



ORIGINAL

## Mediating role of entrepreneurial self-efficacy on the relationship of entrepreneurial education and personality traits on entrepreneurial intention of universities students

### Papel mediador de la autoeficacia emprendedora en la relación entre la educación emprendedora y los rasgos de personalidad en la intención emprendedora de los estudiantes universitarios

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#### ABSTRACT

**Introduction:** entrepreneurs are critical to the long-term economic success of any country. Researchers considered a variety of aspects attempting to determine the importance of entrepreneurial intentions.

**Objectives:** this study examined the influence of entrepreneurial education and personality traits on entrepreneurial intentions among senior students at Jordanian public universities, with a focus on the role of entrepreneurial self-efficacy as a mediator.

**Method:** the study sampled 389 students from a population of 30,236 using stratified random sampling and a cross-sectional design. The data were analysed using SmartPLS 3.

**Results:** entrepreneurial education to entrepreneurial intention (0,329), personality traits to entrepreneurial intention (0,228), entrepreneurial self-efficacy to entrepreneurial intention (0,435), entrepreneurial education to entrepreneurial self-efficacy (0,550), and personality traits to entrepreneurial self-efficacy (0,338). Both entrepreneurial intention (R Square=0,727, Q Square=0,514) and entrepreneurial self-efficacy (R Square=0,577, Q Square=0,392) exhibited strong predictive power and large predictive relevance according to the results of this study.

**Conclusions:** these results suggested that universities should incorporate entrepreneurial education and personality development into their curricula in order to effectively foster entrepreneurial intentions. Thus, the research contributed to the academic understanding of the complex interplay between these variables and provides practical suggestions for educational institutions seeking to foster entrepreneurial intentions.

**Keywords:** Entrepreneurial Education; Personality Traits; Entrepreneurial Self-Efficacy; Entrepreneurial Intention.

#### RESUMEN

**Introducción:** los emprendedores son fundamentales para el éxito económico a largo plazo de cualquier país. Los investigadores consideraron una variedad de aspectos para intentar determinar la importancia de las intenciones emprendedoras.

**Objetivos:** este estudio examinó la influencia de la educación emprendedora y los rasgos de personalidad en las intenciones emprendedoras entre los estudiantes de último año de las universidades públicas jordanas, con un enfoque en el papel de la autoeficacia emprendedora como mediador.

**Método:** el estudio muestreó a 389 estudiantes de una población de 30 236 utilizando un muestreo aleatorio estratificado y un diseño transversal. Los datos se analizaron utilizando SmartPLS 3.

**Resultados:** educación emprendedora a intención emprendedora (0,329), rasgos de personalidad a intención emprendedora (0,228), autoeficacia emprendedora a intención emprendedora (0,435), educación emprendedora a autoeficacia emprendedora (0,550) y rasgos de personalidad a autoeficacia emprendedora (0,338). Tanto la intención emprendedora ( $R^2 = 0,727$ ,  $Q^2 = 0,514$ ) como la autoeficacia emprendedora ( $R^2 = 0,577$ ,  $Q^2 = 0,392$ ) mostraron un fuerte poder predictivo y una gran relevancia predictiva según los resultados de este estudio.

**Conclusiones:** estos resultados sugieren que las universidades deberían incorporar la educación emprendedora y el desarrollo de la personalidad en sus planes de estudio para fomentar eficazmente las intenciones emprendedoras. Por lo tanto, la investigación contribuyó a la comprensión académica de la compleja interacción entre estas variables y proporciona sugerencias prácticas para las instituciones educativas que buscan fomentar las intenciones emprendedoras.

**Palabras clave:** Educación Emprendedora; Rasgos de Personalidad; Autoeficacia Emprendedora; Intención Emprendedora.

## INTRODUCTION

Intention, according to psychological studies, is the best predictor of intended behavior.<sup>(1)</sup> The concept of motivating students' entrepreneurial intention has attracted a lot of research by academics. mostly because of its possibility for economic development and function as a forerunner of real entrepreneurial activity.<sup>(2)</sup> Since it directly affects future entrepreneurial activities and the larger socioeconomic scene, understanding the antecedents of students' entrepreneurial intentions is thus of great relevance to academics, legislators, and teachers.

