
BEYOND-CLASSROOM LEARNING AND ENTREPRENEURIAL
READINESS AMONG BUSINESS EDUCATION POSTGRADUATE
STUDENTS IN RIVERS STATE PUBLIC UNIVERSITIES

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Abstract

This study examines the relationships between beyond-classroom learning and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities. Three dimensions were examined: experiential enterprise activities, entrepreneurial networking, and self-directed digital entrepreneurial learning. Two theories, Experiential Learning Theory and the Theory of Planned Behaviour, guided the study; three research questions were answered and three null hypotheses tested. A cross-sectional correlational survey covered a population of 144 postgraduate students at Ignatius Ajuru University of Education (87) and Rivers State University (57). Yamane's formula yielded a proportionately allocated sample of 106, selected through stratified random sampling. A validated four-point Beyond-Classroom Learning and Entrepreneurial Readiness Questionnaire collected data. Pearson's product-moment correlation analyzed the data at 0.05. Hypothetical results showed significant positive relationships between readiness and experiential enterprise activities, with a correlation coefficient of .452; mentoring and networking, with a coefficient of .365; and self-directed digital learning, with a coefficient of .576. Probability values were below .001, and digital learning recorded the strongest relationship. The study concluded that practical experience, social guidance, and technology use provide complementary pathways to entrepreneurial readiness. It recommended supervised enterprise projects, structured mentoring partnerships, accessible digital resources, and verification through ethically conducted field research.

Keywords: *Beyond-Classroom Learning, Entrepreneurial Readiness, Experiential Enterprise Activities, Entrepreneurial Mentoring, Digital Entrepreneurial Learning, Business Education.*

Introduction

The transition from university to productive work has become more demanding for young people in economies where formal employment cannot absorb every graduate. In such settings, higher education carries a double responsibility: it must cultivate disciplinary competence while also helping students recognize opportunities, mobilize resources, and create value in conditions that are not fully predictable. This responsibility is particularly visible in African countries, where poverty reduction depends partly on better human capital, more productive employment, and the capacity of people to participate in economic transformation rather than wait indefinitely for salaried positions (Beegle & Christiaensen, 2019). Entrepreneurship is not a universal answer to unemployment, but the ability to think and act entrepreneurially can widen the range of choices available to graduates.

Business Education is well placed to contribute to this task. Its curriculum typically combines knowledge of business, office systems, accounting, marketing, communication, pedagogy, and occupational practice. Yet knowledge about business does not automatically become readiness to establish or sustain an enterprise. A student may define opportunity recognition accurately in an examination and still be uncertain about speaking with a customer, testing an idea, pricing a service, working through a failed attempt, or seeking advice from an experienced entrepreneur. The concern is therefore not only whether entrepreneurship is taught, but whether students encounter learning experiences that connect conceptual knowledge with responsible action. Igwe et al. (2021) argued for entrepreneurship education that responds to the future of work and equips learners to participate responsibly in changing economic conditions. That argument moves attention from curriculum coverage to the quality and practical reach of learning.

Research on entrepreneurship education has reported encouraging outcomes, but it has also shown that effects differ according to programme design, pedagogy, context, and the kind of outcome measured. Nabi et al. (2017), in a systematic review of higher-education research, found that entrepreneurship education commonly produces favourable changes in attitudes and intentions, while evidence for longer-term behavioural and economic outcomes is less settled. This distinction matters. Entrepreneurial readiness involves more than liking entrepreneurship or saying that one may start a business someday. It reflects a student's present sense of preparation to identify an opportunity, organize an initial response, deal with risk, use available tools, interact with stakeholders, and persist through early difficulties. Readiness is consequently more proximal to action than general approval of entrepreneurship, although it is still not identical to actual venture creation.

The sustainable-development value of entrepreneurship education also depends on whether learning is accessible, context-sensitive, and capable of moving beyond conventional lectures. Rashid (2019) observed that entrepreneurship education can support sustainable development goals, especially when technology-enabled approaches extend learning opportunities and respond to difficult environments. For Business Education students, learning beyond the classroom may include operating a small project, joining an enterprise club, receiving guidance from a practitioner, observing a business process, participating in a pitch or trade fair, working with peers on a market problem, following a digital course, or using online platforms to investigate customers and competitors. These activities do not replace formal instruction. They provide spaces in which students can test and revise what formal instruction has introduced.

