

The Impact of Entrepreneurship Education on Unemployment Rate in The South East Nigeria

Ann Ngozi Ugobueze¹, Okwunmuo Victoria N²

¹Department of primary education, Nwafor Orizu College of Education Nsugbe, Anambra state, Nigeria

²Department of Early Childhood Education Nwafor Orizu College of Education, Nsugbe, Anambra state, Nigeria

Email: ngoziann609@gmail.com; chrisok222@gmail.com

ABSTRAK

Studi ini menyelidiki dampak pendidikan kewirausahaan terhadap tingkat pengangguran di wilayah Tenggara Nigeria. Studi ini mengungkap manfaat memperoleh pendapatan melalui wirausaha dari keterampilan kewirausahaan yang diperoleh menggunakan lima negara bagian yang membentuk wilayah Tenggara Nigeria yaitu Anambra, Imo, Ebonyi, Enugu, dan Negara Bagian Abia. Studi ini mengadopsi desain penelitian survei di mana kuesioner item yang divalidasi disebut pendidikan Keterampilan Kewirausahaan (ESE) akan dikembangkan sesuai dengan pertanyaan penelitian dan digunakan untuk memperoleh informasi tentang kategori populasi siswa di sekolah yang dipilih. Siswa SS3 yang dipilih dari lima negara bagian akan digunakan untuk penelitian ini. Statistik alfa Cronbach, regresi sederhana, dan uji-t akan digunakan untuk menganalisis data yang dihasilkan untuk penelitian ini. Hasil penelitian menunjukkan bahwa pendidikan kewirausahaan memiliki dampak yang signifikan terhadap pengurangan pengangguran di Nigeria Tenggara. Skor rata-rata tertinggi sebesar 3,47 mencerminkan pengaruh kuat keterampilan dalam mengidentifikasi kebutuhan pasar dan mengembangkan solusi. Peluang berjejaring ($M = 2,95$) dan pelatihan keterampilan praktis ($M = 2,94$) juga memberikan kontribusi positif. Namun, membekali individu untuk menciptakan bisnis ($M = 2,26$) dan memberdayakan pemuda untuk menciptakan lapangan kerja ($M = 2,33$) menunjukkan pengaruh yang lebih rendah. Analisis tersebut mengungkapkan bahwa meskipun pendidikan kewirausahaan secara signifikan mendukung kesiapan kerja pemuda, gender memainkan peran yang lebih substansial daripada usia dalam manfaat dan peluang yang dirasakan yang diciptakan melalui pendidikan kewirausahaan. Secara meyakinkan, penelitian tersebut menggarisbawahi peran penting pendidikan kewirausahaan dalam mempromosikan pemberdayaan ekonomi dan menyarankan rekomendasi kebijakan untuk memperkuat inisiatif pendidikan ini di Nigeria Tenggara.

Keyword: Pendidikan Kewirausahaan; Pendidikan; Pengangguran; Keterampilan; Sekolah Menengah

ABSTRACT

The study investigated the impact of entrepreneurship education on unemployment rate in the South Eastern region of Nigeria. It unfolds the benefit of acquiring income through self-employment of any acquired entrepreneurship skills using the five states that made up the South Eastern region of Nigeria which are Anambra, Imo, Ebonyi, Enugu, and Abia State. The study adopts a survey research design in which a validated items questionnaire termed the Entrepreneurship Skills (ESE) education would be developed in line with the research questions and used to elicit information on the categories of the population of students in the selected schools. The SS3 students selected from the five states would be used for the study. The Cronbach alpha statistics, the simple regression and the t-test would be used to analyze generated data for the study. The results showed that entrepreneurship education has a significant impact on reducing unemployment in Southeast Nigeria. The highest mean score of 3.47 reflects the strong influence of skills in identifying market needs and developing solutions. Networking opportunities ($M = 2.95$) and practical skills training ($M = 2.94$) also contribute positively. However, equipping individuals to create businesses ($M = 2.26$) and empowering youth to create jobs ($M = 2.33$) show lower influence. The analysis reveals that while entrepreneurship education significantly supports youth employment readiness, gender plays a more substantial role than age in the perceived benefits and opportunities created through

entrepreneurship education. Conclusively, the research underscores the critical role of entrepreneurship education in promoting economic empowerment and suggests policy recommendations to strengthen these educational initiatives in Southeast Nigeria.

