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Sustainable Entrepreneurship for Optimal Productivity in the World of Work Among VTE Practitioners in Nigeria

¹Nungse, Nuhu Iliya & ²Sagbara, Dornubari Stella

¹Technical Education Department, Federal University of Education Pankshin, Plateau State Nigeria, ²Home Economic Department, Federal University of Education Pankshin, Plateau State Nigeria

Abstract

The study investigated the level of awareness and impact of sustainable entrepreneurship on Vocational and Technical Education (VTE) students and graduates. A descriptive survey design was adopted for the study. A total of 138 VTE students and 26 VTE graduates who are practicing entrepreneurship activities related to vocational practices in small and medium enterprises since graduation were enrolled. A self-structured questionnaire was used to elicit response from respondents. The validity was ensured through experts in accounting and business education departments. The cronbach alpha method of reliability was employed and a coefficient of 0.80 was obtained. Data collected were analyzed using descriptive statistics of means and standard deviation to answer the research questions while inferential statistics of t-test was used to test the hypotheses at 0.05 level of significance. The study's results showed that there is no statistical significant difference in the mean scores of TVE students on the awareness about sustainability entrepreneurship. However, there is a positive impact on business practices, innovation, and competitiveness from the cluster mean of 3.01. There is also a negative impact on the overall impact of sustainability on business performance from the Cluster Mean of 2.98. There is no significant differences in the level scores of VTE student and graduates on awareness about sustainable entrepreneur. The findings of the study can be used to inform policies and practices that promote sustainability and support the development of sustainable businesses.

*Corresponding Author:

Nungse, Nuhu Iliya, Department of Technical Education, Federal University of Education Pankshin, Plateau State Nigeria. Email: nnungse97@gmail.com

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Introduction

Education is a vital tool for social change as well as personal development. A person with education must be able to behave and think responsibly. Fasae and Adeosun (2021) suggest that positive social transformation is likely associated with the development of better

citizens, as education elevates the general standard of life within a society and improves citizens. Considering the correlation between more education and increased earnings and, eventually, a greater national income, it would make sense that as more people become educated, the nation's wealth will rise in tandem with the

acquisition of relevant skills (Mindell & Reynolds, 2023) for example. Therefore, for vocational and technical education (VTE) students and graduates to be self-sufficient, VTE must be practicable at all institutions of VTE (Okolie, Nwajiuba, Eneje, B., Binuomote, Ehiobuche, & Hack-Polay, 2021).

Vocational and Technical Education plays a major role in the economic development of a nation. According to Saeed, Gull, and Altaf (2022), a society's ability to function is directly impacted by its population's level of education and skill. Consequently, these talented people will probably open the door for a sustainable economy in society. Dewey, (2024) substantiated that the expansion of vocational and technical education is critical to helping students reach their full potentials.

The main components of VTE include home economics, business, fine and applied arts, agriculture education, and technical education. These programs are designed to prepare students academically and vocationally for careers in applied science and modern technology (Owais, Alabidi, Hatamleh, & Hussein, 2020). Thus, the focus of this study is the VTE students and graduates. Owais, et. al. (2020) claim that vocational education gives students the chance to learn new skills that will help them advance in their careers. VTE is therefore, the type of education that makes a significant contribution to a nation's economic development (Giatman, Syah, & Hidayat, 2023). Following graduation, VTE students who have received the necessary training to develop their entrepreneurial skills will undoubtedly be able to sustain their business after graduation.

The majority of VTE graduates work as craftspeople in metropolitan areas, performing tasks including welding, carpentry, electrical and electronic maintenance, cooking, painting and decorating, computer services, and masonry. Students must be instilled with an entrepreneurial attitude during their school years in order to prepare them for any trade they may choose to pursue after graduation that would support them financially. Entrepreneurship development, according to Ezenwakwelu, Egbosionu, and Okwo (2019), is the process of enhancing entrepreneurial knowledge and skills through

planned training and initiatives meant to create institutions. Growth, potential, and innovation are the main focuses of entrepreneurship development (Leonidou, Christofi, Vrontis, & Thrassou, 2020). According to Dolan and Rajak (2018), entrepreneurship is the process of taking advantage of the chance to protect one's future while simultaneously providing a job and a means of subsistence for others. As a result, graduates should begin immediately rather than waiting for the ideal time, which is now. According to studies, graduates lack the abilities needed in the workplace. Fasae and Adeosun observed that the Nigerian educational system previously paid little attention to entrepreneurship instruction because dwindling and modular approaches were used. As a result, just a few individuals and higher education institutions expressed interest.