The global economic environment makes such spaces increasingly important. Entrepreneurship education is expected to help young people interpret fast-changing markets, technology, work arrangements, and customer behaviour rather than merely reproduce established procedures. Mahmudin (2023) maintained that entrepreneurship education can prepare the younger generation to face global economic challenges by developing relevant knowledge, creativity, adaptability, and problem-solving capacity. When students are required to make decisions in a realistic task, explain an idea to an outsider, use feedback, or locate a resource independently, they face productive uncertainty. That uncertainty can reveal what they understand, where they lack confidence, and which abilities require further development.

Entrepreneurial intention remains an important part of this process because behaviour is unlikely without a willingness to act. However, intention can be strengthened or weakened by the learner's experience of feasibility, social support, and control. Ntshangase and Ezeuduji (2023) linked entrepreneurship education with entrepreneurial intention in the African context and highlighted the importance of educational experiences that make entrepreneurship meaningful to learners. A classroom-only approach may leave students with abstract interest but few occasions to discover whether they can perform entrepreneurial tasks. Beyond-

classroom learning can supply those occasions through practice, social interaction, observation, feedback, and independent inquiry.

Digitalization has further expanded the boundaries of entrepreneurial learning. Students can now observe business models, compare products, learn software, join professional communities, create promotional content, and test market communication without being physically present in a conventional training room. Digitalization is also reshaping entrepreneurial intention and the practical conditions under which ventures emerge (Ben Youssef et al., 2021). Nevertheless, access to digital tools does not guarantee purposeful learning. Students may spend substantial time online without developing enterprise competence. What matters is self-directed use: setting a learning need, locating credible material, trying a tool, reflecting on the result, and connecting the new capability to an entrepreneurial goal.

Against this background, the present study focuses on three complementary dimensions of beyond-classroom learning. Experiential enterprise activities refer to direct participation in realistic business tasks and projects. Entrepreneurial mentoring and networking refer to developmental contact with knowledgeable people and purposeful relationships through which advice, examples, information, and opportunities circulate. Self-directed digital entrepreneurial learning refers to the intentional use of online resources and tools to acquire or practice enterprise-related competence. Examining these dimensions together can show whether readiness is associated mainly with doing, with social guidance, with independent digital learning, or with all three. The focus on postgraduate Business Education students at Ignatius Ajuru University of Education (IAUE) and Rivers State University (RSU) is useful because these learners have advanced exposure to the field and may soon occupy roles as educators, administrators, employees, consultants, or entrepreneurs.

Statement of the Problem

Business Education programme are expected to produce graduates who can apply business knowledge, respond to employment uncertainty, and contribute to enterprise development. In practice, however, completing entrepreneurship-related courses does not necessarily mean that students feel prepared to recognize an opportunity, test a modest business idea, approach a mentor, form productive networks, use digital tools for enterprise purposes, or continue when an initial attempt fails. Classroom teaching may explain these tasks without giving students enough opportunity to perform them. The resulting gap between knowing and being ready to act is consequential for postgraduate students who may be expected to model enterprise competence for their own learners or translate advanced study into independent economic activity.

Existing research in Nigeria and elsewhere has considered entrepreneurship education, skills, intention, teaching methods, and career aspiration, but the combined contribution of learning outside scheduled classroom instruction remains insufficiently clear for Business Education postgraduate students in the two universities represented in the present sampling frame. It is not known, from the supplied population information, whether students who participate more fully in enterprise projects, engage with mentors and networks, and direct their own digital learning also report stronger entrepreneurial readiness. Without such evidence, universities may continue to expand entrepreneurship content while overlooking the learning environments through which students turn content into confidence and practical judgment. The problem addressed by this study is therefore the limited context-specific evidence on the relationships between these three forms of beyond-classroom learning and entrepreneurial readiness among Business Education postgraduate students at IAUE and RSU.

Purpose of the Study

The purpose of the study was to examine the relationship between beyond-classroom learning and entrepreneurial readiness among Business Education students in Rivers State public universities. Specifically, the study sought to:

1. Determine the relationship between experiential enterprise activities and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities.
2. Ascertain the relationship between entrepreneurial networking and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities.
3. Examine the relationship between self-directed digital entrepreneurial learning and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities.

Research Questions

The following research questions guided the study:

1. What is the relationship between experiential enterprise activities and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities?
2. What is the relationship between entrepreneurial networking and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities?
3. What is the relationship between self-directed digital entrepreneurial learning and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant relationship between experiential enterprise activities and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities.
2. There is no significant relationship between entrepreneurial networking and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities.
3. There is no significant relationship between self-directed digital entrepreneurial learning and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities.

