

STIMULATING ENTREPRENEURSHIP CULTURE AND SKILL DEVELOPMENT THROUGH VOCATIONAL EDUCATION AND TRAINING IN THE NIGERIAN EDUCATIONAL SECTOR

Ugwu, Kelechi Enyinna, Federal University of Technology
Kekeocha Mary Ezinne, Nnamdi Azikiwe University
Njoku Charles Odinakachi, Federal University of Technology
Nwaimo Chilaka Emmanuel, Federal University of Technology
Akujor Jane Chinyere, Federal University of Technology
Ezekie Kyna Nkiruka, Federal University of Technology

ABSTRACT

Problem: *The low rate of business establishment in Nigeria is influenced by the citizenry's unwillingness to buy things made domestically. Again, insufficient facilities in teaching entrepreneurship courses may hurt students' skill development.*

Purpose: *The study aims to evaluate how vocational education and training would influence entrepreneurship culture and skill development among students in tertiary institutions.*

Design/Methodology/Approach: *The study used a survey design and a questionnaire as an instrument for data collection. The total population of the study is 5,437. The sample size was determined statistically and calculated as 373. A simple Random sampling technique was adopted to select the participants in the survey. The questionnaire was administered to the participants using an objective five-point Likert scale. The data was analyzed using Correlation to determine the relationship between the variables.*

Findings: *The result showed that the culture of entrepreneurship contributes positively to the skill development training among tertiary undergraduates in the Federal University of Technology, Nigeria.*

Originality: *This study contributes to the extant literature by developing a conceptual model that represents the influence of vocational education and training on entrepreneurship culture.*

Practical Implications of the Study: *This research would aid undergraduate students in developing entrepreneurship culture, and employability skills essential to be gainfully employed and self-independent in the future.*

Keywords: Vocational Education and Training, Entrepreneurship Culture, Entrepreneurship, Skill Development, Cochran Cultural Theory of Entrepreneurship, Education Sector

INTRODUCTION

In higher education, vocational education, and training (VET) is essential for developing students' skills and entrepreneurship culture, which helps them meet the changing demands of the job market. According to recent studies, vocational and early training programs (VETs) not only increase employment and incomes but

also develop the practical business and management skills necessary for successful entrepreneurship. Eichhorst et al. (2015) claim that graduates of VET programs have superior industry adaptability and higher job placement rates. Additionally, incorporating entrepreneurship education within VET curricula has a major impact on students' attitudes and intents regarding entrepreneurship, encouraging a culture of creativity and taking calculated risks (Bae et al., 2014). Since areas with robust frameworks for entrepreneurship education have greater rates of startup activity and firm viability, this entrepreneurial culture is critical to economic success.

VET is essential for developing entrepreneurial skills and creating an entrepreneurial culture in postsecondary institutions, in addition to improving career chances. Bae et al. (2014) state that VET programs that incorporate business and management instruction can greatly improve students' entrepreneurial abilities and inspire them to think of entrepreneurship as a feasible career path. According to Liñán et al. (2011), entrepreneurship education fosters a mindset that encourages creativity, taking calculated risks, and proactive actions. Additionally, the entrepreneurial culture that VET promotes has a long-term beneficial effect on the profitability of businesses. Researchers Autio et al. (2014) discovered that areas with a strong entrepreneurial culture have greater rates of new business survival and growth because these cultures foster an atmosphere that is favorable for startups to survive and innovate. Therefore, integrating entrepreneurship education into VET programs at higher education institutions will not only equip students with the necessary skills but also foster an entrepreneurial mindset that will drive economic development and innovation.

Vocational education and training bring social and economic benefits to a country's development (European Centre for the Development of Vocational Training, CEDEFOP, 2011). Higher labor market participation rates, business performance, employee productivity, employment opportunities, employee income, professional recognition, and career development are just some of the economic benefits. The social benefits of the program include reduced crime, increased social cohesion, and increased personal fulfillment and career aspirations. The most effective way to prepare students for entrepreneurial careers, which emphasizes hands-on learning and developing creative thinking skills, is through vocational education and training (VET).

Researchers have obtained different results and have identified the impact of professional and educational training on entrepreneurship spirit. The survey has consistently indicated that VET has a higher employment rate for participants and may improve profits. Kucera et al. (2018) found that people who received vocational training were more likely to be employed and earn higher wages than those who chose general training. Similar studies by Psacharopoulos and Patrinos (2020) also found that vocational training significantly improves employability, especially in developing countries. A study by Hanushek et al. (2017) showed that countries with developed vocational training systems have lower youth unemployment and more stable economies.

