Journal of African Innovation & Advanced Studies (JAIAS)

Human Capital Development and Phenomena Growth in Small and Medium Scale Enterprises in Nigeria

Yomi-Bello Foluke Omowumi; Prof. J.A Folayan; Dr. Kasie Ofoezie; & Mr. Abayomi Bello

Department Of Entrepreneurship, College Of Postgraduate Studies, Joseph Ayo Babalola University Ikeji-Arakeji
DOI: https://doi.org/10.70382/ajaias.v7i2.021

Abstract

Human capital has been recognized globally as one of the major factors that is responsible for the wealth of nations and human resource constitutes the ultimate basis of Small and Medium scale Enterprises development and wealth of Nations. Most developed Nations are rich because of the emphasis they laid on human capital development. This study investigated the impact of human capital development on the performance of small and medium-scale enterprise (SMEs) in Nigeria over the period from 2003 to 2023. The study adopted an "ex-post facto" research design, utilizing secondary data sourced from the Central Bank of Nigeria Statistical Bulletin, Bureau of Statistics, and SMEDAN reports. Autoregressive Distributed Lag (ARDL) methodology was employed for data analysis, allowing for the examination of short and long-term effects of human capital variables such as formal education, training, and participation in seminars, conferences, and workshops on SME phenomena growth indicators. stationarity test, least square multiple regression, long run and short run model estimations, model diagnostic test were carried out on observations to obtain results. The findings revealed a consistently positive and significant relationship between human capital development and SMEs phenomena growth across the study period. Specifically, higher levels of formal education, training initiatives, and participation in knowledge-sharing events are associated with enhanced business outcomes in terms of profitability, productivity, and market competitiveness for Nigerian SMEs. Least Square Multiple Regression showed that Adjusted R2- 08859

indicating that approximately 88.59% of the variance in SMEs Phenomena growth is explained by the model, suggesting a high level of explanatory power. F. statistics showed 39.80876, Prob (F-statistics) was 0.0000 indicated that the overall model is highly significant and Durbin-Watson stat was 206373.3 suggesting that there is no significant autocorrelation in the residuals of the model, the constant term (C) has a coefficient of 2.0040 and is significant with a p-value of 0.0002,indicating that it has a substantial positive impact on SMEsP when all predictors are zero. ARDL Results indicated short and long run impact of human capital development on SMEs performance in Nigeria. This study concluded that investments in human capital development play a crucial role in bolstering SME phenomena growth in Nigeria. The results underscore the importance of continuous skill enhancement and knowledge acquisition among SME operators, suggesting that such initiatives contribute not only to immediate operational improvements but also to sustain growth over time. Based on the findings, the study recommended that policymakers and business support agencies in Nigeria prioritize initiatives that promote access to formal education, vocational training programs, and participation in professional development activities like seminars and exhibitions. Facilitating easier access to these resources and enhancing their quality can empower SMEs to navigate challenges, capitalize on emerging opportunities, and contribute more robustly to Nigeria's economic development goals.

Keywords: Human Capital Development, Phenomena, Growth, Small and Medium Scale Enterprises, Nigeria.

Introduction

Small and Medium Enterprises occupy a very important place in any economy. They are the driving force of business growth, innovation and competitiveness. The SMEs sector plays a decisive role in job creation and generally is a factor of economic development and social stability.

The sector also provides training ground for future entrepreneurs in different fields, aids in the process of redistribution of income and provides intermediate semi-processed goods for use by large scale firms. Small and medium enterprises have also been found to play a leading role by virtue of their contributions to domestic capital formation and technological development (Ojokuku, Sajuyigbe and Ogunwoye 2014).

Human capital refers to the abilities and skills of human resources and human

capital development refer to the process of acquiring and increasing the number of persons who have the skills, education and experience which are critical for economic growth of the country (Harbison, 1962). This prompted the view that there is the need for the Nigerian economy to eliminate or minimize those constraints towards human capital development so as to enhance rapid economic growth (Adegbite, 2016).

Human capital development also refers to a conscious and continuous process of acquiring and increasing the number of people with requisite knowledge, education, skill and experience that are crucial for the economic development of a country (Odusola, 1998).

Long term business survival of SMEs is the tendency of SMEs businesses to sustain a long term level of growth.

Statement of the problem

Despite the economic significance of SMEs in Nigeria, contributing 48% of GDP, it has not played the expected role in the economic growth and development of the Nigerian economy. Today, SMEs struggle to survive under tough competition in the internal and external business environments(Truitt, 2011). The calls for innovative actions through human capital development, notwithstanding, the level of innovation in Nigeria is considered low. Nigeria SMEs and other Organizations place less emphasis on innovation for global competitiveness.

Research Questions

This research work aims at answering the following questions;
- Does human capital development significantly cause phenomena short term growth of SMEs in Nigeria?
- Does human capital development significantly cause phenomena long term growth of SMEs in Nigeria?
- What are the determinants of long term phenomena growth of SMEs Nigeria?

Objectives of the study

The specific objectives of this study include:
- To evaluate the short run effect of human capital development on the phenomena growth of SMEs in Nigeria.
- To examine the long run effect of human capital development on the phenomena growth of SMEs in Nigeria.
- To determine the determinants of phenomena growth of SMEs in Nigeria.