In Jordan, the unemployment rate between all university graduates was high, reaching 27,8 percent when compared to other educational levels.<sup>(3)</sup> Simultaneously, a study conducted by the Higher Population Council-Jordan<sup>(4)</sup> found a decline in entrepreneurial intentions among students expected to graduate from Jordanian institutions. However, higher education institutions like universities can foster students' entrepreneurial intention.<sup>(5)</sup> This is because universities can lower high unemployment rates through fostering a greater interest in entrepreneurship among students.<sup>(6)</sup>

Education in entrepreneurship has become a useful tool for legislators trying to encourage entrepreneurial intention and drive entrepreneurial activities.<sup>(7)</sup> Though a lot of research and knowledge about entrepreneurship education is at hand, little is known about how it affects behaviour or entrepreneurial intention.<sup>(8)</sup> In their 2020 publication, Shah et al. underlined the need of more investigation on the impact of entrepreneurship education on students' entrepreneurial intention. Earlier studies' contradicting results have spurred this demand for more research.

Additionally, one group of individual variances that have drawn a lot of attention are personality traits.<sup>(9)</sup> Though emerging countries like Jordan have received little attention, most of the research concentrates on the link between personality traits and entrepreneurialism in developed countries.<sup>(10)</sup> Hoang<sup>(7)</sup> also advised investigating other factors of entrepreneurial intention, such student personality, to inspire entrepreneurship among graduates.

On the other hand, entrepreneurial intentions could be indirectly influenced by education in entrepreneurship. Self-efficacy has been underlined in the literature as a possible mechanism to change the relationship between entrepreneurial intention and entrepreneurial education.<sup>(8,7)</sup> Pihie and Bagheri<sup>(11)</sup> argue that entrepreneurial education can help students build entrepreneurial self-efficacy. Such education increases entrepreneurial self-efficacy by developing necessary skills and good working habits. Personality traits and self-efficacy showed a positive correlation according to McGee.<sup>(12)</sup> Anwar<sup>(13)</sup> thus show that self-efficacy mediates the link between entrepreneurial intention and personality traits.

Consequently, according to the aforementioned discussion, and in response to previous recommendations for more research in Jordan, the current study aims to investigate how entrepreneurial education influences students' entrepreneurial intention in Jordanian universities, examine how personality traits influence students' entrepreneurial intention at Jordanian institutions, investigate how entrepreneurial self-efficacy affects entrepreneurial intentions and finally, how it mediates the relationship between entrepreneurship education, personality traits, and entrepreneurial intention.

## Literature review and research gap

Bazkiaei<sup>(9)</sup> found that students who take part in educational programmes that highlight entrepreneurship and help them hone their entrepreneurial abilities may be motivated to launch their own businesses.

Izedonmi<sup>(14)</sup> pointed that projects of this kind will open doors for new companies to start and more jobs to be created. European Commission<sup>(15)</sup> stated that entrepreneurship education in higher education enhances students' fundamental entrepreneurial skills and encourages students' entrepreneurial intention. Furthermore, actual data showed that the development of entrepreneurial intention can be influenced by entrepreneurship education.<sup>(16,17,18,19)</sup>

Ciavarella<sup>(20)</sup> found that company owners with the power characteristics associated with outstanding performance were more likely to stay in charge of their companies for a long time. Bazkiaei<sup>(9)</sup>, carried out a Meta-analysis of the relationship between personality and entrepreneurial intention to better figure out how personality functions in entrepreneurial mindsets. Research has shown that personality characteristics can accurately predict entrepreneurial intention.<sup>(21,22)</sup> Yasir<sup>(23)</sup> gave an overview of the importance of personality traits in connection to students' inclinations to choose entrepreneurship as a career path. Referring to a precise model that Churchill and Bygrave<sup>(24)</sup> published, An intention to start a business and characteristics of entrepreneurs are positively correlated.

Recent studies<sup>(8,25,26,27,28)</sup> confirm the need of entrepreneurial self-efficacy in the development of entrepreneurial intentions. Puni<sup>(8)</sup> acclaimed that higher sense of self-efficacy individuals are more likely to be drawn to entrepreneurial activities and behaviour by nature.

Vamvaka<sup>(27)</sup> and Liao<sup>(28)</sup> demonstrated how important entrepreneurial self-efficacy is to the growth of entrepreneurial intention. Zhao<sup>(29)</sup> proposed that ESE mediates the knowledge students gained from enrolling in courses connected to entrepreneurship and their intentions to become entrepreneurs. This allowed it to be shown that both factors favourably correlated with ESE. Bandura<sup>(30)</sup> argue that formal education helps one progressively increase their self-efficacy, so improving their goals and choices for their life. Therefore, theoretically speaking, entrepreneurial self-efficacy could act as a mediator in the link between entrepreneurial intention and entrepreneurial education. Liao and colleagues<sup>(28)</sup> indeed confirmed the presence of this mediating effect.