Keyword; Entrepreneurship Education; Education; Unemployment; Skill; Secondary school

Corresponding Author:

Ann Ngozi Ugobueze,
Nwafor Orizu College of Education Nsugbe,
No. 1 college road, Abata, Nsugbe 432108, Anambra, Nigeria
Email: ngoziann609@gmail.com



1. INTRODUCTION

Education had been part and parcel of this country before Europeans brought in western form of education to the African West coast. In those days, children were taught by the adults about the works, survival skills, social activities and culture that prevailed in those days. Education is a discipline that is concerned with methods of teaching and learning in schools or school like environment. According to Okeke (2013) “real development involves the capacity and creative of people to transform effectively, natural resources of environment into goods and services through the imaginative and practical application of their creative talents and productive labour force”.

Unemployment has been an economic quagmire and social ill that has eaten deep into the economy of the nation. Graduates are mass-produced every year without job opportunities or adequate entrepreneurial skills which vis-à-vis has affected the national economy. Entrepreneurship education is therefore a pragmatic and viable approach for stimulating national development and stimulating rapid transformation for the nation. Entrepreneurship is therefore a programme that inculcates creative, innovative, productive and managerial skills needed in business enterprises for self-reliance and national development.

According to Ezekwereogu (2015), Entrepreneurship has emerged over the last two decades as arguably the most potent economy forces the world has ever experienced. Technology education in the same vein is undisputedly recognized as a catalyst for national development. It is a programme with practical knowledge and process related to technology. In the world of business today, entrepreneurship revolution has taken hold across the global. Ezekwereogu (2015) stated that entrepreneurship is more than the mere creation of business. Studies reveal that entrepreneurship education equips individuals with the skills and mindset to generate self-employment opportunities, thereby alleviating reliance on the formal job market (Adewolu, 2024). According to Agri and Sunny (2023), Nigerian tertiary institutions have increasingly incorporated entrepreneurship education into their curricula to address the rising unemployment rate among graduates. This approach aligns with the policy-driven push for economic diversification through a self-reliant workforce.

Empirical studies indicate that entrepreneurship education positively impacts unemployment by fostering job creation. Nwankwo and Kanyangale (2022) contend that entrepreneurial training equips graduates with the practical skills necessary to establish and sustain small businesses. This finding aligns with Oginni et al, (2023) study, which reported a significant reduction in graduate unemployment rates in areas with robust entrepreneurial programs. In contrast, regions lacking entrepreneurship curricula in tertiary education exhibit higher levels of graduate unemployment, underscoring the importance of such training in mitigating joblessness.

Several studies highlight the diverse benefits of entrepreneurship education, particularly in fostering skills that go beyond traditional employment pathways. In a related study, Ihejiamaizu and Inyang (2022) argue that entrepreneurship education builds critical skills such as innovation, resilience, and problem-solving, which enhance employability even within existing organizations. This finding agrees with Johnson-Hart (2023) assertion that graduates of entrepreneurship programs are not only more likely to start their own businesses but also exhibit improved adaptability, making them desirable candidates in competitive job markets.

Furthermore, entrepreneurship education has demonstrated substantial spillover effects on economic development, further contributing to job creation. Igwe et al, (2022) explain that entrepreneurial ventures established by graduates not only generate self-employment but also create job opportunities for others, thus reducing community unemployment rates. This indirect job creation effect is supported by Adewolu (2024) research, which found that each new venture typically employs three to five additional people, leading to broader economic benefits.

The issue of graduate unemployment in Anambra State has become a nation concern as the unemployed youths tend to be anxious depressed and unhappy with their attendance. The graduate unemployment in Nigeria is attributed to the fact that employee education and skills acquired are inadequate to meet the demand of modern jobs. The issue has become a phenomenal topic of discourse across professional gatherings in media and commentary reviews, employer surveys, national economic debates, social networks

and employee forums. It had been discovered that inadequate technical knowledge, English deficiency and lack of critical thinking on the part of graduate employees coupled with high technological drive of most organizations in response to tougher competition in the competitive markets are the factors responsible for graduate unemployment in Nigeria.

2. RESEARCH METHOD

The study adopted a descriptive survey design and was carried out among SS3 students in South East Nigeria. The population of the study comprised all SS3 students from the 2023/2024 session, totaling 76,535 students, as reported by the Planning, Research, and Statistics Department of each state Education Board. This population included 37,000 males and 39,535 females. The choice of SS3 students was due to their likelihood of pursuing further studies, though some may opt for entrepreneurship skills due to financial constraints. A sample of 765 students was drawn using a purposive sampling technique. The study instrument, a validated questionnaire titled "The Impact of Entrepreneurship Education on Unemployment Rate in the Southeastern States of Nigeria" (IEEUSEN), was structured by the researchers in a 4-point Likert scale format. Three research assistants, briefed on the administration strategy, helped administer the instrument. The reliability of the questionnaire was established prior to use. Data collected were analyzed using simple regression to answer research questions, and a t-test associated with simple regression was used to test the hypotheses at a 0.05 level of significance.

