

ENTREPRENEURSHIP EDUCATION AND THE GROWTH OF SMES IN NORTH-CENTRAL, NIGERIA

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ABSTRACT

Entrepreneurship education is critical to the success and development of small and medium-sized businesses (SMEs). SMEs are regarded as the backbone of the Nigerian economy, helping to create jobs, reduce poverty, and drive economic progress. The primary goal of the research was to look into entrepreneurship education and the growth of SMEs in North-Central Nigeria. The study used a survey research design. The study's population includes all Small and Medium Enterprises (SMEs) registered with the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), which totaled 5,188,310 entities as of 2022. The Taro Yarmane approach was used to determine the sample size for the study, which was 400 people. The study made use of multiple regression to analyze the hypotheses of the study with the aid of SPSS version 21.0. The study found that entrepreneurial awareness has positive (23.040) and significant (.000) effect on growth of small and medium enterprises in North-Central, Nigeria, entrepreneurial learning has positive (16.608) and significant (.000) effect on growth of small and medium enterprises in North-Central, Nigeria while entrepreneurial curriculum has positive (5.979) and significant (.000) effect on growth of small and medium enterprises in North-Central, Nigeria. The study concluded that entrepreneurship education significantly affects growth of SMEs in North-Central, Nigeria. The study recommended that SMEs should place a high priority on raising awareness among entrepreneurs about crucial factors such as market trends, technological advancements, economic conditions, social and cultural dynamics, environmental considerations, and legal and regulatory requirements. SMEs owners and employees should be encouraged to actively participate in practical workshops, seminars, and training sessions that offer real-world case studies and hands-on experiences. SMEs should establish collaborations with universities, colleges, and vocational training institutions to develop and implement relevant and practical entrepreneurial curricula.

Keywords: Entrepreneurial, Entrepreneurship, Entrepreneurial Awareness, Entrepreneurial Curriculum, Entrepreneurial Learning and SMEs

INTRODUCTION

It is important to note that the impact of entrepreneurship education on SME growth in North-Central Nigeria is contingent upon various factors. These include the quality of educational programs, access to relevant resources, supportive government policies, and the availability of infrastructure (Ameh et al. 2018). To maximize the benefits, entrepreneurship education initiatives should be tailored to the specific needs of SMEs in the region, focusing on practical skills, local market dynamics, and sector-specific challenges. Innovation and creativity are essential entrepreneurial skills that enable SMEs to develop new products, services, and processes, giving them a competitive advantage. By identifying and exploiting market opportunities, SMEs can diversify their offerings and adapt to changing customer demands, leading to business growth and sustainability.

Entrepreneurial awareness refers to the knowledge, understanding, and recognition of entrepreneurial opportunities and the ability to identify and exploit them effectively (Abdullahi, 2017). It encompasses various dimensions, including entrepreneurial mindset, business acumen, market knowledge, innovation, risk-taking propensity, and networking capabilities. Entrepreneurial awareness is crucial for SMEs as it enables them to identify and seize opportunities, make informed decisions, and adapt to dynamic market conditions. Nwaizugbo and Okeke (2019) assert that entrepreneurially aware individuals are more likely to establish successful businesses, create employment opportunities, and contribute to the economic development of their regions.

Abdullahi (2017) assert that entrepreneurial learning influences economic development through the creation of new ventures, increased employment opportunities, and the promotion of innovation and competitiveness. Adeleke and Oyewunmi (2018) stress that effective entrepreneurial learning initiatives, such as mentoring, networking, and skills development programs, can foster entrepreneurial success and contribute to economic growth in North-Central Nigeria.

Entrepreneurial curriculum refers to the educational programs and initiatives designed to equip individuals with the necessary entrepreneurial competencies. An effective entrepreneurial curriculum provides aspiring entrepreneurs with the knowledge, skills, and mindset required to navigate the challenges of starting and growing a successful business. By integrating practical experiences, case studies, and industry exposure, an entrepreneurial curriculum can help individuals develop a holistic understanding of the business environment.

