# EFFECT OF ENTREPRENEURSHIP EDUCATION ON BUSINESS INTENTION AMONG SELECTED UNIVERSITIES UNDERGRADUATES STUDENTS IN KADUNA STATE, NIGERIA

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## Abstract

*The increasing vigour in entrepreneurship education in Nigerian tertiary institutions is aimed at preparing graduates to exploit business opportunities and venture into business; yet the rate of business start-up among tertiary institution graduates in Nigeria remains low. This study examined the effect of entrepreneurship education on business intention among selected university undergraduates in Kaduna State, Nigeria. A survey research design was adopted. From a population of 10,460, a sample of 385 was drawn using the Taro Yamane formula, with respondents selected through convenience sampling. Data were collected using a structured questionnaire and analysed using descriptive statistics and Partial Least Square Structural Equation Modelling (PLS-SEM). The study found that entrepreneurship education curriculum (EEC) and entrepreneurship education andragogy (EEA) had positive and statistically significant effects on business intention, while tertiary institution support system (TIS) had a positive but insignificant effect, at the 5% level of significance. The study recommends that tertiary institutions partner with government at all levels to provide a conducive learning environment and access to modern tools and practical training that will strengthen students' entrepreneurial readiness.*

**Keywords:** Entrepreneurship Education; Entrepreneurial Intention; Business Start-up Intention; Undergraduate Students; Kaduna State

## 1. Introduction

Entrepreneurship education serves as a strategic approach to addressing unemployment, poverty, and economic dependency in developing countries, including Nigeria. In response to fluctuations in global economic conditions and Nigeria's reliance on crude oil revenue, the government implemented entrepreneurship education in tertiary institutions to provide students with the knowledge, skills, and competencies necessary for self-employment and business creation. The National Universities Commission (NUC) facilitated the integration of entrepreneurship courses into university curricula to promote innovation, creativity, and entrepreneurial thinking, with the aim of producing graduates who are job creators rather than job seekers (Lackéus, 2020; Nabi et al., 2018).

Entrepreneurship education includes curriculum content, teaching methods (andragogy), and institutional support mechanisms intended to develop entrepreneurial competencies such as

opportunity recognition, risk-taking, creativity, and business management skills. Entrepreneurial intention refers to an individual's conscious commitment to starting a business venture. According to the Theory of Planned Behaviour, entrepreneurial intention is influenced by attitude, perceived behavioural control, and subjective norms. Empirical studies consistently demonstrate a positive relationship between entrepreneurship education and entrepreneurial intention (Liñán & Fayolle, 2015; Shah et al., 2020).

Although entrepreneurship education has been widely implemented in Nigerian universities, a significant proportion of graduates continue to prefer paid employment over entrepreneurship, raising questions about the effectiveness of current programmes. The National Bureau of Statistics reported that 3.67 million Nigerians became unemployed in a single year (Q4 2016), increasing to approximately 4 million in 2017, with over 70 percent of the population living below the poverty line, predominantly youths aged 15-44 (NBS, 2016). Existing literature on entrepreneurship in Nigeria (e.g., Mainoma & Aruwa, 2012; Baba, 2013; Akpomi, 2008) has primarily examined its impact on economic growth and poverty reduction, with limited focus on its specific effect on undergraduates' entrepreneurial intentions in Kaduna State. Consequently, this study investigates the effect of entrepreneurship education on business intention among selected university undergraduates in Kaduna State, Nigeria.

The objectives of this study are to: (i) examine the effect of the entrepreneurship education curriculum on business intention; (ii) determine the effect of entrepreneurship education andragogy on business intention; and (iii) assess the effect of tertiary institution support systems on business intention among selected university undergraduates in Kaduna State, Nigeria. Accordingly, the following null hypotheses were tested: H01 - the entrepreneurship education curriculum has no significant effect on business intention; H02 - entrepreneurship education andragogy has no significant effect on business intention; and H03 - tertiary institution support systems have no significant effect on business intention among selected university undergraduates in Kaduna State, Nigeria.

