

Entrepreneurial Pedagogy and Self-efficacy of Selected Nigerian Undergraduates: Assessing the Mediating Role of Entrepreneurial Orientation

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Abstract

Introduction: The nexus between education and entrepreneurship has garnered increasing attention, particularly in the context of developing economies striving for sustainable industrialization. This study delves into the intricate dynamics of entrepreneurial pedagogy, self-efficacy and entrepreneurial orientation within the ambit of Nigerian universities. As entrepreneurship continues to play a pivotal role in fostering economic growth and innovation, understanding the mechanisms through which educational practices shape entrepreneurial attitudes become imperative.

Objectives: Investigate and assess five distinct pedagogical approaches employed in the Nigerian universities, with specific focus on four Agri based institutions, to understand how they contribute to the level of self-efficacy among undergraduate students. Also, examine the entrepreneurial orientation cultivated among students and its role in mediating the relationship between entrepreneurial pedagogy and self-efficacy.

Methods: Utilizing a unique questionnaire administered to a sample of 311 undergraduate students, the study employs Structural Equation Model as a robust analytical tool, the overall hypothesis posits that specific pedagogical approaches, such as problem-based, experiential, and practice-firm methods, have a significant effect on students' perceptions of their own entrepreneurial efficacy.

Results: Result indicate that problem based, experiential and practice-firm pedagogical approaches significantly impacts student's entrepreneurial self-efficacy. Furthermore, the study unveils a notable partial The association between entrepreneurial pedagogy and self-efficacy is mediated by entrepreneurial orientation. among undergraduate students. These findings shed light on the pivotal role of pedagogy and entrepreneurial orientation in shaping entrepreneurial self-efficacy, thereby enhancing entrepreneurial intentions in the context of Agric-based universities in Nigeria.

Conclusions: This investigation holds implications not only for academia but also for policymakers and educators seeking to cultivate a vibrant entrepreneurial ecosystem within the educational landscape. The findings are expected to offer practical insight into how innovative and interactive teaching methods can be leveraged to enhance students' entrepreneurial intentions by fortifying their self-efficacy. Particularly in agricultural domain, harnessing the potential of entrepreneurial education becomes a strategic imperative.

Keywords: Entrepreneurial Pedagogy, Self-efficacy, Entrepreneurial orientation, Nigeria, University

1. Introduction

Entrepreneurship plays a critical role in accelerating economic development and job creation, making it an essential area of focus in higher education. As the entrepreneurial landscape continues to evolve,

the pedagogical approaches employed in entrepreneurship education are becoming increasingly critical. Entrepreneurial pedagogy refers to the teaching methods, strategies, and curricula employed in entrepreneurship education.

It encompasses the various approaches used to impart knowledge, develop skills, and foster an entrepreneurial mindset among students. These pedagogical approaches can include experiential learning, business simulations, case studies, mentorship programs, and entrepreneurial projects, among others (Igwe et al., 2022; Jones, 2019). The effectiveness of these pedagogical methods in cultivating entrepreneurial skills and fostering self-efficacy is a topic of great interest and importance particularly in emerging economies (Fenech et al., 2019; Fiet, 2001; Nowiński et al., 2019).

However, In Nigeria's context choosing and promoting educators who are not able to engage the students in the necessary experiential activities have inhibited the expected favorable outcomes (Obi and Okekeokosisi, 2018). The common traditional pedagogy has come under increased criticism for failing to be relevant to the students' needs (Philippe, 2018). The theory and teacher-based approach which is rampant in Nigerian institutions could limit the student's ability and self-believe to effectively complete an entrepreneurial task or activities due to their inability to connect the theory thought with the reality faced. Lackéus, (2015) posit that the traditional pedagogy has remained the predominant approach in practice since more than a century rather than the entrepreneurial pedagogy. Similarly, scholars observed that educators continue to have difficulty bridging the conceptual and practical divide in higher education (Hakim, 2015; Lucky & Yusoff, 2015). To express and share learning designs is one potential way to solve this issue and advance practice. Self-efficacy, on the other hand, plays a crucial role in the entrepreneurial process. It influences individuals' perceptions of their ability to identify opportunities, develop innovative solutions, take risks, and persist in the face of challenges. High self-efficacy has been associated with greater entrepreneurial intentions, venture creation, and business success (Juhari et al., 2023; Nowiński et al., 2019). Therefore, understanding the factors that contribute to the development of self-efficacy among undergraduates is crucial for promoting entrepreneurial intentions and actions (Igwe et al., 2022; Jung et al., 2001; Newman et al., 2019; Okolie et al., 2021).