Problem Statement

Numerous factors have impacted Nigeria's tertiary institution entrepreneurship development. Many of the tools utilized in the teaching of specialized fields like science, technology, and engineering are outdated. Throughout their study of specialized courses, students are required to make connections between theory and real-world situations using state-of-the-art technology and equipment. Thus, a lack of state-of-the-art equipment and facilities could hinder the development of skills in higher education. The absence of adequate facilities and trained instructors has a major impact on entrepreneurship teaching at universities. Teaching classes on entrepreneurship might be challenging due to the large student population. Most of the time, schools do not have the resources to hire specialists from the business world with the essential skills to instruct students in technical and career-oriented fields like science, engineering, architecture, and medicine, among others. Another problem that hinders student entrepreneurship development is the low ratios between teachers when compared to their counterparts in developed countries. To combine theory and practice in entrepreneurship, practical knowledge is necessary. This helps students be more creative. Therefore, inadequate training may undermine students'

entrepreneurial development.

Additionally, Nigerians' reluctance to purchase items produced in the country contributes to low productivity in locally produced goods. Most individuals believe that goods made in Nigeria are of lesser quality and are less wealthy than goods made elsewhere. The general populace of the country favors imported items over those produced domestically because of this negative perception. Nigerians' negative perception has hindered their ability to innovate. While many of the country's entrepreneurs have found success, a sizable proportion have not yet due to negative perceptions. Notwithstanding these setbacks, only a few of them have continued to attempt to establish businesses. Considering the problems above, study objectives are formulated to guide the study.

Objective of the Study

Taking the foregoing into account, the goal of this research is to examine the impact of vocational education and training on entrepreneurship within the Nigerian educational system. The specific goal is to assess how entrepreneurship culture may affect students' tertiary institution skill development.

Research Questions

What is the impact of entrepreneurship culture on students' skill development in postsecondary education?

Research Hypothesis

H₀₁: Entrepreneurship culture does not influence skill development among students in tertiary institutions.

Scope of the Study

The researcher focused on third-year students in federal tertiary institutions in Nigeria. A simple random sampling technique was used as the criteria for selecting two federal universities, the Federal University of Technology, Owerri, and Nnamdi Azikiwe University, Awka. The study targets third-year students as a demographic to study entrepreneurship in different business fields within federal institutions to make the study more research-oriented. The geographical scope of the study mainly covers the Southeastern region of Nigeria. The total number of study participants was 5,437. After performing statistical calculations using Taro Yamane's formula, the sample size was 373.

REVIEW OF RELATED LITERATURE

The Concept of Vocational Education and Training (VET)

This refers to a type of training that is focused on a specific career (Doak, 2020). This is known as technical and career education. VET typically emphasizes the practical application of acquired skills rather than focusing on theory or traditional academic skills. Vocational school graduates have an advantage over job seekers with less formal education because they are identified by a recognized institution as having the technical skills necessary to be employed in a particular occupation. The importance of vocational education and training in supplying learners with crucial skills and supporting their personal growth cannot be overstated. It enhances company efficiency, competitiveness, research and development, civic participation, and employability (European Union, 2021).

Schaferhoff (2014) states that VET can be assessed in terms of the skills that an individual develops throughout time. Through training, people can raise their skill levels to the point where they are required for their occupations. Empirical data indicates that those with training report higher levels of job satisfaction than those without. It improves a person's flexibility and work mobility so they can take on additional tasks.

The effect of vocational education and training on long-term company success has been studied by several researchers. Liñán et al. (2011) claim that students' entrepreneurial attitudes and intents are greatly influenced by their exposure to entrepreneurship education. This exposure aids in developing an attitude that supports entrepreneurship. According to a meta-analysis by Bae et al. (2014), exposure to entrepreneurial ideas and experiences encourages students to think of entrepreneurship as a feasible career path. This suggests that entrepreneurship education has a favorable impact on entrepreneurial ambitions. According to Rideout and Gray (2013), kids who take part in programs that promote entrepreneurship also demonstrate improved problem-solving, creative, and risk-taking skills. These abilities, which are essential for entrepreneurship success, are frequently honed via hands-on learning exercises like startup simulations and business proposal competitions. According to a study by Walter and Dohse (2012), individuals who complete entrepreneurship programs have a higher chance than non-graduates of starting and maintaining profitable enterprises. Their educational background instilled a practical skill set and an entrepreneurial perspective that has contributed to their success. According to Fayolle and Gailly (2015), entrepreneurship education contributes to the development of an innovative, resilient, and adaptable entrepreneurial attitude. This kind of thinking is essential for both launching new ventures and fostering innovation in already-established companies.