Entrepreneurship education plays a crucial role in the growth and development of small and medium-sized enterprises (SMEs) in North-Central Nigeria. SMEs are considered the backbone of the Nigerian economy, contributing to employment generation, poverty reduction, and economic growth. However, these enterprises often face numerous challenges, such as limited access to resources, lack of business skills, and inadequate market knowledge. Entrepreneurship education addresses these challenges by equipping individuals with the necessary knowledge, skills, and mindset to start and manage successful businesses. One of the primary benefits of entrepreneurship education for SMEs in North-Central Nigeria is the acquisition of essential business skills. These skills include financial management, marketing, strategic planning, and innovation, which are critical for the long-term success of SMEs. Through entrepreneurship education, aspiring and existing entrepreneurs can develop a comprehensive understanding of business fundamentals and gain insights into effective business practices (Ojeka, 2017).

The expansion of small and medium-sized enterprises (SMEs) is seen as a critical aspect in the production of wealth and employment. Small business growth can be quantified in terms of sales growth over a specific time period (percentage growth or comparison with other firms in the same industry) and/or staff expansion.

The study revolves around providing answers to the following research questions which includes;

- I. What is the nature of relationship between entrepreneurial awareness and the growth of SMEs in North-Central, Nigeria?
- II. What is the degree of relationship between entrepreneurial learning and the growth of SMEs in North-Central, Nigeria?

- III. What is the relationship between entrepreneurial curriculum and the growth of SMEs in North-Central, Nigeria?

The main objective of the study is to examine entrepreneurship education and growth of SMEs in North-Central, Nigeria. Other specific objectives are;

- I. Evaluate the extent of relationship between entrepreneurial awareness and growth of SMEs in North-Central, Nigeria.
- II. Ascertain the relationship between entrepreneurial learning and the growth of SMEs in North-Central, Nigeria.
- III. Assess the relationship between entrepreneurial curriculum and the growth of SMEs in North-Central, Nigeria.

Similar, the hypotheses of the study is stated in null form. This includes;

H0₁: There is no significant relationship between entrepreneurial awareness and the growth of SMEs in North-Central, Nigeria.

H0₂: There is no significant relationship between entrepreneurial learning and the growth of SMEs in North-Central, Nigeria.

H0₃: There is no significant relationship between entrepreneurial curriculum and the growth of SMEs in North-Central, Nigeria.

REVIEW OF RELATED LITERATURE

Concept of Entrepreneurship

Entrepreneurship encompasses the development, launch, and operation of a novel business venture, often starting on a modest scale. It involves the exploration of how innovative enterprises come into existence and the practical steps taken to establish such endeavors. Individuals spearheading these initiatives are commonly referred to as entrepreneurs. According to Hisrich (2020), entrepreneurship is the undertaking of creating something valuable by dedicating time and effort, embracing associated financial, emotional, and social risks, and reaping the subsequent rewards in terms of financial gains and personal fulfillment. Alternatively, Ketchen (2019) defines entrepreneurship as seizing new business opportunities and mobilizing economic resources to initiate a fresh enterprise or revitalize an existing one. This occurs within the context of uncertainties and risks, aiming for profit generation through private ownership.

Education

Education serves as a means of conveying and acquiring general knowledge, fostering the development of reasoning and judgment skills, and preparing individuals, either oneself or others, intellectually, psychologically, and socially for a mature and responsible lifestyle. Dewey (2021) asserts that education is the facilitation of learning, encompassing the acquisition of knowledge, skills, values, beliefs, and habits. Various methods, such as storytelling, discussion, teaching, training, and directed research, are employed in the educational process. While educators often guide this process, learners can also take charge of their own education. In essence, education is the systematic process of giving

and receiving instruction, typically occurring in educational institutions like schools or universities (Lawal, 2020).

Entrepreneurship Education

Entrepreneurship education is an expanding field within the realm of entrepreneurial demands (Ratten & Jones, 2020). This growth has led to the emergence of various objectives for entrepreneurship education and diverse pedagogical approaches employed to deliver it (Van-Ewijk et al., 2020). The methods and strategies applied often exhibit considerable diversity across different programs, courses, and geographic locations (Bauman & Lucy, 2019).