Furthermore, entrepreneurial orientation refers to an individual's inclination and readiness to engage in entrepreneurial activities. It encompasses the willingness to take risks, the proactiveness in seeking opportunities, and the inclination to innovate. This study aims to assess the mediating role of entrepreneurial orientation in the relationship between entrepreneurial pedagogy and self-efficacy, recognizing the potential influence of entrepreneurial orientation on the development of self-efficacy among Nigerian undergraduates. By exploring these interrelationships, this research aims to offer insights into the effectiveness of entrepreneurial pedagogy in fostering self-efficacy among Nigerian undergraduates. Additionally, it aims to shed light on the mediating role of entrepreneurial orientation in this relationship, offering a comprehensive understanding of the factors that influence entrepreneurial intentions and behaviors in Nigeria.

1.1 Literature Review

Entrepreneurial Pedagogy (EP)- How entrepreneurship should be taught

The study of instructional strategies and how they impact students is known as pedagogy. The use of pedagogy helps students gain a full comprehension of a subject and apply what they have learned in real-world situations outside of the classroom. The ability to link the teaching to relevant research in the field of interest is another aspect of pedagogical skills. Therefore, EP refers to the study of teaching methodologies and styles used for entrepreneurship education (Moses & Mosunmola, 2014). Since more than a century, traditional pedagogy has remained the most common method used in practice. Much discussion about entrepreneurial education compares the "traditional" and "entrepreneurial" mode of teaching (Lackeus, 2015). The goal of entrepreneurial pedagogy is to use resources—tools, knowledge, techniques, and instructional approaches—that can help students become more confident in their ability to succeed as entrepreneurs. Because entrepreneurship is reflective action Mariotti and Rabuzzi, (2009) no amount of book-based learning would be sufficient for students to progress in the field. However, teachers must be aware of the learners'

characteristics when implementing the curriculum, including their demography, area of interest, and domain (Obi and Okekeokosisi, 2018; Ibidunni, Ibidunni, Olokundun, Oke, Ayeni & Falola, & Borishade, 2018).

Entrepreneurial pedagogy encompasses different approaches; the problem-based, project-based, practice firm, simulations and games, field trips to local entrepreneurial ventures, and student run businesses all aimed at empowering, reflective, cooperative and experiential activities for the learners. When implementing an entrepreneurial pedagogy, a teacher's function shifts from knowledge distributor to organizer, planner, motivator, counselor, or coach (Paulson, 2013). According to Zhou & Xu (2012), an appropriate instructional approach should be used to enhance entrepreneurship education. Mehlhorn et al., (2015) asserts that the majority of pedagogical teams in developed nations are aware of the necessity for entrepreneurship education as well as the distinction between entrepreneurship and agribusiness or agri-management. Project-based learning is utilized to encourage entrepreneurship, however for the programs to be effective, changes must be made. Use of real and practical initiatives should be employed, and agricultural and business schools should collaborate more (Marchese et al., 2012). However, for entrepreneurial education to be successful, it is crucial to concentrate on how it is taught within the framework of a particular field. (Carey and Matlay, 2011).

Studies indicate that the integration of creative and entrepreneurial abilities into teaching techniques within education and training systems results in the development of mindsets and skills that are more closely aligned with the "art" of entrepreneurship (i.e. creativity and innovation) are transmittable (Jones, 2019; Mukesh et al., 2020; Okolie et al., 2021). Entrepreneurial pedagogy, according to Lackeus (2015), focuses on issues, opportunities, authenticity, artifact creation, iterative experimentation, real-world interactions, value creation to external stakeholders, team work, innovation, risk taking and more. While these approaches may be similar to some other pedagogical approaches, the entrepreneurial approach stands out amidst other approaches; problem-based learning, project based, service

learning because it is all encompassing. It is holistic, multidisciplinary, adopts learning as a social interaction such as storytelling, using an iterative process that is value bond, and students are actively involved, committed and emotionally attached and they can practice the experiences gained through the creation of new values. The teaching of entrepreneurial education uses a variety of methodologies and models, which has led to a variety of pedagogical difficulties. According to Moses & Almeida, (2017) institutional pressure to provide pedagogies that produce succinct, accurate, and comparable measurements so that we can evaluate the outcome is common. These criteria have led to a variety of pedagogical issues, including choosing the best entrepreneurial curriculum, teachers, locations, and results to utilize in entrepreneurship education (Peter, Eze, Adeyeye, Osigwe, Peter, Adeyemi, & Asiyanbola, 2021).