## 2. Literature Review

### 2.1 Conceptual Review

Entrepreneurship education is a structured process designed to develop entrepreneurial knowledge, skills, attitudes, and behaviours that enable individuals to identify opportunities and establish sustainable ventures. Unlike traditional business education, it emphasises creativity, innovation, opportunity recognition, and risk management, and has been shown to enhance students' confidence and preparedness to initiate and manage businesses (Fayolle & Gailly, 2015; Maresch et al., 2016). In Nigeria, the National Universities Commission (NUC) mandated entrepreneurship courses in universities to shift students from job seekers to job creators; however, concerns persist regarding the extent to which the programme leads to actual business intentions (Neneh, 2022; Adu et al., 2023).

Curriculum content shapes the knowledge and competencies that students acquire. Effective curricula integrate theoretical instruction with experiential activities, including case studies, simulations, and business start-up exercises, to enhance opportunity recognition and venture-

creation capacity (Lackéus, 2020; Nabi et al., 2018). In Nigeria, the NUC-prescribed curriculum encompasses business formation, feasibility studies, financial planning, and enterprise development. Well-structured curricula have been shown to positively influence entrepreneurial attitudes, self-efficacy, and business intentions (Maresch et al., 2016; Neneh, 2022).

Andragogy denotes learner-centred approaches to adult education that emphasise active participation, self-direction, and experiential learning. Within entrepreneurship education, andragogical methods connect theoretical concepts to real-world business situations through simulations, internships, mentoring, and business-plan development. Research indicates that these approaches have a stronger effect on entrepreneurial intention than conventional lecture-based instruction (Mwasalwiba, 2010; Nabi et al., 2018; Neneh, 2022).

Tertiary institution support systems include entrepreneurial infrastructure and initiatives such as incubation hubs, mentorship programmes, seed funding, and business advisory services that facilitate the development of entrepreneurial competencies. Students are more likely to develop entrepreneurial intentions when they perceive robust institutional support and have access to resources that assist in transforming business ideas into viable ventures (Nabi et al., 2018; Neneh, 2022).

Business intention is defined as an individual's conscious desire and commitment to establish a new business venture in the future, and it is regarded as a strong predictor of actual business start-up behaviour. This intention is influenced by entrepreneurial knowledge, self-efficacy, opportunity recognition, and institutional support, with entrepreneurship education playing a critical role in strengthening these factors (Liñán& Fayolle, 2015; Maresch et al., 2016.

### 2.2 Empirical Review

Empirical evidence consistently demonstrates a positive relationship between entrepreneurship education and business intention. Song et al. (2021) found that entrepreneurship education significantly mediates the relationship between attitude, perceived behavioural control, and entrepreneurial intention. Similarly, Ikechukwu et al. (2021) reported a positive influence among students in Nigerian tertiary institutions. Byun et al. (2018) and Thanh-Hien and Beri (2018) further demonstrated that curricula, practical learning, and entrepreneurial competencies significantly promote start-up intentions. Specifically, Olokundun et al. (2018) and Hadiza and Garba (2015) found that curriculum quality significantly enhances entrepreneurial capability and skill acquisition.

Regarding andragogy, Dayat (2018) found that training based on self-directed and experiential learning enhances entrepreneurial knowledge and attitudes. Doan and Sung (2018) reported a significant relationship between teaching methods and start-up intentions. Nwokike (2016) and Udo-Imeh et al. (2016) also found that practical teaching approaches positively influence entrepreneurial competencies. However, Ukoha (2017) observed that continued reliance on traditional lecture methods limits practical engagement, highlighting the importance of andragogical quality.

With respect to institutional support, Hong et al. (2020) and Aladejebi (2019) found that entrepreneurship programmes and institutional environments positively shape entrepreneurial attitudes and start-up intentions. Salihu (2016) reported that entrepreneurial culture significantly influenced business start-up intentions in North-Central Nigeria. However, findings are mixed: Bylon and Falicity (2017) found that entrepreneurship training did not significantly predict start-up intentions among Ghanaian MBA students, and Mohammed et al. (2014) observed that many students still preferred paid employment despite exposure to entrepreneurship programmes. Most of these studies were conducted outside the Nigerian university context or focused on single dimensions, revealing a contextual gap that this study addresses by jointly examining curriculum, andragogy, and institutional support among undergraduates in Kaduna State.