Action-based entrepreneurship education (Neck & Corbett, 2018; Rasmussen & Sørheim, 2016) involves student-centered learning rather than teacher-led instruction (Günzel-Jensen & Robinson, 2017; Jones, 2019; Ollila & Wouldiams-Middleton, 2021; Rasmussen & Sørheim, 2016; Verzat et al., 2017). Entrepreneurship education is mainly about an individual's ability to put ideas into action. This underscores the notion that entrepreneurship education, in terms of its scope, nature, and characteristics, has the potential to redefine the educational culture and ensure a comprehensive educational system capable of reshaping the Nigerian educational landscape. Consequently, it can equip students with the essential skills and capacities required in the professional world (Bosire & Nzaramba, 2013).

Components of Entrepreneurship Education

The components of entrepreneurship education in this study include; entrepreneurial awareness, entrepreneurial learning and entrepreneurial curriculum.

Entrepreneurial Awareness

In a world marked by intense competition, characterized by radical societal changes, economic uncertainties, global political conflicts, and technological innovations, there is a heightened emphasis on fostering a highly competitive business environment. Success and survival in this environment hinge on the ability to seize chances and opportunities. However, the outcomes of capitalizing on these opportunities can vary significantly. Some enterprises may successfully achieve their business objectives, particularly in terms of financial gains, while others may not fare as well. To attain success, companies are often willing to embrace risky opportunities.

The core characteristics of business entrepreneurship are intricately linked to the interplay of taking risks and introducing new innovations. Entrepreneurial firms exhibit a more proactive and aggressive approach in the operation of their businesses. Previous studies have demonstrated that entrepreneurial capabilities can better meet customer needs and drive business innovation (Hacioglu et al., 2021). Consequently, firms embracing entrepreneurial perspectives and characteristics tend to expand and elevate themselves to higher performance levels, greater financial returns, and the introduction of innovative business practices.

Entrepreneurial Learning

Entrepreneurship has long been a policy objective (Gilbert, 2022; OECD, 2021). However, entrepreneurs are less tangible entities compared to businesses; they might be in the early stages of

pursuing an idea without having established a venture yet (Lundström & Stevenson, 2015; Raposo, 2019). Therefore, supporting entrepreneurship necessitates comprehensive approaches that encompass both financial and "soft" elements, such as the dissemination of knowledge, entrepreneurial skills, and facilitating networking opportunities for aspiring entrepreneurs (Audretsch, 2022; Lundström & Stevenson, 2015).

The cultivation of these skills is often integrated into entrepreneurial education programs in schools and universities, either as part of the standard curriculum or through extracurricular activities (Lundström & Stevenson, 2015; Mason et al., 2020). These educational efforts may also be coupled with additional support services, as seen in specific programs like business incubators (Amezcuca et al., 2022; Schwartz, 2022). Learning constitutes a crucial aspect of any organization's overall success.

Entrepreneurship Curriculum

The curriculum for entrepreneurship is a dynamic and intentional educational journey associated with fostering the entrepreneurial development of learners (Kasim & Martin, 2022). It encompasses everything about the learners' school experience, specifically focusing on the cultivation of entrepreneurial skills and capabilities. Functioning as a structured mechanism, an entrepreneurship curriculum aims to systematically instill an entrepreneurial culture, placing emphasis on fostering critical independent thinking and facilitating entrepreneurship development. Within the entrepreneurship curriculum, there is comprehensive information on guiding students in identifying and shaping opportunities, evaluating business concepts, formulating operational plans, securing funding for ventures, and nurturing the growth of new enterprises.

Concept of Small and Medium Enterprises (SMEs)

The term 'small and medium enterprises' refers to a broad range of business entities, including hotels, manufacturing industries, agriculture, restaurants, computer software companies, small machine shops, and others (Asaolu et al., 2015). According to the OECD (2022), the fundamental goal of incorporating small and medium-sized firms into the development landscape was to boost commerce and industrialization in today's developed countries. Small and medium-sized firms are defined differently in each country based on their policies, agencies, programs, institutions, and the responsibilities they play in the economy (Abdullah, 2020; Etuk et al., 2020).