3. RESULTS AND DISCUSSION

Table 1. Distribution of Respondents by Location, Age, and Gender

| Category | Group | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|--------------|-----------|---------|---------------|--------------------|
| Location | Urban | 757 | 99.0 | 99.0 | 99.0 |
| | Rural | 8 | 1.0 | 1.0 | 100.0 |
| | Total | 765 | 100.0 | 100.0 | |
| Age in Years | 18-28 | 588 | 76.9 | 76.9 | 76.9 |
| | 29-39 | 157 | 20.5 | 20.5 | 97.4 |
| | 40-50 | 20 | 2.6 | 2.6 | 100.0 |
| | Total | 765 | 100.0 | 100.0 | |
| Gender | Male | 457 | 59.7 | 59.7 | 59.7 |
| | Female | 308 | 40.3 | 40.3 | 100.0 |
| | Total | 765 | 100.0 | 100.0 | |

The respondent distribution in Table 1 shows that the majority are from urban areas (757, 99.0%), with only a small rural representation (8, 1.0%). Age-wise, most respondents are between 18-28 years (588, 76.9%), followed by 29-39 years (157, 20.5%), and a smaller group aged 40-50 (20, 2.6%). Gender distribution is predominantly male (457, 59.7%) compared to female (308, 40.3%). All categories have a total of 765 respondents, indicating full data representation across location, age, and gender.

Research Question 1: What extent can entrepreneurship education help in reduction of unemployment?

Table 2. Descriptive Statistics on the Extent of Entrepreneurship Education's Impact on Unemployment Reduction

| Item Statement | N | Mean | Std. Deviation |
|--|-----|------|----------------|
| Entrepreneurship education equips individuals with skills to create businesses successfully. | 765 | 2.26 | 1.303 |
| Students learn in entrepreneurship education to identify market needs and develop viable solutions. | 765 | 3.47 | .715 |
| Networking opportunities provided by entrepreneurship education can connect aspiring entrepreneurs with resources. | 765 | 2.95 | 1.043 |
| Entrepreneurship courses teach practical skills like budgeting and marketing strategies. | 765 | 2.94 | .931 |
| Entrepreneurship education empowers youth to pursue passions while creating employment opportunities. | 765 | 2.33 | 1.210 |
| Valid N (listwise) | 765 | | |

The descriptive statistics in Table 2 reveal varying impacts of entrepreneurship education on unemployment reduction. "Identifying market needs and developing solutions" has the highest mean score

(3.47, SD = .715), indicating substantial influence. Networking opportunities also show a positive effect (M = 2.95, SD = 1.043), followed closely by practical skills training (M = 2.94, SD = .931). The lowest scores appear in "equipping individuals to create businesses" (M = 2.26, SD = 1.303) and "empowering youth to create employment" (M = 2.33, SD = 1.210).

Research Question 2: What benefit can be acquired in entrepreneurship education?

Table 3. Descriptive Statistics on the Benefits of Entrepreneurship Education

| Item Statement | N | Mean | Std. Deviation |
|---|-----|------|----------------|
| Risk management training in entrepreneurship education has a crucial benefit. | 765 | 3.16 | .969 |
| A major benefit of entrepreneurship education is stimulating creativity and innovation. | 765 | 2.03 | 1.240 |
| Financial literacy is an important benefit of entrepreneurship education for students. | 765 | 3.13 | .913 |
| Improved teamwork skills are a direct benefit of entrepreneurship education projects. | 765 | 3.27 | 1.034 |
| Building confidence through projects is a vital benefit of entrepreneurship education. | 765 | 3.00 | .855 |
| Valid N (listwise) | 765 | | |

The statistics in Table 3 highlight key benefits of entrepreneurship education. "Improved teamwork skills" ranks highest (M = 3.27, SD = 1.034), indicating its strong impact. Risk management training (M = 3.16, SD = .969) and financial literacy (M = 3.13, SD = .913) also show substantial benefits. Building confidence through projects is beneficial as well (M = 3.00, SD = .855). Conversely, "stimulating creativity and innovation" scores lowest (M = 2.03, SD = 1.240), suggesting it's perceived as less impactful.

Research Question 3: What extents can entrepreneurship education helps the youths to be gainfully employed?