The Concept of Entrepreneurial Culture

A strong culture also improves the performance of the business. It helps an organization understand how to meet the expectations of its clients, which the business owner establishes early in the venture. It also helps determine how individuals should behave in their employment and how to generally fit in and succeed in business (Jeff, 2011). An entrepreneurial culture is an atmosphere that encourages people to innovate, create, and take risks. In the workplace, this means that employees are encouraged to come up with new ideas or products (European Union, N.D.). The development of social capital and economic success are two advantages of an entrepreneurial culture.

Scholars have discovered a link between vocational education and entrepreneurial culture. A study by Bosma et al. (2012) found that societies with strong entrepreneurship cultures generally have higher levels of entrepreneurial activity. In this society, people are encouraged to be bold, creative, and risk-takers. Furthermore, the formation of an entrepreneurial culture can be assisted by VET programs. Vocational and early childhood education (VET) programs, which often include practical business and management training, have been shown to enhance students' entrepreneurial skills and encourage them to consider entrepreneurship as a viable career route (Bae et al., 2014). Long-term business success is often influenced by the entrepreneurial culture of a society (Autio et al., 2014). The authors claim that areas with a strong entrepreneurial culture had greater rates of survival.

The Concept of Entrepreneurship

Wickham (2019) defines entrepreneurship as the process of creating jobs and revenue. Market innovation is propelled by entrepreneurs who develop new products to satisfy consumer needs. They contribute innovation, which creates new markets, businesses, industries, technologies, and things of a higher caliber, hence increasing living standards and quickening economic progress.

Similarly, Greene (2017) described entrepreneurship as an individual's actions taken to start a new company. According to the author, entrepreneurs have the power to restructure industries and progress a nation's economy, thus changing the world. An entrepreneur is considered an asset if they assist a nation in developing its socioeconomic infrastructure and job market.

Successful entrepreneurs possess special skills such as curiosity, risk-taking, leadership, adaptability, and team building. Curiosity is one of the key qualities an entrepreneur must possess. It is a quality that successful businesspeople possess that enables them to look for new market prospects. Inquisitive entrepreneurs ask thought-

provoking inquiries and pursue other paths rather than accepting what they believe to be true. Chandra (2022) agrees that entrepreneurs must be curious to interact with their surroundings. Entrepreneurs come up with new approaches to solve problems when things do not go as planned. Curiosity makes people look at a problem from every angle and look for ways to improve the outcome to find a solution. Entrepreneurs must also be willing to take risks. Taking risks fosters innovation and can be a key differentiator for a product or service. Risks that entrepreneurs may face include giving up a full-time job with a stable salary, depleting personal savings with no guarantee of investment returns, over-reliance on colleagues, and missing out on opportunities to pursue personal gain (Chandra, 2022).

Sushant (2021) agrees that an entrepreneur is someone who persuades people to achieve their goals. Through teamwork, leadership promotes entrepreneurial spirit and creativity. Leaders need to have a clear and accurate vision, abuse orientation and resources for this vision in this life. In addition, he will work with others to transform the company. A good businessman recognizes his own skills and weaknesses and respects the strengths of his team. A person should not allow his weaknesses to prevent him from moving up the career ladder. An entrepreneurial team, not just one person, often leads a business to success. It is important to surround yourself with colleagues who can contribute to the overall goal and have complementary skills when starting your business. The formation of an entrepreneur spirit can be effectively developed with important skills necessary for business success.

Fayolle and Gailly (2015) has discovered that the effects of entrepreneurship courses greatly increase the intentions of student entrepreneurs. This effect is more pronounced when the education includes practical components such as business plan development and real-world project work. Martin et al. (2013) demonstrated that students who undergo entrepreneurship education exhibit higher levels of creativity, risk-taking, and problem-solving. Nabi et al. (2017) have found that graduates of entrepreneurship programs are more likely to establish prosperous companies and support them over time compared to those without such training. According to a study by Kuratko (2020), regions with higher levels of entrepreneurship education see increased innovation and higher rates of creating new businesses, which stimulates economic development.

Skill Development

The Swedish International Development Cooperation Agency (SIDA, 2018) defined skills development as the creative qualities acquired at all stages of education and training that take place in formal, non-formal, and informal contexts and the workplace. This allows people to participate in their livelihood completely and productively, allowing adjusting their skills in connection with the needs and abilities of the economy and labor markets. Skill development is affected by various variables, such as training environment for training and effective training systems for a lifetime. Research to date supports the idea that effective long-term skills development and career engagement strategies should help people improve their job skills while building long-term systems to enhance private sector competitiveness.

It is a procedure for determining skill gaps and making sure the individual develops these skills (Leadership Consulting, 2019). The ability of a person to carry out plans and achieve personal objectives can be influenced by his or her skills. Organizations that support skill development typically have a more productive workforce because they have a more skilled workforce.