Growth of SMEs

The growth of Small and Medium Enterprises (SMEs) unfolds through five distinct stages, each characterized by unique attributes, challenges, and milestones. These growth stages are identified as: 1) Existence, 2) Survival, 3) Success, 4) Take-off, and 5) Maturity. Recognizing SME growth as a pivotal factor in wealth and employment generation (Davidsson & Wiklund, 2020), numerous reviews, such as those by Davidsson (2020), Gilbert (2022), and Shepherd & Wiklund (2019), have underscored the extensive empirical research and various attempts at theoretical modeling dedicated to this topic. However, despite these efforts, the conceptual understanding of SME growth remains incomplete, and empirical evidence at times presents conflicting perspectives (Davidsson & Wiklund, 2020; Shepherd & Wiklund, 2019).

Business growth, a complex phenomenon, proves challenging to define and measure (Achtenhagen et al., 2020). In her seminal work, 'The Theory of the Growth of the Firm,' Edith Penrose (1959) notes that

the term 'growth' may sometimes signify a mere increase in quantity, such as when referring to growth in output, export, or sales.

Human Capital Theory

The human capital theory advocates for education as a tool to enhance human capital, foster labor productivity, and elevate technological levels globally (Robert, 1991). Proponents of human capital theory endorse investment in a nation's workforce (individuals engaged in both public and private sector organizations), asserting that expenditures on training and development yield productive returns similar to investments in physical assets (Olaniyan & Okemakinde, 2018). According to Schumpeter (1934), entrepreneurship training plays a role in creative destruction, wherein education serves as a catalyst for generating new ideas, refining techniques, introducing novel technologies, and developing innovative products. Additionally, Van (2021) establishes a connection between the level of education and the development of new products in knowledge-based economies that heavily invest in education, technology, and other growth elements.

Entrepreneurial Self-efficacy and Intentions Theory

The entrepreneurial self-efficacy theory, formulated by Bandura (1982), posits that success in business hinges on an individual's capacity to effectively initiate and manage an entrepreneurial venture (McGee & Peterson, 2019). Entrepreneurial self-efficacy proves valuable in bolstering an entrepreneur's confidence in their ability to undertake the requisite entrepreneurial actions and achieve desired outcomes, be it establishing a new venture or enhancing an existing business. Boyd and Vozkis (1994) offer supporting evidence for the growing emphasis on the role of self-efficacy in the exploration of entrepreneurship, spanning areas such as entrepreneurial career preferences, intentions, and performance.

Experiential Learning Theory

The study followed Kolb's (1984) Experiential Learning Theory, which states that learning is a process of creating knowledge via the transformation of experience. Similarly, Zapeda (2022) states that experiential learning theory is based on the premise that learning occurs through contact between individuals and their surroundings. According to Knowles, Holton, and Swanson (2021), individuals learn best when new material is presented in real-world settings. An illustration of this real-life situation approach to learning is employing a problem-solving methodology in classroom activities, as opposed to the traditional focus on content knowledge practices. Consequently, experiential learning theory considers learning a social process of adaptation, embracing a dynamic and holistic perspective on the learning process (Zapeda, 2022).

Theory Adoption

The theoretical framework for this study is grounded in Experiential Learning Theory, chosen for its classification as a constructivist learning theory. This designation arises from the theory's assertion that individuals construct new knowledge by transforming their experiences, drawing upon both cognitive and social properties (Zapeda, 2022). Consequently, knowledge is viewed as subjective, emerging from the interplay between content and experience (Zapeda, 2022). At the heart of the learning process is the core concept of transforming experience, a necessity that prompts the utilization of diverse learning approaches. The Kolb's learning cycle, is considered a more effective and less traditional approach to

teaching entrepreneurship. The cycle suggests that entrepreneurship can be taught through creating significant learning experiences that encourage learning through engagement in entrepreneurial activities.

