

The Triple Helix: Education, Self-Efficacy and Intention in Entrepreneurship

A Chiranjibi Rambabu Achary^{1*}, Subhasish Das², Jeeban Jyoti Mohanty³ and Debasis Mohanty⁴

¹Research Scholar, GIET University, Gunupur, Odisha. E-mail: chiranjibi@giet.edu

²Assistant Professor, GIET University, Gunupur, Odisha. E-mail: subhasish@giet.edu

³Team Lead, Technical Support Unit (TSU), DAY-NULM, Ministry of Housing and Urban Affairs, Government of India, New Delhi. E-mail: jeebanjyoti.mohanty@gmail.com

⁴Assistant Professor, School of Commerce Management and Research, ITM University, Raipur, Chhattisgarh.

E-mail: debasisacademics@gmail.com

*Corresponding Author

To cite this paper

Achary, A.C.R., Das, S., Mohanty, J.J., & Mohanty, D. (2023). The Triple Helix: Education, Self-Efficacy and Intention in Entrepreneurship. *Orissa Journal of Commerce*. 44(4), 15-31.

Keywords

Entrepreneurship, Entrepreneurial education, Self-Efficacy; Entrepreneurial intention, Economic growth

JEL Classification

I23; M13

Abstract: Now-a-days countries worldwide are grappling with challenges across various economic fronts such as employment, trade, financing, economic growth, and a high rate of inflation due to the global pandemic and conflicts. Entrepreneurship emerges as a mean to manage and stabilize the economy. Examining entrepreneurial intention provides insights into the potential pool of future entrepreneurs. This study aims to analyze the role of entrepreneurial education at the university level in enhancing entrepreneurial self-efficacy and fostering entrepreneurial intention among management graduates. The study involved 386 participants from three different universities who had studied entrepreneurship development as part of their curriculum. Using IBM AMOS 26.0 software, the validity and reliability of the sample data are ensured, and the fitness of the model was confirmed through Confirmatory Factor Analysis (CFA) and Structural Equation Modeling. The results show a significant relationship among the triple helix, entrepreneurial education, self-efficacy, and intention. Furthermore, entrepreneurial self-efficacy acts as a mediator between entrepreneurial education and entrepreneurial intention. Consequently, this study suggests enhancing the quality of entrepreneurial education at universities to nurture entrepreneurial intention among students.

1. Introduction

Entrepreneurship has attracted considerable academic focus in the last decade. (Wadhvani *et al.*, 2020) (Jiatong *et al.*, 2021). It stands as a pivotal concern not only in developed nations but also in under-

developed ones, by contributing the enhancement of a nation's economic well-being (Winterstorm Värlander *et al.*, 2020; Yi, 2021). Entrepreneurship is important in promoting economic and social advancement at a national level. (Li *et al.*, 2020; Neneh, 2022).

Current research emphasizes the transformative influence of entrepreneurial education on the entrepreneurial self-efficacy of young talents. It instills entrepreneurial intention, motivating and guiding them toward engaging in entrepreneurial pursuits. (Hu *et al.*, 2018; Jena, 2020; Jingzhou Pan *et al.*, 2018; Kokotsaki *et al.*, 2016). As the number of university graduates rises, the concern over appropriate job searching intensifies within India's higher education system. The GUESSS_2021_Global Report reveals that 17.8% of all students aspire to be entrepreneurs immediately after completing their studies, while a notable 64.9% prefer organizational employment (Mallick and Nayak, 2023; Matta *et al.*, 2022).

Field of study significantly influences entrepreneurial intentions among students, with "Business and Management" and "Science of art" students exhibiting the strongest intentions post-studies at 26.8%. Highlighting the critical juncture of entrepreneurial intentions, the study reports an entrepreneurial intention rate of 18.1% in India. Moreover, 17.1% of Indian graduates pursue entrepreneurship, surpassing the 9.7% rate among non-graduates or less educated individuals. Examining entrepreneurial activity, 14.2% of Indian youth aged 18-34 are involved, showcasing a disparity compared to low-income countries. Among these, the Dominican Republic leads with a 41% Total Early-stage Entrepreneurial Activity (TEA), while Morocco lags at 6.3%, occupying the bottom tier in this comparative analysis.

Individual perceptions serve as a mirror reflecting intentions toward specific goals, particularly in the entrepreneurial context, where they signify the inclination toward seizing business opportunities and initiating ventures. Using five criteria to analyze attitudes and perceptions about launching a business in India yields informative results. Remarkably, 63.1% of people in the nation think they know someone who just started a new career path. A whopping 83% of respondents said there are enough of prospects in their areas. In addition, 82.2% of young people believe it is simple to launch a business in India, and a staggering 86% of people think they have the necessary abilities and expertise to launch a new venture.

Even though persons in India have a good tendency toward entrepreneurship as shown by these three variables, the country's total rate of entrepreneurial intents is 18.1%. This contradiction can be explained by the fact that 54% of people are afraid of launching a new company for both known and unknown causes. One key belief that acts as a deterrent and keeps people from pursuing entrepreneurship, even when they have all the required resources, is the fear of failure. The mechanics of mentality are closely linked to this anxiety.

Understanding the idea of enterprising self-adequacy becomes critical in unraveling this specific characteristic among Indians. Pioneering self-viability exemplifies a singular's faith in their capacity to capably execute different undertakings and exercises related with business venture. This point of view gives significant bits of knowledge into the transaction of discernments, fears, and inspirations inside the pioneering scene in India.

Individual inspiration remains as a pivotal impetus for the foundation of new organizations. The latest information for the year 2021-22 elements obvious review questions pointed toward fathoming the main impetuses behind pioneering pursuits on a worldwide scale. Notably, in the context of India,

the majority of people who want to start their own business do so because there aren't enough jobs. Ninety-five percent of people say this is why they want to be entrepreneurs. This brings to light the stark reality of the high job shortage in India, leading individuals to investigate entrepreneurial endeavors as an option.

