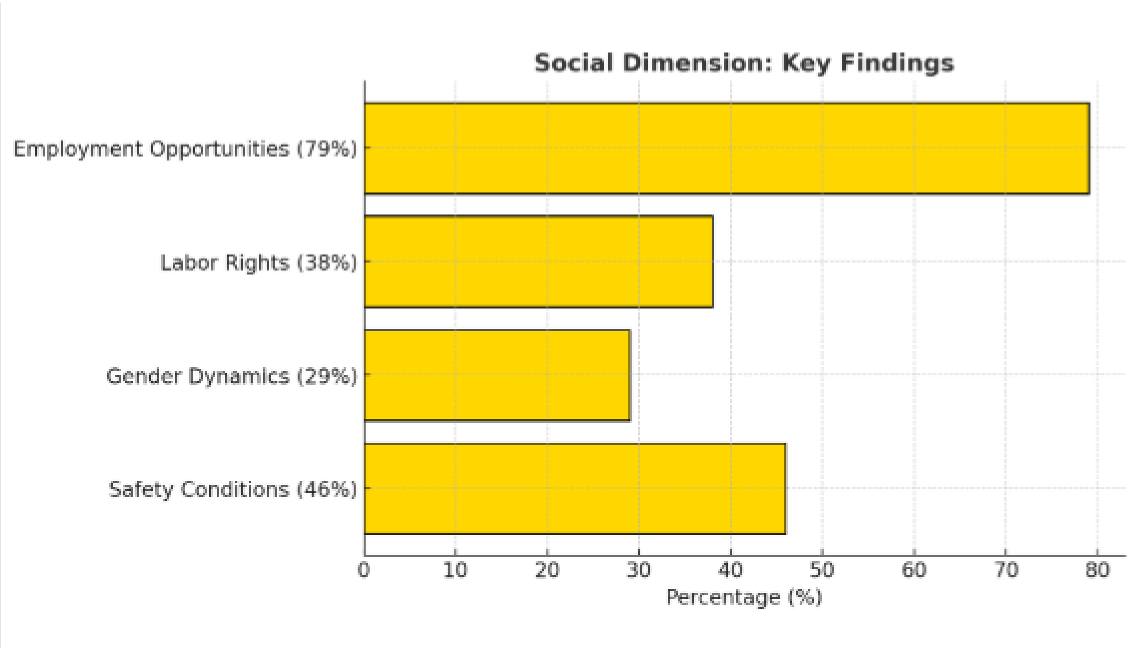

Figure 3, Depiction from hypothesis two

In the social dimension, 79% of respondents acknowledge that sand tipping provides substantial employment opportunities, reflecting its importance in creating jobs for unskilled and semi-skilled workers in Nigeria. However, the findings that only 38% feel labor rights are adequately protected and 46% report safe working conditions highlight the challenges associated with the informal nature of the industry. This aligns with the second hypothesis, which emphasizes low wages, inadequate safety measures, and limited labor protections. The International Labour Organization (ILO) has identified informal labor markets, like sand tipping, as prone to poor working conditions and the absence of enforceable labor rights, especially in developing countries (ILO, 2021).

The gender disparity, where only 29% of respondents agreed that women are actively involved in sand tipping, underscores the need for inclusive labor policies. Reports from the National Bureau of Statistics (NBS, 2022) show that while informal sectors provide significant employment opportunities, they are often characterized by labor exploitation, gender inequality, and the absence of structured protections. Additionally, studies such as Olaniyi and Yusuf (2022) confirm that workers in sand-related industries often face precarious working conditions, with little attention paid to their welfare or safety.

These challenges reflect a broader issue within Nigeria's informal labor sectors, as documented by the Nigeria Labour Congress (NLC, 2021), which advocates for greater regulation, improved labor standards, and gender-sensitive policies to address disparities in industries like sand tipping. Together, these reports and studies validate the findings, emphasizing the critical need for labor reforms and protective frameworks in this sector.