Empirical Review

Maha (2022) examined creative self-efficacy, creative process engagement, and entrepreneurial intentions, the study explored creativity as an antecedent of entrepreneurial intentions. Drawing from social cognitive theory, we explain and empirically illustrate how creative self-efficacy encourages the development of entrepreneurial intentions. The study also examined the mediating roles of attitudes and creative process engagement in the creative self-efficacy and entrepreneurial intentions relationship. Based on a pre-post- survey design, in seven entrepreneurship courses taught in three Canadian universities, our findings support the role of creativity as an antecedent to entrepreneurship, but also hint towards some boundaries/limitations on attitudes as the primary focus of entrepreneurship education programs. The study drew a number of implications for the theory and practice of entrepreneurship education. **Critique:** In terms of methodology, this study underwent a pre-post survey design method in three different Canadian Universities of which the methodology adopted in the study is oblivious.

Alex and Rachel (2022) investigated the effect of entrepreneurship education on higher education students the field of entrepreneurship education (EE) is still new, but it is growing very quickly, with potential to strengthen business education, innovation and economies. Only recently has attention been paid to the quality of the research being produced. Building on previous reviews, this paper uses systematic review methodology to search and grade the most recent literature in EE in higher education. This process finds that some high-quality research is being done but much of the field is held back by methodological limitations, including inadequate description of EE programs, heavy reliance on correlational survey designs, common self-selection bias and a paucity of studies able to establish causal effects on entrepreneurial outcomes. A small number (10) of high-quality studies provide evidence of the effectiveness of experiential programs, within university extracurricular programs; and provide a range of findings to inform current EE practice. Gaps for future research and methodological possibilities are outlined, so that EE research can address current weaknesses and fulfil its potential to inform EE, enabling effective teaching and learning and the prospect of long-term educational, economic and social outcomes. **Critique:** This study has methodological gap since it is based on systematic review and not panel analysis of which our study is based.

Dag et al.(2022) investigated on teaching and facilitating action-based entrepreneurship education: Addressing challenges towards a research agenda Entrepreneurship education is an increasingly distinct domain with particular approaches emphasizing experiential and action-based design. Action-based entrepreneurship education aims to deliver authenticity in entrepreneurial experiences while simultaneously facilitating learning and fair assessment. A venture creation program (VCP) is one such type of action-based entrepreneurship education which uses the creation of a new venture as the main vehicle for students' learning, complemented with more traditional educational content. Engaging students in creating real-life ventures enables unique opportunities for learning but introduces a tension between didactic and pragmatic approaches and thus various challenges for educators. This paper's purpose is to address current controversies related to VCPs and offer research-driven suggestions to key challenges. The empirical investigation, consisting of focus group data and individual interviews,

builds on the accumulated knowledge of a global collaborative forum for VCPs—the VCP Forum which consists of 11 VCPs in six countries in Europe and North America. The findings highlight three main areas that present challenges to educators: (1) facilitating students' venture creation processes, (2) assessment of the students' work connected to real-life activity, and (3) mitigating interaction with external stakeholders. The present paper contributes to entrepreneurship education research by suggesting areas for pedagogic development that need further investigation. **Critique:** The study was conducted in America unlike this study based in Nigeria. There is location and environmental gap.

Ludi (2022) examined the impact of entrepreneurship education and students' entrepreneurial mindset: the mediating role of attitude and self-efficacy the relationship between students' entrepreneurship education and entrepreneurial mindset as well as understanding the mediating role of attitude and self-efficacy. The approach adopted in this study is a convenience random sampling method, which is widely used in entrepreneurship research. Participants were recruited from several universities in Malang of East Java in Indonesia undergoing an online survey and were calculated using structural equation modeling (SEM). The findings of this current study indicate that entrepreneurship education successfully influences entrepreneurial self-efficacy, entrepreneurial attitude, and the entrepreneurial mindset. On the other hand, entrepreneurial self-efficacy promotes entrepreneurial attitude instead of the entrepreneurial mindset. Furthermore, entrepreneurial attitude plays an essential role in mediating both entrepreneurship education and self-efficacy toward students' entrepreneurial mindset. **Critique:** There exists an environmental gap in this study. The some of the findings of the study cannot be generalized due environmental gap. Also, the methodology used in the study was convenience random sampling method. This present study was embarked upon in North-Central Nigeria and also the study made used of panel analysis.