This predominant situation frequently brings about need driven business, a peculiarity considered less effective in specific settings. Approximately 6.7 percent of Indian respondents believe that their company will not hire new employees. Besides, the craving to increment work by 1-5 positions is prominently low at 6.9%, with a simple 0.7% of Complete Beginning phase Enterprising Movement (TEA) members communicating the goal to extend their labor force before very long significantly.

To upgrade the effect of business in India, there is a basic need to encourage development driven business venture and supporter for business venture outfitted towards cultural change. According to the GEM_ India_Report 2021-22, this strategic focus has the potential to provide India with long-term advantages, contributing to economic growth, societal transformation, and broader prospects for its citizens (Mohapatra, 2016).

This research intend to search the factors influencing college students' interest in entrepreneurship and how their education in entrepreneurship relates to it (Singla *et al.*, 2023). The goal is to find better ways to encourage college students to consider entrepreneurship as a career path through their education.

2. Review of Literature and Hypotheses Development

Entrepreneurship education (EE) focuses on enhancing students' understanding, abilities, attitudes, and personal qualities related to entrepreneurship. (Liñán *et al.*, 2008). Within universities, EE plays a distinct role by shaping students' attitudes towards entrepreneurship and nurturing their entrepreneurial perspectives, preparing them for different roles in their entrepreneurial journey. A longitudinal study conducted at a British university revealed that students exposed to entrepreneurship education exhibited higher levels of Startup knowledge and motivation compared to their counterparts who did not have such educational exposure (Nabi *et al.*, 2018). Notably, entrepreneurship education significantly enriched students' business knowledge and skills, resulting in a significant increase in their involvement in small business ventures after graduation (Egan *et al.*, 2017; Loy, 2014; Vaughan, 2014).

According to Thompson (2009), entrepreneurial intention refers to an individual's intention to launch a new enterprise and their thoughtful initiatives set for the future. This state of awareness preceding action has significant influence over individuals' decision to pursue new business ventures (Bird, 1988; Nabi, 2010) and is widely considered the most reliable predictor of entrepreneurial behavior (Carsrud and Brännback, 2011; Yang *et al.*, 2021). There has been an increasing focus on examining the entrepreneurial intentions of students in recent academic discussions. (Resa, 2000; Sánchez, 2013; Udayanan, 2019; Zhang *et al.*, 2014). Entrepreneurial intentions are influenced by a range of factors, encompassing personality traits, environmental influences, and demographic variables. (Indarti, 2008; Reynolds *et al.*, 1994). Gender also emerges as a notable determinant, with studies indicating higher entrepreneurial intentions among boys compared to girls (Cohoon *et al.*, 2010; Faloye and Olatunji, 2018; Malach *et al.*, 2010) identified significant influencers of entrepreneurial intentions, including entrepreneurship education, risk-taking ability, and familial and mentor support (Wu *et al.*, 2022).

Strong entrepreneurial intentions are associated with a higher likelihood of entrepreneurial actions (Jha and Mohaptara, 2023). Therefore, educators in entrepreneurship need to provide diverse learning opportunities to cultivate students' entrepreneurial intentions (Bagheri *et al.*, 2013).

H1: Entrepreneurship education significantly affects the entrepreneurial intention

Entrepreneurship education is a topic of significant discussion within the field of entrepreneurship studies, primarily due to its influence on shaping students' intentions to become entrepreneurs. The focus of this education lies in fostering an person's capability to generate notions, nurture originality, and propel novelty to steer a venture into entrepreneurship (Oluseye *et al.*, 2017). Although researchers in higher education and professional institutes acknowledge the crucial part of entrepreneurship education, its influence on nurturing business intentions has been less explored in primary school settings. (Karyaningsih *et al.*, 2020; Wardana *et al.*, 2020). Though, certain experts contend that the introduction of entrepreneurship education in elementary schools is vital for fostering fundamental proficiencies (Floris and Pillitu, 2019). The belief is upheld that EE has an control on students' self-efficacy, as highlighted by (Nowiński *et al.*, 2019). (Agboola, 2021) signifies that the central theme of entrepreneurship education in elementary schools is the promotion of entrepreneurial awareness. As a result, this education becomes crucial not just for disseminating wisdom but also for molding dispositions favorable to entrepreneurship. (Huber *et al.*, 2014). Furthermore, researchers have recorded that the incorporation of outdoor learning activities into entrepreneurship education can additionally boost students' self-efficacy (Fox *et al.*, 2018).

H2: There is a significant relationship between entrepreneurship education and entrepreneurial self-efficacy.

Perceived entrepreneurial self-efficacy refers to an individual's personal assessment of the difficulty or ease in undertaking a specific action, particularly in the context of entrepreneurship (Alshebami *et al.*, 2022). Simply put, it represents an individual's belief in their ability to carry out activities related to creating a company (Krueger and Brazeal, 2018; Liñán *et al.*, 2015; Jha *et al.*, 2019). Studies indicate that individuals with high self-efficacy for a task tend to exert more effort and exhibit greater persistence compared to those with lower self-efficacy (Elnadi and Gheith, 2021) (Bandura and Bandura, 2008; Chen and Greene, 1998).

Scientific evidence underscores that entrepreneurial self-efficacy not only holds a positive influence but stands out as one of the most crucial factors influencing entrepreneurial intention, transcending regional differences (Liñán *et al.*, 2015). According to (Krueger and Brazeal, 2018), it stands as the most significant factor in the establishment of new companies. Consequently, promoting self-efficacy becomes a key focus, and educational reforms designed to foster entrepreneurship in young individuals should target enhancing this perceived self-efficacy. Importantly, promoting self-efficacy involves more than just teaching entrepreneurial skills; it necessitates presenting credible models of behavior and providing psychological and emotional support (Asimakopoulos *et al.*, 2019).

H3: Entrepreneurial self-efficacy has a positive effect on their entrepreneurial intention.