Swedish International Development Cooperation Agency (SIDA, 2018) defined skill development as the creative qualities acquired through all stages of education and training that take place in official, informal, non-formal, and on-the-job contexts. It gives people the ability to engage fully and productively in their livelihoods and to adjust their skills to the shifting needs and opportunities of the economy and labor market. These skills development is influenced by various variables, including a supportive learning environment and an effective

system of lifelong learning. Prior research supports the idea that effective, long-term strategies for skill development and job engagement should help people enhance their professional skills while also creating a long-term system for increased private sector competitiveness.

The World Bank Group (2022) claims that skill development can support structural change and economic expansion by boosting present and future workers' acceptability, labor competitiveness, and productivity. Investment in a person's skill development results in a high-quality workforce, which in turn boosts productivity and promotes the competitiveness of both the present and the future workforce.

Some researchers have identified a link between entrepreneurship education and skills development. Nabi et al. (2017) emphasized that EE programs often incorporate practical training in areas such as accounting, marketing, and operations management, providing students with the technical knowledge needed to run a business. Jones and English (2004) noted that entrepreneurship education significantly enhances soft skills, which are essential for effective leadership and collaboration in entrepreneurial ventures. Gielnik et al. (2015) found that students who received entrepreneurship training showed higher levels of creative thinking and innovation, which are essential for entrepreneurial success in a competitive market.

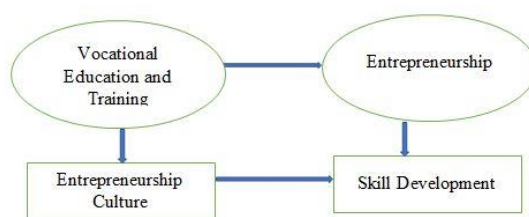


Figure 1

Conceptual Model Representing the Influence of Vocational Education and Training on Entrepreneurship Culture and Skill Development

Source: (Authors Own Creation)

This model recapitulates the influence of vocational education and training (VET) on entrepreneurship. VET serves as an independent variable and proxy for entrepreneurship culture. On the other hand, entrepreneurship represents the dependent variable and proxy to skill development. The pairwise combination of the independent and dependent variables explains the relationship between them in this model.

Theoretical Framework

The Cultural Theory of Entrepreneurship, proposed by Cochran Thomas in 1965, served as the foundation for this study. The Cultural Theory of Entrepreneurship, proposed by Cochran Thomas in 1965, posits that entrepreneurial behavior is significantly influenced by the cultural environment in which an individual is embedded. One of the key assumptions is that culture shapes individuals' values, attitudes, and behaviors, thereby affecting their propensity to engage in entrepreneurial activities. According to Cochran, societal norms, beliefs, and values play a crucial role in fostering or hindering entrepreneurial spirit. Another assumption is that different cultures have varying degrees of support for entrepreneurial activities, which can be reflected in their tolerance for risk, innovation, and competition. This theory also assumes that cultural capital, which includes education, social networks, and familial influence, is integral to the development of entrepreneurial intentions and capabilities (Cochran, 1965).

According to Pawar (2013), the performance of an entrepreneur is linked to factors such as attitude, societal role expectations that are held by sanctioning groups, and operational requirements of the job he/she is engaged with. The expectations of investors and the attitudes of potential business owners are culturally determined.

The relevance of Cochran's Cultural Theory of Entrepreneurship lies in its ability to explain the disparities

in entrepreneurial activities across different regions and societies. This theory highlights the importance of understanding cultural contexts when designing policies and interventions aimed at promoting entrepreneurship. For instance, it suggests that fostering an entrepreneurial culture through education, media, and public policy can significantly enhance the entrepreneurial ecosystem (Liñán & Chen, 2009). Additionally, in today's globalized world, where cross-cultural interactions are frequent, this theory provides valuable insights for multinational corporations and international development agencies in their efforts to stimulate entrepreneurship in diverse cultural settings. It underscores the need for culturally tailored strategies to nurture entrepreneurial talent and drive economic development (Hayton, George, & Zahra, 2002).

Despite its contributions, the Cultural Theory of Entrepreneurship has faced several criticisms. One major criticism is its determinism, as it tends to overemphasize the role of culture in shaping entrepreneurial behavior while downplaying other factors such as economic conditions, political stability, and individual agency (Gartner, 1988). Critics argue that this theory does not sufficiently account for the dynamic and multifaceted nature of entrepreneurship, where multiple factors interact to influence entrepreneurial outcomes. Another criticism is the difficulty in empirically testing and measuring cultural variables, which can be abstract and subjective. This makes it challenging to establish clear causal relationships between culture and entrepreneurship (Hofstede, 2001). Additionally, the theory has been critiqued for its potential to reinforce stereotypes and overlook the diversity within cultures, thereby failing to recognize the individual differences and entrepreneurial potential that exist within any given cultural context (Aldrich & Zimmer, 1986).