The few who expressed interest misunderstood entrepreneurship and taught it didactically in the same way that other broad courses can or should be taught, i.e., listen and take notes. Previously, most schools taught entrepreneurship in theory. Okoli and Azhi (2015) remarked that the country's unemployment rate is rising since our educational system was designed in the past to prepare students for white collar jobs. It is comparable to what is now available in the workplace. Most graduates today are solely concerned with government-paid employment and have forgotten the importance of blue-collar jobs. The place of sustainable enterprise is thus compromised. This is actually the concern of this study as to whether the students and graduates of VTE are aware of sustainable entrepreneurship and how sustainable entrepreneurship has influenced TVE students and graduates' approach to innovation and competitiveness in entrepreneurship practice for self-sustainability in the world of work.

Statement of the Problem

Students and graduates of VTE are supposed to be aware of sustainable entrepreneurship and how sustainable entrepreneurship has influenced their approach to innovation and competitiveness in entrepreneurship practice for self-sustainability in the world of work. The educational curriculum

seems not to balance theoretical training with skill acquisition for self-reliance.

After graduation from tertiary institutions, students of Vocational and Technical Education are not expected to stay at home, expecting non-existing white-collar jobs. This is because VTE is the education for the acquisition and development of skills and competencies, attitudes and attributes which are necessary for efficiency of the economic system. It is an aspect of education that is pupated to help individuals to acquire saleable skills which will enable them fit into various business organizations or be self-employed in the absence of paid employment.

Unfortunately, it seems VTE students and graduates' level of awareness of sustainable entrepreneurship for self-sustainability upon graduation is low. Hence the need for this study to ascertain the TVE students and graduates' level of awareness about sustainable entrepreneurship and how sustainable entrepreneurship has influenced TVE students and graduates' approach to innovation and competitiveness in entrepreneurship practice for self-sustainability in the world of work.

Purpose of the studies

The purpose of the study was to:

1. Describe TVE students and graduates' level of awareness about sustainable entrepreneurship
2. Ascertain how sustainable entrepreneurship has influenced TVE students and graduates' approach to innovation and competitiveness in entrepreneurship practice
3. Assess how sustainable entrepreneurship has impacted TVE students and graduates' ability to respond to changing market trends and customer needs

Research questions

The following research questions guided the study:

1. What is the level of awareness of TVE students and graduates about sustainable entrepreneurship?
2. How has sustainable entrepreneurship influenced TVE students and graduates'

approach to innovation and competitiveness in your VTE practice?

3. What is the impact of sustainable entrepreneurship on TVE students and graduates' ability to respond to changing market trends and customer needs?

Research Hypotheses

Ho₁: There is no significance difference in the mean scores of TVE students and graduates on the level of awareness about sustainable entrepreneurship

Methodology

Descriptive survey research design was adopted for the study. The population for the study was 138 which consisted of 112 VTE students and 26 VTE graduates who are practicing entrepreneurship related to vocational in small and medium enterprises since graduation. The graduates are those practicing the skills related to Technical Education and Home Economics only in the urban cities of North central Nigeria. The entire population was used, hence total sampling technique was used. The questionnaire was rated on a four-point adapted Likert scale of Strongly Agree (SA) = 4; Agree (A) = 3; Disagree (D) = 2 and Strongly Disagree (SD) = 1. The items with values of 2.50 and above are considered agree while values below 2.50 are considered disagree. They inturn mean positive and negative impact respectively. The questionnaire contained 19 items to ascertain the level of preparedness and entrepreneurship consciousness of accounting students and graduates in facing unemployment challenges. The validity was ensured through experts in accounting and business education departments. The cronbach alpha method of reliability was employed and a coefficient of 0.80 was obtained. Data was administered and collected within one week with the help of three research assistants who have been practicing entrepreneurship for more than five years in the study area. Data collected were analyzed using descriptive statistics of means and standard deviation to answer the research questions while inferential statistics of t-test was used to test the hypotheses at 0.05 level of significance.

Findings of the Study

The findings of the study is presented in the Tables below.

Research Question 1: What is the level of awareness of TVE students and graduates about sustainable entrepreneurship?