In a previous study (Schmutzler *et al.*, 2019) the significance of self-efficacy in explaining individual entrepreneurial intentions and actions was emphasized. Besides, there is a rising pool of investigation on models that investigate the connection between enterprising expectations and conduct, featuring the critical job of self-viability as a middle person. This variable works both straightforwardly and in a roundabout way in the fields of business venture and social brain research. (Li *et al.*, 2020; McGee and

Peterson, 2019; Newman *et al.*, 2019) The disclosures from these investigations propose that self-visibility is a pivotal determinant that impacts individual conduct through mental cycles, objective setting, and assumptions for results.

In the field of pioneering cognizance, (Burnette *et al.*, According to 2020), self-efficacy is an essential component of the cognitive process. It encourages imaginative reasoning and assists people with pursuing choices while beginning new undertakings. Individual creative thinking in the context of starting new business ventures has been the focus of scholars' attention on the cognitive aspect (Hsu *et al.*, 2019; Schmitt *et al.*, 2018). In their assessment, (Kumar and Shukla, 2022) investigated how imagination and proactive character straightforwardly impact pioneering goal, with enterprising self-visibility playing an interceding job, among college understudies in India.

H4: Entrepreneurial self-efficacy mediates the relationship between EE and EI.

Hypothetical Model

3. Research Methodology

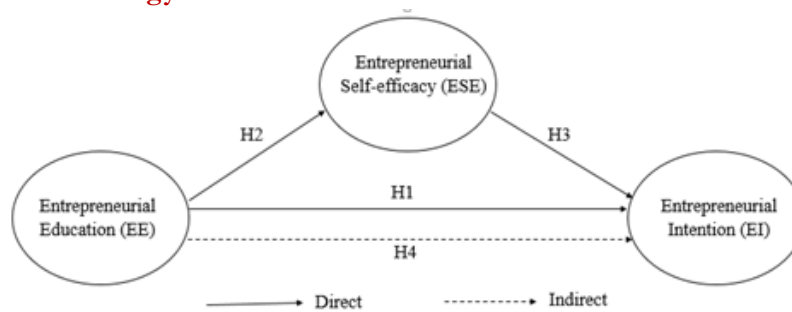


Figure 1: Hypothetical Prototype

Source: Authors' Own compilation

3.1. Sample

Between November 2022 and March 2023, an extensive survey has been conducted across three distinguished universities in Odisha, India. Using a convenience sampling method, our focus was on involving second-year management students who were actively studying entrepreneurial development in their third semester. To maximize accessibility and efficiency, we created a detailed questionnaire distributed through Google Forms. The survey links were thoughtfully shared with class counselors via both Gmail and WhatsApp, accompanied by a polite request to extend the invitation to their respective class groups. This collaborative effort resulted in the collection of a robust dataset, consisting of 386 carefully gathered responses, poised to enhance our study with valuable insights.

3.2. Tools

The research questionnaire comprises two distinct sections. The initial segment captures participants' fundamental information, emphasizing demographic factors pertinent to entrepreneurship research.

The subsequent section encompasses the assessment of EE, ESE and EI. This study predominantly relies on the entrepreneurial self-efficacy scale developed by (Barakat *et al.*, 2014), encompassing a total of 14 items. The entrepreneurial self-efficacy scale exhibits robust internal consistency, with an alpha coefficient of 0.936, a sampling adequacy value of 0.945, and a result of Bartlett’s sphericity test is 0.000 (< 0.05). (Zhang and Zhou, 2023)

To assess entrepreneurship education, the Entrepreneurship Education Scale developed by (Mukhtar *et al.*, 2021) is employed, featuring five questions. The entrepreneurship education scale demonstrates high reliability, with an alpha coefficient of 0.912, a sampling adequacy value of 0.887, and a result of Bartlett’s sphericity test is 0.000 (< 0.05) (Zhang and Zhou, 2023).

The entrepreneurship intention scale, derived from prior research, particularly the work of (Lian and Y, 2009), comprises five questions in total. This scale demonstrates robust reliability, as evidenced by an alpha coefficient of 0.932, a sampling adequacy value of 0.892, and a result of Bartlett’s sphericity test is 0.000 (< 0.05) (S. Zhang and Zhou, 2023). All three scales exhibit reliability coefficients surpassing 0.7, KMO values exceeding 0.7, and significant Sphericity results from Bartlett’s test is below 0.05, confirming their robust reliability and strong Inner coherence structure. Every query item on the scale employs Likert-type scale, ranging from “Strongly Disagree (1)” to “Strongly Agree (5).”

4. Analysis and Interpretation

Table 1: Demography

<i>Sl. No.</i>	<i>Characteristic</i>	<i>Frequency</i>	<i>Percentage</i>
1	Gender		
	Male	226	58.54
	Female	160	41.45
2	Parents’ occupation		
	Business	113	29.27
	Farmer	51	13.21
	Employment (Salary)	184	47.67
	Freelancers	20	5.18
	Others	18	4.66
3	Family Size		
	Below 5	243	62.95
	In Between 5-10	107	27.72
	More than 10	36	9.33
4	Subject		
	MBA	307	79.53
	BBA	79	20.47
5	Name of University		
	GIET University	194	50.26
	Centurian University	101	26.17
	BPUT	91	23.58

Source: Authors’ Own compilation

Measurement Model

The AMOS software was used to conduct confirmatory factor (CFA), and the can be found in Table 2 and Figure 2. The results in Table 2 indicate that all three measurement constructs have satisfactory reliability, with Cronbach’s á values exceeding 0.70 and composite reliability ranging from 0.917 to 0.936— surpassing the recommended benchmark of 0.60 (Bagozzi *et al.*, 1991). In terms of validity, the factor loadings for all measured items stretched from 0.687 to 0.914 (all $p < 0.001$). The AVE values, as shown in Table 2, were also considered satisfactory, ranging from 0.512 to 0.733. Additionally, all measured items’ factor loadings were within the range of 0.687 to 0.914 (all $p < 0.001$) for validity testing. The AVE values were found to be satisfactory, ranging from 0.512 to 0.733 (as shown in Table 2)

For the assessment of discriminant validity, the criteria proposed by (Fornell and f. larcke, 1981) were utilized. The outcomes presented in Table 3 indicate favorable results for the measurement model, with square roots of Average Variance Extracted (AVE) exceeding the values in their respective rows and columns. Additionally, the Heterotrait-Monotrait (HTMT) criterion, with values below the 0.85 threshold, further supports these satisfactory findings. These results were reinforced by the cross-loading analysis.

