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Analysis of the Impact of Entrepreneurship Education and Curriculum Innovation on Entrepreneurial Motivation and Student Performance in Private Universities in East Java

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ABSTRACT

This study examines the impact of Entrepreneurship Education and Curriculum Innovation on Entrepreneurial Motivation and Student Performance in private universities in East Java. Using a quantitative research design with a sample of 180 students, data were collected using a Likert scale (1-5) and analyzed with Structural Equation Modeling (SEM-PLS 3). The results indicate that Curriculum Innovation significantly affects Entrepreneurial Motivation and Student Performance, with Entrepreneurship Education also positively influencing both Entrepreneurial Motivation and Student Performance. These findings highlight the importance of innovative curricula and entrepreneurial-focused education in fostering entrepreneurial attitudes and enhancing academic performance among students. The study provides practical implications for educational institutions, suggesting that continuous curriculum innovation and entrepreneurship education are critical to preparing students for entrepreneurial ventures and improving their overall academic success.

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1. INTRODUCTION

Entrepreneurship drives economic growth, innovation, and societal progress. Higher education institutions play a key role in nurturing entrepreneurial skills, preparing students to face global economic challenges. By integrating entrepreneurial education into curricula, students are better equipped to contribute to economic development through creativity, job creation, and technological advancement. Higher education institutions are essential in developing students' entrepreneurial skills and mindsets [1]. University programs focused on entrepreneurship education inspire students to start their own businesses, promoting economic and social progress [2]. Experiential learning allows students to apply theoretical concepts in real-world settings, enhancing practical skills [3]. Entrepreneurial skills such as creativity, resilience, and problem-solving are crucial for success, particularly for student

entrepreneurs [4]. Creativity drives innovation and new ideas [4]. Universities can support student entrepreneurs through technical assistance, seminars, training, and financial partnerships [5]. However, students face challenges like limited knowledge of business processes, financial constraints, and lack of practical experience [1]. Inadequate entrepreneurship curricula create barriers for aspiring entrepreneurs [1]. Addressing these challenges requires curriculum adjustments, networking with successful entrepreneurs, and improved access to financial resources [1].

Entrepreneurship is a key driver of economic growth and innovation, particularly in developing regions like East Java, Indonesia. Higher education institutions, especially private universities, play a vital role in equipping students with entrepreneurial skills necessary for thriving in competitive environments. Entrepreneurship education inspires students to start businesses, contributing to economic and social progress by fostering innovative and practical skills [3]. Improving these skills enhances local economic development through a mix of educational approaches, financial support, and stakeholder collaboration [6]. Experiential learning is an effective approach that allows students to apply theoretical concepts in real-world settings [7]. Creativity, communication, and leadership skills are essential for business continuity, and universities can support this through seminars, training, and financial assistance [8]. However, students face challenges such as lack of information, financial constraints, and insufficient practical skills. Addressing these requires curriculum changes to include entrepreneurial skills, along with support measures like networking and financial resources [9].

Entrepreneurship education plays a crucial role in shaping students' entrepreneurial mindset, equipping them with skills to identify and seize business opportunities. The integration of practical experiences like experiential learning and mentorship fosters creativity, resilience, and adaptability, motivating students and improving their performance in entrepreneurial ventures. This education significantly enhances students' motivation by fostering an innovative mindset and creative problem-solving skills, helping them identify opportunities and adapt to change [10]. Experiential learning, such as hands-on activities and business simulations, promotes an entrepreneurial mindset by providing real-world experiences that engage students in entrepreneurial activities [8]. Additionally, entrepreneurship education equips students with critical skills for success in both entrepreneurial and traditional careers, improving their job market performance and contributing to a more innovative society [9]. By fostering creativity and adaptability, entrepreneurship education empowers students to drive economic growth and social empowerment, aligning with sustainable development goals and emphasizing the importance of nurturing a culture of innovation [11].