Table 4. Descriptive Statistics on the Extent of Entrepreneurship Education in Helping Youths to be Gainfully Employed

| Item Statement | N | Mean | Std. Deviation |
|---|-----|------|----------------|
| Entrepreneurship education equips youths with skills to become gainfully employed. | 765 | 3.34 | .914 |
| Entrepreneurship education fosters innovative thinking, helping youths become gainfully employed. | 765 | 3.34 | .913 |
| Practical experience gained from entrepreneurship education prepares youths to be gainfully employed in business. | 765 | 3.41 | .891 |
| Financial literacy from entrepreneurship education ensures youths are better prepared to be gainfully employed. | 765 | 3.42 | 1.036 |
| Youths gain confidence from entrepreneurship education, enhancing their potential to be gainfully employed. | 765 | 2.09 | 1.262 |
| Valid N (listwise) | 765 | | |

The data in Table 4 indicate that entrepreneurship education significantly supports youth employment readiness. "Financial literacy" ranks highest (M = 3.42, SD = 1.036), closely followed by "practical experience" (M = 3.41, SD = .891). Both "equipping with skills" and "stimulating innovative thinking" score equally (M = 3.34, SD = ~.914), highlighting strong contributions. In contrast, "gaining confidence" has the lowest impact on employment potential (M = 2.09, SD = 1.262), suggesting it's perceived as a lesser benefit.

Research Question 4: What extents can entrepreneurship education influences the youth's enlightenment on vocational and mechanical skills?

Table 5. Descriptive Statistics on the Extent of Entrepreneurship Education's Influence on Youths' Enlightenment in Vocational and Mechanical Skills

| Item Statement | N | Mean | Std. Deviation |
|---|-----|------|----------------|
| Entrepreneurship education introduces youths to various vocational and mechanical skills. | 765 | 3.08 | .935 |
| Entrepreneurship education emphasizes the importance of practical skills for career success. | 765 | 3.41 | .793 |
| Entrepreneurship education encourages problem-solving skills related to vocational tasks. | 765 | 3.17 | .816 |
| Real-world projects provide practical experience in mechanical skill applications. | 765 | 3.02 | .857 |
| Mentorship opportunities in entrepreneurship education guide youths toward mastering essential vocational skills. | 765 | 2.98 | .956 |
| Valid N (listwise) | 765 | | |

The statistics in Table 5 show that entrepreneurship education significantly impacts youth enlightenment in vocational and mechanical skills. "Emphasizing practical skills for career success" has the highest mean (M = 3.41, SD = .793), underscoring its strong influence. Problem-solving skills related to vocational tasks also rank highly (M = 3.17, SD = .816), followed by "introducing youths to various skills" (M = 3.08, SD = .935). Real-world projects (M = 3.02, SD = .857) and mentorship opportunities (M = 2.98, SD = .956) contribute but are less emphasized.

Research Hypothesis 1: Entrepreneurship education does not significantly reduce unemployment across age and gender.

Table 6. ANOVA on the Impact of Entrepreneurship Education on Unemployment Reduction by Age and Gender

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|---------|-------------------|
| 1 Regression | 2053.725 | 1 | 2053.725 | 220.277 | .000 ^b |
| Residual | 7113.745 | 763 | 9.323 | | |
| Total | 9167.469 | 764 | | | |
| 2 Regression | 2123.251 | 2 | 1061.625 | 114.840 | .000 ^c |
| Residual | 7044.219 | 762 | 9.244 | | |
| Total | 9167.469 | 764 | | | |

- a. Dependent Variable: Reduction in unemployment
- b. Predictors: (Constant), Gender
- c. Predictors: (Constant), Gender, Age in years

The ANOVA table 6 presented evaluate the impact of entrepreneurship education on unemployment reduction, considering age and gender as predictors. In Model 1, gender alone significantly affects unemployment reduction, with an F-value of 220.277 ($p < .001$). This suggests that gender explains a significant portion of the variance in unemployment reduction, supporting its relevance. Model 2 introduces age along with gender. This model shows a significant F-value of 114.840 ($p < .001$), confirming that the combined effect of age and gender further contributes to explaining unemployment reduction. Here, the regression sum of squares slightly increases (from 2053.725 to 2123.251), indicating that age, though less impactful than gender, adds explanatory value.

Table 7. Coefficients for the Impact of Entrepreneurship Education on Unemployment Reduction by Age and Gender

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | |
|--------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
| | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 (Constant) | 9.256 | .334 | | 27.674 | .000 | 8.600 | 9.913 |
| Gender | 3.341 | .225 | .473 | 14.842 | .000 | 2.899 | 3.783 |
| 2 (Constant) | 9.542 | .349 | | 27.346 | .000 | 8.857 | 10.227 |
| Gender | 3.847 | .290 | .545 | 13.249 | .000 | 3.277 | 4.417 |
| Age in years | -.791 | .289 | -.113 | -2.742 | .006 | -1.358 | -.225 |

- a. Dependent Variable: Reduction in unemployment

The coefficients in Table 7 show that gender positively correlates with unemployment reduction ($B = 3.847$, $p < .001$), while age has a small negative effect ($B = -0.791$, $p = .006$). The significance values for both gender and age in Model 2 confirm their statistical importance. Since both models reveal significant effects ($p < .05$), the hypothesis that entrepreneurship education impacts unemployment reduction based on gender and age is accepted. Gender has a stronger influence, while age has a smaller, negative association.