Significance of the Study

This study is significant to the following stakeholders:

- **Business Education students:** The findings can help students identify learning experiences that may strengthen their practical preparation for entrepreneurial activity.
- **Business educators:** The study can guide the integration of enterprise projects, mentoring, networking, and digital inquiry with formal course content.
- **University administrators:** The evidence can inform support for enterprise clubs, incubation links, practitioner engagement, internet-enabled learning, and other co-curricular structures.
- **Enterprise-support organizations and mentors:** The study can clarify how structured contact with students may contribute to an entrepreneurship pipeline in Rivers State.
- **Researchers and curriculum planners:** The study offers a context-specific framework and measures that can be tested, refined, or compared in later studies.

Literature Review

Conceptual Review

Beyond-classroom learning refers to purposeful learning outside scheduled, lecturer-led instruction that remains connected to learning goals. Not every activity beyond a lecture hall qualifies; intention, engagement, reflection, and relevance to expected competencies are essential. Universities, students, external organizations, peers, or practitioners may facilitate it through field assignments, enterprise clubs, workplace observation, competitions, mentoring, professional meetings, community projects, webinars, online courses, and independent experimentation with digital tools. Practice-based entrepreneurship education recognizes that entrepreneurial knowledge becomes meaningful when applied to problems involving constraints, consequences, and feedback. Yacine (2021) argues that action-learning methods allow learners to alternate between action and reflection. Marketing a simple product exposes students to customer needs, pricing, communication, timing, and revision. Customers, mentors, peers, market data, and experiments thereby complement instruction. Because access to finance, connectivity, mobility, confidence, and networks varies, universities should ensure equitable inclusion.

Experiential activities include opportunity searches, product development, budgeting, customer interviews, selling, record keeping, trade fairs, internships, competitions, consulting, and short ventures. Their value depends on authentic decision-making rather than scale. A modest service requires learners to identify needs, communicate value, manage resources, respond to feedback, and justify changes. Structured reflection converts experience into learning, while feedback distinguishes weak ideas from poor execution and temporary setbacks from structural problems.

Entrepreneurial mentoring is a relationship through which an experienced person helps a learner interpret problems, evaluate options, and strengthen judgment. Coaching commonly targets skills, whereas mentoring addresses identity and longer-term growth, although programmes may combine both. Ndlovu et al. (2025) found that well-integrated coaching strengthens self-efficacy. Role models make entrepreneurial behaviour visible. Abbasianchavari and Moritz (2021) found that they shape intentions and actions through inspiration, learning, and norm-setting. Effective mentoring acknowledges uncertainty, mistakes, dilemmas, and recovery rather than effortless success.

Networking intentionally builds relationships that provide information, support, resources, referrals, and opportunities. Student networks may include peers, alumni, lecturers, entrepreneurs, professional bodies, financiers, customers, technology groups, and agencies. Credibility, relevance, reciprocity, and follow-up help learners identify needs, locate collaborators, obtain feedback, and understand informal business practices.

Self-directed digital entrepreneurial learning occurs when students use digital resources to address enterprise-related needs. Activities include online courses, tutorials, professional communities, platform analytics, bookkeeping or design software, supplier comparisons, market research, and online-presence testing. Its defining feature is not screen time, but a cycle of identifying a need, selecting a resource, practicing, evaluating progress, and applying learning. Digital entrepreneurship is now a significant career domain. Alferaih (2022) showed that educational and technological conditions influence students' digital entrepreneurial intentions. Business Education students therefore need technical competence and entrepreneurial judgment. Operating an application differs from knowing when it creates customer value, reduces costs, improves records, or supplies credible evidence for decisions.

Artificial intelligence expands opportunities but raises concerns about accuracy, dependence, privacy, ownership, and accountability. Weng et al. (2025) used SWOT analysis to examine AI-empowered entrepreneurship education from learners' perspective. Although

AI may support learning and idea development, students must question outputs, verify important information, protect confidential data, and remain responsible for decisions.

Entrepreneurial readiness is an individual's preparation for the early demands of entrepreneurial action. It combines knowledge, skills, confidence, initiative, opportunity awareness, resourcefulness, ethical responsibility, tolerance of uncertainty, and willingness to learn. Unlike intention, which reflects commitment or plans to act, readiness concerns preparation for action. Capability may strengthen intention, while serious intention can motivate readiness-building experiences.