Hypotheses
Hypotheses of the study

Ho1: Human Capital Development does not have significant impact on short run survival of SMEs in Nigeria.

Ho2: Human Capital Development does not have any significant impact on long run survival of SMEs in Nigeria

Ho3: There are no determinants of phenomena growth of SMEs in Nigeria.

Significance of the study

The importance of the research work lies in the advancement of evidence-based knowledge on the activities and contribution of Human Capital Development to the phenomena growth of SMEs in Nigeria; it however helps to expand knowledge in the field of study. Nigeria is a developing economy blessed with business opportunity but not much is known about fostering human capital development as an engine of spontaneous business growth and improved business performance as this study will throw much light on the importance of human capital development as an engine of growth.

Scope of Study

This study on Human Capital Development and phenomena growth of SMEs in Nigeria hope to limit itself to general survey of existing SMEs in Nigeria with an in-depth evaluation of some selected SMEs in the state. Business must be registered with the Corporate Affairs Commission (CAC) and have survived for at least five (5) years. The scope of this study relates to SMEs in the manufacturing and processing sectors as well as those in trade and commerce sectors. These four were chosen for their largest representation of SMEs establishments and significant contributions to Nigeria's economy. The geographical scope covers SMEs in Nigeria, while the time lag scope covers period year 2003-2023 (two decades).

Gap in the Study

Though much research has been carried out on the effect and impact of human capital development on phenomena growth of SMEs in Nigeria, none has actually approached the topic using the ARDL model (Secondary data) as methodology to achieve the stated objectives of the study, most past study on the subject matter made use of primary data mostly survey using questionnaires and interviews. Most scholars tend to focus on cross-sectional data using primary data, offering insights into the short-term effects of human capital development. This study addresses this gap by incorporating both short-term and long term perspectives. Also, considering the scope of the study which covers from 2003 to 2023 made the study quite different from those of past scholars which has no recent scope. Also, the study looked into manufacturing and processing in addition to trade and commerce industries which were never researched together in the past studies. In addition, the few existing studies in Nigeria, such as Ojokuku and Sajuyigbe, 2015).

Review of Literature

The review of literature can be grouped into three headings namely;

Conceptual review

Theoretical review

Empirical review

Conceptual Review of Literature

Human Capital refers to the employees' knowledge, skills and abilities. It is the set of attitudes, values and aptitude that employees possess, which brings about competitive advantage and organizational value creation.

Akingbola (2009) described human capital development as people centered strategy of development which requires effective monitoring system for improvements in the process.

Productivity can also be defined as the ratio of output to input in a given period of time (Anyanwu, 2007). It is also defined as what you get out of an activity for what you put in an effort.

Under the theoretical review of literature, five theories of human capital development were looked into which includes;

i. **The traditional human capital theory**- Theodore, Gary and Jacob (1961) introduced the traditional human capital theory which explained that investment in individuals can be mathematically measured based on the economic value it was able to contribute to the society.

ii. **The modernization theory**-This theory originated from the idea of German Sociologist, Max Weber (1864-1920) which provided the basis for the modernization paradigm developed by Harvard Sociologist, Talcott Parsons (1902-1979), the theory focuses on how education transforms an individual's value, belief and behavior

iii. **Human Capital Investments and the separation theorem**- This theory considers the schooling decision of a single individual facing exogenously given prices for human capital. Throughout and assumes that there are perfect capital markets. The separation theorem referred to in the title of this section will show that, with perfect capital markets, schooling decisions will maximize the net present discounted value of the individual.

iv. **Adams Smith Human Capital theory**- Adam Smith, in the *The Wealth of Nations* (1976) formulated the basis of what was later to become the science of human capital. Over the next two centuries, two schools of thought were distinguished. The first school of thought distinguished between acquired capacities that were classified as capital and human beings themselves, who were not. The second school of thought claimed that human beings themselves were capital.

v. **Resource-based Theory** - The theory that support this study is Resource-based theory which emphasizes the critical importance of internal resources for sustainable competitive advantage. This perspective argues that firm performance is a function of how well managers build their organizations around resources that are valuable, rare, inimitable, and lack substitutes, (Barney, 1991).

Theoretical Framework

There has been emergence of different models from various experts and researchers on the concept of human capital development. However, the Solow and Lucas models of human capital development (Hansen & Prescott, 2002) is the theoretical framework for this work. Details are as contained in the document.

Determinants of phenomena growth of SMEs in Nigeria

The four determinants of SME's phenomena growth are;
  i. Profitability Lag
  ii. Firm size
  iii. Leverage Ratio
  iv. Revenue Growth
  v. Gross DFomestic Product Growth
  vi. Quality of National governance

METHODOLOGY

The study employed an Ex-post facto research design method and e-view econometric package was used to analyze the data. Ex-Post facto research design will examine the cause-and-effect relationship between an independent variable. It will also hypothesize how the independent variable, which is not controlled or manipulated, influences or affects the dependent variable. a dependent variable. The sampling technique for the study was stratified sampling technique. Stratified Sampling technique was used to select SMEs registered with CAC, operating for at least 5 years. The study employs the Secondary method of data analysis using Autoregressive Distributed Lag method (ARDL) as the statistical tool to analyze some time series data

Sources of data for the work

The study uses secondary data that were sourced from publications of National Bureau of Statistics (NBS) and Central Bank of Nigeria (CBN). These publications include; the statistical bulletin, annual report, statement of accounts, financial review of various years and other related items for the period under consideration.