It is obvious that the existing literature recognize the positive effects of entrepreneurship education and personality traits on entrepreneurial intentions. However, a vital research gap still exists, necessitating further research into the effect of personality traits, entrepreneurship education and self-efficacy on students entrepreneurial intentions, particularly in Jordan. As emerging countries like Jordan have received little attention, while most of the research concentrates on these links in developed countries.<sup>(10)</sup> According to <sup>(31,32)</sup> further research on undergraduates' EIs is still needed. And more investigation on the impact of entrepreneurship education on students' entrepreneurial intention is still required.<sup>(33)</sup>

## **Theoretical/conceptual framework**

### *Entrepreneurial Intention*

Entrepreneurial intention may be viewed as a cognitive process prior to starting a business. There are two models that have been proposed in the literature to explain entrepreneurial intention. This includes Shapero's Entrepreneurial Event and Ajzen's Theory of Planned Behaviour. The basic paradigm of entrepreneurial intentions (EI) defines EI as perceived feasibility, desire, and action. According to Van Gelderen,<sup>(35)</sup> the second model defines intention utilising personal attitudes, subjective norms, and perceived behavioural control. Because entrepreneurial activity is planned and desired information can help predict future behaviour,<sup>(13)</sup> an intention-based model offers several study choices. This is due to the planned nature of entrepreneurial activities. Entrepreneurial intention can explain 30 % of behavioural variance, compared to 10 % for personalities, personal qualities, and attitude.<sup>(1)</sup>

### *Entrepreneurial Self-Efficacy*

Entrepreneurial self-efficacy is the belief of a person on their ability to effectively perform the tasks and responsibilities engaged in entrepreneurship.<sup>(36)</sup> Schmutzler<sup>(37)</sup> claimed that one of the most significant contributions ESE research makes is in determining whether people have entrepreneurial intentions. Previous research<sup>(38)</sup> indicated that complex social, physical, linguistic, and cognitive skills constitute the basic elements of self-efficacy. All these components come from experience since self-efficacy motivates people to aim higher and perform better going forward. Another research<sup>(39)</sup> showed a relationship between professional curiosity, intentions for career choice, and job performance with self-efficacy. Thus, the corpus of earlier studies on self-efficacy in entrepreneurial settings shows that it transmits people's opinions and predicts their intentions to start new businesses.<sup>(39)</sup>

### *Entrepreneurial Education*

Entrepreneurial education is the organised pedagogical programmes and curriculum meant to give students the knowledge, abilities, and mindsets required to participate in entrepreneurial activities. The number of entrepreneurial education programmes offered at higher education institutions worldwide has significantly

increased in recent years, claimed Obschonka.<sup>(40)</sup> The quantity of articles and citations has increased significantly recently, indicating a surge in interest in doing study on this topic. According to Westhead and Solesvik<sup>(17)</sup>, an entrepreneur's involvement in entrepreneurial education is the key element determining their success. The European Commission<sup>(15)</sup> states that the aim of higher education entrepreneurial education is to enhance students' fundamental entrepreneurial skills and increase their entrepreneurial intention. All students should thus have access to entrepreneurial education, even those who do not enrol in business courses.<sup>(34)</sup> This will raise the prospect that pupils will eventually start their own businesses.

### Personality Traits

Personality traits are enduring patterns of thinking, feeling, and acting that characterise people and influence their propensity for entrepreneurship.<sup>(40)</sup> Numerous meta-analyses have produced the consensus that personality characteristics have an impact on an entrepreneur's success. This is so that a person's behaviour and decision-making, which have long been associated with outstanding performance in their businesses.<sup>(41)</sup> The Big Five personality traits are a framework that divides human personality into five main components: neuroticism, extraversion, conscientiousness, openness to experience, and agreeableness. Recent years have seen a broad acceptance of this theory. Awwad and Al-Aseer<sup>(32)</sup> state that because of the stability of the scale that relates to an individual's ability for entrepreneurship, it is thought that the big five personality traits may be used to highlight almost any individual's personality. This is so that an individual's ability to succeed in business can be most predicted by the big five characteristics.