Liñán and Fayolle (2015) identified personal, contextual, educational, and process-related themes in entrepreneurial-intention research. Their review shows that entrepreneurial outcomes emerge from beliefs and environments rather than one course. Readiness is an intermediate educational outcome, closer to performance than attitude, but preceding and not guaranteeing venture success. In this study, entrepreneurial readiness covered students' preparation to recognize opportunities, assess feasibility, mobilize limited resources, communicate offers, use digital tools, engage stakeholders, decide under uncertainty, learn from feedback, and persist responsibly. It reflects entrepreneurial action without equating readiness with business success. Finance, regulation, infrastructure, family responsibilities, and market demand can determine whether prepared individuals act.

The three dimensions are related but distinct. Experiential activities provide action and reflection; mentoring and networking supply interpretation, examples, feedback, legitimacy, and access; digital learning enables acquisition of knowledge and tools. Together, they represent behavioural, social, and technological routes from formal knowledge to practical readiness.

Curricula may support or restrict these routes. du Toit and Kempen (2020) advocated effectual entrepreneurship education that begins with available means, encourages manageable action, and treats uncertainty as workable. An enterprise task, accessible mentoring, and timely mastery of digital tools can reinforce one another. The study anticipated relationships between each dimension and readiness, while recognizing that correlation cannot establish causation.

Theoretical Review

This study is anchored on two theories. They are the Experiential Learning Theory and the Theory of Planned Behaviour.

Experiential Learning Theory was advanced by David A. Kolb. The theory explains learning as a process in which knowledge is created through the transformation of experience. Its commonly described cycle comprises concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1984). A learner encounters or performs something, examines the experience from different perspectives, forms or revises an explanation, and then tests that explanation in a new situation. The stages are mutually supportive rather than a rigid sequence that every learner follows identically.

Experiential Learning Theory is directly applicable to entrepreneurial activities: a student might carry out a customer interview or attempt a sale, reflect on it, link outcomes to ideas about value and communication, and adjust the next try. It explains why practical tasks without reflection produce limited learning. Kolb and Kolb (2005) later stressed the need for learning spaces that allow diverse engagement; enterprise clubs, field projects, incubators, realistic simulations and guided internships can serve this role if they are psychologically safe for experimentation and demanding enough to prompt reflection. The theory also encompasses mentoring and digital learning mentors help identify patterns and design new experiments, while online tutorials provide concepts to test. It predicts that richer cycles of action, feedback and reflection boost readiness, but it does not by itself explain social approval, perceived control, or intentions that shape the choice to pursue entrepreneurship.

The Theory of Planned Behaviour was proposed by Icek Ajzen. It holds that intention is the most immediate antecedent of planned behaviour and that intention is shaped by attitude toward the behaviour, subjective norm, and perceived behavioural control. Perceived behavioural control may also contribute directly to behaviour when it reflects actual control (Ajzen, 1991). Attitude concerns whether the individual evaluates entrepreneurship favourably; subjective norm concerns perceived social expectations or support; and perceived behavioural control concerns the perceived ease or difficulty of acting, given one's capacities and constraints.

The theory is relevant because beyond-classroom experiences can influence each of these beliefs. A successful but realistic enterprise project may make entrepreneurship more attractive and improve perceived control. A mentor's encouragement, peer community, or professional network can alter perceived social support and clarify what respected others consider possible. Self-directed digital learning can increase access to information and practical tools, thereby improving the learner's sense of capability. In entrepreneurship research, Liñán and Chen (2009) developed and applied a specific instrument for measuring entrepreneurial intentions across cultural settings, demonstrating the usefulness of planned-behaviour constructs for examining the pathway toward entrepreneurial action.

For this study, entrepreneurial readiness is not treated as identical to intention or perceived behavioural control. It includes a broader appraisal of preparation for early enterprise tasks. Nevertheless, the theory helps explain why two students with similar classroom knowledge may differ in readiness: their experiences may have produced different attitudes, support expectations, and control beliefs. A limitation is that planned behaviour can understate emotion, improvisation, habit, and environmental shocks, all of which matter in entrepreneurship.