The cultural theory of entrepreneurship is relevant to the study objective because entrepreneurial culture enhances skill development among Nigerian undergraduate students.

Empirical Review

Some researchers have evaluated the impact of vocational education and training on entrepreneurship within the Nigerian educational system. This has produced positive and negative results in the literature. Some of the studies reviewed in both Nigeria and the rest of the world are stated below.

Munyoro, Makota, and Tanhara (2016) examined the Significance of Entrepreneurial Culture in Zimbabwean Vocational Training Centers. Parents, students, and instructors from the Mupfure Vocational Training Center in Chegutu made up the study population. 500 respondents were given a structured questionnaire utilizing a straightforward random and judgmental sampling technique. To provide results, SPSS was used to statistically test and evaluate the primary data. The results showed that the promotion of an entrepreneurial culture fosters the innovation and creativity necessary for the growth of new businesses and the economy.

Olsson, Bernhard, Arvemo, and Lundh-Snis (2021) Conducted a Study on a Conceptual Model for University-Society Research Collaboration Facilitating Societal Impact on Local Innovation. The goal is to create a work-integrated learning (WIL) model for university-society research partnership that would facilitate societal effect for local innovation with a short lag but lasting societal influence. Data gathering was done using a mixed-methods technique to get results. The results showed that societal changes with short latencies had a higher impact on product and process innovations.

Essia (2012) researched the relationship between formal education programs and entrepreneurial culture in Nigeria. The study used a comparative analytical method to ascertain how culture affects higher education. The results showed that formal educational programs enhance the entrepreneurial culture in higher education.

In addition, Usman, Dabo, Garba, and Yakubu (2019) investigated the effects of entrepreneurship and vocational training on students' employability in a few Nigerian colleges of education. Out of 1740 persons, 286 were randomly selected as part of the sample. The study's target group consisted of graduates from training facilities such as Aminu Saleh College of Education in Azare, Bauchi State, Federal College of Education in Pokiskum, Yobe State, and Federal College of Education in Gombe State, both in the Northeast. The instrument for

data gathering was a survey design. The distribution of the survey used simple stratified random sampling procedures. To test the study hypotheses, descriptive statistics-percentage, mean, standard deviation, and chi-square were used. Results showed that personality traits and business skills had a beneficial impact on graduates' employment.

Gilbert and Constantine (2015) researched how university curricula in Kenya can promote entrepreneurship. The research used a descriptive survey methodology. About 4,495 individuals from 6 recognized universities in Kenya made up the study's overall population. The hypothesis was examined using descriptive statistics. Results indicated that entrepreneurship is encouraged by university curricula.

Research Gap

Kumar (2020) listed some study gaps in addition to population, analysis, implications, methodologies, conceptual framework, and theoretical framework. Earlier studies by Munyoro, Makota, and Tanhara (2016) examined the Significance of Entrepreneurial Culture in Vocational Training Centres in Zimbabwe; Essia (2012) studied the relationship between entrepreneurial culture and formal education programs in Nigeria; Usman, Dabo, Garba, and Yakubu (2019) assessed the impact of entrepreneurship and vocational education on the employability of students in a selected college of education in Nigeria; Gilbert and Constantine (2015) examined the function of university curricula in fostering entrepreneurship in Kenya; and the current study seeks to find out how vocational education and training contributes to entrepreneurship culture in Nigerian Education Sector. Previous research has been conducted elsewhere in the world. None of these studies explored the influence of vocational education training on entrepreneurship culture and skills development in tertiary institutions in Nigeria. This is the gap the study intends to fill.

RESEARCH METHODOLOGY

Research Design

To fulfill the study's goal, a correlation survey design and structured questionnaire were used to achieve the study's main objective. With the help of a structured questionnaire, the researcher collected data and tested the hypothesis on the relationship between entrepreneurship culture and skill development. The researcher reported what occurred in the field impartially and objectively with the aid of the research design.

Model Specification

To test the research hypothesis on the impact of vocational education and training on entrepreneurial culture, the following model was used below.

$$Y_{it} = \alpha + \beta_0 X_{it} + \mu_{it} \text{----- Equation 1}$$

Where Y_{it} is the dependent variable (ENC represents entrepreneurship culture)

B_0 = Intercept

X_{it} = Independent variable (SDV denoted as skill development)

μ_{it} = Error terms.

i = number of firms

t = number of periods

The model is further specified as.

$$Y_{ENC} = \alpha + \beta_0 X_{SDV} + \mu_{it} \text{-----Equation 2}$$

The Population of the Study

The researcher has narrowed his focus to Federal tertiary institutions in Southeast Nigeria. To make this study more research-oriented, the targeted demographics are pursuing entrepreneurship in their third year. The total number of participants comprised of 5,437 university students. A statistical calculation resulted in a sample size of 373. The survey's participants were chosen using a simple random sample technique. Every item in the population has a chance to be chosen using this strategy. This suggests that every department and faculty member at the

university will be chosen for and represented in the survey.