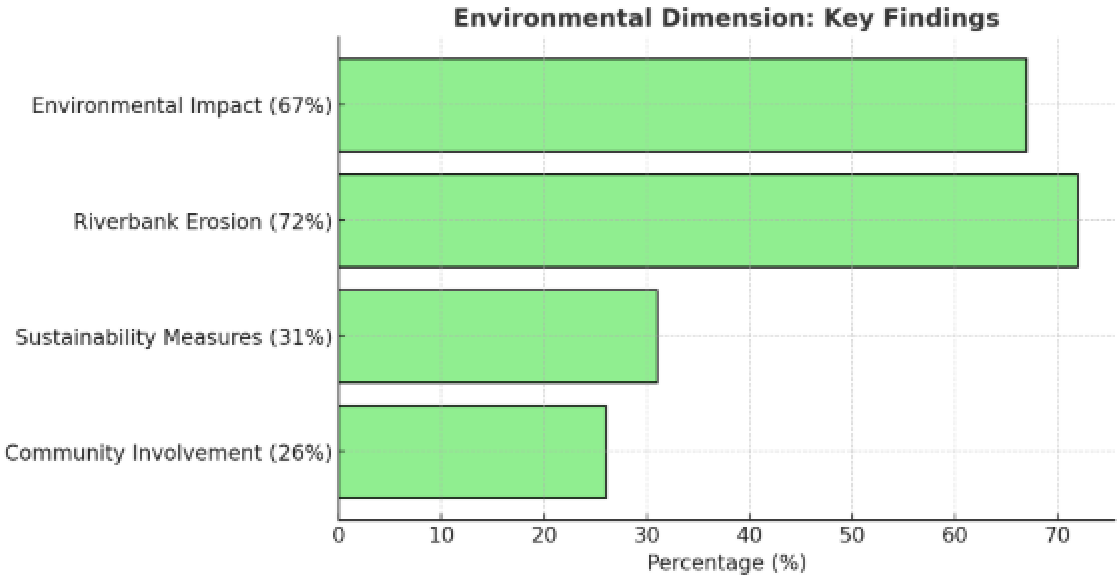

Figure 4, Depiction from hypothesis three

The environmental dimension findings reveal significant ecological challenges linked to sand tipping practices, with 67% of respondents observing visible environmental changes and 72% identifying riverbank erosion as a common consequence. These align with reports from the United Nations Environment Programme (UNEP, 2022), which highlights unsustainable sand mining practices as a leading cause of riverbank erosion, habitat destruction, and water table depletion, particularly in developing countries. The low percentage of respondents (31%) who believe sustainability measures are in place underscores the lack of effective regulatory frameworks in addressing these issues, while the minimal community involvement (26%) reflects a gap in participatory decision-making processes.

The Federal Ministry of Environment (Nigeria, 2023) identifies sand mining as a major contributor to environmental degradation in riverine areas, including riverbank destabilization and biodiversity loss, aligning with the findings. Moreover, the National Environmental Standards and Regulations Enforcement Agency (NESREA) emphasizes the need for stricter enforcement of environmental regulations to mitigate the adverse effects of sand mining and ensure sustainable practices. Research by Ajibade et al. (2020) corroborates these insights, documenting the long-term ecological consequences of unregulated sand tipping and the negative impact on community livelihoods dependent on natural resources.

These findings strongly validate the third hypothesis, underscoring the need for policy reforms, stricter enforcement of environmental laws, and greater community engagement in sustainable practices. Addressing these gaps is essential to mitigate environmental damage and support community resilience in sand tipping areas.

Results of Qualitative Analysis

Overview

Qualitative data were collected through semi-structured interviews and focus group discussions (FGDs) with 14 respondents, including sand tipping workers, construction stakeholders, local government officials, and community members from Rogo (Kano State) and Gouro (Kaduna State). Thematic analysis was used to identify patterns and insights across three key dimensions: economic, social, and environmental.

Key Themes and Findings

1. Economic Dimension

Theme: Contribution to Local Economy

Respondents highlighted the significant role of sand tipping in supporting livelihoods and driving local economic activities. A construction stakeholder stated:

"Without sand tipping, our projects would face delays, and many laborers would lose their jobs."
Several respondents noted that sand tipping indirectly supports ancillary businesses such as transportation and equipment rentals. However, some workers expressed dissatisfaction with the irregularity of income, stating it is heavily dependent on market demand.

Theme: Dependency on the Construction Sector

Local government officials emphasized the symbiotic relationship between sand tipping and the construction industry, citing it as a backbone for infrastructure projects. One official remarked:
"Sand tipping ensures that construction projects progress smoothly, which is vital for regional development."

2. Social Dimension

Theme: Employment Opportunities and Labor Challenges

Respondents acknowledged that sand tipping provides substantial employment, especially for unskilled workers. However, workers expressed concerns about low wages and poor working conditions. One sand tipper stated:

"The job is physically demanding, but the pay does not reflect the effort we put in."
The lack of safety measures was also highlighted, with one respondent describing injuries as "common but ignored."