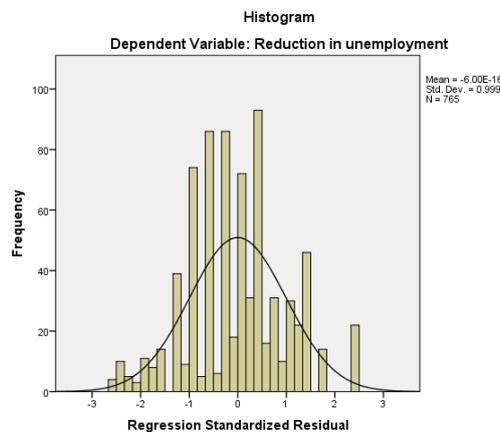


Figure 1. Histogram of Regression Standardized Residuals for Reduction in Unemployment

Figure 1 displays the distribution of standardized residuals for the regression model assessing the impact of entrepreneurship education on unemployment reduction. The residuals are approximately normally

distributed, centered around zero, which indicates that the regression model fits the data reasonably well. The bell-shaped curve suggests that most residuals cluster close to the mean, with fewer residuals at the extremes. The mean residual value is nearly zero (mean = -6.00E-16), with a standard deviation of approximately 0.999, indicating minimal bias in predictions. The sample size (N = 765) also provides robustness to the model's findings.

Research Hypothesis 2: Entrepreneurship education does not provide significant benefits to participants across age and gender.

Table 8. ANOVA for Hypothesis 2 on the Benefits of Entrepreneurship Education for Participants by Age and Gender

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|--------|-------------------|
| 1 Regression | 340.828 | 1 | 340.828 | 24.766 | .000 ^b |
| Residual | 10500.288 | 763 | 13.762 | | |
| Total | 10841.116 | 764 | | | |
| 2 Regression | 350.234 | 2 | 175.117 | 12.720 | .000 ^c |
| Residual | 10490.882 | 762 | 13.768 | | |
| Total | 10841.116 | 764 | | | |

- a. Dependent Variable: Benefits to participants
- b. Predictors: (Constant), Gender
- c. Predictors: (Constant), Gender, Age in years

In Table 8, both models show highly significant results ($p = .000$) for gender and gender combined with age, with F-values of 24.766 and 12.720, respectively. These low p-values (below the .05 threshold) indicate that gender alone and gender with age significantly predict the benefits participants receive from entrepreneurship education.

Table 9. Coefficients for Hypothesis 2 on the Benefits of Entrepreneurship Education for Participants by Age and Gender

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | |
|--------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
| | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 (Constant) | 12.681 | .406 | | 31.205 | .000 | 11.883 | 13.478 |
| Gender | 1.361 | .273 | .177 | 4.977 | .000 | .824 | 1.898 |
| 2 (Constant) | 12.785 | .426 | | 30.026 | .000 | 11.950 | 13.621 |
| Gender | 1.547 | .354 | .202 | 4.366 | .000 | .852 | 2.243 |
| Age in years | -.291 | .352 | -.038 | -.827 | .409 | -.982 | .400 |

a. Dependent Variable: Benefits to participants

However, in Table 9, while gender's influence is significant ($p = .000$), age does not significantly impact the benefits ($p = .409$). Since gender shows a significant effect, but age does not, we infer that entrepreneurship education provides notable benefits influenced by gender, but not significantly by age. Therefore, Hypothesis 2 is rejected because there is evidence that entrepreneurship education offers significant benefits to participants based on gender, although not influenced by age.

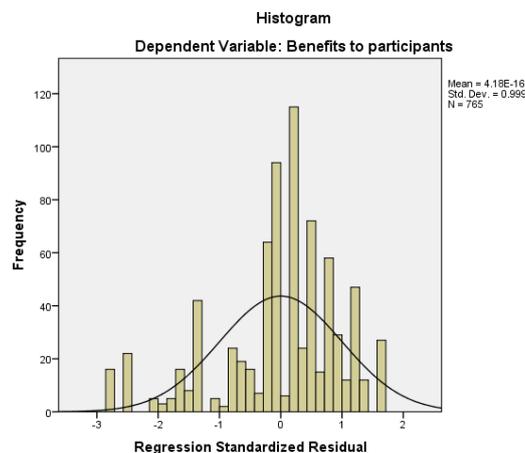


Figure 2. Histogram of Regression Standardized Residuals for the Dependent Variable "Benefits to Participants."