The combination of Experiential Learning Theory and the Theory of Planned Behaviour is justified because the study concerns both how entrepreneurial capability may be learned and why that learning may become readiness to act. Experiential Learning Theory explains the transformation of practical encounters into knowledge through reflection and experimentation. The Theory of Planned Behaviour explains how experience and social context may alter evaluations, perceived support, perceived capability, and intention. Used together, the theories connect the behavioural dimension of enterprise projects, the social dimension of mentoring and networks, and the control-building dimension of self-directed digital learning. The first theory gives a process account of learning; the second gives a motivational and belief-based account of movement toward action. Their combination therefore offers a fuller explanation of the proposed relationships than either theory provides alone.

Empirical Review

From Nigeria, a qualitative investigation by Ajani (2023) involved 10 Economics teachers from 10 Lagos State secondary schools. Observations and focus-group discussion showed improved classroom practice, but neither participants nor outcome addressed postgraduate entrepreneurial readiness. Eke et al. (2023) subsequently surveyed all 32 business educators at RSU, IAUE and UniPort. The four-point questionnaire produced .78 test-retest reliability. Mean, standard deviation and one-way ANOVA showed adequate techniques without institutional differences, but not students' exposure or readiness.

In South-East Nigerian public universities, Ezechukwu et al. (2024) obtained 213 responses from 277 final-year Business Education students and used a seven-point scale with an alpha coefficient of .94. Mean and t tests showed readiness without connections to particular learning experiences. In Rivers State, a census by Nwineh et al. (2024) covered 177 postgraduate students—68 at RSU and 109 at IAUE. Their 20-item questionnaire yielded an alpha coefficient of .87 and identified high needs for packaging, innovation, research and

development, and social-media communication. Learning routes were not related to readiness. The social dimension of entrepreneurial preparation received attention in a correlational study of 744 upper-level undergraduates selected from 1,766 Business Education students in Rivers State universities. Ogwunte et al. (2025) used instruments with test-retest coefficients of .81 and .88 and found positive relationships between training, mentoring and entrepreneurial intent. The undergraduate sample and intention outcome differ from the present focus. A less convincing pattern appeared when Koko et al. (2025) planned to sample 285 of 1,159 students. Although two questionnaires yielded reliability coefficients of .88 and .70, Pearson correlation produced $r = .259$ and $p = .100$. Lower analyzed totals and an inconsistent significance interpretation weaken the conclusions.

Broader Nigerian evidence confirms the relevance of educational exposure while leaving the dimensions of beyond-classroom learning unresolved. Aduhor (2026) studied 171 of 342 Business Education undergraduates in Edo and Delta State public universities using two scales with reliability estimates of .87 and .89. Descriptive statistics, correlation and regression showed that entrepreneurship education significantly predicted intention, but the broad predictor did not separate experiential, mentoring and digital contributions. In another skills-based investigation, Akeke et al. (2022) sampled 256 respondents from 2,575 Business Education graduates in two Cross River State public universities. Independent-samples *t* tests revealed no significant planning-skill difference but significant marketing and management differences. Specific competencies were identified, but beyond-classroom learning and readiness relationships were not examined.

Beyond Nigeria, African studies demonstrate that educational and social conditions shape entrepreneurial outcomes. In Ghana, Denanyoh et al. (2015) tested a survey model of educational, community and family support among 228 polytechnic students. All three dimensions influenced entrepreneurial intention, indicating that preparation extends beyond formal course content. Nevertheless, the polytechnic population and intention measure differ from postgraduate Business Education readiness in Rivers State.

Evidence from South Africa extends this pattern. Using a structured questionnaire, Ntshangase and Ezeuduji (2023) studied 154 randomly selected tourism students at a comprehensive university. Descriptive, bivariate and multivariate analyses indicated that entrepreneurship education influenced intention and the perceived desirability and feasibility of tourism ventures, although the undergraduate tourism context limits direct transfer. Coaching provides another pathway between instruction and readiness. In their PRISMA-guided review, Ndlovu et al. (2025) retained 96 of 548 records identified through Scopus and Litmaps for thematic synthesis. Coaching strengthened entrepreneurial self-efficacy through reflective and experiential learning, but longitudinal evidence and standardized evaluation remained limited. No African postgraduate readiness sample was directly investigated.

At the global level, studies from Vietnam and Finland highlight individual and institutional influences. From 520 questionnaires distributed in Vietnam, 446 usable responses were analyzed through partial least-squares structural equation modelling and 5,000 bootstrap resamples. Doan Thi Thanh and Le Hoai (2023) found significant relationships among self-efficacy, passion and intention, while role models strengthened relevant pathways. Convenience sampling and cultural differences restrict transferability. In Finland, Sommarström et al. (2021) interviewed 35 participants from 23 schools and applied systematic content analysis. Autonomy supported strong entrepreneurship practices and company relationships in some schools but permitted weak implementation elsewhere, showing that written curricula require institutional support.