Model Specification

$$\text{Phenomena Output Growth} = \frac{f \text{ (On the job training, Formal Education, Participation in seminars \& conferences}}{\text{workshop, participation in trade fairs\& exhibition}}$$

…………   (3.1)

The model is therefore presented mathematically or econometrically as:

$PERF = a_o + a_1 OJT + a_2 FE + a_3 PSCW + a_4 PTFE + U_t$ ……………(3.2)

Equation 3.2 is further turned into non-linear model because the variables are not stated in the same unit. As such the model becomes;

$LOG\ POG = a_o + a_1 LogOJT + a_2 Log\ FE + a_3 LogPSCW + a_4 LogPTFE + U_t$ … (3.3)

Where POG = Phenomena Output growth of SMEs

OJT=On the Job Training

FE = Formal Education

PSCW= Participation in Seminar & Conferences/Workshop

PTFE= Participation in Trade Fairs & Exhibition

a_o = constant term

a_1, a_2, a_3, a_4 = parameters to be estimated

U_t = error term

A priori Expectation signs as stated below;

It is expected that, $a_{1>0}, a_{2>0}, a_{3,>0}, a_{4>0}$ and $a_{5, >0}$ and $a_{6>0}$

Phenomena Output growth of SMEs = f (level of training, level of formal education, level of participation in seminars, conferences & workshops, level of participation in trade fairs & exhibitions)   …………………… (3.1)

POG= f(Xi, X2,X3,X4)

Where,

X1 = Level of Training

X2 = Level of formal Education

X3 = Level of Participation in seminars, conferences & workshops

X4 = Level of participation in trade fairs & exhibitions

HDI = Human Development Index

U_t = error term

A priori Expectation signs as stated below;

It is expected that, $a_{1>0}, a_{2>0}, a_{3,>0}, a_{4>0}$ and $a_{5, >0}$ and $a_{6>0}$

Expected A priori expectation

In line with the above justification of chosen variables, it is expected that increased human capital development will lead to increase in phenomena long run growth of SMEs in Nigeria as they are expected to have direct and positive relationship.

Presentation and discussion of results

Unit root test and co-integration test to ensure that the variables are properly screened in order to obtain reliable results. Table 1: Unit Root Test for Variables at Levels and First Difference.

Table 1: Summary of unit root test

4.1   Augmented Dickey-Fuller Unit Root Test

The data analysis involved testing the data for stationarity to ensure the validity of the regression results. The Augmented Dickey-Fuller (ADF) unit root test was used to test for the presence of unit roots and determine the order of integration of each variable. Table 4.4 presents the results of the ADF tests for the study variables.

Table 4.4: Augmented Dickey-Fuller Unit Root Test

Variables	ADF Test Statistics	Critical Values @5%	P-value	Order of Integration
SMEs PG	-4.8725	-3.0810	0.0019	1(1)
LTN	-4.2176	-3.0810	0.0235	1(1)
LFEN	-3.7423	-3.0207	0.0115	1(0)
PSCN	-6.7603	-3.0300	0.0000	1(1)
PTE	-13.0886	-3.0300	0.0000	1(1)

Source: Eview Output, 2024

The data analysis involved testing for stationarity using the Augmented Dickey-Fuller (ADF) unit root test to determine the presence of unit roots and the order of integration of each variable, as presented in Table 4.4. The results show that SMEs Phenomena Growth (SMEsPG) has an ADF test statistic of -4.8725, which is less than the critical value of -3.0810 at the 5% level, with a p-value of 0.0019, indicating it is stationary at first difference (1(1)). Similarly, the Level of Training in Nigeria (LTN) has an ADF test statistic of -4.2176, also less than the critical value of -3.0810, with a p-value of 0.0235, making it stationary at first difference (1(1)). The Level of Formal Education in Nigeria (LFEN) has an ADF test statistic of -3.7423, which is less than the critical value of -3.0207 at the 5% level, with a p-value of 0.0115, indicating it is stationary at level (1(0)). The Level of Participation in Seminars, Conferences, and Workshops in Nigeria (PSCN) has an ADF test statistic of -6.7603, which is less than the critical value of -3.0300, with a p-value of 0.0000, indicating it is stationary at first difference (1(1)). Lastly, the Level of Participation in Trade Fairs and Exhibitions in Nigeria (PTE) has an ADF test statistic of -13.0886, which is less than the critical value of -3.0300, with a p-value of 0.0000, indicating it is also stationary at first difference (1(1)). Based on these results, further testing should include cointegration tests to determine if a long-run equilibrium relationship exists among the variables that are

integrated of the same order (1(1)), to better understand the long-term impact of human capital development on SMEs' phenomena growth in Nigeria.

The results indicate that the null hypotheses (H0) of unit root can be rejected at both the level and first difference since the probability values are less than 5% and the ADF test statistics exceed the critical values at the 5% significance level. Therefore, the regression results will not be spurious as all variables are stationary at the 5% critical value. Furthermore, given the mixed order of integration—some variables being stationary at level and others at first difference—the Johansen technique of cointegration is unsuitable. Consequently, the ARDL bounds testing approach to cointegration, developed by Pesaran, Shin, and Smith (2001), will be applied.