### 2.3 Theoretical Framework

This study is anchored on the Risk-Taking Theory of Cantillon and Mill, which views entrepreneurship as a process that stimulates individuals to take calculated risks in exchange for a stream of economic benefits, with greater risks attracting greater responsibility (Alam & Hossan, 2003; Raimi, 2010). The theory holds that entrepreneurship education improves the ability, capability and potential of human capital to undertake risks from which society benefits, a proposition complemented by the opportunity-based view of Drucker (1985) and Krishna (2013), which sees entrepreneurs as agents who identify and exploit opportunities created by change. Risk-Taking Theory was adopted for this study because it directly addresses how entrepreneurship education builds individuals' capacity to take the calculated risks associated with business start-up and job creation, making it well suited to explaining the link between entrepreneurship education and bus

## 3. Methodology

This study employed a survey research design, which was deemed appropriate as it facilitated the collection of primary data on demographic characteristics and opinions from a large population (Osinbanjo et al., 2014; Oso & Omen, 2008; Sekaran & Bougie, 2010). Using Yamane's (1967) formula, a sample size of approximately 385 was determined from a population of 10,460 undergraduate students across three tertiary institutions in Kaduna State. This sample size falls within the recommended range of 30 to 500 for social science research (Ng'ora, 2012; Sekaran & Bougie, 2013). Since the population of each stratum was known, the sample was proportionately allocated across the three institutions as presented in Table 1.

**Population of the Selected Institutions**

| S/N | Names of the Institutions | Level of the Students | Population of the Students |
|---|---|---|---|
| 1 | Ahmadu Bello University (ABU), Zaria | 400 | 5,991 |
| 2 | Kaduna State University (KASU), Kaduna | 400 | 3,933 |
| 3 | Air Force Institute of Technology (AFIT), Kaduna | 300 | 536 |
| | **Total** | | **10,460** |

*Note.* Source: Researcher's computation, 2026.

A purposive sampling technique was employed to select undergraduate students who had completed entrepreneurship education courses and were thus deemed appropriate respondents (Nikolopoulou, 2023). Data collection utilized a structured questionnaire consisting of closed-ended items measured on a five-point Likert scale (ranging from Strongly Agree = 5 to Strongly Disagree = 1). The instrument assessed entrepreneurship education in terms of curriculum content, andragogy, and institutional support, as well as business intention through items addressing students' willingness, readiness, and commitment to initiate a business. Measurement items were adapted from previously validated instruments in entrepreneurship education and entrepreneurial intention research. Of the 385 questionnaires distributed, 342 were returned, yielding a 91 per cent response rate, which is considered adequate for statistical reliability and generalizability (Aminu, 2015). Data analysis was conducted using descriptive statistics and Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS, following a two-stage process: first, assessment of the measurement model (reliability, convergent validity, and discriminant validity), and subsequently, evaluation of the structural model and hypotheses (Chin, 1998; Hair et al., 2019).