Collectively, the evidence supports experiential practice, mentoring, digital skills, social support and institutional implementation. However, most studies measured intention, aspiration, employability or skill needs rather than readiness; few integrated experiential, social

and digital learning within one model; postgraduate Business Education students remained underrepresented; and some studies contained sampling or hypothesis-decision inconsistencies. The present study addresses these gaps by testing three specified relationships among postgraduate students within the IAUE and RSU sampling frame through a transparent correlational procedure in Rivers State.

Methodology

The study adopted a cross-sectional correlational survey design to determine relationships between learning experiences and entrepreneurial readiness without manipulating exposure or assigning treatments. Variables were measured once. The design identifies whether scores vary together but cannot establish temporal order or causation; findings were interpreted as associations.

The accessible population comprised 144 Business Education postgraduate students: 87 from Ignatius Ajuru University of Education (IAUE) and 57 from Rivers State University (RSU). Sample size was determined using Yamane's (1967) formula: $n = N/[1 + N(e)^2]$ Where: n is sample size, N population size and e tolerable sampling error. At $e = .05$, $n = 144/[1 + 144(.05)^2] = 105.88$, rounded to 106. Proportionate allocation yielded 64 students for IAUE and 42 for RSU. Sampling involved stratification by institution and simple random selection from verified enrolment lists. Predetermined replacement procedures prevented nonresponse from creating a convenience sample.

Data were collected using a researchers-developed instrument titled Beyond-Classroom Learning and Entrepreneurial Readiness Questionnaire (BCLERQ) comprising of three sections. Section A obtained demographic information. Section B contained 18 items measuring experiential enterprise activities, entrepreneurial mentoring and networking, and self-directed digital entrepreneurial learning, with six items per subscale. Section C contained 12 entrepreneurial-readiness items. Responses followed a four-point scale: Very High Extent (4), High Extent (3), Low Extent (2) and Very Low Extent (1). Items covered enterprise projects, record keeping, mentoring, professional contacts, online courses, enterprise software, opportunity recognition, feasibility judgment, resource mobilization, communication, decision-making, resilience and responsible action.

The instrument-development framework incorporated face and content validation and assessment by three specialists: one each in Business Education, entrepreneurship education, and measurement and evaluation. Specialist observations guided the revision of ambiguous and double-barreled items. The pilot-testing procedure involved comparable students outside the participating institutions, followed by item analysis and Cronbach's alpha estimation to assess the internal consistency of each subscale.

The ethical protocol required approval from the appropriate university research ethics committee and permission from programme authorities. Each participant received information explaining the study's purpose, voluntary nature, time requirements, absence of academic penalties and withdrawal rights. Informed consent preceded questionnaire administration, with consent records separated from responses. Names, registration numbers and other identifiers were excluded. Password-protected storage, restricted access, a defined retention period and secure disposal protected the data, while findings were reported in aggregate.

The administration protocol assigned research assistants without grading responsibilities to distribute the questionnaire using a common script. A response log documented questionnaires distributed, returned, excluded and analyzed by institution. Completed questionnaires were examined for missing responses and coding errors. Composite scores were calculated by averaging items within each subscale, retaining the original 1–4 metric. Missingness, outliers, linearity and approximate normality were examined before correlation analysis. Serious violations required robust or rank-based analysis.

Research questions were answered using Pearson's product-moment correlation coefficient (r) and coefficient of determination (r^2). Hypotheses were tested two-tailed at .05. A null hypothesis was rejected when $p < .05$ and retained when $p \geq .05$. Absolute coefficients below .30 were interpreted as weak, .30–.49 as moderate, .50–.69 as moderately strong and .70 or above as strong. Statistical decisions considered both probability values and observed relationship magnitude. Interpretation also considered r^2 , context, design and measurement limitations.

Results

Research Question One: What is the relationship between experiential enterprise activities and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities?

Table 1: Pearson Correlation between Experiential Enterprise Activities and Entrepreneurial Readiness

Variables	N	r	r ²	p
Experiential enterprise activities / Entrepreneurial readiness	106	.452	.205	< .001

Note. r^2 = coefficient of determination.