Despite the extensive research on student's entrepreneurial intentions, gaps remain in understanding how entrepreneurial education, personality traits, and entrepreneurial self-efficacy influence students' entrepreneurial intention in Jordanian universities, and how entrepreneurial self-efficacy mediates the relationship between entrepreneurship education, personality traits, and entrepreneurial intention. The lack of comprehensive investigation in this domain especially in Jordan, leaves unanswered questions. This study seeks to explore these relationships, aiming to bridge the current knowledge gap while offering valuable details for both industry and academia practitioners.

### METHOD

Students graduating from Jordanian public universities were the subjects of this research. Students who already have studied entrepreneurship course or workshop have been included in this study. Graduating students stand at a critical juncture, making career decisions that can have lasting impacts on their lives and the broader economy. There are ten public universities in Jordan, with an estimated total enrolment of 30236 students. With a margin of error of 5 % and a confidence interval of 95 %, Krejcie and Morgan<sup>(42)</sup> formula for estimating the appropriate sample size yields a target sample size of 380. However, 389 participants were included in the final valid dataset used to produce these results. Each of the 10 universities served as a stratum, and the sample was drawn from there using a stratified sampling method that took into account the proportion of students at each institution. Information gathered in 2022 via Google's online form service.

Since the authors assumed that the theoretical framework's various variables could be presented numerically and evaluated using statistical analysis, the study's design corresponds to positivism. The authors can construct plausible hypotheses to advance the research, and the study takes a deductive approach by primarily focusing on testing those hypotheses through the application of statistical methods. For this assessment P-value and T-value are the main indicators for making the decision of rejection and acceptance. To provide statistical results for the primary data that was collected with a survey-based strategy, this study employed quantitative methods. The constructed survey questionnaire was used to collect information from public universities in Jordan. Partial Least Squares Structural Equation Modelling (PLS-SEM) is performed on the data with the help of Smart-PLS software.

Distinct degrees of consensus between the various constructs were uncovered by the descriptive statistics. A mean score of 3,221 and a standard deviation of 1,123 for entrepreneurial intent indicates a respectable 64,42 % level of agreement. A mean score of 3,273 and a standard deviation of 1,154 (representing 65,46 %) indicate a satisfactory level of agreement regarding entrepreneurs' perceptions of their own abilities to succeed. The mean score of 3,426 and the standard deviation of 0,993 for perceived behavioural control demonstrates a satisfactory level of agreement (68,52 %). Finally, the level of agreement regarding personality traits is the highest overall, scoring a satisfying 72,26 % on a 5-point scale (mean = 3,613, standard deviation = 0,962).

### RESULTS AND DISCUSSION

For the multiple regression study PLS-SEM was used. Smart-PLS allowed one to investigate the structural and measuring model efficiency. PLS-SEM was applied to the analysis since other researchers<sup>(43,44)</sup> had advised and used it. Three main areas—the evaluation of the structural model for testing the hypotheses; the validity and reliability of the measurement model; and the preliminary data inspection and descriptive statistics—are

covered in the section that follows in a critical manner. The results of these studies are also included into the design of the project, so supporting the conclusions' credibility.<sup>(45)</sup>

### Frequency And Descriptive Analysis

The bulk of the sample consists of younger people since 92,3 % of them fall between the ages of 21 and 25. With a 57,2 % percentage, men make the majority among the responders. Two universities—The University of Jordan (19,8 %) and Yarmouk University (16,7 %) allow over 36,5 % of the sample to trace their educational background back to them. Of the respondents, 35 % are registered in a business or economics course. Not insignificantly, 21,9 % of the population calls Amman home. At last, a good number of the sample—78,4 %—comes from entrepreneurial families either because both of their parents are self-employed (36,8 %) or because their father is self-employed (41 %).

The descriptive statistics revealed different degrees of agreement among the several constructions. With a standard deviation of 1,123, the average score for entrepreneurial intent is 3,221, so reflecting a reasonable degree of agreement (64,42 %). Entrepreneurial self-efficacy shows a good degree of agreement with a mean score of 3,273 and a standard deviation of 1,154 (which stands for 65,46 %). With a mean score of 3,426 and a standard deviation of 0,993 for perceived behavioural control, the agreement is rather good (68,52 %). With a satisfying 72,26 % on a 5-point scale (mean = 3,613, standard deviation = 0,962), the degree of agreement on personality traits is finally highest overall.