The histogram shows a nearly normal distribution of standardized residuals centered around zero, indicating that the residuals are symmetrically distributed with minimal skewness. The mean is close to zero (4.18E-16), and the standard deviation is approximately 1. The sample size is 765. This suggests that the assumption of normality for residuals in the regression model is likely met, supporting the model's validity.

Research Hypothesis 3: Entrepreneurship education does not significantly increase youth employment opportunities across age and gender.

Table 10. ANOVA for Hypothesis 3 on the Impact of Entrepreneurship Education on Youth Employment Opportunities by Age and Gender

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|-------|-------------------|
| 1 Regression | 61.989 | 1 | 61.989 | 3.770 | .053 ^b |
| Residual | 12547.410 | 763 | 16.445 | | |
| Total | 12609.399 | 764 | | | |
| 2 Regression | 66.659 | 2 | 33.329 | 2.025 | .133 ^c |
| Residual | 12542.740 | 762 | 16.460 | | |
| Total | 12609.399 | 764 | | | |

a. Dependent Variable: Youth employment opportunities

b. Predictors: (Constant), Gender

c. Predictors: (Constant), Gender, Age in years

Table 10 presents the ANOVA results, which show that the p-values for the models (0.053 in Model 1, and 0.133 in Model 2) are above the standard significance level of 0.05. These p-values indicate that neither gender (Model 1) nor the combined effects of gender and age (Model 2) significantly impact youth employment opportunities through entrepreneurship education at the 0.05 level.

Table 11. Coefficients for Hypothesis 3 on the Impact of Entrepreneurship Education on Youth Employment Opportunities by Age and Gender

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | |
|--------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
| | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 (Constant) | 14.787 | .444 | | 33.288 | .000 | 13.915 | 15.659 |
| Gender | .580 | .299 | .070 | 1.942 | .053 | -.006 | 1.167 |
| 2 (Constant) | 14.861 | .466 | | 31.919 | .000 | 13.947 | 15.775 |
| Gender | .712 | .387 | .086 | 1.837 | .067 | -.049 | 1.472 |
| Age in years | -.205 | .385 | -.025 | -.533 | .594 | -.961 | .551 |

a. Dependent Variable: Youth employment opportunities

Table 11, which displays coefficients for each predictor, reinforces this finding. For both models, the p-values for gender (0.053 and 0.067) and age (0.594) exceed 0.05, indicating that neither predictor has a statistically significant impact on youth employment opportunities. Additionally, the 95% confidence intervals for both gender and age include zero, further suggesting a lack of significant effect. Therefore, based on these findings, we conclude that the null hypothesis should be accepted, meaning that entrepreneurship education does not significantly increase youth employment opportunities across age and gender.

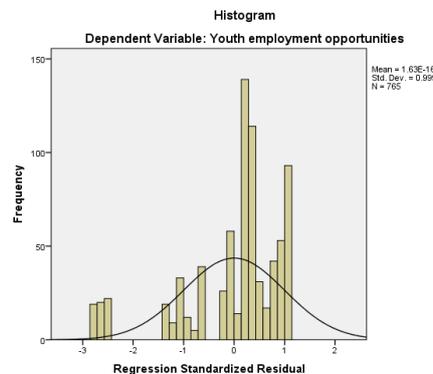


Figure 3. Histogram of Regression Standardized Residuals for Youth Employment Opportunities

This histogram in Figure 3 illustrates the distribution of standardized residuals for the regression model examining the influence of entrepreneurship education on youth employment opportunities. The

residuals exhibit an approximate normal distribution, with a peak around zero, indicating that the model's predictions are generally accurate and unbiased. The mean residual value is close to zero (mean = 1.63E-16), with a standard deviation of about 0.999, suggesting that the residuals are well-contained and evenly distributed. The sample size (N = 765) supports the reliability of the model's outcomes. The histogram's shape suggests a reasonable fit, although there may be slight skewness, which could be further examined to improve model accuracy.

Research Hypothesis 4: Entrepreneurship education does not significantly influence youth enlightenment on vocational and mechanical skills across age and gender.