Cointegration test (Bound testing approach test)exceeds the upper bound (I(1)) critical value, a long-run relationship exists. . In Table 4.2 the F-statistics. **Effect Estimation Using Least Square Multiple Regression**

Dependent Variable: SMEs P

Variable	Coefficient	Standard Error	t-statistics	Prob
C	2.0040	0.4090	4.9001	0.0002
LTN	0.1112	0.0415	2.6828	0.0163
LFEN	0.1795	0.0411	4.3700	0.0005
PSCN	0.2281	0.0737	3.0961	0.0069
PTE	0.1549	0.0622	2.4891	0.0242
Adjusted R2	0.8859			
F-statistic	39.8087			
Prob(F-statistic)	0.0000			
Durbin-Watson stat	2.63733			

Source: Eview Output, 2024

The multiple regression results in Table 4.5 demonstrate the effect of various predictors on SMEs Performance (SMEsP). The Adjusted R-squared value of 0.8859 indicates that approximately 88.59% of the variance in SMEsP is explained by the model, suggesting a high level of explanatory power. The constant term (C) has a coefficient of 2.0040 and is significant with a p-value of 0.0002, indicating that it has a substantial positive impact on SMEsP when all predictors are zero. The predictors show positive and significant relationships with SMEsP: LTN (coefficient = 0.1112, p-value = 0.0163), LFEN (coefficient = 0.1795, p-value = 0.0005), PSCN (coefficient = 0.2281, p-value = 0.0069), and PTE (coefficient = 0.1549, p-value = 0.0242). These results suggest that increases in the levels of training, formal education, participation

in seminars/conferences, and participation in trade fairs/exhibitions are all significantly associated with improved SMEs performance. The F-statistic of 39.8087 with a Prob(F-statistic) of 0.0000 indicates that the overall model is highly significant. The Durbin-Watson stat of 2.63733 suggests that there is no significant autocorrelation in the residuals of the model.

Cointegration test (Bound testing approach test)

The criterion for determining the existence of a long-run relationship between human capital development and SMEs phenomena growth in Nigeria using the Bounds F-test for cointegration involves comparing the F-statistic to the critical values at various significance levels. If the F-statistic exceeds the upper bound (I(1)) critical value, a long-run relationship exists. . In Table 4.3, the F-statistic is 29.43485, which is significantly higher than the upper bound critical value of 5.06 at the 1% significance level. Based on this criterion, we can conclude that a long-run relationship exists between human capital development (measured by LTN, LFEN, PSCN, and PTE) and SMEs phenomena growth in Nigeria.

Table 4.3: Bounds F-test for co-integration (Long Run Model Estimation)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	29.43485	10%	2.45	3.52
k	4	5%	2.86	4.01
		2.5%	3.25	4.49
		1%	3.74	5.06

Short Run Dynamic Model

The regression analysis was carried out to estimate the ARDL model for the short run (ARDL ECM) for the study on impact of human capital development on SMEs phenomena growth in Nigeria.

Table 4.4: Estimating ARDL model in the short run (ARDL ECM).

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
C	2.4027	0.4907	4.8964	0.0002
LTN	0.1202	0.0419	2.8699	0.0124
LFEN	0.1795	0.0426	4.2180	0.0009
PSCN	0.2482	0.0800	3.1030	0.0078
PTE	0.1738	0.0689	2.5240	0.0243

Dependent Variable: SMEs PG

The short-run coefficients for the impact of human capital development on SMEs phenomena growth in Nigeria, estimated using the Autoregressive Distributed Lag (ARDL) approach, are presented in Table 4.7. The constant term (C) has a coefficient of 2.4027 and is highly significant with a p-value of 0.0002, indicating a substantial positive baseline short run impact on SMEs performance when all predictors are zero. The coefficients for the predictors—LTN, LFEN, PSCN, and PTE—are all positive and statistically significant, suggesting that increases in these variables are associated with improvements in SMEs phenomena growth in the short run. Specifically, the coefficient for LTN is 0.1202 (p-value = 0.0124), indicating that a 1% increase in the level of training leads to a 0.12% increase in SMEs phenomena growth in the short run. The coefficient for LFEN is 0.1795 (p-value = 0.0009), showing that a 1% increase in formal education support results in a 0.18% increase in SMEs phenomena growth in the short run. The coefficient for PSCN is 0.2482 (p-value = 0.0078), suggesting that a 1% increase in participation in seminars, conferences, and workshops leads to a 0.25% increase in SMEs performance in the short run. Lastly, the coefficient for PTE is 0.1738 (p-value = 0.0243), indicating that a 1% increase in participation in trade fairs and exhibitions results in a 0.17% increase in SMEs phenomena growth in the short run. These results collectively highlight the significant positive short-term impact of human capital development activities on the phenomena growth of SMEs in Nigeria.

Long Run Dynamic Model

Although the dimensions of human capital development considered in this study may have a significant short-term impact on SMEs phenomena growth in Nigeria, their influence might diminish over time. Therefore, further analysis was necessary to understand the long-term effects of human capital development on SMEs performance in Nigeria. Consequently, the long run impact of human capital development on SMEs phenomena growth in Nigeria is presented in Table 4.5.