### Results of Validity and Reliability

The Smart\_PLS 3 statistical analysis program produces the results shown in table 1; hence, the roadmap described by Hair Jr, Hult, Ringle, and Sarstedt<sup>(46)</sup> has been followed in assessing the validity and dependability of the constructs.

Ideally should be higher than 0,7 for adequacy,<sup>(47)</sup> factor loadings show the strength of the relationship between the observed variables and their corresponding latent constructs. For example, the Entrepreneurial Education (EED) construct item EED1 had a loading of 0,788, which is rather above the threshold. It is interesting that weak loading caused the item EED5 to be deleted, so improving the construct's dependability. The suggested items' outer loading is depicted in figure 1.

The Average Variance Extracted (AVE) measures the amount of variance that a latent construct captures from its indicators. Generally, values above 0,5 are considered to reflect good convergent validity.<sup>(48)</sup> For instance, the AVE for Entrepreneurial Intention (EI) was 0,715, affirming its convergent validity.

Every construct in Table 1 surpasses the allowable cutoff of 0,7, according to Cronbach's alpha, which measures the internal consistency of items within each construct.<sup>(49)</sup> Entrepreneurial Self-Efficacy (ESE), for instance, the Cronbach's alpha of 0,935 indicates exceptional internal consistency.

Construct	Item	Loading	AVE	Cronbach's alpha
Entrepreneurial Education (EED)	EED1	0,788	0,636	0,905
	EED2	0,775		
	EED3	0,826		
	EED4	0,789		
	EED6	0,793		
	EED7	0,825		
	EED8	0,785		
	Entrepreneurial Intention (EI)	EI1		
EI2		0,855		
EI3		0,876		
EI4		0,829		
EI5		0,809		
Entrepreneurial Self-Efficacy (ESE)	ESE1	0,842	0,688	0,935
	ESE2	0,829		
	ESE3	0,827		
	ESE4	0,812		
	ESE5	0,757		
	ESE6	0,856		
	ESE7	0,844		
	ESE8	0,866		

Construct	Item	Loading	AVE	Cronbach's alpha
Personality Traits (PT)	PT1	0,838	0,555	0,864
	PT2	0,769		
	PT3	0,796		
	PT4	0,823		
	PT5	0,68		
	PT6	0,652		
	PT7	0,630		