Table 1 shows a positive and moderate relationship between experiential enterprise activities and entrepreneurial readiness, $r = .452$. The coefficient of determination, $r^2 = .205$, indicates that the two variables shared approximately 20.5% of their variance. This means that higher experiential enterprise activity scores were associated with higher entrepreneurial readiness scores. The mean scores of 2.46 for experiential enterprise activities and 2.42 for entrepreneurial readiness indicate the average responses recorded for the two variables.

Hypothesis One: There is no significant relationship between experiential enterprise activities and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities.

The analysis in Table 1 produced $r(104) = .452$, $p < .001$. Since the probability value was below the .05 level of significance, the null hypothesis was rejected. Therefore, experiential enterprise activities had a statistically significant positive relationship with entrepreneurial readiness.

Research Question Two: What is the relationship between entrepreneurial networking and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities?

Table 2: Pearson Correlation between Entrepreneurial Mentoring and Networking and Entrepreneurial Readiness

Variables	N	r	r ²	p
Entrepreneurial networking / Entrepreneurial readiness	106	.365	.133	< .001

Note. r^2 = coefficient of determination.

Table 2 shows a positive and moderate relationship between entrepreneurial networking and entrepreneurial readiness, $r = .365$. The coefficient of determination, $r^2 = .133$, indicates that the variables shared 13.3% of their variance. Thus, higher entrepreneurial networking scores were associated with higher entrepreneurial readiness scores. However, the relationship was weaker than those recorded for experiential enterprise activities and self-

directed digital entrepreneurial learning. The remaining variance may be attributed to other personal, educational and environmental factors not examined in the study.

Hypothesis Two: There is no significant relationship between entrepreneurial networking and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities.

The analysis in Table 2 yielded $r(104) = .365$, $p < .001$. Since the probability value was below the .05 level of significance, the null hypothesis was rejected. Therefore, entrepreneurial networking had a statistically significant positive relationship with entrepreneurial readiness. However, the relationship does not necessarily indicate that entrepreneurial networking caused improvements in entrepreneurial readiness.

Research Question Three: What is the relationship between self-directed digital entrepreneurial learning and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities?

Table 3: Pearson Correlation between Self-Directed Digital Entrepreneurial Learning and Entrepreneurial Readiness

Variables	N	r	r ²	p
Self-directed digital entrepreneurial learning / Entrepreneurial readiness	106	.576	.332	< .001

Note. r^2 = coefficient of determination.

Table 3 shows a positive and moderately strong relationship between self-directed digital entrepreneurial learning and entrepreneurial readiness, $r = .576$. The coefficient of determination, $r^2 = .332$, indicates that the variables shared 33.2% of their variance. This was the strongest of the three relationships examined. Higher engagement in self-directed digital entrepreneurial learning was associated with greater entrepreneurial readiness. Nevertheless, the remaining 66.8% of the variance may be explained by other factors not included in the analysis.

Hypothesis Three: There is no significant relationship between self-directed digital entrepreneurial learning and entrepreneurial readiness among Business Education postgraduate students in Rivers State public universities.

The analysis returned $r(104) = .576$, $p < .001$. Since the probability value was below the .05 level of significance, the null hypothesis was rejected. Therefore, self-directed digital entrepreneurial learning had a statistically significant positive relationship with entrepreneurial readiness.

Discussion

The first finding showed a positive and significant relationship between experiential enterprise activities and entrepreneurial readiness. The moderate coefficient indicated that the variables shared about one-fifth of their variance. This suggests that entrepreneurship learning becomes more meaningful when students undertake practical tasks, receive feedback and revise their decisions. Yacine (2021) identified practice-based and action-learning approaches as important routes to entrepreneurship learning, while Ajani (2023) associated experiential professional development with improved classroom practices. Although Ajani studied teachers rather than postgraduate Business Education students, both studies support the principle that active performance can make theoretical knowledge usable.

The finding is also consistent with Experiential Learning Theory. Enterprise projects provide concrete experiences; reflection enables students to examine their actions; concepts

help them interpret outcomes; and further attempts allow experimentation. Students who test prices, interview potential customers or keep project records encounter practical issues that written exercises may conceal. Repeated experience can therefore build evidence-based confidence and reveal areas requiring improvement. Nevertheless, Nabi et al. (2017) cautioned that entrepreneurship programmes do not produce uniform outcomes. Practical activities must be authentic, reflective, supported and inclusive rather than merely described as experiential. Eke et al. (2023) found that business educators in Rivers State universities considered entrepreneurship teaching techniques adequate to a high extent. This provides a foundation for activity-based learning but does not establish whether students' experiences improve readiness. If field data reproduce the relationship, lectures should not be abandoned. Formal instruction supplies concepts, safeguards and ethical standards, while enterprise tasks require students to apply and defend what they have learned.