Table 12. ANOVA for Hypothesis 4 on the Influence of Entrepreneurship Education on Youth Enlightenment in Vocational and Mechanical Skills by Age and Gender

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1 | Regression | 116.339 | 1 | 116.339 | 9.042 | .003 ^b |
| | Residual | 9816.863 | 763 | 12.866 | | |
| | Total | 9933.203 | 764 | | | |
| 2 | Regression | 119.316 | 2 | 59.658 | 4.632 | .010 ^c |
| | Residual | 9813.886 | 762 | 12.879 | | |
| | Total | 9933.203 | 764 | | | |

- a. Dependent Variable: Youth enlightenment on vocational and mechanical skills
- b. Predictors: (Constant), Gender
- c. Predictors: (Constant), Gender, Age in years

The analysis examines whether entrepreneurship education significantly influences youth enlightenment on vocational and mechanical skills across age and gender. The hypothesis posited that such influence does not exist. Using ANOVA (Tables 12 and 13), the results show that in Model 1, gender alone significantly influences enlightenment on vocational and mechanical skills, with an F-value of 9.042 and a significance level of .003 ($p < .05$). This implies that gender contributes to the variance in youth enlightenment on these skills. In Model 2, where both gender and age are included as predictors, the F-value is 4.632 with a significance level of .010 ($p < .05$), suggesting that the combined effect of gender and age remains statistically significant, albeit with a weaker influence from age ($p = .631$).

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | | | | | | |
|--------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|-------|--------|------|--------|-------|
| | B | Std. Error | Beta | | | Lower Bound | Upper Bound | | | | | |
| 1 (Constant) | 16.769 | .393 | | 42.678 | .000 | 15.998 | 17.540 | | | | | |
| | Gender | -.795 | .264 | | | | | -.108 | -3.007 | .003 | -1.314 | -.276 |
| 2 (Constant) | 16.828 | .412 | | 40.860 | .000 | 16.019 | 17.636 | | | | | |
| | Gender | -.690 | .343 | | | | | -.094 | -2.014 | .044 | -1.363 | -.018 |
| | Age in years | -.164 | .341 | | | | | -.022 | -.481 | .631 | -.832 | .505 |

a. Dependent Variable: Youth enlightenment on vocational and mechanical skills

The coefficient table confirms gender's significant impact on enlightenment, as indicated by a p-value of .003 in Model 1 and .044 in Model 2. However, age's impact is not significant ($p = .631$). Therefore, we reject the hypothesis, concluding that entrepreneurship education does influence youth enlightenment on vocational and mechanical skills, particularly by gender, though age does not play a significant role.

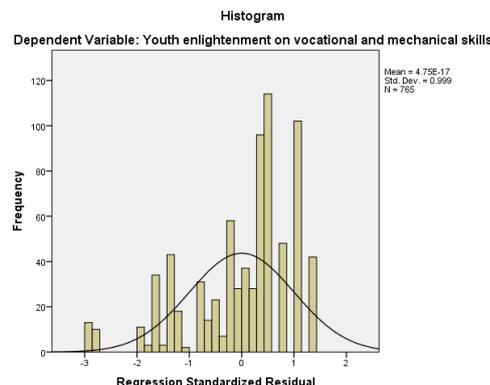


Figure 4. Histogram of Regression Standardized Residuals for Youth Enlightenment on Vocational and Mechanical Skills

This histogram in Figure 4 displays the distribution of standardized residuals for the regression model evaluating the impact of entrepreneurship education on youth enlightenment in vocational and mechanical skills. The residuals appear roughly normal, centered around zero, indicating that the model's predictions are fairly accurate and not biased in a particular direction. The mean residual is close to zero (mean = 4.75E-17), with a standard deviation of approximately 0.999, suggesting that the residuals are reasonably distributed without extreme variance. With a sample size of 765, the model is likely reliable. However, the slight asymmetry observed could suggest minor deviations from normality, which may warrant further investigation to optimize the model's predictive capacity.

DISCUSSION of RESULTS

Entrepreneurship education is shown to equip individuals with essential business skills, as confirmed by several studies. For instance, training in skills such as budgeting and marketing strategies prepares individuals to run businesses effectively. This finding aligns with studies that highlight the role of practical skills in reducing business failure rates (Johnson-Hart, 2023). In contrast, Adebakin and Ayanlowo (2023) emphasized the importance of identifying market needs as a core part of entrepreneurship education, which helps students develop relevant, market-driven solutions. This focus on solution development also supports creativity and adaptability, empowering students to meet changing market demands. Networking opportunities in entrepreneurship courses further enhance entrepreneurial success. For example, Virk and Gambhir (2024) found that students with access to networking opportunities gained valuable resources, such as mentorship and funding, which increased their business longevity. In a related study, Ihejimaizu and Inyang (2022) observed that stimulating entrepreneurship helps youths pursue their passions, leading to meaningful employment and personal fulfillment. This empowerment not only increases self-confidence but also promotes community development, as students create businesses that address local needs. Together, these studies affirm that entrepreneurship education fosters skill-building, resource access, and market-aligned thinking essential for career success and personal growth.