The outcomes of the fit index are as follows: “ $\chi^2/df = 2.826$, $GFI = 0.865$, $CFI = 0.927$, $NFI = 0.805$, $RMR = 0.043$, and $RMSEA = 0.069$ ”. All of these standards for the measurement model constructs are within adequate ranges, which enables the subsequent analysis of the structural model.

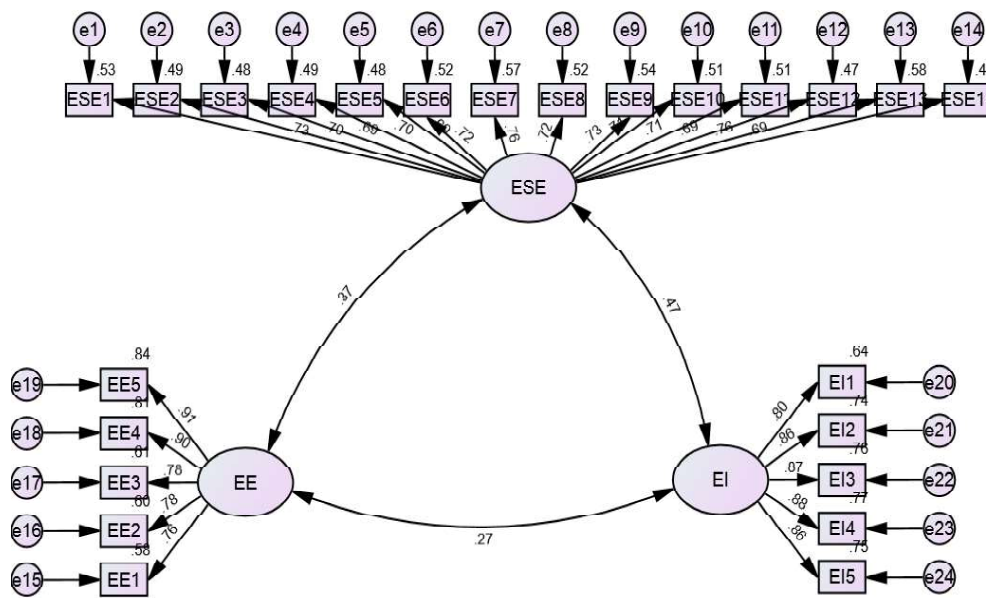


Figure 2: Measurement Framework

Source: Authors’ Own Compilation

Table 2: Confirmatory Factor Analysis (CFA)

<i>Code</i>	<i>Variable/Indicator</i>	<i>Loading</i>	<i>Composite Reliability (CR)</i>	<i>Cronbach's Alpha</i>	<i>Average Variance Extracted (AVE)</i>
1	Entrepreneurial Education (EE)		0.917	0.912	0.689
	EE1	0.763			
	EE2	0.776			
	EE3	0.784			
	EE4	0.898			
	EE5	0.914			
"2	Entrepreneurial Intention (EI)		0.932	0.932	0.733
	EI1	0.801			
	EI2	0.861			
	EI3	0.873			
	EI4	0.880			
	EI5	0.864			
3	Entrepreneurial Self-efficacy (ESE)		0.936	0.936	0.512"
	ESE1	0.729			
	ESE2	0.703			
	ESE3	0.693			
	ESE4	0.696			
	ESE5	0.693			
	ESE6	0.722			
	ESE7	0.758			
	ESE8	0.719			
	ESE9	0.734			
	ESE10	0.712			
	ESE11	0.715			
	ESE12	0.687			
	ESE13	0.762			
	ESE14	0.689			

Source: Author's Own Compilation

Table 3: Discriminant Validity (Fornell-Larcker Criterion)

	<i>CR</i>	<i>AVE</i>	<i>MSV</i>	<i>MaxR(H)</i>	<i>ESE</i>	<i>EE</i>	<i>EI</i>
ESE	0.936	0.512	0.221	0.937	0.716		
EE	0.917	0.689	0.137	0.932	0.370***	0.830	
EI	0.932	0.733	0.221	0.934	0.470***	0.273***	0.856

Source: Authors' Own Compilation

Table 4: Heterotrait-Monotrait Ratio (HTMT) Analysis

	ESE	EE	EI
ESE			
EE	0.391		
EI	0.467	0.289	

Source: Authors' Own Compilation

Structural Model

The Amos 26.0 software package was employed to evaluate the structural model, and the outcomes are illustrated in Figure 3, demonstrating overall satisfaction with the results. Subsequently, we conducted tests on the hypothetical propositions, and the results are outlined in Table 5 and Fig 3. Our analysis discovered that EE had an immediate and notable favorable influence on EI “($\beta = 0.115$, critical ratio = 2.153, $p < 0.031$)”, confirming H1. Additionally, the findings suggested that entrepreneurial education had a straightforward and impactful positive influence on entrepreneurial self-efficacy “($\beta = 0.370$, critical ratio = 6.564, $p < 0.001$)”, thereby supporting H2. Simultaneously, the findings demonstrated that ESE had a direct, positive, and significant effect on EI ($\beta = 0.428$, critical ratio = 7.267, $p < 0.001$), resulting in the acceptance of H3.

The bootstrapping analysis, carried out with a 95% confidence level and based on 5000 samples, aimed to evaluate the mediating role of Entrepreneurial Self-Efficacy (ESE) between Entrepreneurial Education (EE) and Entrepreneurial Intention (EI). The results align with the criteria established by (Preacher and Hayes, 2008), supporting the mediation effect of ESE as indicated in Table 6b and Table 6d. Consequently, the affirmation of Hypothesis 4 (H4) underscores the validity of this mediating influence.