No lecture in a textbook can compare to the impact of using real money and the participation of business executives, while when younger or less experienced students learn by observing and imitating individuals whose tactics and talents are higher, some of the most beneficial learning may occur informally and tacitly. Therefore, a wider range of pedagogical tools should be included in youth entrepreneurship education, including liberal use of visual aids in addition to text, in order to suit various learning styles (Olokundun et al., 2017). Another entrepreneurship education technique that ought to be implemented in Nigerian universities is the case study. Additionally, a practical and learner-driven teaching strategy that incorporates exchanges and study visits, brainstorming sessions, role plays, and a variety of activities should be employed (Ma'atoofi, & Tajeddini, 2010). Ely et al., (2014), study on the improving instructional strategy concluded that the multimedia-based interventions enables students to identify, exploit business opportunities, obtain and apply the skills required to transform opportunities into profitable ventures.

Mariotti and Rabuzzi (2009) argue that digital learning approaches must be continuously pioneered in entrepreneurial education in their discussion of the use of digital resources. the use of digital models like the Virtual Enterprise, provided

by a partnership led by the City University of New York, the M.I.T. "Games-to-Teach" Project, supported by Microsoft, and many more options. In order to motivate students to continually pursue their entrepreneurial ambitions, it is crucial to provide them with real-world examples. Students should be obliged to read and write about some of the greatest entrepreneurs of the past and present. School and working world collaboration is another teaching method in entrepreneurship education. This method of instruction gives students the chance to see first-hand what goes on in the real workplace (Hughes, Morgan, Ireland, & Hughes, 2011).

As a result, learners are actively engaging with entrepreneurs through the immersion method and are exposed to entrepreneurship-in-practice through the utilization of real-world case studies and practitioner testimonials. Depending on the specifics of the school, each student works with an entrepreneur for around three (3) months, after which the student reports to his or her supervisor (Donbesuur, Boso, & Hultman, 2020). Amjad, Rani, and Sa'atar, (2020) suggests some practical factors for an instructional program on entrepreneurship; approach must be empowering such that students can take responsibility of their learning, EP should be experiential and actively promote practical orientations by engaging students in concrete experiences, should be reflective of what students have learned (metacognition) by promoting creativity and innovations and should be collaborative such that social skills is strengthened. Correspondingly, Kozlinska, Rebmann, and Mets (2020) submit that pedagogy should be focused on problem solving and practical applications, as well, include the concepts of individual responsibility and ownerships. In addition, direct links between teachers and entrepreneurs as well as schools and organizations should be encouraged to bridge the gap between theory and practice (Ibidunni, Mozie, & Ayeni, 2020).

Theoretical Framework: Self-efficacy

People's views of their ability to reach particular performance levels that exert influence over situations that have an impact on their lives are referred to as self-efficacy, according to Albert Bandura's concept of self-efficacy introduced in 1986. This concept is frequently compared to

perceived behavioral control in the theory of planned behavior and perceived feasibility in the entrepreneurial event model, especially in entrepreneurship intention research. A sizable body of research demonstrates that self-efficacy influences the successful self-control of a variety of entrepreneurial behaviors, such as developing a new product and launching a business, as a motivational perception driving behavior. It is believed that self-efficacy, in particular, has an impact on the tasks and activities that people decide to take on.

Importantly, our decision about how much effort and perseverance to put forth toward goal fulfillment is guided by our self-efficacy beliefs when established goals (or standards) become endangered. As a result, self-efficacy is a crucial psychological concept to consider when analyzing the self-regulation of entrepreneurial and enterprising behavior and performance because innovations like new product designs, or agribusiness start-up demand constant work and perseverance. A few researches indicate that entrepreneurial self-efficacy has a major role in determining entrepreneurial intention (Bernstein & Carayannis, 2012; Bullough et al., 2013).