Theme: Gender and Inclusion

The underrepresentation of women in the sector was evident, with women primarily involved in ancillary roles such as sales. A community leader commented: *"Women are rarely seen working directly in sand tipping due to cultural and physical constraints, but they contribute indirectly through related activities."*

3. Environmental Dimension

Theme: Environmental Degradation

All respondents agreed that sand tipping has noticeable environmental impacts, including riverbank erosion, habitat destruction, and dust pollution. A local environmental advocate stated:
"The unchecked activities are altering the landscape and threatening the ecosystem."

Theme: Sustainability and Regulation

Several respondents criticized the lack of enforcement of environmental regulations. A local government official admitted:

"We have guidelines for sustainable sand mining, but enforcement is weak due to resource constraints and limited oversight."

Additionally, community members expressed frustration over not being involved in discussions about sand mining activities, which they felt contributed to ecological and social tensions.

Implications

The qualitative findings provide rich contextual insights into the economic contributions, social challenges, and environmental impacts of sand tipping. While it is a critical economic activity, the lack of fair labor practices, gender inclusion, and sustainable environmental management underscores the need for targeted interventions. These themes reinforce the quantitative results, highlighting areas for policy and stakeholder focus.

Results of Focus Group Discussions (FGDs)

Overview

Focus group discussions were conducted with sand tipping workers, community members, and local leaders from Rogo (Kano State) and Gouro (Kaduna State). The FGDs included 14 participants divided into three groups, focusing on the economic, social, and environmental aspects of sand tipping. Thematic analysis was used to identify recurring ideas and insights.

Key Themes and Findings

1. Economic Dimension

Theme: Livelihoods and Income Participants in all groups emphasized the role of sand tipping as a critical livelihood source. A worker noted:

"Many of us depend solely on sand tipping to feed our families, but the income fluctuates with the seasons and market demand."

Community members acknowledged the economic benefits but expressed concerns about how income is distributed, stating that profits often favor middlemen and contractors rather than laborers.

Theme: Contribution to Infrastructure Development Local leaders highlighted the industry's importance in supporting infrastructure projects. One leader remarked:

"Without sand, our roads, schools, and homes cannot be built. Sand tipping sustains these projects and benefits the entire community indirectly."

2. Social Dimension

Theme: Employment and Labor Conditions Workers described sand tipping as a physically demanding yet indispensable source of employment. However, they expressed dissatisfaction with low wages and the lack of protective equipment. A worker shared:

"Injuries are common, and we get no compensation. We are left to manage on our own." Participants also mentioned that jobs are often temporary, making financial stability difficult.

Theme: Gender Roles and Participation FGD participants highlighted the limited participation of women in sand tipping activities. A female participant said:

"Women are mostly involved in sales or managing small businesses linked to sand tipping, but direct involvement is rare due to societal norms and the physical nature of the work."

3. Environmental Dimension

Theme: Environmental Damage All groups agreed that sand tipping has caused noticeable environmental damage, including riverbank erosion and loss of agricultural land. A community elder stated:

"Our rivers are becoming narrower, and farmland near riverbanks is being washed away." Dust pollution was also identified as a major issue affecting the health of nearby residents.

Theme: Lack of Sustainability and Regulation Participants criticized the lack of enforcement of environmental regulations. A community leader explained:

"Even when rules exist, there is no one to enforce them. Sand tipping goes unchecked, and we are left to deal with the consequences."

Another participant noted that the community is rarely involved in decision-making, leading to dissatisfaction and mistrust.

Implications

The FGDs revealed the dual nature of sand tipping as both an economic necessity and a source of social and environmental challenges. While it provides essential income and supports infrastructure, poor labor conditions, gender disparities, and environmental degradation undermine its sustainability. Participants emphasized the need for improved wages, safety measures, and community involvement in decision-making, aligning with both the qualitative and quantitative findings.

Triangulate both the quantitative and the qualitative findings

The triangulation of quantitative and qualitative findings reveals a comprehensive picture of the economic, social, and environmental dimensions of sand tipping in Rogo (Kano State) and Gouro (Kaduna State). Quantitatively, 83% of respondents agreed that sand tipping significantly contributes to the local economy, a sentiment echoed in the qualitative data where participants emphasized its role in providing livelihoods and supporting infrastructure development. Construction stakeholders and community leaders from focus group discussions reinforced this by highlighting the industry's dependence on sand tipping for building projects, making it a cornerstone of economic activity in these regions. However, workers expressed concerns about the fluctuating and often inadequate income, aligning with the quantitative finding that 81% acknowledged its positive impact but still faced financial instability due to market dependencies.