Ugwoke et al. (2022) analyzed the effect of entrepreneurship education in teacher preparation programme in Federal College of Education Eha–Amufu Enugu State. A descriptive survey research design was adopted for the study. The population of the study comprised of all the academic staff of the Federal College of Education Eha- Amufu, Enugu State numbering 188 (108 females and 80 males). There was no sample due to the small population. Questionnaire containing 22 items was used for data collection. Mean and standard deviation were used as statistical tool for answering the research questions. Major finding revealed that there were inadequate provision of funds, facilities and personal. The study worked on constraints on the implementation entrepreneurship education in teachers' preparatory programme that are also undergraduates and this study is on higher education. The difference is that why the previous study sought to identify problem, the current study seeks to suggest a remedy approach with the use SWOT analysis. **Critique:** The primary focus of this study was to investigate the impact of entrepreneurship education on the teacher preparation program at the Federal College of Education, Eha–Amufu, Enugu State. The research utilized a descriptive survey research design to explore how entrepreneurial education influences the growth of Small and Medium Enterprises (SMEs) in the North-Central region of Nigeria.

In a related study, Tijani et al. (2022) investigated the impact of technical entrepreneurial skills on job creation in small and medium-sized firms in Lagos, Nigeria. Data were gathered by administering questionnaires to 37 entrepreneurs participating in diverse businesses. The investigation used sample t-tests, paired difference sampled tests, and simple regression analysis. All hypotheses were evaluated with a significance threshold of 0.05. The results of the three hypotheses revealed that technical

entrepreneurial skills generate more jobs in Nigerian SMEs than commercial entrepreneurial activities. Furthermore, the study found that the rise of SMEs in Nigeria made no meaningful contribution to the country's Gross Domestic Product (GDP), citing a variety of known and stochastic variables. As a recommendation, the study suggests that all stakeholders, particularly the government, should reconsider and refocus efforts on establishing technical schools and providing a business-friendly environment, including consistent power supply and improved road networks. **Critique:** a critical perspective on the study indicates that it was conducted in 2022 using a simple t-test, whereas the present study was carried out in the same year but employed a survey research design.

Gap in Literature

Every research endeavor comes with its limitations, and the primary purpose of any research is to contribute to the existing body of knowledge. A review of previous studies, including works by Egwuonwu, Baba, and Adamu (2021), Haibinc et al. (2021), Ayodeji et al. (2020), and Oseni (2017), within this research domain reveals a predominant focus on geographical areas outside the North-Central region of Nigeria. This study aims to address this geographical gap by investigating the relationship between entrepreneurship education and SMEs growth specifically in the North-Central region of Nigeria.

Additionally, many prior studies in this field relied on individual survey primary data, neglecting the potential insights that could be gained from panel survey data. This research seeks to fill this gap by employing panel survey data for a more comprehensive understanding.

Furthermore, in terms of methodology, previous studies such as those by Egwuonwu et al. (2021), Haibin et al. (2021), Ayodeji et al. (2020), and Oseni (2017) commonly utilized the simple percentage method for data analysis. In contrast, this current study opts for a panel regression method, aligning with the nature and scope of its research objectives.

METHODOLOGY

This study employs a survey research design with a focus on collecting data from the study population to examine identified variables. The population consists of the total number of Small and Medium Enterprises (SMEs) registered with the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) as recorded in the 2022 survey in the North-Central region. The survey documented a total of five million, one hundred and eighty-eight thousand three hundred and ten registered SMEs in North-Central Nigeria. Therefore, the population of the study comprises the 5,188,310 registered SME owners in North-Central Nigeria, encompassing Benue State, Kogi State, Kwara State, Nasarawa State, Niger State, Plateau State, and the Federal Capital Territory Abuja (SMEDAN, 2022). The target sample size for the study was determined to be 400 using the Taro Yarmane technique. Data were presented through tables, with frequencies and percentages used to interpret respondents' responses. The questionnaire utilized a five-point Likert scale ranging from Strongly Agree (SA), Agree (A), Undecided, Disagree (D), to Strongly Disagree (SD). Statistical Package for Social Sciences (SPSS) version 21.0 was employed for data analysis, with multiple regression analysis utilized to estimate the model and test all formulated null hypotheses. The growth of Small and Medium Enterprises (GSME) serves as the dependent variable in this study, with entrepreneurial education represented by the proxies of Entrepreneurial Awareness (EA), Entrepreneurial Learning (EL), and Entrepreneurial Curriculum (ECC)