Sample Size

Statistical analysis was used to calculate the sample size using the Taro Yamane formula (1967) for a finite population. The formula is written as follows mathematically:

$$n = \frac{N}{1+N \cdot (e)^2}$$

Where n = sample size; N= Population size
e = Level of precision or error (0.05)

$$n = \frac{N}{1+N \cdot (e)^2}$$

$$n = \frac{5,437}{1+5,437 \cdot (0.05)^2} = 372.589 = 373$$

Sampling Technique

A statistical calculation resulted in a sample size of 373, the survey's participants were chosen using a simple random sample technique. Every item in the population has a chance to be chosen using this strategy. This suggests that there is a chance for every sample to be chosen and included in the survey.

Instrument of Data Collection

With the help of a standardized questionnaire as the data collecting tool, primary data was sourced. It was gathered from a survey conducted with a five-point Likert scale. Strongly Agree (SA) was given a rating of 5, Agree (AG) was given a rating of 4, Undecided (UN) was given a rating of 3, Disagree (DA) was given a rating of 2, and Strongly Disagree (SD) was given a rating of 1.

Validity and Reliability of the Instrument

Face and content validity were carried out for the aim of this study with the assistance of experts for close inspection. Once more, they were instructed to assess the instrument's items considering the study's goals and determine whether they were both facet and content valid Table 1. It was given to the participants based on how relevant the tool.

Six volunteers were used in a pilot test to gauge the instrument's potency. In this study, the reliability of test outcomes was investigated using Cronbach's Alpha technique. According to Cronbach's (1979) suggestions, the result is considered acceptable when the alpha test result is between the level of 60% and higher.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.86	0.861	6

Method of Data Analysis

The Pearson Product Moment Correlation Coefficient was used to examine the research objective. Finally, if the p-value is less than 0.05, the null hypothesis (H0) is rejected, and if the p-value is larger than 0.05, the alternate hypothesis (HA) is accepted.

DATA PRESENTATION AND DISCUSSION OF FINDINGS

Data Presentation

The specific objective is to evaluate how entrepreneurship culture influences skill development among students in tertiary institutions Table 2. Statistical Package on Social Science (SPSS Version 20) was used to tabulate, process, and analyze the information gleaned from the survey questions. Only 342 of the 373 copies of the questionnaire given to the respondents were completed and returned, and the other 18 were not used in the analysis.

Item	Frequency	% of Questionnaire
Returned Questionnaire	342	91.7
Unreturned Questionnaire	31	8.3
Total number of questions administered	373	100

Analysis of Research Question

What effect do entrepreneurial cultures have on the skill development of students Table 3, Table 4?

S/N	Items	AG	UN	DA	SD	Total
A	Entrepreneurship Culture					
1	I feel passionate about doing my own business.	158	3	6	2	342
2	I have a clear idea of the business I am doing.	157	2	2	0	342
3	Often, I seek new ideas from people to find alternate means of solving problems.	163	5	4	2	342
4	I am dedicated to my business, and it pays me well.	173	3	2	2	342
5	I have developed multiple business outlets which allow me to increase my market share and profitability.	172	4	1	2	342
B	Skill Development					
1	Most times, I brainstorm with	168	9	1	0	342

	peers to gain new insight.					
2	The knowledge I have gained so far is relevant to my present line of business.	163	4	3	1	342
3	I can handle stress and pressure from this business even though it is quite stressful.	163	9	1	1	342
4	Most times, I feel so enthusiastic each time I learn new things.	167	3	6	2	342
5	I have the passion to take on a range of tasks and offer help to my clients.	169	1	8	1	342

Table 4 TEST RESULT OF PEARSON MOMENT CORRELATIONS		
	SDV	ENC
SDV	1	.948**
		0
	342	342
ENC	.948**	1
	0	
	342	342
Source: (SPSS Version 20).		
**. Correlation is significant at the 0.01 level (2-tailed).		
SDV represents Skill Development		
ENC represents Entrepreneurial Culture.		

Decision Rule

If the p-value is less than 0.05, reject the null hypothesis (H0), but accept the alternate hypothesis (HA). The conclusion of the hypothesis test utilizing the Pearson Product Correlation approach is established in Table 4 above. The null hypothesis, which claims that entrepreneurial culture does not contribute positively to the skill development of students, was therefore rejected because the p-value (000) is bigger than the critical value (0.05), which supports the alternate hypothesis that entrepreneurial culture contributes positively to the skill development of students.