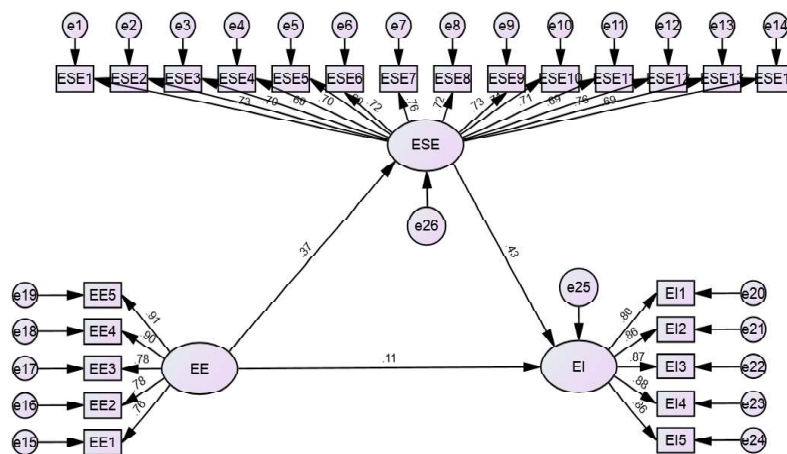


Figure 3: Structural Framework

Source: Authors' Own Compilation

Table 5: Hypothesis Testing

"Hypotheses	Relationships	Un-Standardized Estimate	S.E.	Critical Ratio	P	Standardized Estimate"
H2	ESE ← EE	0.284	0.043	6.564	***	0.370
H1	EI ← EE	0.124	0.058	2.153	0.031	0.115
H3	EI ← ESE	0.601	0.083	7.267	***	0.428

Source: Authors' Own Compilation

Mediation Analysis

To examine the mediation effect of Entrepreneurial Self-Efficacy (ESE) between Entrepreneurial Education (EE) and Entrepreneurial Intention (EI), we employed the bootstrapping method with 5000 iterations, as recommended by (Preacher and Hayes, 2008), This investigation was conducted with a 95% confidence interval.

The confidence interval analysis (Table 6b) revealed a mediating effect with a lower bound of 0.106 and an upper bound of 0.251, excluding zero, indicating the presence of mediation. This illustrates the cumulative effects of entrepreneurial education and entrepreneurial self-efficacy on entrepreneurial intention. To further explore the nature of the mediation, we analyzed the direct effect of entrepreneurial education on intention (0.124) and the indirect effect ($EE \rightarrow ESE = 0.284 * ESE \rightarrow EI = 0.601$) totaling 0.171 (Table 6b) (Wang *et al.*, 2023), with a two-tailed significance of 0.000 (Table 6a). Given the significance of both direct and indirect effects (0.031 and 0.000, respectively), we deduce a partial mediation of entrepreneurial self-efficacy in the relationship between entrepreneurial education and entrepreneurial intention (Praswati *et al.*, 2022). The detailed results of the mediating effect test are presented in Table 6b.

Additionally, we computed the Variance Accounted For (VAF) to ascertain the size of the indirect effect relative to the total effect. With a VAF value of 57.9% (Table 6d) (Pradhan and Gupta, 2020), falling within the range of 20% to 80%, we conclude that there is partial mediation (Elnadi and Gheith, 2021), consistent with the findings that ESE plays a partial mediating role in the connection between EE and EI (Hadi and Abdullah, 2016).

Table 6: Mediating Effect Test

Relationships	Estimate	S.E.	Critical Ratio	P
ESE ← EE	0.284	0.043	6.564	***
EI ← EE	0.124	0.058	2.153	0.031
EI ← ESE	0.601	0.083	7.267	***

Source: Authors' Own Compilation

Table 6a: Indirect Effects

<i>Indirect Effects</i>												
	<i>Lower Bounds</i>			<i>Upper Bounds</i>			<i>Two Tailed Significance</i>					
	<i>EE</i>	<i>ESE</i>	<i>EI</i>	<i>EE</i>	<i>ESE</i>	<i>EI</i>	<i>EE</i>	<i>ESE</i>	<i>EI</i>	<i>EE</i>	<i>ESE</i>	<i>EI</i>
ESE	0	0	0	ESE	0	0	0	ESE
EI	0.106	0	0	EI	0.251	0	0	EI	0.000

Source: Authors' Own Compilation

Table 6b: Mediation Result

<i>Relationship</i>	<i>Direct Effect</i>	<i>Indirect Effect</i>	<i>Confidence Interval</i>		<i>p-value</i>	<i>Conclusion</i>
			<i>Lower Bound</i>	<i>Upper Bound</i>		
EE → ESE → EI	0.124 0.031	0.171	0.106	0.251	0.000	Partial Mediation

Source: Authors' own Compilation

Table 6c: Feeder Data

	<i>Total Effect</i>			<i>Direct Effect</i>			<i>Indirect Effect</i>			
	<i>EE</i>	<i>ESE</i>	<i>EI</i>	<i>EE</i>	<i>ESE</i>	<i>EI</i>	<i>EE</i>	<i>ESE</i>	<i>EI</i>	
ESE	0.37	0	0	ESE	0.37	0	ESE	0	0	0
EI	0.273	0.428	0	EI	0.115	0.428	EI	0.158	0	0

Source: Authors' Own Compilation

Table 6d: VAF Analysis

<i>Path</i>	<i>Total Effect</i>	<i>Direct Effect</i>	<i>Indirect Effect</i>	<i>Variation accounted for (VAF)</i>	<i>Mediation</i>
EE → ESE → EI	0.273	0.115	0.158	0.579	Partial

Source: Authors' Own Compilation

5. Discussion

The study's results affirm the positive influence of entrepreneurial education on entrepreneurial intention, consistent with previous Western research. Notably, entrepreneurial education imparts foundational

knowledge and practical skills, aligning with studies like (Westhead and Solesvik, 2016) and Sun *et al.*, 2017). This discovery provides new insights into the field of Indian entrepreneurial. It furnishes business students with the necessary gifts to begin and achieve their own organizations, distinguish valuable open doors, and develop a proactive innovative outlook.