## 4. Results and Discussion

### 4.1 Structural Model and Hypotheses Testing

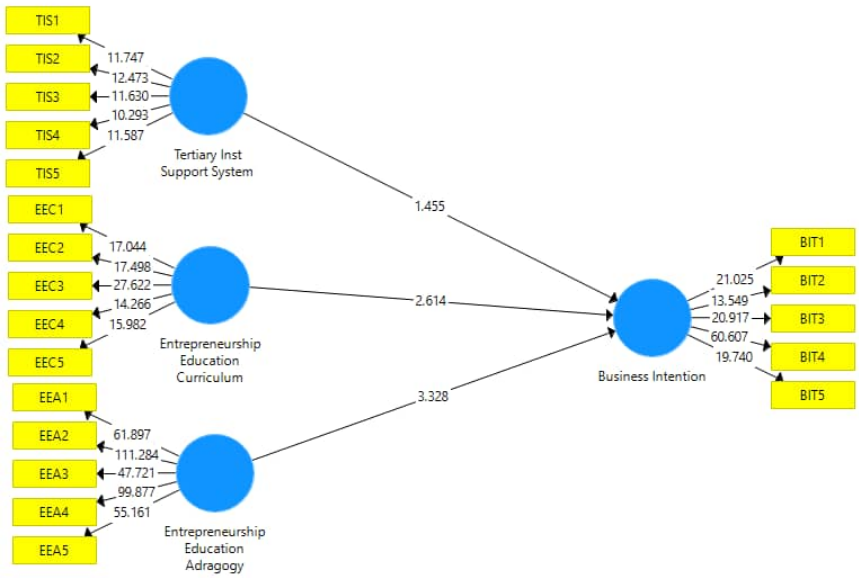



*Fig. 1: Structural Model and Hypotheses Testing*

**Table 2: Results of the Structural Model Analysis (Hypotheses Testing)**

| Hypotheses | Relationship | Path Coefficient Beta (β) | Standard Error | T Statistics | P value | Decision | $R^2$ | Adj. $R^2$ |
|---|---|---|---|---|---|---|---|---|
| **$H_{O1}$** | EEC->BIT | 0.166 | 0.061 | 2.614 | 0.009 | Rejected | 0.586 | 0.453 |
| **$H_{O2}$** | EEA->BIT | 0.218 | 0.066 | 3.328 | 0.001 | Rejected | | |
| **$H_{O3}$** | TIS->BIT | 0.087 | 0.054 | 1.455 | 0.146 | Accepted | | |

**Source: Smart PLS Output, 2026**

The structural model results indicate that the entrepreneurship education curriculum (EEC) has a positive and statistically significant effect on business intention (β = 0.166, t = 2.614, p = 0.009). Entrepreneurship education andragogy (EEA) also demonstrates a positive and significant effect (β = 0.218, t = 3.328, p = 0.001). As both t-values exceed 1.96 and p-values are below 0.05, hypotheses H01 and H02 were rejected. In contrast, the tertiary institution support system (TIS)

exhibited a positive but statistically insignificant effect on business intention ($\beta = 0.087$, $t = 1.455$, $p = 0.146$), leading to the acceptance of H03. The model accounted for 58.6 per cent of the variance in business intention ($R^2 = 0.586$, adjusted $R^2 = 0.453$). The blindfolding-based $Q^2$ statistic further confirmed the model's predictive relevance, consistent with the thresholds established by Cohen (1988) and Hair et al. (2019).

### 4.2 Discussion of Findings

The Heterotrait-Monotrait (HTMT) ratio confirmed the absence of discriminant validity issues, while convergent validity and measurement-model assessments established construct reliability. The finding that curriculum content significantly enhances business intention aligns with prior studies that emphasise the importance of well-structured entrepreneurship curricula in developing entrepreneurial competencies (Olokundun et al., 2018; Hadiza & Garba, 2015). Similarly, the significant effect of andragogy demonstrates that experiential and learner-centred teaching approaches strengthen students' business intentions more effectively than conventional lecture-based instruction (Dayat, 2018; Doan & Sung, 2018). The insignificant effect of institutional support indicates that, although incubation hubs, mentorship, and funding opportunities are relevant, they are not sufficient on their own to influence students' intention to start businesses. Instead, curriculum quality and teaching methods appear to play a more decisive role, consistent with the mixed findings reported by Bylon and Falicity (2017) and Mohammed

## 5. Conclusion and Recommendations

### 5.1 Conclusion

This study concludes that entrepreneurship education significantly influences business intention among undergraduate students in selected tertiary institutions in Kaduna State, Nigeria. Both the entrepreneurship education curriculum and andragogy demonstrated positive and significant effects on students' intentions to pursue business ventures. This finding indicates that well-structured curriculum content, combined with effective and experiential teaching methods, enhances students' entrepreneurial interest, skills, and readiness for self-employment after graduation. Although the tertiary institution support system exhibited a positive relationship with business intention, its effect was not statistically significant, suggesting that current institutional support mechanisms are not yet sufficiently effective in stimulating students' interest in business creation.