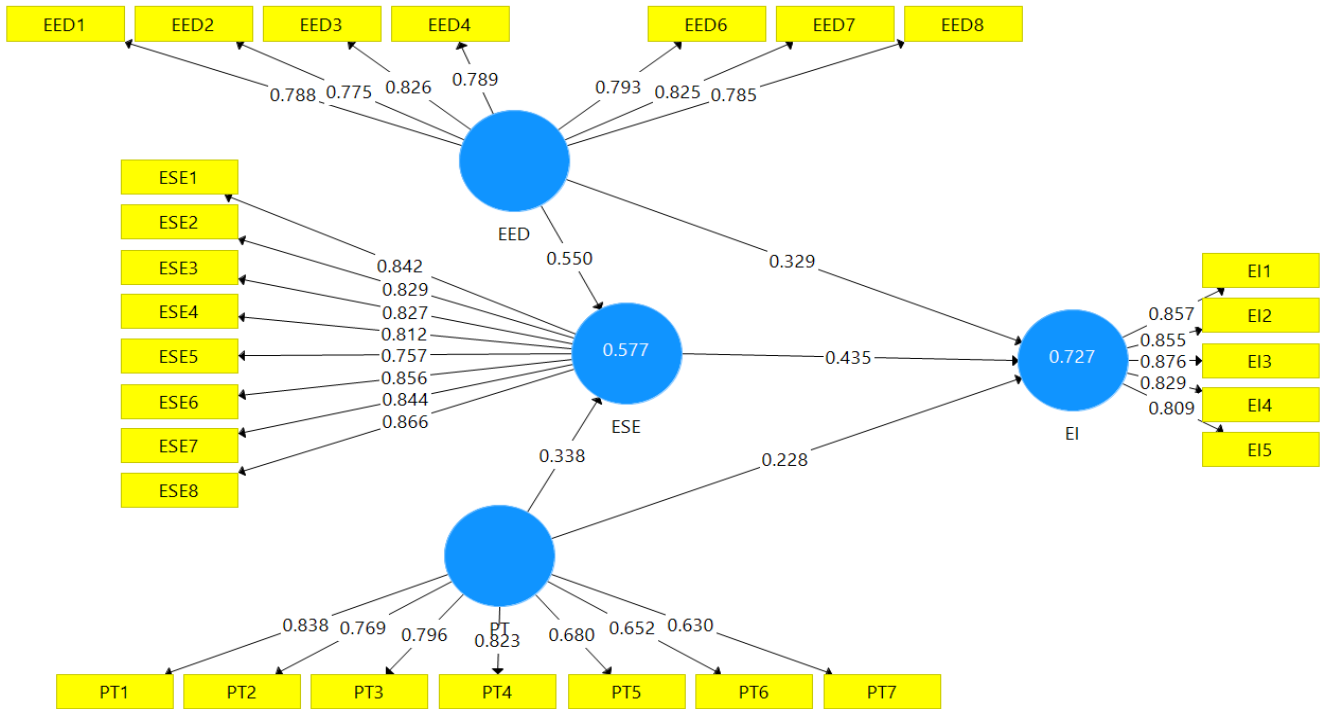


Figure 1. Structural Model Outer Loading Estimates

The results in table 2 represent discriminant validity as assessed by the Fornell-Larcker Criterion. According to this criterion, discriminant validity is confirmed if the square root of the Average Variance Extracted (AVE) for each construct is greater than its highest correlation with any other construct.<sup>(48)</sup> The diagonal elements in the table show the square root of the AVE for each construct—0,797 for Entrepreneurial Education (EED), 0,845 for Entrepreneurial Intention (EI), 0,830 for Entrepreneurial Self-Efficacy (ESE), and 0,745 for Personality Traits (PT). for instance, for Entrepreneurial Education (EED, the square root of the AVE is 0,797, which is higher than its correlations with other constructs—0,730 with EI, 0,696 with ESE, and 0,433 with PT. The Fornell-Larcker Criterion confirms good discriminant validity for all the constructs. The constructs are distinct yet related, thereby reinforcing the robustness of the measurement model used in the study.

	EED	EI	ESE	PT
Entrepreneurial Education (EED)	0,797			
Entrepreneurial Intention (EI)	0,730	0,845		
Entrepreneurial Self-Efficacy (ESE)	0,696	0,795	0,830	
Personality Traits (PT)	0,433	0,621	0,576	0,745

By means of R Square and Q Square values, respectively, the data in Table 3 clarify the predictive power and predictive relevance of the suggested model. The R Square value in structural equation modelling indicates the percentage of the variance in the dependent variable that can be foreseen from the independent variables.<sup>(45)</sup> While Entrepreneurial Self-Efficacy (ESE) shows a modest R Square value of 0,577, Entrepreneurial Intention

(EI) shows in the current study a R Square value of 0,727, so indicating strong predictive power. These values indicate that the model can adequately explain a significant share of the variation in these constructs.

Turning to predictive relevance, the Q Square value is a measure of how well the observed values are reconstructed by the model and its parameters.<sup>(45)</sup> Value of Q Square greater than zero suggests the model has predictive relevance for a particular endogenous construct. In this study, both Entrepreneurial Intention (EI) and Entrepreneurial Self-Efficacy (ESE) display large Q Square values of 0,514 and 0,392, respectively. This underscores that not only is the model theoretically sound, but it also possesses practical utility in terms of prediction.

Overall, the high R Square and Q Square values for both constructs bolster the proposed model's validity, revealing it to be both powerfully predictive and relevant.

	Predictive Power		Predictive Relevance	
	R Square	Status	Q Square	Status
Entrepreneurial Intention (EI)	0,727	Strong	0,514	Large
Entrepreneurial Self-Efficacy (ESE)	0,577	Moderate	0,392	Large

To evaluate the hypotheses proposed in the study, a comprehensive analysis utilising path coefficients, standard deviation, t-statistics, and p-values was conducted. Generally, a t-statistic value above 1,96 implies significance at the 0,05 level (two-tailed), and p-values less than 0,05 are usually interpreted as evidence that the variable is a significant predictor.<sup>(47)</sup> Table 4 and figure 2 show the results.

For Hypothesis 1, which posits that Entrepreneurial Education (EED) has a significant effect on Entrepreneurial Intention (EI), the path coefficient is 0,329 with a p-value of 0,000. These figures align with prior research indicating a strong positive relationship between entrepreneurial education and entrepreneurial intentions.<sup>(9,15,16,18,50)</sup>

Hypothesis 2, suggesting a significant impact of Personality Traits (PT) on Entrepreneurial Intention (EI), is also supported with a path coefficient of 0,228 and a p-value of 0,000. This finding corroborates prior studies<sup>(21,22,23,51)</sup> which identified certain personality traits as pivotal in influencing entrepreneurial intentions.