Besides, the review uncovers that pioneering training emphatically influences understudies' enterprising self-viability, lining up with social mental hypothesis (Albert Bandura, 1985). Students learn more about entrepreneurship as a result of this influence, and they are better able to make informed career choices. In addition, the results demonstrate a significant positive relationship between entrepreneurial intention and entrepreneurial self-efficacy. This suggests that an elevated identity viability upgrades understudies' capacities to perceive valuable open doors and think imaginatively in commercializing clever thoughts.

The concentrate likewise uncovers that connection between pioneering training and innovative goal is decidedly affected by enterprising self-adequacy. It features the significant job of college the executives in directing understudies through pioneering schooling, improving their abilities in business exercises, and establishing a climate that cultivates enterprising self-viability. Thus, people with upgraded enterprising self-viability are better at recognizing valuable open doors and thinking imaginatively with regards to commercializing creative thoughts.

6. Conclusion

The current study on entrepreneurial intention focuses on both entrepreneurial education and entrepreneurial self-efficacy, exploring the relationship between these factors. The results of the analysis confirm the mediating role of entrepreneurial self-efficacy between entrepreneurial education and intention, as indicated by the VAF value of 0.579. This value represents partial mediation and is further supported by the results of bootstrapping methods, with a lower bound of 0.106 and an upper bound of 0.251, both excluding zero. Upon compiling all the analysis results and testing hypotheses, we observed that enhancing entrepreneurial education among university students increases entrepreneurial intention. This, in turn, augments the pool of potential future entrepreneurs for the specific geographical region.

7. Implications and Limitations

Based on our research, we can recommend some practical implications for entrepreneurship development. Entrepreneurial education fosters self-belief, thereby boosting entrepreneurial intention. Firstly, universities across the country should make it mandatory for all students, regardless of their branch or stream, to include entrepreneurship development in their syllabus. Secondly, there is a need to move beyond traditional classroom methods. Thirdly, institutions should engage students with "real-life" opportunities to learn and involve themselves in experimental forms of learning.

While this study provides valuable insights, there are some limitations that present opportunities for future research. The data were collected from students at BPUT, GIET, and Centurion University in Odisha, representing a relatively small sample size from the business department. Future research could explore other regions in India or include students from diverse fields such as vocational schools, IT, and engineering to enhance result generalizability with a larger sample size.

References

- Agboola, O. W. (2021). Framework for School Stage Entrepreneurship Education in Nigeria. *Entrepreneurship Education and Pedagogy*, 4(3), 312–345. <https://doi.org/10.1177/2515127419899484>
- Alshebami, A. S., Seraj, A. H. A., & Alzain, E. (2022). Lecturers' Creativity and Students' *Entrepreneurial Intention in Saudi Arabia*. *Vision*, May. <https://doi.org/10.1177/09722629221099596>
- Asimakopoulou, G., Hernández, V., & Miguel, J. P. (2019). Entrepreneurial intention of engineering students: The role of social norms and entrepreneurial self-efficacy. *Sustainability (Switzerland)*, 11(16), 1–17. <https://doi.org/10.3390/su11164314>
- Bagheri, A., Lope Pihie, Z. A., & Krauss, S. E. (2013). Entrepreneurial leadership competencies among Malaysian university student entrepreneurial leaders. In *Asia Pacific Journal of Education* (Vol. 33, Issue 4, pp. 493–508). Taylor & Francis. <https://doi.org/10.1080/02188791.2013.822789>
- Bagozzi, R. P., Yi, Y., & Singh, S. (1991). On the use of structural equation models in experimental designs: Two extensions. *International Journal of Research in Marketing*, 8(2), 125–140. [https://doi.org/10.1016/0167-8116\(91\)90020-8](https://doi.org/10.1016/0167-8116(91)90020-8)
- Bandura, A., & Bandura, A. (2008). Guide des balances en officine. *Journal de Pharmacie de Belgique*, 63(3), 307–337.
- Barakat, S., Boddington, M., & Vyakarnam, S. (2014). Measuring entrepreneurial self-efficacy to understand the impact of creative activities for learning innovation. *International Journal of Management Education*, 12(3), 456–468. <https://doi.org/10.1016/j.ijme.2014.05.007>
- Bird, B. (1988). Implementing Entrepreneurial Ideas: The Case for Intention. *The Academy of Management Review*, 13(3), 442. <https://doi.org/10.2307/258091>
- Carsrud, A., & Brännback, M. (2011). Entrepreneurial Motivations: What Do We Still Need to Know? *Journal of Small Business Management*, 49(1), 9–26. <https://doi.org/10.1111/j.1540-627X.2010.00312.x>
- Chen, C. C., & Greene, P. G. (1998). Distinguish Entrepreneurs From Managers/ ? *Journal of Business Venturing*, 13(4), 295–316.
- Cphoon, J. M., Wadhwa, V., & Mitchell, L. (2010). The Anatomy of an Entrepreneur: Are Successful Women Entrepreneurs Different from Men? Ewing Marion Kauffman Foundation. *Kansas City: MIS, May*.
- Nabi, D. R. H. (2010). Entrepreneurial intentions amongst students/ : Towards a re-focused research agenda. *Journal of Small Business and Enterprise Development*, 17(4), 537–551.
- Egan, A., Maguire, R., Christophers, L., & Rooney, B. (2017). Developing creativity in higher education for 21st century learners: A protocol for a scoping review. *International Journal of Educational Research*, 82, 21–27. <https://doi.org/10.1016/j.ijer.2016.12.004>
- Elnadi, M., & Gheith, M. H. (2021). Entrepreneurial ecosystem, entrepreneurial self-efficacy, and entrepreneurial intention in higher education: Evidence from Saudi Arabia. *International Journal of Management Education*, 19(1), 100458. <https://doi.org/10.1016/j.ijme.2021.100458>
- Faloye, D. O., & Olatunji, O. D. (2018). Entrepreneurship Education and Self-employment Intentions among Fresh Graduates in Nigeria. *Journal of Economics and Sustainable Development*, 9(12), 146–158.
- Floris, M., & Pillitu, D. (2019). Improving entrepreneurship education in primary schools: a pioneer project. *International Journal of Educational Management*, 33(6), 1148–1169. <https://doi.org/10.1108/IJEM-09-2018-0283>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50.