Entrepreneurial motivation in higher education is crucial for driving students to engage in entrepreneurial ventures, influenced by the educational environment, including the quality of instruction and curriculum alignment with student aspirations. Motivated students perform better academically and show increased engagement in entrepreneurial activities, fostering a cycle of learning and application. Entrepreneurial intention and attitude are key in enhancing motivation, with studies showing they positively influence students' motivation to pursue entrepreneurship [12]. Entrepreneurship education plays a pivotal role by providing the knowledge and skills needed to increase interest and motivate students to start and grow businesses [13], [14]. Social media and creativity mediate the relationship between education and entrepreneurial motivation, with social media exposing students to success stories and networks, while creativity indirectly fosters entrepreneurial interest [15], [16]. Additionally, external factors like business incubation centers and entrepreneurship

programs significantly impact students' entrepreneurial intentions, underscoring the importance of a cohesive university entrepreneurial ecosystem [17].

This relationship underscores the significance of aligning educational strategies with students' entrepreneurial ambitions to enhance overall academic and professional outcomes. This study investigates the impact of entrepreneurship education and curriculum innovation on entrepreneurial motivation and student performance in private universities in East Java.

2. LITERATURE REVIEW

2.1 Entrepreneurship Education

Entrepreneurship education is a multifaceted approach designed to equip individuals with the skills and mindset necessary to identify and exploit business opportunities, playing a crucial role in fostering creativity, resilience, and innovation among students, essential for navigating the complexities of modern business. The effectiveness of this education is influenced by curriculum design, teaching methods, and alignment with real-world business practices. Diverse teaching methods such as lectures, workshops, case studies, business simulations, and mentoring programs enhance learning outcomes [6], [10], with creative and interactive learning methods like business plan development fostering practical skills and entrepreneurial thinking [18]. The integration of sustainability principles in the curriculum promotes socially and environmentally responsible entrepreneurship [19]. Entrepreneurship education significantly improves students' ability to identify opportunities, solve problems creatively, and adapt to change, fostering an innovative mindset [10]. It enhances entrepreneurial competencies such as creativity, resilience, and risk-taking, crucial for business success. Students exposed to this education show increased confidence in starting and managing businesses, improved problem-solving skills, and a stronger orientation toward innovation [20]. Additionally, entrepreneurship education is linked to job creation and economic development, contributing to a more prosperous and resilient society [21], [22], empowering individuals to drive economic growth, social empowerment, and environmental stewardship [11].

2.2 Curriculum Innovation

Curriculum innovation in entrepreneurship education is crucial for equipping students with the skills needed to thrive in the dynamic business environment, involving the integration of practical experiences, interdisciplinary knowledge, and digital tools. Empirical research emphasizes the importance of experiential learning, such as internships and project-based assignments, in developing entrepreneurial competencies [14]. Activities like the "Tiaozhanbei" competition provide platforms for students to engage in innovation and entrepreneurship, enhancing their readiness for employment and entrepreneurship [13]. Higher education curricula should focus on creativity, originality, critical thinking, and

complex problem-solving to produce graduates capable of business innovation [23]. Interdisciplinary learning fosters an entrepreneurial mindset and bridges the gap between theoretical knowledge and practical application [15]. Additionally, digital tools such as e-learning platforms and virtual simulations enhance curriculum innovation by offering flexibility and accessibility, with tools like the Student Research Platform and curriculum games showing high student engagement and satisfaction, indicating their effectiveness in enhancing learning outcomes [3].

2.3 Entrepreneurial Motivation

Entrepreneurial motivation in higher education is shaped by the quality of entrepreneurship education and curriculum relevance, influenced by intrinsic factors like personal growth and extrinsic factors such as financial rewards and social recognition. Educational institutions can enhance motivation through supportive environments, collaboration, and mentorship. Entrepreneurial intention and attitude are crucial in boosting motivation, with studies showing their positive influence, highlighting the need to strengthen entrepreneurial intentions [24]. Entrepreneurship education significantly impacts motivation by providing the necessary knowledge and skills to foster genuine business interest [15]. Global variations in curriculum integration affect students' entrepreneurial mindset and motivation [25]. Creativity mediates the relationship between education, motivation, and entrepreneurial interest, emphasizing the importance of fostering creativity [13]. Social media, combined with education, enhances entrepreneurial interest, with motivation acting as a mediator, bridging education and entrepreneurial success [12]. Motivation accounts for 47% of the influence on entrepreneurial interest [26].