### 5.2 Recommendations

Based on these findings, the following recommendations are proposed:

i. Tertiary institutions should regularly review the entrepreneurship education curriculum to reflect current trends and student needs, ensuring it remains practical and focused on knowledge acquisition to continually stimulate students' interest in business ventures during their studies.

ii. Institutions should enhance entrepreneurship education andragogy by adopting proactive, learner-centred, and technology-supported teaching methods that facilitate communication and engagement, thereby strengthening students' interest in business ventures.

iii. Tertiary institutions should collaborate with government at all levels to provide a supportive learning and teaching environment, as well as improved access to modern tools, materials, and practical business training experiences delivered by qualified teaching staff.

**References**

Adu, E. O., Adebayo, T. S., & Ibrahim, M. A. (2023). Entrepreneurship education and entrepreneurial intentions among university students in developing economies. Journal of Entrepreneurship Education, 26(2), 1-14.

Aikhuomogbe, S. O. (2016). Preparing employees for entrepreneurship in retirement in Nigeria. Journal of Entrepreneurship and Business Innovation, 3(2), 45-58.

Aladejebi, O. (2019). The effect of entrepreneurship education on entrepreneurial intention among tertiary institution students in Nigeria. Journal of Small Business and Entrepreneurship Development, 7(1), 1-14.

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.

Bylon, A., & Falicity, A. (2017). Factors influencing entrepreneurship start-ups among graduate students in Ghana. International Journal of Business and Management Studies, 9(2), 55-68.

Byun, C. G., Sung, C. S., Park, J. Y., & Choi, D. S. (2018). A study on the effectiveness of entrepreneurship education programs in higher education institutions. Journal of Open Innovation: Technology, Market, and Complexity, 4(3), 1-13.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. Lawrence Erlbaum Associates.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum Associates.

Dayat, H. (2018). Adult learning and andragogical approaches in entrepreneurship education. Journal of Adult Education and Development, 12(2), 45-58.

Doan, X. T., & Sung, C. S. (2018). The relationship between entrepreneurship education and entrepreneurial intention among university students. Asia Pacific Journal of Innovation and Entrepreneurship, 12(3), 1-15.

Ekpoh, U. I., & Edet, A. O. (2011). Entrepreneurship education and career intentions of tertiary education students in Nigeria. International Education Studies, 4(1), 172-178.

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.

Fems, K. M. (2018). Entrepreneurship Education in Nigeria Tertiary Institutions and its Impact on Students' Entrepreneurial Career Intentions. A Study of Students at Federal Polytechnic Ekowe. Open Science Journal 5(4). https://doi.org/10.23954/osj.v5i4.1112

Hadiza, U., & Garba, A. S. (2015). Assessment of entrepreneurship education curriculum content and entrepreneurial skill acquisition among students. Journal of Education and Practice, 6(18), 45-52.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Sage Publications.

Hong, L. M., Abdullah, M. F., & Rahman, N. A. (2020). Determinants of entrepreneurial intention among university students in Malaysia. International Journal of Academic Research in Business and Social Sciences, 10(11), 105-118.

Ikechukwu, E., Nwosu, H., & Okafor, M. (2021). Influence of entrepreneurship education on students' business venturing in tertiary institutions in Nigeria. Journal of Entrepreneurship and Innovation Studies, 5(2), 22-35.

International Labour Organization (ILO). (2022). Skills development and entrepreneurship for employment creation. Geneva: ILO.

Lackéus, M. (2020). Comparing the impact of three different experiential approaches to entrepreneurship in education. International Journal of Entrepreneurial Behavior & Research, 26(5), 937-971.

Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. International Entrepreneurship and Management Journal, 11(4), 907-933.

Lloyd, E., & Robbins, P. (2014). Pre-retirement entrepreneurship skills development and public service employees in Nigeria. African Journal of Business Management, 8(12), 453-462.