as the independent variables. To test all the hypotheses, the methodology employed multiple regression analysis to estimate the model. The model is articulated as follows:

$$GSME = f(EA, EL \text{ and } ECC)$$

$$GSME_i = \beta_0 + \beta_1EA_i + \beta_2EL_i + \beta_3ECC_i + e_i \text{-----} (1)$$

Where: GSME = an indicator representing Growth of SMEs (Dependent Variable);

β_0 = a constant and β_{1-5} = coefficients of independent variables;

EA = a predictor representing (Entrepreneurial Awareness);

EL = a predictor representing (Entrepreneurial Learning);

ECC = a predictor representing (Entrepreneurial Curriculum);

e= Stochastic error term;

i = Cross sectional; and

f = Functional relationship.

DATA ANALYSIS AND DISCUSSION OF FINDINGS

The study conducted a reliability test using Cronbach's Alpha, alongside presenting frequencies, percentages, and inferential statistics, specifically Multiple Regression, to assess all formulated null hypotheses. The satisfactory result of the Cronbach's Alpha test, which yielded a score of 76%, is provided below:

Reliability Statistics

Cronbach's Alpha	N of Items
.759	30

Source: Researcher's Computation Using SPSS 21.0 Version

Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.978 ^a	.957	.956		.66542

a. Predictors: (Constant), ECC, EA, EL,

The table above reveals an R-square value of .978, signifying that the components of the independent variable collectively contribute to a 98% impact on the dependent variable. Additionally, the adjusted R-square value of .956 indicates a precise assessment of the combined influence of entrepreneurial awareness (EA), entrepreneurial learning (EL), and entrepreneurial curriculum (ECC), amounting to 96%, on the growth of SMEs in North-Central, Nigeria.

ANOVA Result

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3619.258	5	723.852	1634.785	.000 ^b
	Residual	162.501	367	.443		
	Total	3781.759	372			

a. Dependent Variable: GSME

b. Predictors: (Constant), ECC, EC, EA

The F-Statistics value of 1634.785, accompanied by a corresponding significance level of .000 in the table above, indicates that the model is well-fitted and statistically significant at a 5% level. This implies that the model is suitable and reliable for making informed decisions.

Test of Hypotheses

The output of the Coefficients table below was used to explain the hypotheses of this study.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.334	.364		.919	.359
	EA	.451	.020	.562	23.040	.000
	EL	.613	.037	.462	16.608	.000
	ECC	.589	.099	.421	5.979	.000

a. Dependent Variable: GSME

Ho₁: There is no significant relationship between entrepreneurial awareness and growth of SMEs in North-Central, Nigeria.

The table above shows that the result of t statistic of 23.040 and the corresponding sig. level of .000 which is significant at 5% indicated that entrepreneurial awareness has a significant effect on growth of small and medium enterprise (SMEs) in North-Central, Nigeria. Based on this, the null hypothesis three, which says, there is no significant relationship between entrepreneurial awareness and growth of SMEs in North-Central, Nigeria, is rejected.

Ho₂: There is no significant relationship between entrepreneurial learning and growth of SMEs in North-Central, Nigeria.

The table above also shows that the result of t statistic of 16.608 and the corresponding sig. level of 0.00 which is significant at 5% indicated that entrepreneurial learning has a significant effect on growth of small and medium enterprise (SMEs) in North-Central, Nigeria. Based on this, the null hypothesis four, which says, there is no significant relationship between entrepreneurial learning and growth of SMEs in North-Central, Nigeria, is rejected.