2.4 Student Performance

Entrepreneurship education aims to enhance student performance by fostering skills beyond traditional academic achievement, such as opportunity identification and business model development, supported by factors like motivation, curriculum innovation, and practical knowledge application. Research shows that motivated students excel in entrepreneurial settings, suggesting that effective entrepreneurship education can improve both cognitive and practical abilities. Integrating academic learning with practical experience is vital for applying theoretical knowledge in real-world settings, especially in entrepreneurship [27]. Effective curriculum design that includes experiential learning opportunities helps students develop entrepreneurial skills, such as opportunity recognition and business model development [28]. Educational data mining and machine learning models predict and improve student performance by analyzing factors like attendance and study environment, informing curriculum design and teaching strategies [29].

Predictive models can identify students needing additional support, enhancing academic performance and entrepreneurial capabilities [30]. External factors like financial needs and work experience influence student performance; while part-time work can detract from academics, it also provides practical skills that enhance entrepreneurial abilities [31]. Managing these influences through strategic educational policies can optimize student performance in entrepreneurship education.

2.5 *Theoretical Framework*

The study draws on Bandura's Social Cognitive Theory (1986) and Ajzen's Theory of Planned Behavior (1991) [32], [33]. Social Cognitive Theory posits that learning occurs through observation, imitation, and interaction with the environment, emphasizing the role of self-efficacy in shaping behavior. In the context of entrepreneurship education, this theory underscores the importance of experiential learning and role models in fostering entrepreneurial competencies.

The Theory of Planned Behavior highlights the role of attitudes, subjective norms, and perceived behavioral control in influencing entrepreneurial intentions. This framework provides a basis for understanding how entrepreneurship education and curriculum innovation impact students' motivation and behavior.

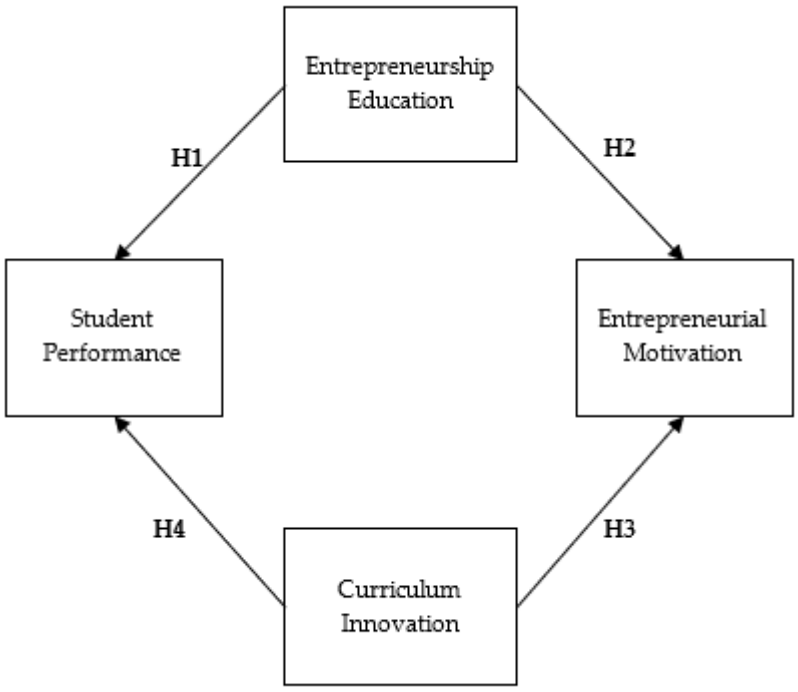

Figure 1. Conceptual Framework

3. METHODS

3.1 Research Design

The quantitative nature of the study shall be captured through the examination of

the relationships of the variables under study. Thus, a structured questionnaire with a Likert scale (1–5) was used in collecting primary data from participants. Data analysis uses Structural Equation Modeling - Partial Least Squares (SEM-PLS 3) to verify the direct and indirect effects of entrepreneurship education and curriculum innovation on entrepreneurial motivation and then on student performance.