FINDINGS AND DISCUSSIONS

This study uses the Federal University of Technology Owerri in Imo State, Nigeria, to assess the impact of vocational education and training on entrepreneurship. The Pearson Correlation Method was also used to evaluate and analyze the alternative hypothesis. The test showed that there is a strong association between the independent

and dependent variables. According to this study, there has been a (+1) unit improvement in skill development training due to a 0.948-unit improvement in entrepreneurial culture among university students. This showed that students' culture of entrepreneurship is fostered via skill development courses.

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

An overview of the results is stated in the following:

The results of the research hypothesis test revealed that the culture of entrepreneurship influences skill development among students of tertiary institutions. According to the Pearson product correlation coefficient test,

$$r = 0.948, N = 342, \text{ and } P = 0.000.$$

CONCLUSION

The study concludes that the culture of entrepreneurship promotes skill development among college students. This finding is in line with the results of Munyoro, Makota, and Tanhara (2016), who demonstrated that the encouragement of an entrepreneurial culture supports the innovation and creativity required for the expansion of new firms and the economy. The findings also agree with the study by Bosma et al. (2012) which shows that societies with a strong entrepreneurship culture promote risk-taking, innovation, and proactive behaviors among individuals. The findings agree with the study by Autio et al. (2014) which posits that the long-term success of businesses is often influenced by the entrepreneurial culture prevalent in a society. Considering the above, the study establishes that entrepreneurial culture enhances the skill development of students in tertiary education in Nigeria.

Recommendations

Based on the conclusions, the recommendations are made below.

- The administration of the Federal University of Technology is urged to encourage staff training to help them improve their knowledge of and proficiency with ICT tools. Student performance and efficient and effective structural delivery methods will both benefit from manpower development.
- It is suggested that Nigerian tertiary schools equip their labs with advanced tools, machines, and equipment in specialized fields that are practical to help students develop abilities relevant to the industry for a given career.
- The promotion of academic standards and university rankings depends on quality assurance; management should establish a disciplinary committee to keep an eye on the caliber of lectures provided to students and to ensure discipline-specific compliance. This will help the tertiary institution achieve high-performance standards.
- To promote the technology and knowledge transfer required for socioeconomic development, the government is encouraged to support private-public collaboration between large enterprises and universities. This would make it possible for business professionals, academics, and specialists in the field to work together, particularly in the areas of research, innovation, and development, which will in turn lead to the growth of the Nigerian economy through creativity, innovation, and invention.

Further Research

To generalize findings, future researchers are recommended to fill the vacuum by investigating additional tertiary institutions in South-East Nigeria. The paper suggests that future academics should focus on formal education and student innovation in South-East Nigerian colleges and universities.

Practical Implications of the Study

The university administration would benefit from this study in developing suitable course syllabi for entrepreneurial studies in their institutions. This research would help undergraduate students cultivate an

entrepreneurial mindset and the employability skills necessary to find profitable employment and become independent in the future.