Table 4.5: Estimating ARDL Model in the Long Run.

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LTN	0.1053	0.0371	2.8377	0.0132
LFEN	0.1572	0.0417	3.7675	0.0021
PSCN	0.2174	0.0666	3.2650	0.0056
PTE	0.1522	0.0570	2.6690	0.0183

Dependent Variable: SMEs Phenomena Growth

The long run impact of human capital development on SMEs phenomena growth in Nigeria, as estimated by the ARDL model, is presented in Table 4.5. This analysis

examines the relationships between various dimensions of human capital development—level of training (LTN), level of formal education (LFEN), participation in seminars, conferences, and workshops (PSCN), and participation in trade fairs and exhibitions (PTE)—and the performance of SMEs in the long run. All coefficients for the predictors are positive and statistically significant, indicating a favourable impact on SMEs phenomena growth in the long run. Specifically, the coefficient for LTN is 0.1053 (p-value = 0.0132), suggesting that a 1% increase in the level of training results in a 0.1053% increase in SMEs phenomena growth in the long run. The coefficient for LFEN is 0.1572 (p-value = 0.0021), indicating that a 1% increase in formal education support leads to a 0.1572% increase in SMEs phenomena growth in the long run. The coefficient for PSCN is 0.2174 (p-value = 0.0056), implying that a 1% increase in participation in seminars, conferences, and workshops results in a 0.2174% increase in SMEs phenomena growth in the long run. Finally, the coefficient for PTE is 0.1522 (p-value = 0.0183), showing that a 1% increase in participation in trade fairs and exhibitions leads to a 0.1522% increase in SMEs phenomena growth in the long run. These findings underscore the positive long-term effects of human capital development on the SMEs phenomena growth in Nigeria in the long run.

Table 4.6: Bounds F-test for co-integration (Long Run Model Estimation)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	29.43485	10%	2.45	3.52
k	4	5%	2.86	4.01
		2.5%	3.25	4.49
		1%	3.74	5.06

Short Run Dynamic Model
The regression analysis was carried out to estimate the ARDL model for the short run (ARDL ECM) for the study on impact of human capital development on SMEs phenomena growth in Nigeria.

Table 4.7: Estimating ARDL model in the short run (ARDL ECM).

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
C	2.4027	0.4907	4.8964	0.0002
LTN	0.1202	0.0419	2.8699	0.0124
LFEN	0.1795	0.0426	4.2180	0.0009
PSCN	0.2482	0.0800	3.1030	0.0078
PTE	0.1738	0.0689	2.5240	0.0243

Dependent Variable: Phenomena Long run growth in SMEs

Discussion of Findings

The main objective of this study was to examine the impact of human capital development on phenomena growth of SMEs in Nigeria from 2003 to 2023 in the short and long run. The proxies for human capital development adopted for this study are level training in Nigeria, level of formal education in Nigeria, level of participation in seminars, conferences, and workshops in Nigeria and level of participation in trade fairs and exhibitions in Nigeria. The following are the major findings and their implications for theory and practices.

First, the results of the study reveal that the level training in Nigeria has a positive and significant impact of SMEs phenomena growth in both in the short and long run. The positive and significant impact of training levels in Nigeria on SMEs' phenomena growth, both in the short and long run, can be attributed to several factors. Training enhances the skills and competencies of employees, leading to increased productivity, innovation, and efficiency. This improved human capital enables SMEs to adapt to market changes, adopt new technologies, and improve their operational processes. Moreover, training fosters a culture of continuous learning and development, which is crucial for maintaining competitive advantage. In the Nigerian context, where SMEs face challenges such as limited access to resources and market competition, investment in employee training becomes a critical strategy for sustaining growth and improving overall business performance. This alignment of enhanced skills with business needs drives significant and positive outcomes.

The study reveals that the level of participation in trade fairs and exhibitions in Nigeria has a positive and significant impact on SMEs' phenomena growth in both the short and long run. This aligns with several empirical studies. Ojokuku and Sajuyigbe (2015) found that human capital development strategies, including trade fairs, significantly enhance SME performance. Chigozie et al. (2018) also reported that training and skills acquisition positively affect SME phenomena growth. Similarly, Pauli (2020) confirmed that structured training processes improve business outcomes. Zewdie et al. (2021) emphasized the benefits of entrepreneurial training in enhancing growth. Reza et al. (2020) showed a significant impact of entrepreneurial education on growth, though entrepreneurial training's impact was insignificant in Indonesia. Conversely, Purnamasari (2024) and Yangailo (2023) found no significant impact of training on competitive advantage and productivity, respectively. Overall, the majority of these studies support the finding that participation in trade fairs positively influences SME phenomena growth.

Second, the results of the study reveal that the level of formal education in Nigeria has a positive and significant impact of SMEs phgenomena growth both in the short and long run. The positive and significant impact of formal education on SMEs' performance in Nigeria, both in the short and long run, can be justified by the role education plays in equipping individuals with essential skills and knowledge. Formal education provides a strong foundation in critical thinking, problem-solving, and management practices, which are vital for running successful SMEs. Educated entrepreneurs and employees are better equipped to understand and navigate market dynamics, innovate, and implement effective business strategies. In Nigeria, where

SMEs often face numerous challenges such as limited access to capital and technology, a well-educated workforce can drive operational efficiency, enhance productivity, and foster innovation, leading to improved business performance and long-term growth.