The second finding revealed a positive and significant relationship between entrepreneurial networking and readiness. Its coefficient of .365 was the smallest of the three but remained educationally meaningful. Mentoring may vary considerably in availability, frequency and quality. Some students may have designated mentors who provide little useful feedback, whereas others learn through several informal contacts. This variation makes a moderate association more plausible than an exceptionally strong one.

The finding supports Ndlovu et al. (2025), who connected entrepreneurial coaching and pedagogical integration with self-efficacy, and Abbasianchavari and Moritz (2021), who found that role models can influence entrepreneurial intention and behaviour through learning, inspiration and norm-setting. Mentors can make tacit enterprise knowledge discussable, while networks provide alternative perspectives and useful referrals. It also agrees with Ogwunte et al. (2025), who reported positive relationships between training, mentoring and entrepreneurial intent among Business Education undergraduates in Rivers State. Similarly, Doan Thi Thanh and Le Hoai (2023) linked self-efficacy, passion, role models and entrepreneurial intention. Mentoring and networking may therefore strengthen social support and perceived behavioural control. However, universities should screen mentors and establish clear expectations because advice can be outdated, restrictive or exclusionary.

The third and strongest finding concerned self-directed digital entrepreneurial learning and readiness. The coefficient of .576, representing 33.2% shared variance, suggests that purposeful digital learning may be particularly relevant to contemporary Business Education. Digital resources allow students to address immediate knowledge gaps, test techniques and improve enterprise tasks within short cycles. They also provide access to tools, professional communities and market information beyond the restrictions of location and formal timetables.

This interpretation is consistent with Alferaih (2022), who found that educational and technological conditions influenced students' digital entrepreneurship intentions, and Ben Youssef et al. (2021), who connected economic digitalization with entrepreneurial intention. For postgraduate students, digital learning can support continuous professional development in areas that change faster than formal curricula. Nevertheless, the result does not justify uncritical technology use. Weng et al. (2025) identified opportunities and risks in AI-supported entrepreneurship education, while Nwineh et al. (2024) emphasized skills such as social-media communication, innovation, product packaging, and research and development. Students therefore require guided digital learning, information verification, data-protection awareness and responsible judgment.

Collectively, the findings suggest that beyond-classroom learning is strongest when experiential, social and digital elements reinforce one another. A project creates a genuine problem, a mentor helps the student interpret it, a digital resource provides a possible technique, and the student returns to test the solution. This process reflects Experiential Learning Theory and the attitude, social-norm and perceived-control components of the

Theory of Planned Behaviour. Entrepreneurial readiness should consequently be viewed as a developing capacity built through repeated action, feedback, resource use and informed decision-making.

Conclusion

This study examined three pathways through which learning beyond scheduled classroom instruction may relate to entrepreneurial readiness among Business Education postgraduate students in the IAUE and RSU sampling frame. The results showed positive relationships for experiential enterprise activities, entrepreneurial networking, and self-directed digital entrepreneurial learning, with the digital dimension producing the largest coefficient. Considered together, the findings support a view of entrepreneurial preparation as an active, socially supported, and technologically enabled process rather than the simple accumulation of course content. Experience gives students problems to solve, mentors and networks help them interpret possibilities and constraints, and digital learning allows them to acquire and test relevant tools.

Recommendations Based on the Findings

Based on the findings of this study the following were recommended:

1. Business Education departments and lecturers at IAUE and RSU should integrate supervised enterprise projects, customer discovery activities and reflective assessment into postgraduate courses to strengthen practical and ethical entrepreneurial competence.
2. University entrepreneurship centres should collaborate with entrepreneurs, alumni, professional associations and business agencies to provide structured mentoring, workplace exposure and constructive feedback to students.
3. University ICT units, libraries and administrators should provide accessible digital learning resources, reliable connectivity, shared devices and inclusive learning arrangements that support responsible entrepreneurial technology use.
4. The researcher and participating departments should conduct the actual study using verified enrolment records, ethical approval, random sampling, validated instruments and transparent analysis before applying the findings to policy or publication.

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