3.2 Population and Sample

The population targeted in this research includes undergraduate students attending private universities in East Java and engaged in entrepreneurship courses or programs. In estimating the sample size using Cochran's formula, it was appropriate and statistically reliable. Stratified random sampling was considered to capture a sample size of 180 students that ensures diversity within the population concerning institution, academic discipline, and exposure to entrepreneurship education.

3.3 Data Collection Instrument

A structured questionnaire was designed based on validated scales from existing literature. Each item was measured on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). A pilot test was conducted with 30 students to ensure the instrument's reliability and validity. All the constructs had Cronbach's alpha values of more than 0.7, which is considered satisfactory for internal consistency.

3.4 Data Collection Procedure

The survey was administered both online and offline to the respondents to ensure a higher response rate. Ethical approval was obtained from the relevant university authorities, and informed consent was sought and obtained from all respondents. Confidentiality and anonymity were guaranteed to obtain truthful responses.

3.5 Data Analysis

The data collected were analyzed using SEM-PLS 3-a statistical technique that is appropriate for testing complex models with multiple constructs and small-to-medium sample sizes. The steps involved in the analysis included descriptive statistics to summarize demographic characteristics of respondents and mean values of each construct, followed by measurement model assessment for construct validity and reliability through CFA. Convergent validity was checked by using AVE values above 0.5, while the discriminant validity was checked by the Fornell-Larcker criterion. Finally, the structural model was tested by assessing the hypotheses that were proposed, the path coefficient, t-statistics, and the significance level. The mediating role of entrepreneurial motivation was determined using the bootstrapping technique with 5,000 resamples.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

The respondents were 180 students from various private universities in East Java. The demographic characteristics of the respondents are described in Table 1.

Table 1. Demographic Characteristics of Respondents

Gender	Frequency	Percentage (%)
Male	108	60.0
Female	72	40.0
Age Group		
18–20 years	54	30.0
21–23 years	96	53.3
24 years and above	30	16.7
Academic Background		
Business/Economics	81	45.0
Engineering/Technology	54	30.0

Other	45	25.0

The demographic characteristics of the sample, consisting of 180 respondents, are presented in terms of gender, age group, and academic background. In terms of gender, the majority of respondents were male, comprising 60% (108 individuals), while 40% (72 individuals) were female, indicating a slightly higher representation of male students. Regarding age, the largest group of respondents was in the 21–23 years range, making up 53.3% (96 individuals), followed by 30% (54 individuals) in the 18–20 years group. A smaller portion, 16.7% (30 individuals), was aged 24 years and above, suggesting that most students were in the early to mid stages of their university education. As for academic background, the respondents came from various fields, with the largest group, 45% (81 individuals), having a background in Business/Economics, followed by 30% (54 individuals) from Engineering/Technology, and 25% (45 individuals) categorized as having other academic backgrounds, such as social sciences, humanities, or natural sciences. The descriptive statistics for the key constructs—Entrepreneurship Education (EE), Curriculum Innovation (CI), Entrepreneurial Motivation (EM), and Student Performance (SP)—are summarized in Table 2.

Table 2. Descriptive Statistics for Constructs

Construct	Mean	Standard Deviation (SD)	Minimum	Maximum
Entrepreneurship Education (EE)	4.12	0.58	3.00	5.00
Curriculum Innovation (CI)	4.08	0.62	2.80	5.00
Entrepreneurial Motivation (EM)	4.18	0.55	3.20	5.00
Student Performance (SP)	4.15	0.57	3.10	5.00

The data shows that the respondents had positive perceptions of the factors being studied. Entrepreneurship Education received a mean score of 4.12 (SD = 0.58), indicating that students viewed the quality of entrepreneurship education favorably. Curriculum Innovation had a mean score of 4.08 (SD = 0.62), reflecting positive perceptions of the innovative elements in their academic programs. Entrepreneurial Motivation scored the highest with a mean of 4.18 (SD = 0.55), suggesting that the respondents were strongly motivated to pursue entrepreneurial endeavors. Lastly, Student Performance had a mean score of 4.15 (SD = 0.57), demonstrating positive outcomes in both academic and entrepreneurial performance.