The study's finding that formal education in Nigeria positively and significantly impacts SMEs' phenomena growth in both the short and long run aligns with several empirical studies. Appiah, Zanu, and Glover (2023) support this by showing a significant positive relationship between formal education and business performance among small-scale fashion designers in Ghana. Similarly, Ahmed and Kar (2019) found that educational level significantly influences youth-owned business performance in Ethiopia. Agbasi, Edoko, and Nwangene (2019) further corroborate this by revealing that entrepreneurs with degree certificates significantly enhance the return on investment for manufacturing firms in Anambra State, Nigeria. However, Erawan, Putra, and Sentanu (2021) present a contrasting view, finding no statistically significant relationship between education level and business performance among women entrepreneurs in Indonesia, suggesting that the impact of education may vary by context.

Third, the results of the study reveal that the level of participation in seminars, conferences, and workshops in Nigeria has a positive and significant impact of SMEs phenomena growth both in the short and long run. The positive and significant impact of participation in seminars, conferences, and workshops on SMEs' phenomena growth in Nigeria can be attributed to the knowledge and networking opportunities these events provide. Such engagements enable SMEs to stay updated with industry trends, best practices, and new technologies. They also offer platforms for learning from experts and peers, which can enhance business strategies and operational efficiencies. Networking at these events can lead to valuable partnerships, collaborations, and access to new markets. For SMEs in Nigeria, where market conditions can be volatile and resources limited, the continuous learning and connections gained from these events are crucial for adapting to changes, driving innovation, and maintaining competitive advantage, thereby improving both short-term and long-term business performance.

The study's findings that participation in seminars, conferences, and workshops significantly enhances SME phenomena growth in Nigeria are consistent with several empirical studies. Djajadikerta et al. (2022) agree, showing that participation in business conferences benefits SME managers' learning and professional development, albeit with moderate results. Similarly, Oludele and Akinpelu (2019) found that human resource development activities, including seminars and workshops, positively impact organizational performance in Nigeria's banking sector. Setyawan and Wibowo (2023) partially support these findings by showing that business orientation activities like seminars and workshops have a weak but significant relationship with business expansion and profitability among female entrepreneurs in Yobe State. Conversely, Kamara and Widagdo (2022) found that while off-the-job training (including workshops) significantly impacts employee performance, it does not directly enhance competitive advantage, indicating mixed results in different contexts. Overall, these

studies generally align with the positive impact of participation in professional development activities on SME phenomena growth.

Lastly, the results of the study reveal that the level of participation in trade fairs and exhibitions in Nigeria has a positive and significant impact of SMEs phenomena growth both in the short and long run. The positive and significant impact of participation in trade fairs and exhibitions on SMEs' phenomena growth in Nigeria is justified by the exposure and opportunities these events offer. Trade fairs and exhibitions provide SMEs with a platform to showcase their products and services to a broader audience, including potential customers, investors, and partners. This visibility can lead to increased sales, brand recognition, and market expansion. Additionally, these events facilitate the exchange of ideas and best practices, enabling SMEs to innovate and improve their offerings. Networking opportunities at trade fairs can also lead to strategic alliances and collaborations, further enhancing business growth. For Nigerian SMEs, leveraging these platforms helps them stay competitive, access new markets, and sustain growth in both the short and long term.

The study's finding that participation in trade fairs and exhibitions significantly enhances SME performance in Nigeria, both in the short and long run, is supported by various empirical studies. Gerschewski et al. (2020) agree, demonstrating that trade show participation positively influences network development and operational performance for international SMEs, particularly in the service industry, although they noted no significant impact on financial performance. Silva et al. (2022) also support the finding, showing that showcasing product innovations at trade fairs facilitates the creation of valuable networks, enhancing export performance for industrial SMEs. Fitriani et al. (2021) further agree, revealing that engaging in exhibitions leads to economic benefits such as increased sales and product improvement for SMEs. Kim et al. (2020) found that exhibitors' resources influence trade show output and market performance over time, reinforcing the long-term benefits of trade show participation. Lastly, Melese and Kumar (2024) confirm that export promotion programs, including trade fairs, significantly impact export performance, aligning with the study's results. These studies collectively validate the positive impact of trade fairs and exhibitions on SME phenomena growth in Nigeria.

Conclusion and recommendations

The study employed an ex-post facto research design using the Autoregressive Distributed Lag (ARDL) method to analyze secondary data. The study area comprised SMEs in Nigeria registered with the Corporate Affairs Commission (CAC) and operating for at least five years. Data were collected from sources such as the CBN Statistical Bulletin, Bureau of Statistics, and SMEDAN.

Short-run Effects: There is a significant positive impact of HCD on SMEs phenomena growth in the short run, suggesting immediate benefits from investment in human capital. There is a pronounced short run growth of SMEs once there is human capital development.

Long-run Effects: HCD also has a positive and significant impact on SMEs phenomena growth in the long run, indicating sustained benefits over time. There is

pronounced long run growth of SMEs in the long run once there is human capital development.

