

Predicting entrepreneurial intentions through entrepreneurial education and the Mediating role of self-efficacy, using partial least squares structural equation model (PLS-SEM)

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Abstract:

This study investigates the impact of entrepreneurship education on students' entrepreneurial intentions. Data collected via a structured questionnaire from students at University assess the relationship between entrepreneurship educations, entrepreneurial self-efficacy and entrepreneurial intentions. We used the Methodology Structural Modeling Partial Least Squares Equations (SEM-PLS) using Smart PLS (version 4). Findings confirm the direct and indirect positive relationship between entrepreneurship education (EE) and entrepreneurial intention.

Key words: Entrepreneurship education; Entrepreneurial intention; Self-efcacy; University students; entrepreneurial pedagogy.

JEL Classification Codes : L26, C31, I23.

1. Introduction:

The importance of entrepreneurship as a social and economic phenomenon has been recognized and widely discussed since at least the 15th century; GEM has recognized it like a crucial strategy for generating employment for young people. Therefore, governments in almost every country have increased investment in programs to promote entrepreneurship and encourage communities to adopt an entrepreneurial attitude.

Numerous research reveal that entrepreneurial activity conducted by nascent entrepreneurs and owners/managers of young businesses has a significant impact on economic growth; It facilitates social and economic progress through various means, As they raise people's incomes, To create more jobs, To cultivate and promote the innovative vitality of society. Achieving this objective depends on the existence of a favorable entrepreneurial ecosystem. Entrepreneurship education is an essential element of the entrepreneurial ecosystem, there are various crucial elements of the entrepreneurial ecosystem that are explicitly determined by Entrepreneurship education.

1.1. Statement of the problem

According to (BOUFELDJA.G., 2014,p48) "the training programs are not adequate for socio-professional changes...; we still cannot find adequate programs that can provide students with the knowledge necessary, in order to facilitate the creation of businesses". Also for other research (MEZIANE.A & BOUKSANI.R, 2018, p.15) Training university is not enough to make entrepreneurship a desirable career choice but above all feasible" this study concluded the absence of entrepreneurial intention among students because they only plan to start a business after some experience as than employees. Others prefer to work in the public sector (BOUFELDJA, 2019, p. 13).

However, recently Algerian universities are oriented to support entrepreneurial thinking by introducing at least an "Entrepreneurship course".

Based on the above discussion, this study will answer the following research questions: What is the impact of the entrepreneurial education on the entrepreneurial intention in the Algerian context?

1.2. Sub questions

Q1 : Does entrepreneurial education (EE) affect entrepreneurial intention (EI) ?

Q2 : Does entrepreneurial education (EE) affect entrepreneurial self-efficacy (ESE) ?

Q3 : Does entrepreneurial self-efficacy (ESE) affect entrepreneurial intention (EI) ?

Q 4: Can entrepreneurial self-efficacy (ESE) play a mediating role between EE and EI?

1.3.The study's hypothesis

To answer these questions, we can put forward the following hypotheses:

H1: entrepreneurship education positively influences entrepreneurial intention.

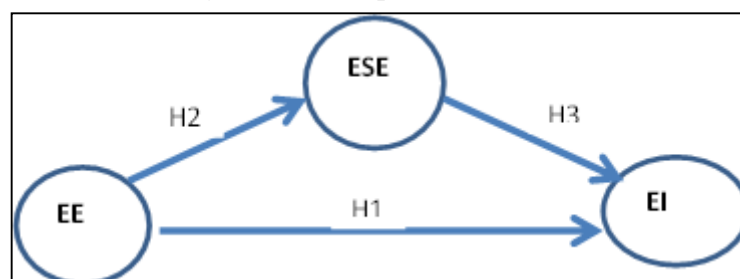
H2: Entrepreneurship education has a significant and positive impact on entrepreneurial self-efficacy.

H3: Entrepreneurial self-efficacy has significantly and positively affect entrepreneurial intentions.

H4: Entrepreneurial self-efficacy plays a mediating role in the relationship between entrepreneurship education and entrepreneurial intentions.

The conceptual framework developed in this study is to answer the relationship between entrepreneurship education, self-efficacy and students' entrepreneurial intention. This will show in the next illustration.

Figure (1): conceptual framework



Source: made by researcher

1.4. Aim and importance of the study

This study has the following objectives:

- Assessing whether Algerian universities have successfully fostered entrepreneurial intentions among students;
- Examining if the university training has been effective in enabling students to recognize their own entrepreneurial self-efficacy;
- Knowing the the aims of students toward starting a new business

1.5. Methodology

In this study, we have adopted the hypothetico-deductive approach. This scientific approach consists of constructing theoretical answers on the phenomenon under study from the existing literature and confronting them with reality through empirical research, that is to say, laying down hypotheses and then issuing the types of observations that will demonstrate the validation or not of the hypotheses already formulated.

We worked with Structural Equation Modelling Partial Least Squares (SEM-PLS) using SmartPLS (version 4.0) to evaluate the relationship among variables. Bootstrapping function (5000 resample) employed to evaluate the path's level of significance. The SEM-PLS in this study followed Hair et al. (2017) which includes evaluation of the outer model; (2) assessment of the internal model (structural model), (3) goodness-of-fit estimation (GoF), and (4) hypothesis testing.