- Fox, J., Pittaway, L., & Uzuegbunam, I. (2018). Simulations in Entrepreneurship Education: Serious Games and Learning Through Play. *Entrepreneurship Education and Pedagogy*, 1(1), 61–89. <https://doi.org/10.1177/2515127417737285>
- Hadi, N. U., & Abdullah, N. (2016). Making Sense of Mediating Analysis: A Marketing Perspective-CL72. *Review of Integrative Business and Economics Research*, 5(2), 62–76. <http://buscompress.com/journal-home.html>
- Hu, R., Wang, L., Zhang, W., & Bin, P. (2018). Creativity, proactive personality, and entrepreneurial intention: The role of entrepreneurial alertness. *Frontiers in Psychology*, 9(JUN), 1–10. <https://doi.org/10.3389/fpsyg.2018.00951>
- Huber, L. R., Sloof, R., & Van Praag, M. (2014). The effect of early entrepreneurship education: Evidence from a field experiment. *European Economic Review*, 72(12), 76–97. <https://doi.org/10.1016/j.euroecorev.2014.09.002>
- Indarti, N. & rokhima R. (2008). Intensi Kewirausahaan Mahasiswa/ : Study Perbandingan Antara Indonesia, Jepang, Dan Norwegia. *Core.Ac.Uk*, 23(no 4), 1–27. <https://core.ac.uk/download/pdf/297708482.pdf>
- Jena, R. K. (2020). Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107(December 2018), 106275. <https://doi.org/10.1016/j.chb.2020.106275>
- Jha, S. K., & Mohapatra, A. K. (2023). Developing Entrepreneurial Ecosystem: A Case Study of Technopark, Thiruvananthapuram. *Journal of Management and Public Policy*, 14(2), 4-8. DOI: 10.47914/jmpp.2023.v14i2.001
- Jha, S., Mohapatra, A. K., & Lodha, S. S. (2019). Political economy of farm loan waivers in India. *FIIB Business Review*, 8(2), 88-93. DOI: 10.1177/2319714519844128
- Jiatong, W., Murad, M., Bajun, F., Tufail, M. S., Mirza, F., & Rafiq, M. (2021). Impact of Entrepreneurial Education, Mindset, and Creativity on Entrepreneurial Intention: Mediating Role of Entrepreneurial Self-Efficacy. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.724440>
- Jingzhou Pan, Yanjun Guan, Jingru Wu, Lihong Han, F. Z., & Xinyu Fu, J. Y. (2018). Internship Quality and Employment Success 1 Internship Quality and Employment Success 2. *Journal of Vocational Behavior*, 1–34.
- Karyaningsih, R. P. D., Wibowo, A., Saptono, A., & Narmaditya, B. S. (2020). Does entrepreneurial knowledge influence vocational students' intention? Lessons from indonesia. *Entrepreneurial Business and Economics Review*, 8(4), 138–155. <https://doi.org/10.15678/EBER.2020.080408>
- Kokotsaki, D., Menzies, V., & Wiggins A. (2016). Durham Research Online EXCEPTIONALLY. *Language Learning Journal*, 19(3), 267–277. <http://dx.doi.org/10.1037/xge0000076>
- Krueger, Jr., N. F., & Brazeal, D. V. (2018). Entrepreneurial Potential and Potential Entrepreneurs. *REGEPE - Revista de Empreendedorismo e Gestão de Pequenas Empresas*, 7(2), 201–226. <https://doi.org/10.14211/regepe.v7i2.1071>
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411–432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0)
- Li, C., Murad, M., Ashraf, S. F., Syed, N., & Riaz, M. (2020). Entrepreneurial nascent behaviour: The role of causation process in opportunity discovery and creation. *Entrepreneurial Business and Economics Review*, 8(4), 183–200. <https://doi.org/10.15678/EBER.2020.080410>
- Lian, F., & Y. C. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 33(3), 593–617.

- Liñán, F., León, J. A. M., & Zarnowska, A. (2008). *Stimulating entrepreneurial intentions through education. In Teaching Psychology of entrepreneurship: perspective from six European countries.* 45–67.
- Liñán, F., Sevilla, U. De, Economía, D., & Rodríguez-cohard, J. C. (2015). Factors Affecting Entrepreneurial Intention Levels/ : a Role for Education. *International Entrepreneurship and Management Journal*, 7(2), 195–218., 7(2), 195–218.
- Loy, J. (2014). Elearning and emaking: 3d printing blurring the digital and the physical. *Education Sciences*, 4(1), 108–121. <https://doi.org/10.3390/educsci4010108>
- Malach Pines, A., Lerner, M., & Schwartz, D. (2010). Gender differences in entrepreneurship: Equality, diversity and inclusion in times of global crisis. *Equality, Diversity and Inclusion: An International Journal*, 29(2), 186–198. <https://doi.org/10.1108/02610151011024493>
- Mallick, M., & Nayak, P. P. (2023). Women Entrepreneurs in MSME Sector in India. *Orissa Journal of Commerce*, 44(2), 109–119. <https://doi.org/https://doi.org/10.54063/ojc.2023.v44i02.08>
- Matta, R., Kochhar, K., Mohapatra, A. K., & Mohanty, D. (2022). Board Characteristics and Risk Disclosure Quality by Integrated Reporters: Evidence from Indian Banks. *Prabandhan: Indian Journal of Management*, 15(5), 27–42. DOI: 10.17010/pijom/2022/v15i5/169579
- Mohapatra, A. K. (2016). Role of MUDRA Bank in Financing Non-Corporate Small Business Sectors. *Review of Knowledge Management*, 6(1/2), 21.
- Mukhtar, S., Wardana, L. W., Wibowo, A., & Narmaditya, B. S. (2021). Does entrepreneurship education and culture promote students' entrepreneurial intention? The mediating role of entrepreneurial mindset. *Cogent Education*, 8(1). <https://doi.org/10.1080/2331186X.2021.1918849>
- Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., & Neame, C. (2018). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education*, 43(3), 452–467. <https://doi.org/10.1080/03075079.2016.1177716>
- Neneh, B. N. (2022). Entrepreneurial passion and entrepreneurial intention: the role of social support and entrepreneurial self-efficacy. *Studies in Higher Education*, 47(3), 587–603. <https://doi.org/10.1080/03075079.2020.1770716>
- Nowiński, W., Haddoud, M. Y., Lanèariè, D., Egerová, D., & Czeglédi, C. (2019). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. *Studies in Higher Education*, 44(2), 361–379. <https://doi.org/10.1080/03075079.2017.1365359>
- Oluseye, M., Adebayo, F., Olulanu, I., Adesola, O., & Omonike, O. (2017). Effect of entrepreneurship education on self-employment initiatives among Nigerian science & technology students. *Journal of Education and Practice*, 8(15), 44–51. www.iiste.org
- Pradhan, S., & Gupta, P. (2020). Abusive supervision and work-family conflict: an empirical investigation of Indian professionals. *International Journal of Conflict Management*, 32(3), 493–513. <https://doi.org/10.1108/IJCMA-07-2020-0130>
- Praswati, A. N., Sari, N. P., & Murwanti, S. (2022). Youth Entrepreneurial Intention: Theory of Planned Behaviour and Social Cognitive Theory. *Benefit: Jurnal Manajemen Dan Bisnis*, 7(1), 66–79. <https://doi.org/10.23917/benefit.v7i1.18197>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <https://doi.org/10.3758/BRM.40.3.879>