4.2 Measurement Model Assessment

The measurement model was evaluated to ensure the reliability and validity of the constructs. The following criteria were assessed: factor loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). The results are summarized in Table 3.

Table 3. Measurement Model Assessment

Variable	Code	Loading Factor	Cronbach's Alpha	Composite Reliability	Average Variant Extracted
Entrepreneurship Education	EPE.1	0.903	0.914	0.946	0.853
	EPE.2	0.939			
	EPE.3	0.928			
Curriculum Innovation	CRI.1	0.894	0.806	0.886	0.721
	CRI.2	0.863			
	CRI.3	0.788			
Entrepreneurial Motivation	EPM.1	0.907	0.869	0.910	0.718
	EPM.2	0.827			

	EPM.3	0.888			
	EPM.4	0.760			
Student Performance	SPF.1	0.753	0.914	0.930	0.625
	SPF.2	0.793			
	SPF.3	0.811			
	SPF.4	0.796			
	SPF.5	0.716			
	SPF.6	0.860			
	SPF.7	0.736			
	SPF.8	0.847			

Source: Data Processing Results (2025)

The analysis of measurement model quality showed strong reliability and validity for all constructs. Factor loadings for all items exceeded the minimum threshold of 0.70, with the highest loading observed for EPE.2 (0.939) and the lowest for SPF.5 (0.716), confirming that the observed variables adequately measure their respective latent constructs. Cronbach's alpha values for all constructs were above 0.70, indicating internal consistency, with Entrepreneurship Education exhibiting the highest value (0.914) and Curriculum Innovation the lowest (0.806), which was still acceptable. Composite Reliability (CR) values for all constructs exceeded 0.70, confirming the reliability of the constructs, with Entrepreneurship Education having the highest CR (0.946), indicating excellent reliability. Average Variance Extracted (AVE) values for all constructs surpassed the 0.50 threshold, ensuring sufficient convergent validity, with Entrepreneurship Education having the highest AVE (0.853), indicating that a large proportion of the variance in the indicators is explained by the construct. To assess discriminant validity, the Fornell-Larcker criterion and inter-construct correlations were used, confirming that each construct measures a unique aspect of the research model.

Table 4. Discriminant Validity

	Curriculum Innovation	Entrepreneurial Motivation	Entrepreneurship Education	Student Performance
Curriculum Innovation	0.674			
Entrepreneurial Motivation	0.389	0.491		
Entrepreneurship Education	0.492	0.593	0.629	
Student Performance	0.592	0.518	0.592	0.612

Source: Data Processing Results (2025)

Discriminant validity was assessed using the square root of AVE and correlations between constructs. For Curriculum Innovation (CRI), the square root of AVE (0.674) was higher than its correlations with other constructs, indicating satisfactory validity. Similarly, for Entrepreneurial Motivation (EPM) (0.491), Entrepreneurship Education (EPE) (0.629), and Student Performance (SPF) (0.612), the square roots of AVE were greater than their correlations with other constructs, confirming discriminant validity for all variables).