Maresch, D., Harms, R., Kailer, N., & Wimmer-Wurm, B. (2016). The impact of entrepreneurship education on entrepreneurial intention of students in science and engineering. Technological Forecasting and Social Change, 104, 172-179.

Mohammed, A., Baburo, F., &Karage, M. (2014). Entrepreneurship education and students' job creation ability after graduation. Journal of Education and Practice, 5(27), 140-148.

Moses, C. L. (2015). Impact of entrepreneurship education on poverty alleviation among university graduates in Nigeria. Journal of Entrepreneurship Education, 18(2), 45-58.

Mwasalwiba, E. S. (2010). Entrepreneurship education: A review of its objectives, teaching methods, and impact indicators. Education + Training, 52(1), 20-47.

Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2018). The impact of entrepreneurship education in higher education: A systematic review and research agenda. Academy of Management Learning & Education, 17(2), 277-299.

Neneh, B. N. (2022). Entrepreneurial passion and entrepreneurial intention among university students. Journal of Entrepreneurship in Emerging Economies, 14(2), 230-249.

Nwokike, F. O. (2016). Teaching methods and entrepreneurial competencies among university students in Nigeria. International Journal of Vocational Education and Training Research, 2(4), 45-53.

Ojotu, E. L., Tsetim, J. T., Dadashi, A. & Kenneth, O. M. (2022). Entrepreneurship Education and Entrepreneurial Intention of University Undergraduate Students in Benue State Nigeria. International Journal of Innovation in Engineering 2(1), pp. 58-67. https://doi.org/10.5281/zenodo.7040190

*Ojotu, E. L., Tsetim, J. T., Dadashi, A. & Kenneth, O. M. (2022). Entrepreneurship Education and Entrepreneurial Intention of University Undergraduate Students in Benue State, Nigeria. International Journal of Innovation in Engineering 2(1), pp. 58-67. https://doi.org/10.5281/zenodo.7040190*

Olokundun, M. A., Moses, C. L., Iyiola, O. O., Ibidunni, A. S., Amaihian, A. B., Peter, F., &Borishade, T. T. (2018). The effect of non-traditional teaching methods in entrepreneurship education on students' entrepreneurial interest and business startups. Journal of Entrepreneurship Education, 21(1), 1-11.

Onuma, N. (2016). Entrepreneurial education and post-graduation job creation ability among undergraduates. Journal of Educational Policy and Entrepreneurial Research, 3(5), 32-41.

Ratten, V., &Usmanij, P. (2021). Entrepreneurship education: Time for a change in research direction? International Journal of Management Education, 19(1), 100367.

Salihu, A. (2016). Effect of entrepreneurship education on graduates' business start-up in North-Central Nigeria. Nigerian Journal of Entrepreneurship Education, 3(1), 67-82.

Shah, I. A., Amjed, S., & Jaboob, S. (2020). The moderating role of entrepreneurship education in shaping entrepreneurial intentions. Journal of Entrepreneurship Education, 23(1), 1-15.

Sofoluwe, A. O. (2013). Entrepreneurship education as a strategy for boosting human capital development and employability in Nigeria. Journal of Educational and Social Research, 3(4), 389-394.

Song, B., Rahman, M. M., & Karim, R. (2021). Entrepreneurial intention among university students: The mediating role of entrepreneurship education. International Journal of Academic Research in Business and Social Sciences, 11(6), 356-372.

Thanh-Hien, N., & Beri, N. (2018). Entrepreneurship education and innovative start-up intentions among university students in Vietnam. International Journal of Entrepreneurship, 22(3), 1-14.

Udo-Imeh, P. T., Effiong, A. I., & Asuquo, P. N. (2016). Students' perceptions of entrepreneurship education and entrepreneurial intentions. Journal of Education and Practice, 7(15), 45-53.

Ukoha, O. O. (2017). Entrepreneurship education and teaching methods in Nigerian tertiary institutions. Journal of Educational Research and Development, 12(1), 82-91.

World Bank. (2023). Youth employment and entrepreneurship development report. Washington, DC: World Bank.