According to Bandura's self-efficacy theory (Bandura, 1997) in Tirtayasa, Khair, and Yusri, (2021), mastery experiences, vicarious experiences, verbal persuasion, and physiological/affective states are the four main sources of information used to create self-efficacy beliefs. Importantly, depending on how people interpret and process the information, these sources may have a good or negative impact on self-efficacy. In order to provide "the most authentic evidence of whether one can muster whatever it takes to achieve," mastery experiences are regarded as the most significant source of self-efficacy. As opposed to unsuccessful task performance, successful task performance often boosts self-efficacy. Watching others (i.e., models) accomplish a task, visualizing oneself performing a task (i.e., through mental imagery), and interpreting the procedures followed and the results (success/failure) in light of one's own experiences are all examples of vicarious experiences. It is believed that vicarious experiences boost self-efficacy through successful performances; in other words, when someone

visualizes themselves or a model accomplishing a task, their own self-efficacy for that task rises as well. However, in terms of normative performance standards, vicarious experiences also function through social comparison. Self-efficacy rises when people outperform others, but it declines when they are outperformed.

Verbal persuasion affects efficacy beliefs by using input from other people. Positive reinforcement, such as "excellent work," and competence-related criticism, such as "you did fantastic," boost self-efficacy, whereas negative assessments of performance lower self-efficacy. Affective and physiological states are the final source(s) of self-efficacy. When performing physical tasks, affective and physiological states are especially crucial for affecting self-efficacy (Bandura, 2000). Depending on how it is evaluated, physiological information can have a significant impact on self-efficacy. While recent research has sought to study the causal significance of self-efficacy, it was not originally posited as a psychological construct driving self-regulated behavior.

Entrepreneurial self-efficacy:

De Noble et al. (2007) developed the concept of Entrepreneurial Self-Efficacy, which includes creating new products and markets, creating an innovative environment, establishing connections with investors, defining a core purpose, handling unforeseen obstacles, and creating vital human resources. In order to build a strong foundation upon which to launch a business, the first dimension, developing new product and market opportunities, entails an individual's belief in their ability to produce new products and to locate openings. The ability to inspire others or one's team to try a novel concept or take creative action is a key component of the second dimension, creating an inventive atmosphere. Establishing investor relationships, the third component, entails a person's confidence in their ability to locate funding sources for their enterprise.

The fourth component, identifying fundamental purpose, deals with a person's conviction that they can articulate their vision clearly, uphold it, and make it understandable to their team and investors. The ability to accept and manage ambiguity and uncertainty in the start-up entrepreneur is a component of the fifth dimension, coping with

unforeseen challenges. The ability to attract and keep significant and talented people as venture members is a prerequisite for the sixth dimension, building vital human resources.

2. Objectives

The nexus between education and entrepreneurship has garnered increasing attention, particularly in the context of developing economies striving for sustainable industrialization. This study delves into the intricate dynamics of entrepreneurial pedagogy, self-efficacy and entrepreneurial orientation within the ambit of Nigerian Universities, with specific focus on four agricultural based institution. As entrepreneurship continues to play a pivotal role in fostering economic growth and innovation, understanding the mechanisms through which education practices shape entrepreneurial attitudes become imperative. In this pursuit, the study aims to unravel the relationship between entrepreneurial pedagogy, students' self-efficacy and the cultivation of an entrepreneurial orientation. Based on the aforementioned, the following hypotheses were formulated:

H1: Entrepreneurial pedagogy significantly impact entrepreneurial self-efficacy

H2: entrepreneurial pedagogy is significantly associated with the development of entrepreneurial orientation

H3: Entrepreneurial orientation (innovativeness, proactiveness, and risk-taking propensity) mediates the relationship between entrepreneurship pedagogy and entrepreneurial self-efficacy of undergraduates in Nigeria.

3. Methods

The research employed a quantitative approach utilizing a survey method to collect data. A total of 311 respondents were randomly selected from four Agric-based Universities. Of the 397 individuals invited to participate, 311 completed the questionnaire, a response rate of 78%. The sample was drawn from a population of 58,011 undergraduate students enrolled in various programs at four universities. The sample size was determined using the Taro-Yamane formula. Stratified sampling was employed to ensure proportional representation of the questionnaire

responses from each university: Joseph Sarwan Tarka,121; Federal University of Agriculture, Abeokuta, 123; Michael Okpara University of Agriculture, 127; and Landmark University, 26. Random techniques were used for randomization. To administer the questionnaire, a digital platform in the form of Google Forms was used. The respondents were contacted via email and WhatsApp. The measurement of variables involved assessing respondents' entrepreneurship self-efficacy as the dependent variable. The independent variables include the use of entrepreneurship pedagogy, which is mediated by entrepreneurship orientation.