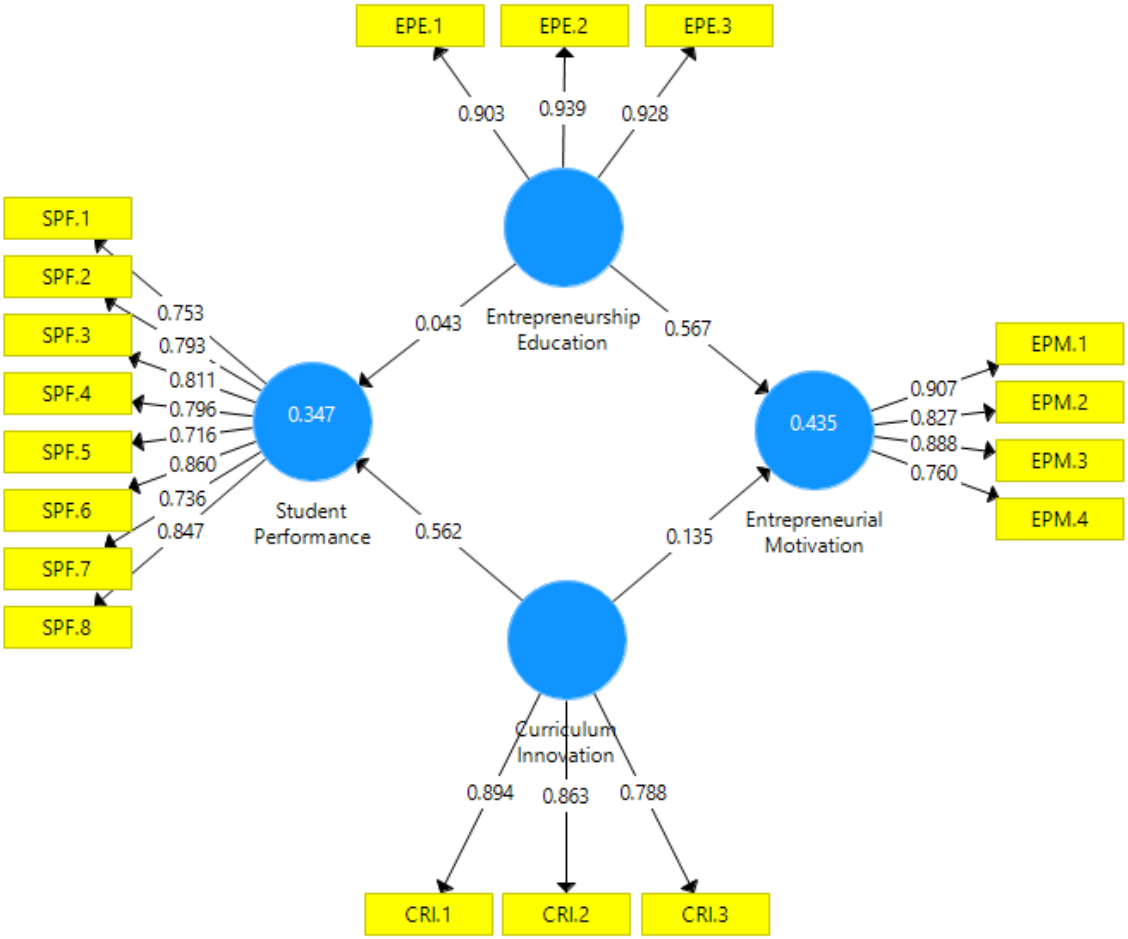

Figure 2. Model Results

Source: Data Processed by Researchers, 2025

4.3 Model Fit Analysis

Model fit evaluates how well the hypothesized model aligns with the observed data. Key indicators such as SRMR, d_ULS, d_G, Chi-Square, and NFI provide insights into the adequacy of the model fit. Here, we discuss the results for the Saturated Model and Estimated Model.

Table 5. Model Fit Results Test

	Saturated Model	Estimated Model
SRMR	0.101	0.137
d_ULS	1.759	3.211
d_G	0.921	0.992
Chi-Square	598.532	624.667
NFI	0.683	0.669

Source: Process Data Analysis (2025)

The model fit was assessed using several indicators. The SRMR for the Saturated Model (0.101) exceeded the ideal threshold, indicating a moderate fit, while the Estimated Model (0.137) showed a weaker fit. The d_ULS for the Saturated Model (1.759) was better than the Estimated Model (3.211), but both require improvement. The d_G for the Saturated Model (0.921) was closer to zero, indicating a better fit compared to the Estimated Model (0.992). The Chi-Square for the Saturated Model (598.532) performed slightly better than the Estimated Model (624.667), but both models need refinement.

The NFI for both models was below the ideal threshold of 0.90, indicating suboptimal fit.

Table 6. Coefficient Model

	R Square	Q2
Entrepreneurial Motivation	0.435	0.425
Student Performance	0.347	0.336

Source: Data Processing Results (2024)

R-Square indicates the proportion of variance explained by independent variables. In this study, Entrepreneurial Motivation (R^2 = 0.435) explains 43.5% of the variance, suggesting a moderate level of explanatory power, but other factors may also play a role. Student Performance (R^2 = 0.347) explains 34.7% of the variance, indicating a moderate to low explanatory power, with additional factors beyond Entrepreneurial Motivation and Curriculum Innovation likely influencing performance.