In the social dimension, the quantitative finding that 79% of respondents viewed sand tipping as a substantial employment provider is consistent with qualitative insights from workers and community members who described it as an indispensable source of income for unskilled laborers. However, the qualitative findings provided deeper context to the challenges associated with poor labor rights and safety conditions, with only 38% of quantitative respondents affirming adequate labor protections. Focus group participants elaborated on these issues, noting frequent injuries, lack of compensation, and temporary job arrangements. Additionally, both data sources highlighted gender disparities, with only 29% of respondents acknowledging women’s active involvement, which was further supported by female participants who described their roles as limited to sales and peripheral activities.

The environmental dimension reveals strong alignment between the two methods. Quantitatively, 67% of respondents observed visible environmental changes, and 72% identified riverbank erosion as a significant issue, findings corroborated by qualitative participants who reported habitat destruction, reduced farmland, and health risks from dust pollution. Both sets of data emphasized the lack of sustainability measures, with only 31% of quantitative respondents believing such measures were in place and qualitative participants criticizing weak regulatory enforcement. The minimal community involvement reported (26%) was also reinforced in focus group discussions, where participants expressed frustration over being excluded from decision-making processes. Together, these findings highlight the urgent need for targeted policies addressing labor conditions, sustainability, and community engagement in sand tipping operations.

Conclusion

Sand tipping is a critical economic activity in Rogo (Kano State) and Gouro (Kaduna State), contributing significantly to local economies and supporting labor-intensive sectors such as construction. The study revealed that sand tipping drives economic growth by providing essential materials for infrastructure projects and creating employment opportunities, particularly for unskilled laborers. However, it also highlighted significant challenges, including poor labor protections, inadequate safety measures, and environmental degradation. Unsustainable practices, such as unregulated sand mining, have caused riverbank erosion and habitat destruction, affecting both ecosystems and community livelihoods. The findings underscore the need for a balanced approach that maximizes the economic benefits of sand tipping while addressing its social and environmental challenges.

Recommendations

1. Policies should be introduced or enhanced to improve wages, ensure safe working conditions, and provide workers with protective equipment. Labor rights should be enforced through regular inspections and the establishment of grievance mechanisms to address worker concerns promptly.

2. Efforts should be made to involve women more actively in sand tipping operations, including direct roles and support for related entrepreneurial activities. Gender-sensitive policies can help bridge the gap and ensure equitable opportunities within the sector.

3. Regulatory frameworks should be strengthened to enforce sustainable sand mining practices. Environmental guidelines must be adhered to, and penalties for non-compliance should be strictly applied. Additionally, stakeholders should invest in sustainable mining technologies that minimize ecological impact.

4. Local communities should be actively involved in decision-making processes related to sand tipping operations. Establishing community forums and participatory planning mechanisms can help address local concerns and foster trust between stakeholders.

5. Training programs should be introduced to enhance the skills of workers in sand tipping and related activities. This can include safety training, entrepreneurial skills, and sustainable mining techniques to improve efficiency and reduce risks.

6. Collaboration among government agencies, private sector actors, and local communities is crucial for addressing the multifaceted challenges of sand tipping. Multi-stakeholder partnerships can provide innovative solutions, such as alternative livelihoods, environmental restoration projects, and funding for sustainable infrastructure.

Practical Implications

From the findings its suggested that implementing policy measures would significantly improve the working conditions, financial stability, and overall well-being of sand tipping workers in Nigeria. Thus, by enforcing minimum wage structures and safety regulations, workers will receive fair compensation and protection from occupational hazards, reducing workplace injuries and exploitation. Regular inspections and compliance monitoring will create a more structured and accountable industry, ensuring that sand tipping contributes to economic development without compromising labor rights. Establishing grievance redressal mechanisms and worker support systems will empower employees to report labor violations, fostering a culture of transparency and fairness. Moreover, training programs in safety, financial literacy, and entrepreneurship will provide workers with skills that enhance job security and create pathways for economic mobility. These initiatives will not only benefit sand tipping workers but also enhance the efficiency and sustainability of the construction and infrastructure sectors that rely on their services.

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