Conclusion

Based on the findings, the study concludes that various forms of Human Capital Development (HCD) significantly enhance phenomena growth of SMEs in Nigeria. Training programs positively impact SMEs, both in the short and long term, by equipping employees with the necessary skills and knowledge to improve operational efficiency and innovation. Formal education also plays a crucial role in SME growth, as it provides a foundation of essential skills and knowledge that contribute to better decision-making, strategic planning, and overall business growth.

Moreover, participation in seminars, conferences, and workshops has a significant positive impact on SME growth. These events offer opportunities for networking, learning about industry trends, and gaining insights into best practices, which collectively enhance the strategic capabilities and competitiveness of SMEs. Additionally, involvement in trade fairs and exhibitions is found to significantly boost SME growth. These events facilitate market expansion, customer acquisition, and showcasing of innovations, thereby driving both short-term gains and long-term growth for SMEs.

In summary, the study underscores the importance of comprehensive HCD initiatives, including training, formal education, seminars, conferences, workshops, and trade fairs, in fostering the sustainable development and growth of SMEs in Nigeria.

Recommendations

The following recommendations are based on the key findings:

- Based on the finding that training significantly impacts SME phenomena growth in Nigeria, it is recommended that the government and private sector collaborate to establish comprehensive and continuous training programs tailored for SMEs. These programs should focus on practical skills, business management, and technological adoption. Implementation can be facilitated through partnerships with universities, vocational institutions, and international organizations, ensuring the training is accessible and affordable for SME operators across the country. Within the Nigerian context, this initiative will work by leveraging existing educational infrastructures and creating mobile training units to reach remote areas. Regular assessments and feedback mechanisms should be incorporated to adapt the training content to evolving market needs and challenges. This approach will enhance the skill sets of SME employees, leading to improved productivity, innovation, and competitiveness, thereby contributing to the overall economic growth of Nigeria.

- Given the significant impact of formal education on SMEs phenomena growth in Nigeria, it is recommended that the government invest in expanding and improving access to higher education and vocational training programs tailored for aspiring and current SME operators. This can be achieved through scholarships, subsidized education programs, and partnerships with educational

institutions to develop curricula focused on entrepreneurship, business management, and innovative practices. Within the Nigerian context, this initiative will work by leveraging the existing network of universities and vocational schools, ensuring that education is both accessible and relevant to the needs of SMEs. By enhancing the educational foundation of SME operators, this approach will foster a more skilled and knowledgeable workforce, driving long-term business growth and economic development.

- Based on the finding that participation in seminars, conferences, and workshops positively impacts SME performance in Nigeria, it is recommended to increase government support and incentives for SMEs to participate in such events. This can include subsidies for registration fees, facilitation of networking opportunities, and funding for knowledge-sharing platforms. In the Nigerian context, fostering a culture of continuous learning through accessible and targeted events will enhance SMEs' skills, knowledge, and strategic capabilities. By equipping SMEs with up-to-date insights and best practices, they can better navigate challenges, innovate, and contribute more effectively to economic growth and sustainability.

- Based on the study's finding that participation in trade fairs and exhibitions enhances SME performance in Nigeria, it is recommended to establish structured support mechanisms for SMEs to regularly participate in these events. This could involve subsidies for booth rentals, logistical support for transportation of goods, and promotional activities. Additionally, creating networking opportunities and matchmaking services within these events would amplify their impact. In the Nigerian context, enhancing SMEs' visibility and market access through trade fairs and exhibitions can stimulate business growth, facilitate knowledge exchange, and foster collaborations, ultimately contributing to a more robust and competitive SME sector.

References

Abbass, Q. (2001). Endogeneous Growth and Human Capital.A Comparative Study of Pakistan and Sri Lanka. *The Pakistan Development Review*, 40 (4): 987-1007.

Abu & Abdullahi, 2010. Human Capital Investment and sustainable Economic growth in Nigeria.
Business and Economic Journal, pp. 16

Adams, F. H. & Alarfi A. F. (2021).Human Capital Development and economic growth in Nigeria. *European Journal of Business and Management*, 4(29-38).

Adamu, P. A. (2003). The impact of human capital formation on economic development in Nigeria: An error correction approach in human resource development in Africa. Selected Papers for the year 2002 Annual Conference. *The Nigerian Economic Society (NES),* Part 11, 53-77.

Adebisi, J. F. and Gbeji, D. O. (2013). Effect of tax avoidance and tax evasion on personal income tax administration in Nigeria. *American Journal of Humanites and Social Sciences.* 1 (3): 125-134.

Adelakun, O. J. (2011). Human Capital Development and economic growth in Nigeria. *European Journal of Business and Management*, 9 (29-38).

Adekoya, 1999. Impact of Human Capital Development on poverty alleviation in Nigeria. *International Journal of Economics and Education.*

Adenikinju, 2005. Human Development and productivity. Pp 15

Adeyemo (2020). Human Capital Theory: Implications for educational development. *European Journal of Business and Management*, 9 (21-35)

Adisa, T.J. (2014). Human Resource Management in Nigeria: A Review and Conceptual model.

Ageogladis, M. & Christos, P. (2011). Humanizing Human Capital- Invest in your people for optimal productivity.