Table 1: Mean and standard deviation of the level of awareness of TVE students and graduates about sustainable entrepreneurship

S/N	Item statement	\bar{x}	SD	Dec
01	I have a good understanding of sustainable entrepreneurship and its benefits.	3.05	.82	A
02	I have a basic understanding of sustainable entrepreneurship, but I need more information.	3.26	.74	A
03	I have heard of sustainable entrepreneurship, but I don't know much about it.	3.46	.62	A
04	I have never heard of sustainable entrepreneurship.	2.34	.89	D
05	I have a good understanding of the benefits of sustainable entrepreneurship	3.38	.66	A
Cluster Mean		3.10	.75	A

N.B. SD = Standard Deviation; A = Agree; D = Disagree; Dec = Decision

Result of table 1 revealed that most respondents have a basic understanding of sustainable entrepreneurship (item 02), but need more information. Some respondents have a good understanding of sustainable entrepreneurship and its benefits as in item 01 and 05 while a few respondents have never heard of sustainable

entrepreneurship as per item 04. The overall understanding of sustainable entrepreneurship is moderate as evident in the Cluster Mean of 3.10.

Research Question 2: How has sustainable entrepreneurship influenced TVE students and graduates' approach to innovation and competitiveness in your VTE practice?

Table 2: Mean and Standard Deviation of how sustainable entrepreneurship has influenced TVE students and graduates' approach to innovation and competitiveness in your VTE practice

S/N	Item statement	\bar{x}	SD	Dec
01	Sustainable entrepreneurship has encouraged me to develop new products/services	3.12	.80	A
02	Sustainable entrepreneurship has helped me to improve my business model	3.11	.92	A
03	It has increased my use of technology	3.45	.72	A
04	It has not enhanced my marketing strategies	2.37	.99	D
Cluster Mean		3.01	.86	A

N.B. SD = Standard Deviation; A = Agree; D = Disagree; Dec = Decision

The result of Table 2 suggest that sustainable entrepreneurship has encouraged respondents to develop new products/services as in item 01 and improve their business model as in item 02. It has also increased their use of technology as evident in item 03 as well as enhanced their marketing strategies (item 04) since the response was disagree. The overall impact of sustainable entrepreneurship on

business practices is positive based on Cluster Mean of 3.01. In this case, the standard deviations range from .72 to .99, indicating a moderate to high level of variability in responses

Research Question 3: How has sustainable entrepreneurship impacted TVE students and graduates' ability to respond to changing market trends and customer needs?

Table 3: Mean and Standard Deviation of how sustainable entrepreneurship impacted TVE students and graduates' ability to respond to changing market trends and customer needs

S/N	Item statement	\bar{x}	SD	Dec
01	Improved my ability to adapt to change	3.27	.45	A
02	Enhanced my responsiveness to customer needs	3.23	.64	A
03	Increased my ability to innovation	2.72	.94	A
04	It has not improved my rate of return rate	2.23	.99	D
05	It has exposed me new trends in market segmentation	3.46	.62	A
Cluster Mean		2.98	.91	A

N.B. SD = Standard Deviation; A = Agree; D = Disagree; Dec = Decision

The result of Table 3 suggest sustainable entrepreneurship has improved respondents' ability to adapt to change as seen in item 01 and responsiveness to customer needs as in item 02. It has also increased their ability to innovate as seen in item 03, although to a lesser extent. While it has improved their rate of return according to item 04. Sustainable entrepreneurship has similarly exposed respondents to new trends in market segmentation as per item 05. The overall

impact of sustainable entrepreneurship on business performance is positive from the Cluster Mean of 2.98. In this case, the standard deviations range from .45 to .99, indicating a moderate to high level of variability in responses

Ho₁: there is no significance difference in the mean scores of TVE students and graduates on the level of awareness about sustainable entrepreneurship.

Table 4: Summary of T-test for mean scores of TVE students and graduates on the level of awareness about sustainable entrepreneurship

		Levene's test for Equality of variance		T	Df	Sig. (2-tailed)	t-test for Equity of Means Mean Std Error Difference Differences	95% Confidence Interval of the Difference	
		F	Sig.					Lower	Upper
Level of awareness	Equal variances assumed	0.096	.758	-.740	136	.464	-.108 .147	-.407	.189
	Equal variances not assumed			-.657	6.41	.534	-.108 .165	-.508	.290

The Levene's test for equality of variances of Table 4 showed that the Sig. value $.75 > .05$. This means that the variances for the two groups (TVE students and Graduates) are the same. As such, the data does not violate the assumption of equal variance response for TVE students and Graduates on the level of awareness about sustainable entrepreneurship. Since the value in the Sig. (2-tailed) column $0.46 > .05$, there is a good reason to accept the hypothesis of no significant difference. It is therefore concluded

that there is no statistical significant difference in the mean scores of TVE students and graduates on the level of awareness about sustainable entrepreneurship

Discussion of Findings

The findings suggest that while some respondents have a good understanding of sustainable entrepreneurship and its benefits, others have a basic understanding and require

more information. This is consistent with recent studies that highlight the need for education and training in sustainable entrepreneurship (Sudarwati, 2022). Additionally, the fact that a few respondents have never heard of sustainable entrepreneurship underscores the importance of raising awareness about this concept (Johnson, & Schaltegger, 2020). The moderate level of understanding revealed by the Cluster Mean of 3.10 suggests that there is room for improvement in promoting sustainable entrepreneurship practices. This is in line with recent research that emphasizes the need for organizations to prioritize sustainability and social responsibility (Di Vaio, Hassan, Chhabra, Arrigo, & Palladino, 2022).