Entrepreneurship pedagogy was measured using five Likert items, while entrepreneurship orientation was measured using 11 Likert items, comprising three questions on proactiveness, four items on risk-taking, and four items on innovative capacity. Additionally, five items were used to measure self-efficacy. A structured questionnaire was used to collect data. It consisted of two sections: the first captured the respondents' demographic variables (bio data), while the second addressed the core subject matter related to the research problem. The questionnaire adopted a five-point Likert scale, allowing respondents to indicate their agreement or disagreement, ranging from "Strongly Agreed" to "Strongly Disagreed." Structural equation modelling (SEM) was used for data analysis. SEM was used to assess the strength and direction of the relationship between the independent variable (agriprenurship pedagogy) and dependent variable (self-efficacy). SEM was used to examine the mediating effect of entrepreneurship orientation on this relationship. This approach allowed for a comprehensive examination of the interplay between the variables and provided insights into the magnitude of their impact.

4. Results

The result of the descriptive statistics show that the mean and standard deviations were 4.39 (0.737), 4.23 (0.712), 3.66 (0.947), 3.96 (0.816) and 3.83 (0.964) for problem based, Simulations, Book based, Experiential and Practice firm pedagogies respectively. 4.08 (0.487) and 4.05 (0.597) for entrepreneurial orientation and self-efficacy

respectively. The outcome shows that every mean was higher than 3, which is the midpoint, indicating that every respondent gave an affirmative response. The standard deviation showed that the practice firm had the greatest variety in perception, while the entrepreneurship approach had the least variability of 0.964 and 0.487 respectively.

Table 1: Direct effects of Entrepreneurial pedagogy on Self-Efficacy

Model	Co ef.	Sig.	z	Hypoth eses	Remar k
EO→AG P_SE	0.766	.000**	3.51	H ₀₂	Confir med
PB →AGP_SE	0.088	.009**	1.83	H ₀₁	Confir med
Sim→AG P_SE	-0.069	.061	-0.12	H ₀₁	Not confir med
BB →AGP_SE	-0.033	.171	4.18	H ₀₁	Not confir med
EI →AGP_SE	0.086	.008**	5.64	H ₀₁	Confir med
PF →AGP_SE	0.067	0.023*		H ₀₁	Confir med

The result of the structural equation model (Direct effects) of agriprenurship pedagogy predictors (problem based, simulations, book based, experiential and practice firm pedagogies) on student entrepreneurial self-efficacy with entrepreneurial orientation as the mediating variable shows that the coefficient of the entrepreneurial orientation, problem based, simulations, book based, experiential and practice firm pedagogies were 0.766, 0.088, -0.068, -0.0329, 0.0860, and 0.0667 respectively. Thus, the model of Agriprenurship self-efficacy is:

$$\text{Agp_SE} = 0.7656\text{EO} + 0.0878\text{PB} + -0.069\text{Sim} + -0.033\text{BB} + 0.086\text{EL} + 0.067\text{PF} + e.... (i).$$

The calculated Z and corresponding p values for the model were: 13.54 (p<0.000), 2.62 (p<0.009), -1.88 (p<0.061), -1.37 (p< 0.171), 2.64 (p<0.008), 2.27 (p<0.023) for EO, entrepreneurial orientation, problem based, simulations, book based,

experiential and practice firm pedagogies respectively (see figure 1 and Table 3). The implication is that the mediator (entrepreneurial orientation), and problem based, experiential learning and practice firm are the only statistically significant predictors of student attitude and skills. Equation (ii) indicates that a unit change in entrepreneurial orientation will stimulate 76.56% variation in entrepreneurial self-efficacy, a unit change in problem-based approach will cause a 08.78% change, A unit change in simulation approach will cause a -06.87% variation on the self-efficacy of the students. Also, a unit change in book-based approach will cause a 03.29% change in the self-efficacy of the undergraduates, a unit change in experiential learning will lead to a 08.60% change and a unit change in practice firm will lead to a 06.67% change in self-efficacy (see figure 1 and table 1)