Ho₃: There is no significant relationship between entrepreneurial curriculum and growth of SMEs in North-Central, Nigeria

Lastly, the table above shows that the result of t statistic of 5.979 and the corresponding sig. level of 0.00 which is significant at 5% level of significance, indicated that entrepreneurial curriculum has a significant effect on growth of small and medium enterprise (SMEs) in North-Central, Nigeria. Based on

this, the null hypothesis five, which says, there is no significant relationship between entrepreneurial curriculum and growth of SMEs in North-Central, Nigeria, is rejected.

Discussion of Findings

The study unveiled that entrepreneurial awareness exerts a significant positive influence on the growth of small and medium enterprises (SMEs) in North-Central, Nigeria. This implies that an escalation in entrepreneurial awareness corresponds to an increase in SME growth. Factors such as entrepreneurial market awareness, technological awareness, economic awareness, social and cultural awareness, environmental awareness, and legal and regulatory awareness collectively contribute to SME growth in North-Central Nigeria. This finding aligns with the conclusions of Mawoli (2017), Odia and Odia (2019), Ramoni (2016), Shar and Sooro (2017), and Utami et al. (2017). However, it diverges from the findings of Farzana (2018), Igomu et al. (2018), and Oseni (2017).

Similarly, the study indicated that entrepreneurial learning has a substantial positive impact on the growth of SMEs in North-Central, Nigeria. This suggests that an upsurge in entrepreneurial learning leads to SME growth, encompassing entrepreneurial experiential learning, reflective learning, social learning, failure-based learning, and collaborative learning. This outcome resonates with the findings of Mawoli (2017), Odia and Odia (2019), Ramoni (2016), Shar and Sooro (2017), and Utami et al. (2017). Conversely, it contradicts the results of Farzana (2018), Igomu et al. (2018), and Oseni (2017).

Lastly, the study highlighted that entrepreneurial curriculum significantly contributes to the growth of SMEs in North-Central, Nigeria. An augmentation in entrepreneurial curriculum corresponds to an increase in SME growth, encompassing entrepreneurial foundation courses, business management and strategy courses, social entrepreneurship courses, entrepreneurial leadership and team-building courses, and entrepreneurial mentoring and coaching. This finding aligns with the conclusions of Mawoli (2017), Mukhtar and Naveed (2016), Nuzhath (2013), Odia and Odia (2019), Ramoni (2016), Saira and Alvir (2016), Shar and Sooro (2017), and Utami et al. (2017). However, it contrasts with the findings of Farzana (2018), Igomu et al. (2018), and Oseni (2017).

CONCLUSION AND RECOMMENDATIONS

Partnerships and collaborations between SMEs and industry experts must be facilitated to encourage knowledge exchange. Awareness about market trends, technology, economics, culture, environment, and regulations should be raised among entrepreneurs, with access to relevant data and resources. Entrepreneurship development programs must incorporate experiential learning, reflection, social learning, failure-based learning, and collaboration. Networking events and platforms must be established to facilitate learning and exchange of best practices. Integration of comprehensive entrepreneurial education within formal education systems, in collaboration with educational institutions, is crucial. The curriculum must cover foundational courses, business management, social entrepreneurship, entrepreneurial leadership, and team building, and align with the specific needs of SMEs through partnerships with industry stakeholders.

Drawing from the aforementioned findings, the following recommendations are put forth:

- i. SMEs should place a high priority on raising awareness among entrepreneurs about crucial factors such as market trends, technological advancements, economic conditions, social and cultural dynamics, environmental considerations, and legal and regulatory requirements. They should promote access to market research, industry reports, and relevant data to facilitate well-informed decision-making and adaptability to changing business landscapes.
- ii. SME owners and employees should be encouraged to actively participate in practical workshops, seminars, and training sessions that offer real-world case studies and hands-on experiences. Moreover, facilitating networking events and platforms for entrepreneurs to learn from each other's experiences and share best practices is crucial.
- iii. SMEs should establish collaborations with universities, colleges, and vocational training institutions to develop and implement relevant and practical entrepreneurial curricula. These curricula should include subjects such as foundational courses, business management and strategy, social entrepreneurship, entrepreneurial leadership, and team building.

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