Turning to Hypothesis 3, the data indicate a path coefficient of 0,435 and a p-value of 0,000 between Entrepreneurial Self-Efficacy (ESE) and Entrepreneurial Intention (EI). This aligns well with existing literature which has underscored the pivotal role of self-efficacy in shaping entrepreneurial intentions.<sup>(25,26,27,28,52)</sup>

For Hypothesis 4, which proposes that Entrepreneurial Education (EED) significantly impacts Entrepreneurial Self-Efficacy (ESE), the path coefficient stands at 0,550 with a p-value of 0,000. This is in line with recent studies that suggest educational interventions can significantly enhance individuals' belief in their entrepreneurial capabilities.<sup>(53,54)</sup>

Lastly, Hypothesis 5 states that Personality Traits (PT) significantly affect Entrepreneurial Self-Efficacy (ESE). With a path coefficient of 0,338 and a p-value of 0,000, the hypothesis is supported, echoing the findings of works such as that by Al-Qadasi<sup>(55)</sup> and Memon,<sup>(54)</sup> which show that intrinsic personality traits can significantly impact one's belief in their entrepreneurial capabilities.

H#	Relationship	Path Coefficient	Standard Deviation	T Statistics	P Value	Status
H1	EED -> EI	0,329	0,048	6,796	0,000	Significant
H2	PT -> EI	0,228	0,037	6,176	0,000	Significant
H3	ESE -> EI	0,435	0,057	7,614	0,000	Significant
H4	EED -> ESE	0,550	0,039	14,062	0,000	Significant
H5	PT -> ESE	0,338	0,039	8,742	0,000	Significant

To assess the mediating role of Entrepreneurial Self-Efficacy (ESE) in the relationships between Entrepreneurial Education (EED), Personality Traits (PT), and Entrepreneurial Intention (EI), both direct and indirect effects were calculated. The rule of thumb for mediation analysis suggests that a significant indirect effect is indicative of mediation.<sup>(56)</sup> Additionally, if both direct and indirect effects are significant, partial mediation is confirmed.<sup>(57)</sup>

For Hypothesis 6, proposing a mediating role of ESE between EED and EI, the data reveals a direct effect (Beta = 0,329, P-Value = 0,000) and an indirect effect (Beta = 0,239, P-Value = 0,000). Both effects are statistically significant, confirming the partial mediation status. These results align with studies by Maheshwari and Kha<sup>(58)</sup> and Wang,<sup>(59)</sup> which highlight that variables like self-efficacy can act as partial mediators in the relationship between education and entrepreneurial intentions.