Q^2 (Predictive Relevance) measures the model's predictive relevance, with values above 0 indicating relevance. Entrepreneurial Motivation (Q^2 = 0.425) has moderate predictive relevance, suggesting the model's solid predictive framework, though other factors may improve prediction accuracy. Similarly, Student Performance (Q^2 = 0.336) shows moderate predictive relevance, but the model may need refinement or additional predictors for better accuracy.

4.4 Hypothesis Testing Results

Hypothesis testing in Structural Equation Modeling (SEM) is conducted to evaluate the significance of the paths in the proposed model. The key statistics used for hypothesis testing include the Original Sample (O), Sample Mean (M), Standard Deviation (STDEV), T-Statistics, and P-Values. T-statistics are used to assess the significance of each path, with a value greater than 1.96 indicating a significant result at the 95% confidence level. P-values less than 0.05 indicate statistical significance.

Table 7. Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
Curriculum Innovation -> Entrepreneurial Motivation	0.435	0.438	0.093	5.443	0.000
Curriculum Innovation -> Student Performance	0.562	0.574	0.080	7.017	0.000
Entrepreneurship Education -> Entrepreneurial Motivation	0.567	0.577	0.096	5.882	0.000
Entrepreneurship Education -> Student Performance	0.343	0.345	0.088	2.483	0.003

Source: Process Data Analysis (2025)

Curricular Innovation is positively and significantly related to Entrepreneurial Motivation, with an original sample (O) of 0.435, T Statistics of 5.443, and a P Value of 0.000, indicating that the better the curriculum improvement, the more the students are motivated toward entrepreneurship. Also, Curriculum Innovation significantly influences Student Performance, with O = 0.562, T = 7.017, P = 0.000, underlining the relevance of continuous curriculum adaptation in order to increase academic performance. Entrepreneurship Education has a positive significant effect on Entrepreneurial Motivation, with O = 0.567, T = 5.882, and P = 0.000, which confirms the

critical role of entrepreneurship education in raising student interest in entrepreneurial activities. Finally, Entrepreneurship Education has an effect on Student Performance-O = 0.343, T = 2.483, P = 0.003-because the incorporation of entrepreneurial concepts and skills improves the performance level of students in general through developing critical thinking and innovation.

Discussion

This study was carried out to assess the impact of Entrepreneurship Education and Curriculum Innovation on Entrepreneurial Motivation and Student Performance in private universities within the East Java region. Significant relationships were found between key model variables; more importantly, their meaningful insights about how these factors influence students' outcomes within higher education have been obtained.

1. Curriculum Innovation and Entrepreneurial Motivation

The study found a significant positive relationship between Curriculum Innovation and Entrepreneurial Motivation ($\beta = 0.435$, $p < 0.05$). From this, it can be seen that when universities introduce innovative teaching methods, update the content of courses, and adopt more dynamic pedagogical approaches, students are more motivated to pursue entrepreneurial ventures. The results are consistent with previous studies identifying an innovative curriculum as a relevant nurturing factor in attitudes and behaviors for entrepreneurship [13], [34], [35].

Curriculum Innovation is seen as a way to align education with real-world entrepreneurial needs, enabling students to develop critical thinking, creativity, and problem-solving skills, all essential traits for an entrepreneur [36]. The positive impact of Curriculum Innovation on Entrepreneurial Motivation suggests that educational institutions should focus on integrating modern, interactive, and practical teaching strategies to inspire students and foster a culture of entrepreneurship.

2. Curriculum Innovation and Student Performance

The second key finding of this research is the positive impact of Curriculum Innovation on Student Performance ($\beta = 0.562$, $p < 0.05$). This result means that an innovative curriculum, with regard to teaching methodologies and content, enhances the academic achievements of students. This supports the theory that innovation in the curriculum leads to greater engagement, improved learning outcomes, and better retention of knowledge [10], [37], [38]. On the contrary, students who are exposed to an innovative curriculum will enjoy learning and, therefore, can perform better in assignments, examinations, and practical exercises.