- Reynolds, P., Storey, D. J., & Westhead, P. (1994). Cross-national Comparisons of the Variation in New Firm Formation Rates. *Regional Studies*, 28(4), 443–456. <https://doi.org/10.1080/00343409412331348386>
- Ruiz Resa, J. D. (2000). Trabajo y franquismo. *Crítica Del Derecho*, 11(c), 185.
- Sánchez, J. C. (2013). The impact of an entrepreneurship education program on entrepreneurial competencies and intention. *Journal of Small Business Management*, 51(3), 447–465. <https://doi.org/10.1111/jsbm.12025>
- Singla, H. K., Samanta, P. K., & Sridharan, S. (2023). What Second-Generation Internal Family Business Successors Think/ : A Case of Construction Family Businesses in India. *Orissa Journal of Commerce*, 44(3), 45–58.
- Sun, H., Lo, C. T., Liang, B., & Wong, Y. L. B. (2017). Engineering Students in Hong Kong. *The Impact of Entrepreneurial Education on Entrepreneurial Intention of Engineering Students in Hong Kong*, 1(1), 123–156.
- Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship: Theory and Practice*, 33(3), 669–694. <https://doi.org/10.1111/j.1540-6520.2009.00321.x>
- Udayanan, P. (2019). The role of self-efficacy and entrepreneurial self-efficacy on the entrepreneurial intentions of graduate students: A study among omani graduates. *Entrepreneurial Business and Economics Review*, 7(4), 7–20. <https://doi.org/10.15678/EBER.2019.070401>
- Vaughan, N. (2014). Student engagement and blended learning: Making the assessment connection. *Education Sciences*, 4(4), 247–264. <https://doi.org/10.3390/educsci4040247>
- Wadhvani, R. D., Kirsch, D., Welter, F., Gartner, W. B., & Jones, G. G. (2020). Context, time, and change: Historical approaches to entrepreneurship research. *Strategic Entrepreneurship Journal*, 14(1), 3–19. <https://doi.org/10.1002/sej.1346>
- Wang, X. H., You, X., Wang, H. P., Wang, B., Lai, W. Y., & Su, N. (2023). The Effect of Entrepreneurship Education on Entrepreneurial Intention: Mediation of Entrepreneurial Self-Efficacy and Moderating Model of Psychological Capital. *Sustainability (Switzerland)*, 15(3), 2562. <https://doi.org/10.3390/su15032562>
- Wardana, L. W., Handayati, P., Narmaditya, B. S., Wibowo, A., Patma, T. S., & Suprajan, S. E. (2020). Determinant factors of young people in preparing for entrepreneurship: Lesson from Indonesia. *Journal of Asian Finance, Economics and Business*, 7(8), 555–566. <https://doi.org/10.13106/jafeb.2020.vol7.no8.555>
- Westhead, P., & Solesvik, M. Z. (2016). Entrepreneurship education and entrepreneurial intention: Do female students benefit? *International Small Business Journal: Researching Entrepreneurship*, 34(8), 979–1003. <https://doi.org/10.1177/0266242615612534>
- Winterstorm Värlander, S., Sölvell, I., & Klyver, K. (2020). Entrepreneurship as a vocational choice in contested entrepreneurship communities: The role of entrepreneurs' justification strategies. *Journal of Business Venturing*, 35(3). <https://doi.org/10.1016/j.jbusvent.2020.106006>
- Wu, L., Jiang, S., Wang, X., Yu, L., Wang, Y., & Pan, H. (2022). Entrepreneurship Education and Entrepreneurial Intentions of College Students: The Mediating Role of Entrepreneurial Self-Efficacy and the Moderating Role of Entrepreneurial Competition Experience. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.727826>
- Yang, Q., Chen, J., Yang, L., & Liu, Z. (2021). How to Develop Entrepreneurial Talent More Effectively? A Comparison of Different Entrepreneurship Educational Methods. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.644113>
- Yi, G. (2021). From green entrepreneurial intentions to green entrepreneurial behaviors: the role of university entrepreneurial support and external institutional support. *International Entrepreneurship and Management Journal*, 17(2), 963–979. <https://doi.org/10.1007/s11365-020-00649-y>

- Zhang, S., & Zhou, A. (2023). The Construction and Practice of a TPACK Development Training Model for Novice University Teachers. *Sustainability (Switzerland)*, 15(15), 11816. <https://doi.org/10.3390/su151511816>
- Zhang, Y., Duysters, G., & Cloudt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, 10(3), 623–641. <https://doi.org/10.1007/s11365-012-0246-z>