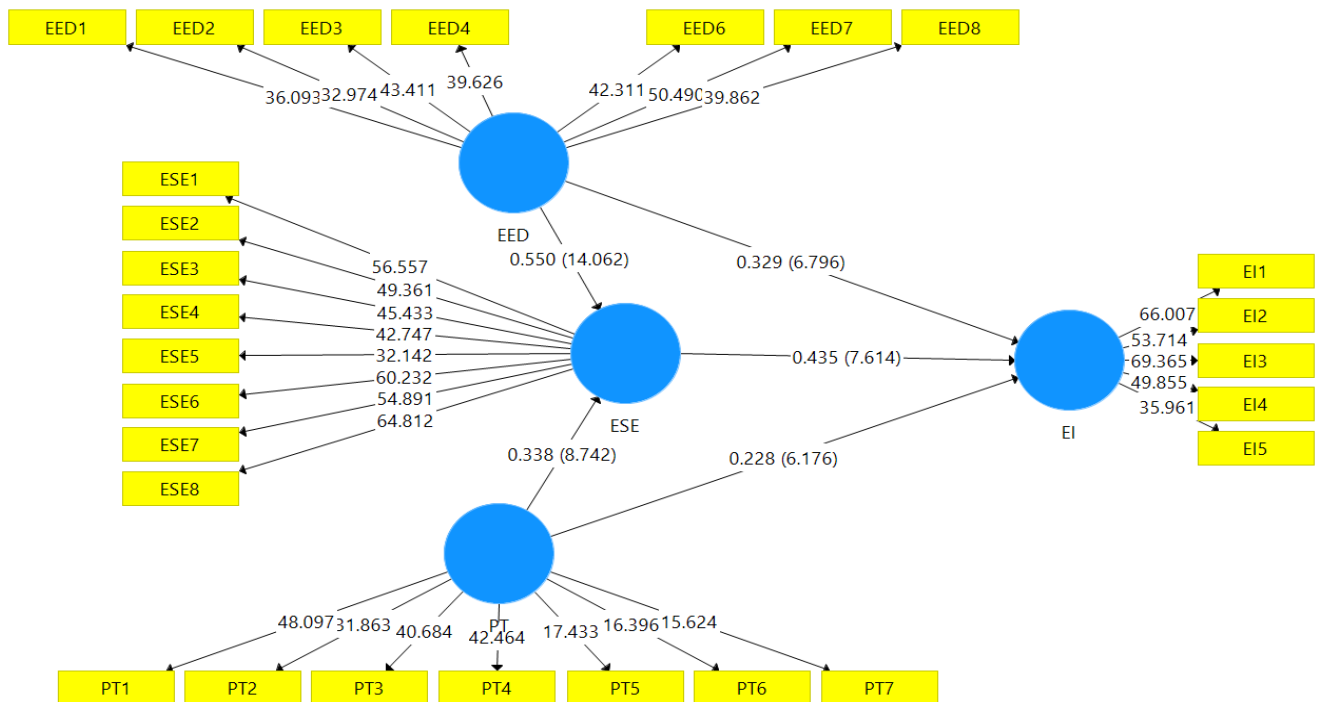


Figure 2. T Statistics Estimates of the Proposed Model

Similarly, Hypothesis 7, suggesting a mediating role of ESE between PT and EI, also shows both direct (Beta = 0,228, P-Value = 0,000) and indirect (Beta = 0,147, P-Value = 0,000) effects as significant, thus confirming partial mediation. This finding is consistent with earlier research that underscores the nuanced ways in which personality traits can influence entrepreneurial intentions through mediators such as self-efficacy.<sup>(55)</sup>

Table 5. Mediating Assessment of Effective Internal Control

H#	Relationship	Direct Effect			Indirect Effect			Total Effect		Status (Mediation)
		Beta	P-Value	Status	Beta	P-Value	Status	Beta	P-Value	
H6	EED -> ESE -> EI	0,329	0,000	Sig	0,239	0,000	Sig	0,568	0,000	Partial Mediation
H7	PT -> ESE -> EI	0,228	0,000	Sig	0,147	0,000	Sig	0,375	0,000	Partial Mediation

In summary, all the direct hypotheses were found to be statistically significant, highlighting the complex interplay between Entrepreneurial Education, Personality Traits, Entrepreneurial Self-Efficacy, and Entrepreneurial Intention. These findings contribute to existing literature by reinforcing and expanding on the theoretical frameworks from which they were derived. In addition, the mediating assessment confirms that Entrepreneurial Self-Efficacy partially mediates the relationships between Entrepreneurial Education, Personality Traits, and Entrepreneurial Intention, substantiating the complex interrelations between these constructs.

**CONCLUSIONS**

This study’s findings have important ramifications for the administration and operation of higher education institutions. The findings highlight the significance of encouraging entrepreneurial self-efficacy as a key mediating factor that influences entrepreneurial intentions among college students. That’s why it’s so important for schools to offer courses in both entrepreneurship and personal growth. Both entrepreneurial education and self-efficacy can be improved through the organisation of specialised workshops, boot camps, and guest lectures from successful entrepreneurs. In this way, students would be better equipped to take on entrepreneurial endeavours, which would satisfy not only educational but also economic needs.

This study adds to the existing academic literature by clarifying the role of entrepreneurial self-efficacy as a mediator between entrepreneurial education, personality traits, and entrepreneurial intentions. While prior research has focused on each of these factors independently, this study brings them all together in a single, coherent framework. With this information, it is obvious that there are many different factors influence college



students' decision to start their own businesses.

To enhance future research endeavours, it is advisable to undertake longitudinal studies that can effectively track the progression of entrepreneurial intentions and self-efficacy over an extended period. Such studies would yield more comprehensive and reliable insights into the causal relationships and interactions among these variables. Moreover, the utilisation of qualitative research methods, such as conducting in-depth interviews, can be employed to acquire a comprehensive comprehension of the fundamental motivations, challenges, and cognitive processes that contribute to the formation of entrepreneurial intentions and self-efficacy. Moreover, it is imperative to conduct tests of the model in diverse cultural and educational contexts in order to ascertain its generalizability.

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