These findings bring into focus the need for a revision and updating of the contents to meet the needs of today's learners. In this regard, a university can increase the performance of its students and their overall academic achievement by fostering a learning environment that encourages exploration, creativity, and practical application of knowledge.

3. Entrepreneurship Education and Entrepreneurial Motivation

The study further revealed that Entrepreneurship Education significantly influences Entrepreneurial Motivation, with $\beta = 0.567$, at $p < 0.05$. This confirms the hypothesis that the more comprehensive and focused the entrepreneurship education, the higher the levels of entrepreneurial motivation among students. Education which arms students with necessary knowledge, skills, and inspiration for entrepreneurial activities, has a great influence on motivating students toward the exploitation of entrepreneurial opportunities.

This result also agrees with the research by [6], [10], [18], where exposure to entrepreneurship education was seen to have positive impacts on the intentions of students to create a business. Entrepreneurship Education, by its focus on concepts of entrepreneurship, creates an incentive among

students to pursue entrepreneurship as a career goal and fosters self-efficacy and motivation to accept risks associated with entrepreneurship.

4. Entrepreneurship Education and Student Performance

Also, a positive effect is observed between Entrepreneurship Education and Student Performance, $\beta = 0.343$, $p < 0.05$. This relation could mean that Entrepreneurship Education may not only enable students to become entrepreneurs but also enhance their performance in school. Students who will receive entrepreneurship education are likely to develop skills applicable across various domains, such as critical thinking, creativity, and teamwork, contributing not only to entrepreneurial ventures but also to overall academic success.

This finding supports the findings of studies that indicate that entrepreneurship education enhances students' problem-solving skills and academic performance due to the practical nature of learning through case studies, simulations, and project work [8]–[10]. Besides, entrepreneurship education tends to be practical in nature, thus allowing students to put theoretical knowledge into practice and thereby improve their overall academic performance.

5. Implications for institutions of higher learning education

The findings of this study have several practical implications for Entrepreneurship Education and Curriculum Innovation in universities: Entrepreneurial courses and programs should be included in universities for the development of theoretical knowledge as well as practical skills related to entrepreneurship. This includes workshops, internships, business plan competitions, and mentorship that enhance entrepreneurial mindset and skills.

a) The institutions need to innovate the curriculum continuously to accommodate the changing requirements of the business world and meet student interests. It includes technological methods of teaching, collaborative learning, and case studies. These innovative curriculums can engage and make the mode of learning more interactive; therefore, students can be motivated, which reflects on Entrepreneurial Motivation and Performance.
b) Entrepreneurship education need not be confined to schools of business. Entrepreneurship principles taught in a cross-disciplinary fashion to engineers, healthcare professionals, and artists might have broader and deeper impact. Hence, students from other disciplines could also apply entrepreneurial mindset to their studies and become innovators for their respective fields.

6. Limitations and Future Research Directions

The study offers an insight into the effect of Entrepreneurship Education and Curriculum Innovation on Entrepreneurial Motivation and Student Performance; however, there are a few limitations that have to be put into consideration. First, the sample consists of only private universities in East Java; therefore, generalization across other regions or public institutions may not be representative. Further studies may increase sample size and broaden the geographical scope for improved external validity. This study adopted a cross-sectional design; that is, it gave a snapshot of the relationships between the variables at a particular point in time. Longitudinal studies are needed to further capture the long-term impact of EE and CI on students' career outcomes and entrepreneurial success. Finally, other mediators or moderators that might be explored in future research are the personality traits of the students, their prior entrepreneurial experience, or even their

resource availability, which may influence the strength of the relationships among the variables.

5. CONCLUSION

The findings of this study reiterate the importance of Entrepreneurship Education and Curriculum Innovation in instilling entrepreneurial attitudes in students and enhancing their academic performance. These strong correlations suggest that universities should embed innovative teaching approaches and entrepreneurship-oriented curricula. In this respect, educational institutions will be better positioned to equip students for eventual entrepreneurial careers and ensure the attainment of more favorable academic results. The findings underline the necessity to adequately link education to labor market needs and provide students with the ability and motivation to successfully operate within the challenging business environment of today. Future research should explore broader geographical regions and longitudinal approaches to gain deeper insights into the long-term impact of these educational practices.

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