Table 2: Direct effects of Entrepreneurial pedagogy on EO

Model	Coef.	Sig.	z	Hypotheses	Remark
PB→EO	0.116	.000**	3.51	H ₀₂	Confirmed
Sim→EO	0.067	.067	1.83	H ₀₂	Not confirmed
BB→EO	-0.003	.907	-0.12	H ₀₂	Not confirmed
EL→EO	0.133	.000**	4.18	H ₀₂	Confirmed
PF→EO	0.158	.000**	5.64	H ₀₂	Confirmed

The result of the Table 2 SEM model (direct effects) reveals that the coefficient of the predictor were 0.116, 0.067, -0.003, 0.133, and 0.158 for problem based, Simulations, Book based, Experiential and Practice firm pedagogies respectively. Considering that the research model is given by:

$$AgpP = \beta_0 + \beta_1 PB + \beta_2 Sim + \beta_3 BB + \beta_4 EL + \beta_5 PF + e$$

The hypothesized relationship between Agripreneurship Pedagogy and Entrepreneurial orientation is given by:

$$EO = \beta_0 + 0.1159PB + 0.0668 Sim + -0.0028BB + 0.1332EL + 0.1580 PF + e \dots (ii).$$

Equation (i) indicates that a unit change in problem based approach will cause a 11.59% change, a unit change in Simulation will cause a 06.68% variation, a unit change in Book based approach will cause a 0.28% change, a unit change in experiential learning

approach will lead to 13.32% change and a unit change in practice firm approach will lead to a 15.80% change on the entrepreneurial orientation of the students (see figure 1 and table 1).

The result also indicates that the computed Z and associated asymptomatic probabilities were -3.51 ($p < 0.000$), 1.83 ($p < 0.067$), -0.12 ($p < 0.907$), 4.18 ($p < 0.000$), and 5.64 ($p < 0.000$) for problem based, Simulations, Book based, Experiential and Practice firm pedagogies respectively. This indicates that all the explanatory variables (problem based, simulations, book based, experiential and practice firm pedagogies) excluding book based are positively related to entrepreneurial orientation. However, while the positive relationship between problem based, experiential and practice firm pedagogies were statistically significant, the result for Simulations and Book based approach were not statistically significant at all; thus, problem based, experiential and practice firm pedagogies are perceived to be significant predictors of

entrepreneurial orientation while simulations and book-based approaches were not. Consequently, we can conclude that, at 99% confidence level, problem based, experiential and practice firm pedagogies are significant predictors of EO

Table 3: Indirect effects

Model	Coef.	Sig.	z	Hypotheses	Remark
AGP_S E <-EO <- PB	0.089	0.001**	3.51	H ₀₃	Confirmed
AGP_S E <- EO <- Sim	0.051	0.070	1.83	H ₀₃	Not confirmed
AGP_S E <-EO <- BB	-0.002	0.907	-0.12	H ₀₃	Not confirmed
AGP_S E <-EO <- EL	0.102	.000**	4.00	H ₀₃	Confirmed
AGP_S E <-EO <- PF	0.121	.000**	5.20	H ₀₃	Confirmed

The result of the structural equation model (indirect effects) of agripreneurship pedagogy indices (problem based, simulations, book based, experiential and practice firm pedagogies) on

students self-efficacy with entrepreneurial orientation as the mediating variable shows that the coefficient of problem based, simulations, book based, experiential and practice firm pedagogies were 0.0887 , 0.0511, -0.0021, 0.1019, and 0.1209 respectively. Thus, the specific model for Agripreneurship self-efficacy is:

$$\text{AgpSE} = 0.0887\text{PB} + 0.0511\text{Sim} + -0.0021\text{BB} + 0.1019\text{EL} + 0.1209\text{PF} + \dots\dots\dots \text{(iii)}$$

The calculated Z and corresponding p values for the model were 3.40 (p<0.001), 1.81 (p<0.070) -0.12 (p<0.907), 4.00 (p<0.000) 5.20 (p<0.000), and for problem based, simulations, book based, experiential and practice firm pedagogies respectively (see Table 2). The implication is that all the explanatory variables are positively related to attitude and skills except book-based approach. But while the positive relationship between three agripreneurial pedagogy variables (problem-based, experiential and practice firm approaches) and agripreneurial self-efficacy were statistically significant, the relationship between two variable (Simulations and book-based approaches) and agripreneurial self-efficacy were not statistically significant (see Table 2).

The equation level goodness of fit test shows the fitted variance is 0.3550, the predicted variance is 0.2043 and the residual is 0.1507 for entrepreneurial Self-efficacy the corresponding values of entrepreneurial orientation are 0.2363, 0.0847, 0.1516. The overall value was 0.4087 meaning that 40% of the perceived variation in Entrepreneurial self-efficacy is due to the variation in the explanatory variables (see table 3).