The findings in Table 2 indicate that sustainable entrepreneurship has had a positive impact on business practices, consistent with recent research that highlights the benefits of sustainable entrepreneurship for businesses (Emon & Khan, 2023). The encouragement to develop new products/services and improve business models aligns with studies that show sustainable entrepreneurship leads to innovation and competitiveness (Ishaq, Sarwar, Aftab, Franzoni, & Raza, 2024). The increased use of technology and enhanced marketing strategies also support recent findings on the role of sustainable entrepreneurship in driving digital transformation and marketing innovation (Daraojimba, Abioye, Bakare, Mhlongo, Onunka, & Daraojimba, 2023). The moderate to high level of variability in responses, indicated by the standard deviations, suggests that businesses may be at different stages of adopting sustainable entrepreneurship practices. This is consistent with recent research that highlights the importance of contextual factors, such as organizational size and industry, in influencing sustainable entrepreneurship adoption (Maheshwari, Kha, & Arokiasamy, 2023).

The findings in Table 3 indicate that sustainable entrepreneurship has had a positive impact on business performance, consistent with recent research that highlights the benefits of sustainable entrepreneurship for businesses (Yasir, Babar, Mehmood, Xie, & Guo, 2023). The improvement in adaptability and responsiveness to customer needs aligns with studies that show

sustainable entrepreneurship leads to increased agility and customer-centricity (Agarwal, 2024; Bennett, 2024). The increase in innovation, although to a lesser extent, supports recent findings on the role of sustainable entrepreneurship in driving innovation (Veronica, Alexeis, Valentina, & Elisa, 2020). The improvement in rate of return and exposure to new trends in market segmentation further highlight the positive impact of sustainable entrepreneurship on business performance. The moderate to high level of variability in responses, indicated by the standard deviations, suggests that businesses may be at different stages of adopting sustainable entrepreneurship practices, consistent with recent research (Bajdor, Pawełszek, & Fidlerova, 2021).

The results of the independent samples t-test show that there is no significant difference in the mean scores of TVE students and graduates on the level of awareness about sustainable entrepreneurship, as the Sig. (2-tailed) value (0.46) is greater than the alpha level (0.05). This suggests that the null hypothesis, which states that there is no significant difference in the mean scores, cannot be rejected.

Therefore, it can be concluded that there is no statistical significant difference in the level of awareness about sustainable entrepreneurship between TVE students and graduates. This finding is consistent with recent studies that suggest that education and training in sustainable entrepreneurship can have a positive impact on awareness and knowledge (Zahrani, 2022). However, it is important to note that the lack of significant difference may also be due to other factors, such as the quality of education and training programmes.

Conclusion

The study investigated the level of awareness and impact of sustainable entrepreneurship on Vocational and Technical Education (VTE) students and graduates. The findings suggest that while some respondents have a good understanding of sustainable entrepreneurship, others need more information. Sustainable entrepreneurship has had a positive impact on business practices, innovation, and

competitiveness. However, there is no significant difference in the level of awareness about sustainable entrepreneurship between VTE students and graduates. The study highlights the need for education and training in sustainable entrepreneurship to promote awareness and adoption. The study's findings are consistent with recent research that highlights the importance of sustainable entrepreneurship for businesses and the need for education and training in this area. The study's results can inform strategies for promoting sustainable entrepreneurship among VTE students and graduates, such as integrating sustainable entrepreneurship into the curriculum and providing training programs. Overall, the study contributes to the body of knowledge on sustainable entrepreneurship and its impact on VTE students and graduates. The study's findings can be used to inform policies and practices that promote sustainable entrepreneurship and

support the development of sustainable businesses.

Recommendation

The following major recommendations were asserted for researchers and policy makers' perusals:

1. There is the need for education and training in sustainable entrepreneurship to promote awareness and adoption in the higher institutions that practice VTE.
2. The study's results can inform strategies for promoting sustainable entrepreneurship among VTE students and graduates, such as integrating sustainable entrepreneurship into the curriculum and providing training programs.

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