REFERENCES

- Aldrich, H., & Zimmer, C. (1986). Entrepreneurship through social networks. In D. L. Sexton & R. W. Smilor (Eds.), *The Art and Science of Entrepreneurship*, Ballinger Publishing Company.
- Autio, E., Pathak, S., & Wennberg, K. (2014). Regional innovation systems and the formation of entrepreneurial intent. *Regional Studies*, 47(5), 810-828.
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The Relationship Between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review. *Entrepreneurship Theory and Practice*, 38(2), 217-254.
- Bosma, N., Schött, T., Terjesen, S., & Kew, P. (2012). *Global Entrepreneurship Monitor 2012 Extended Report: Entrepreneurs and Entrepreneurial Employees Across the Globe*. Global Entrepreneurship Research Association.
- CEDEFOP, European Centre for the Development of Vocational Training, (2011). *The Benefits of Vocational Education and Training*. Research Paper N0 10, 2011, Luxembourg European Union.
- Cedefop. (2017). *Skill needs anticipation: Systems and approaches*. Analysis of stakeholder survey on skill needs assessment and anticipation in Europe. Cedefop Research Paper No. 65.
- Chandra, C. (2022). *Why Curiosity Is the Most Important Trait an Entrepreneur Can Have*.
- Cochran, T. C. (1965). The Cultural Theory of Entrepreneurship. In *Economic History and the Modern Economist*.
- Doak, M. J. (2020). *What is Vocational Training?* Retrieved on July 02,
- Eichhorst, W., Hinte, H., Rinne, U., & Tobsch, V. (2015). How big is the gig? Assessing the preliminary evidence on the effects of digitalization on the labor market. *IZA Policy Paper No. 117*.
- Essia, U. (2012). Entrepreneurial Culture of Formal Education Programmes in Nigeria. *Journal of Sustainable Society*, 1 (2), 2012, 52-62.
- European Union (EU, 2021). *Why is Vocational Education and Training Important?*
- European Union, (N.D). *Entrepreneurial Culture*.
- Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75-93.
- Gartner, W. B. (1988). Who is an entrepreneur? is the wrong question. *American Journal of Small Business*, 12(4), 11-32.
- Gielnik, M. M., Frese, M., Graf, J. M., & Kampschulte, A. (2012). Creativity in the opportunity identification process and the moderating effect of diversity of information. *Journal of business venturing*, 27(5), 559-576.
- Gilbert, M. N., & Constantine, N. (2015). Role of University Curricula in Promoting Entrepreneurship in Kenya. *ICABUMPA-IN4IN Conference*, 2-9.
- Greene, V. (2020). *The Role of Higher Education in Nurturing Entrepreneurship*, 2017.
- Hanushek, E. A., Schwerdt, G., Woessmann, L., & Zhang, L. (2017). General education, vocational education, and labor-market outcomes over the lifecycle. *Journal of Human Resources*, 52 (1), 49-87.
- Hayton, J. C., George, G., & Zahra, S. A. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship Theory and Practice*, 26 (4), 33-52.
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*. SAGE Publications.
- Jeff, C. (2011). *Building an Entrepreneurial Culture*.
- Jones, C., & English, J. (2004). A contemporary approach to entrepreneurship education. *Education + Training*, 46(8/9), 416-423.
- Kuczera, M., Field, S., & Windisch, H. C. (2018). *Building Skills for All: A Review of England*. OECD Publishing.
- Kumar, D. M. (2020). *Journey through research gaps*. *White paper*.
- Kuratko, D. F. (2005). The emergence of entrepreneurship education: development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29, 577-598.
- Leadership Consulting (2019). *What is Skill Development and Training?*
- Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617.
- Liñán, F., Nabi, G., & Krueger, N. (2011). Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain. *Entrepreneurship & Regional Development*, 25(3-4), 187-215.
- Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28 (2), 211-224.
- McGrath, S. (2018). What is the point of vocational education and training (VET)? A philosophy of VET. *Journal of Vocational Education & Training*, 70(2), 150-166.

- Munyoro, G., Makota, B., & Tanhara, J. R. (2016). The Significance of Entrepreneurial Culture in Vocational Training Centres: A Case Study of Mupfure Vocational Training Centre, Mashonal and West Zimbabwe. *International Journal of Research in Business Management*, 4 (10), 55-70.
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277-299.
- Najm, M. (2020), *The Importance of Entrepreneurship*.
- Olsson, A. K., Bernhard, I., Arvemo, T., & collaboration facilitating societal impact for local innovation. *European Journal of Innovation Management*, 24 (4), 1335-1353.
- Praveena, C., Martin, T., & Maryanne, L. (2020). Innovation education programs: a review of definitions, pedagogy, frameworks, and evaluation measures. *European Journal of Innovation Management*, 24 (4), 1268-1291.
- Psacharopoulos, G., & Patrinos, H. A. (2020). A decimal review of global literature. *Policy Research Working Paper*, 8402.
- Rideout, E. C., & Gray, D. O. (2013). Does Entrepreneurship Education Work? A Review and Methodological Critique of Empirical Literature on the Effects of University-Based Entrepreneurship Education. *Journal of Small Business Management*, 51(3), 329-351.
- Schaferhoff, N. (2014). *The Benefits of Vocational Training for Employees, 2014*, SIDCA, Swedish International Development Cooperation Agency, Definition of Skills Development (SIDCA, 2018).
- Sushant, M. (2021). *Definition of Entrepreneurship, 2021*
- The Work Bank Group, *Skill Development*, (2022).
- Usman, H., Dabo, B. H., Garba, S. B., & Yakubu, M. A. (2019). Impact of Entrepreneurship, Vocational and Technical Education on National Certificate of Education Graduating Students to be Self-employed in Some Selected Colleges of Education Nigeria in the Northeast, Nigeria. *European Journal of Business and Management*, 11 (30), 44-54.
- Walter, S. G., & Dohse, D. (2012). Why mode and regional context matter for entrepreneurship education. *Entrepreneurship & Regional Development*, 24(9-10), 807-835.
- Wickham, P. A (2019). *Strategic Entrepreneurship, Fourth Edition*. England, United Kingdom: Pearson Education Limited.

Received: 21-Apr-2024, Manuscript No. AEJ-24-14894; **Editor assigned:** 24-Apr-2024, PreQC No. AEJ-24-14894 (PQ); **Reviewed:** 09-May-2024, QC No. AEJ-24-14894; **Revised:** 14-May-2024, Manuscript No. AEJ-24-14894 (R); **Published:** 21-May-2024