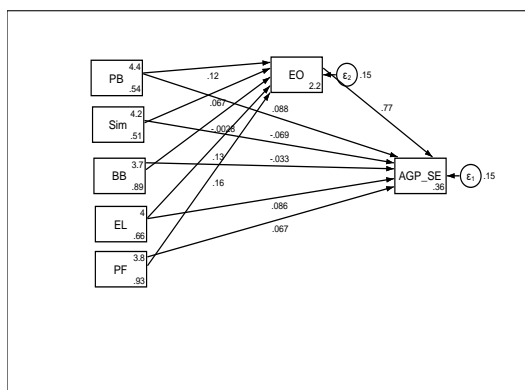


Figure 1. Structural path model: Entrepreneurial Pedagogy and Agripreneurial Self efficacy

5. Discussion

In this study, we examined the connection between students' entrepreneurial self-efficacy, entrepreneurial orientation, and agripreneurial pedagogy. The results obtained from Structural Equation Modelling (SEM) analysis supported our hypothesis that different pedagogical approaches significantly influence students' entrepreneurial self-efficacy. Specifically, problem-based, experiential, and practice firm approaches were found to have a positive impact on students' entrepreneurial self-efficacy. These findings highlight the importance of incorporating these pedagogical strategies in entrepreneurship education to enhance students' belief in their ability to succeed as entrepreneurs.

Furthermore, our study revealed that entrepreneurial orientation partially mediates the relationship between entrepreneurial pedagogy and entrepreneurial self-efficacy. This suggests that fostering entrepreneurial orientation within educational institutions can enhance the effectiveness of pedagogical approaches in promoting self-efficacy among students. Entrepreneurial self-efficacy is a crucial factor for entrepreneurial success as it influences motivation, persistence, and performance. The findings of this study align with previous research that has shown the significant role of pedagogy in predicting entrepreneurial self-efficacy and actions (Isabelle, 2020; Irshid, Khasawneh, & Al-Barakat, 2023). Students primarily acquire entrepreneurial skills through practical, hands-on learning experiences in real-world environment where critical thinking and active engagement are fostered (Mujuru et al., 2022; Olokundun et al., 2018). By improving students' self-efficacy, entrepreneurship education can effectively equip them with the necessary mindset, skills, and behaviors for entrepreneurial endeavors. It is essential to include cutting-edge and interactive teaching methods within entrepreneurial pedagogy to engage students and facilitate meaningful learning experiences. However, it is important to recognize that the success of entrepreneurship education initiatives also relies on the teachers who serve as change-agents and sources of inspiration. Therefore, it is crucial to extend the discussions and initiatives in entrepreneurship education to reach and empower

teachers, as they play a significant role in delivering effective pedagogy and fostering an entrepreneurial mindset among students.

The study highlights the significance of Agripreneurial pedagogy, entrepreneurial orientation, and self-efficacy in entrepreneurship education. By incorporating effective pedagogical strategies and promoting an entrepreneurial orientation, educators can nurture students' self-belief and empower them for entrepreneurial success.

Implication for practice.

Importance of Pedagogical Approaches: The study highlights the significance of specific pedagogical approaches, such as problem-based, experiential, and firm practice approaches, in enhancing students' entrepreneurial self-efficacy. Educators can incorporate these approaches into entrepreneurship education programs to promote self-efficacy and enhance students' EI.

The findings indicate that entrepreneurial orientation plays a mediating role between entrepreneurial pedagogy and self-efficacy. Educators and policymakers should encourage and foster entrepreneurial orientation within educational institutions or organizations to create an environment that nurtures students' belief in their entrepreneurial abilities. The study suggests that delivering entrepreneurship lectures using cutting-edge and interactive teaching methods can positively impact students' entrepreneurial self-efficacy and intentions. Managers and educators should explore innovative teaching techniques such as problem-based approach, case studies, and real-world experiential learning to engage students and enhance their self-efficacy beliefs. Also, the study emphasizes the importance of equipping lecturers and faculty members with the knowledge and skills necessary to deliver entrepreneurship education effectively. Providing professional development opportunities and resources to faculty members can improve their ability to employ entrepreneurial pedagogy and create a supportive learning environment for students.

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