Akingbola, E. (2009). Human Capital Development meeting the challenges of the global economic meltdown, Human Resource Development Forum.

Akinnawo, B. S. (2003). Performance evaluation of Small and Mediun scale Enterprises in Nigeria.

Al Mamum, N. (2018). Effect of entrepreneurial orientation on competency and micro-enterprise performance. *Arabian Journal of Management Review*, 7(2), 21-28

Al-Azzam, Z. F., Irtaimeh, H. J. & Al-Quraan, A. B. (2016).Impact of Intellectual Capital on Carefour Internal Growth Strategies (Ansoffs Model). *Arabian Journal of Management Review*, 6(3), 1-9

Alonso, A. & Kok (2018). Defining Human Resource Success: 9 Critical competencies for Human Resource. *The International Journal of Business and Management*, 8(3), 24-32

Anyanwu, 2007. Impact of Human Capital Development on economic growth in Nigeria. *Journal of economic and sustainable development*

Ark, 2007. Human Capital as a contributor to growth

Atoyebi et al, 2013. Impact of Human Capital Development on the productivity of manufacturing industries. *RSIS International Journal.*

Barro, 2001. Human Capital and growth. Vol 91, Issue 2, Pages 12-17 of American Economic Review.

Bontis et al,2001. Managing Organizational knowledge by diagonizing Intellectual Capital framing and advancing the state of the field.

Dauda, 2009. Human Capital Development in a depressed economy: The Nigerian experience, Irish International Journal of Law, Political Sciences and Administration. Vol. 7, Issue: 04, July-Aug 2025. ISSN: 2146-3283.

Gbenga & Norhasni, 2013. Human Capital Development and productivity growth in Nigeria.

Grayson, 1982. Human Resource Management in Nigeria.

Hansen & Prescott, 2002. Human Capital and specialization. Cambridge University Press 1997. 1217 Vol. 92.No.4.

Ishola & Alani, 2012. Human Capital Development and economic growth in Nigeria: Empirical evidence from Nigeria

John, 2007. Beyond Human Resource: The new Science of Human Capital. Harvard Business Press, 2007, ISBN 1422148130

Menon, 2010. Integrating South and East Asia. Economics of Regional Cooperation and Development

Odusola, 1998. Human Capital Development strategies and Manpower requirements in Enterprises in Nigeria. *Journal of International Institute of Social History.*

Ogunleye, G. A. (2004). Small and Medium Scale Enterprises as foundation for rapid economic development in Nigeria. Maryland Finance Co. and Consultancy Services Ltd.

Ogunyomi, P. & Bruning, N. S. (2015). Human Resource Management and Organizational Performance of Small and Medium Enterprises (SMEs) in Nigeria. The International Journal of Human Resource Management.

Ojokuku, R. M., and Sajuyigbe, A. S. (2015). Effect of Human Capital Development on the Performance of Small and Medium Scale Enterprises in Nigeria. *Journal of Emerging Trends in Economic and Management Sciences* (JETEMS), 6(1), 88-93.

Ojukuku, R. M., Sajuyigbe, A. S. & Ogunwoye, A. B. (2014). Human Resource Management Practices and Small Scale Business Performance: Evidence from Osun State, South-West, Nigeria. *Journal of Emerging Trends in Economics and Management Sciences*. 5(7), 1-6.

Okechukwu, A. M. and Izuwanne, E. C. (2014). Issues, challenges and prospects of small and medium scale enterprises (SMEs) in Post-Harcourt city. *European Journal of Sustainable Development*, 3(1): 101.

Oladoyin & Dauda, 2010. The role of Human Capital on economic Development. An Empirical study of the Nigerian case, Oxford Business and Economic Conference Program.

Ologunde, A. O., Monday, J. U., and James-Unam, F.C. (2015).The Impact of Strategic Human Resource Management on Competitiveness of Small and Medium-Scale Enterprises in the Nigerian Hospitality Industry. *African Research Review*, 9(4), 264-276.

Oluwatobi & Ogunrinola, 2011. Government expenditure on Human Capital Development: Implications for Economic growth in Nigeria.

Omerzel, D. G. & Jurdana, D. S. (2016): The Influence of Intellectual Capital on Innovativeness and growth in Tourism SMEs: Empirical evidence from Slovenia and Croatia. *Economic Research*, 29(1), 1075-1090.

Orugun, J. J., Nafiu, A. T. & Aduku, D. J. (2017).Strategy Implementation and its effect on superior performance and competitive advantage of SMEs in Kogi State, Nigeria. *Journal of Economics, Business and Accounting,* 2(4), 99- 112.

Scultz, 1971. Investment in Human Capital: The role of education and of research. New York, The free press, 197. American Journal of Agricultural Economics.

Simon-Oke, 2012. Human Capital Investment and Industrial Productivity in Nigeria. *International Journal of Humanities and Social Sciences.*

Sofoluwe, 2000. Analysis of impact of Human Capital Development on the productivity of manufacturing firms in Nigeria.

UNECA, 1990. Human Capital Development in Africa: Agents, Drivers and Implications for growth and structural transformation.

Woodhall, 1997. Managing Human Capital in the public sector by Woodhall.

World Bank, 2010. Human Capital and Poverty Alleviation: Liteature review on Human Capital and economic growth.