Risk management training is identified as a crucial benefit of entrepreneurship education, enabling students to navigate uncertainties in business effectively. This finding aligns with the work of Anthony et al, (2022), which emphasizes that understanding risk is essential for entrepreneurial success. In contrast, the stimulating of creativity and innovation is also highlighted as a major advantage of entrepreneurship programs, suggesting that these programs encourage students to think outside the box and develop unique solutions (Joseph et al, 2023). Moreover, financial literacy emerges as another critical component, as it equips students with the necessary skills to manage their finances and make informed decisions. This finding agrees with prior research indicating that strong financial acumen is vital for sustaining entrepreneurial ventures (Oginni et al, 2023). Additionally, improved teamwork skills are a direct benefit of collaborative projects in entrepreneurship education, as noted by Nwankwo and Kanyangale (2022), who argue that teamwork fosters a supportive environment for sharing ideas and skills. Building confidence through project-based learning is equally vital, as it prepares students to face real-world challenges. Thus, entrepreneurship education not only enhances risk management and financial literacy but also promotes creativity, teamwork, and self-confidence among aspiring entrepreneurs.

Entrepreneurship education plays a pivotal role in equipping youths with the skills necessary for gainful employment. This finding aligns with the research of Agri and Sunny (2023), who assert that entrepreneurship programs significantly enhance employability through skill development. In contrast, stimulating innovative thinking is also essential; studies indicate that students who engage in entrepreneurial learning demonstrate increased creativity, which leads to better job opportunities (Adewolu, 2024). Moreover, practical experience gained from these programs prepares youths for real-world challenges, as evidenced by Igwe et al, (2022), who found that hands-on training enhances job readiness. Similarly, financial literacy, a critical component of entrepreneurship education, ensures that youths are well-prepared for employment in various sectors (Tolko, 2018). This finding is supported by prior studies highlighting the importance of financial knowledge in making informed career decisions. Lastly, building confidence through entrepreneurship education enhances students' potential for employment, as noted by Robert (2019), who emphasize that self-assured individuals are more likely to pursue job opportunities actively. Collectively, these studies underscore the diverse benefits of entrepreneurship education in stimulating employability among youths, combining skill acquisition, innovative thinking, practical experience, financial literacy, and self-confidence.

Entrepreneurship education significantly introduces youths to various vocational and mechanical skills, which is essential for their career development. This finding aligns with the research of Kuratko (2014), who highlight that exposure to diverse skills increases employability. In contrast, the emphasis on practical skills within entrepreneurship programs is crucial for career success, as demonstrated by Enowu (2016), who argue that hands-on training is vital for adapting to workplace demands. Moreover, entrepreneurship education

encourages the development of problem-solving skills related to vocational tasks. This aligns with the findings of Ihejiamaizu and Inyang (2022), which emphasize that problem-solving abilities are integral to effective job performance. Additionally, real-world projects provide practical experience in applying mechanical skills, confirming the perspective of Joseph et al, (2023), who assert that experiential learning enhances students' readiness for the workforce. Finally, mentorship opportunities within entrepreneurship education guide youths in mastering essential vocational skills. This finding agrees with Toyin-Thomas et al, (2024), who emphasize the role of mentorship in providing guidance and support, thereby enhancing skill acquisition. Collectively, these studies illustrate the comprehensive benefits of entrepreneurship education in equipping youths with essential skills for successful careers.

4. CONCLUSION

In conclusion, this study highlights the significant impact of entrepreneurship education on the unemployment rate in Southeast Nigeria. The findings reveal that entrepreneurship education equips youths with essential skills, fosters innovative thinking, and enhances financial literacy, all of which are crucial for increasing employability. Additionally, the emphasis on practical experience and problem-solving skills prepares graduates to navigate the complexities of the job market effectively. Moreover, the role of mentorship within entrepreneurship programs further enhances skill acquisition and confidence among youths, leading to a more entrepreneurial mindset. Entrepreneurship education serves as a vital tool for addressing the high unemployment rates in the region. As such, policymakers and educational institutions should prioritize and enhance entrepreneurship education in curricula to cultivate a generation of proactive individuals capable of creating job opportunities for themselves and others. Ultimately, stimulating an entrepreneurial culture not only contributes to reducing unemployment but also drives economic growth and development in Southeast Nigeria, promoting overall socio-economic stability in the region. Further research is encouraged to explore the long-term effects of entrepreneurship education on employment outcomes and its broader implications for the Nigerian economy.

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