To respond those questions, first, we start with a literature review on the subject studied. Next, we will focus on modeling the entrepreneurial intent of students. Then, the methodological approach. Finally, the article will present and discuss the main results obtained, revealing and concludes on the contributions.

2. Literature review

2.1. Entrepreneurial education (EE)

Entrepreneurship education refers to a range of educational courses and activities aiming at enhancing entrepreneurial attitudes and skills (Hong.M, Ching-Hung.L, Yuanyuan.X, 2020, p. 7).

Fayolle and Gailly (Fayolle & Gailly, B, 2008, p.572) define entrepreneurship education as any pedagogical program or education process for entrepreneurial attitudes and skills. Ginanjar defines entrepreneurship education as "...teaches the theory and practice of entrepreneurship with the aim of students have the ability in understanding and practicing entrepreneurship, causing changing perceptions, expectations, and behavior" (GINANJAR.A, 2016, p. 684).

McIntyre defines entrepreneurship education as a process to provide individuals with the necessary concepts and skills to identify opportunities, others have overlooked and to have the insights and self-esteem to act while others have hesitated. It facilitates value creation for students undertaking entrepreneurial activities (U.Blesia & ALL, 2021, p. 56). The objectives of entrepreneurship training revolve around three dimensions (KAVITA .P, 2020, p. 41):

- Entrepreneurial awareness education aims to Enhancing the number of individuals equipped with sufficient knowledge about small enterprises, self-employment and entrepreneurship, so that they consider that alternative as a rational and viable option, should impart to students choices for their development of the skills required to help them in choosing a career in entrepreneurship if they wish. This type of opportunity is useful for many students and broadens their education to improve their career prospects.

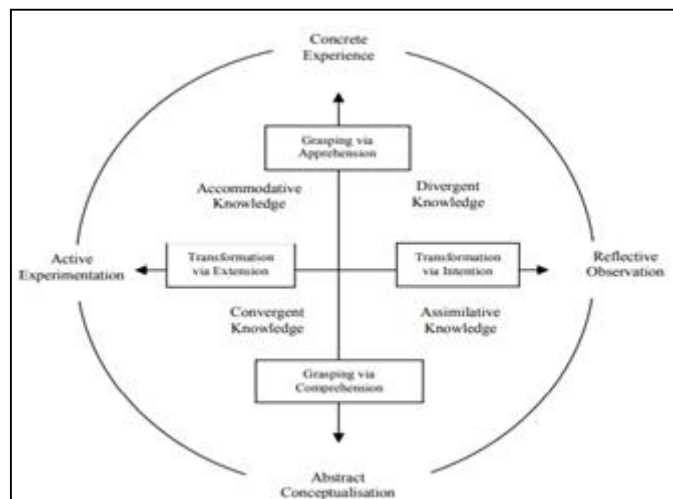
- Entrepreneurship education is to train students to start their own business, and intended to give practical assistance to business start-ups and aims to maintain a strong and informed development of students' entrepreneurship skills.

- Education for entrepreneurial dynamism, the purpose of this level of education is to encourage entrepreneurial behaviors, it is necessary after setting up a business to ensure the growth and future development of the business.

Providing students with entrepreneurship education in their business practices is crucial to improve their skills and ability to handle tough situations.

Overall, most entrepreneurial learning research fits within the practice experiential approach as shown in the kolb and fry model of reflection.

Figure (2): David Kolb's experiential learning model



Source: Jennifer Raechel Carter, From Fragmentation to Integration: an interpretive analysis of entrepreneurial learning during social engagement, thesis degree of Doctor of Philosophy, Lancaster University, July 2019, p21

The learning process outlined in Figure 1 shows the participation of a learner has when using the experiential learning paradigm. Learners fully engage in new experiences and are able to reflect and observe their experiences. Learners then create concepts that integrate their observations into logically sound theories and use these theories to make decisions and solve problems (Pacalo.C.A, 2014)

2.2. Entrepreneurial self-efficacy

Constantly mobilized by researchers, the notion of entrepreneurial self-efficacy (ESE) regarded as a significant predictor of entrepreneurial intention (St-Jea & Cécile Fonrouge, 2020, p. 356). For the American psychologist Bandura « self-efficacy, It is the self-evaluation and judgment of the individual for the achievement of a certain behavior» (Jiang & all, 2022, p. 3). Entrepreneurial self-efficacy is also characterized by Yun as «belief in one's ability to muster and implement necessary resources, skills, and competencies to attain certain levels of achievement» (Yun, 2010, p. 2).

In another way, it necessitates achieving success in tasks like innovation, marketing, management, and finance related to the establishment of a new venture (Faruk & Büşra, Tuncce, 2019, p. 1192). Bandura proposed four sources of self-efficacy (Olivie & all, 2014, p. 198) mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states.

2.3. Entrepreneurial intentions

Intention is a general term for thinking, aiming, or planning to do something, this means a commitment to take action now or in the future. Entrepreneurial intentions are frequently delineated as one's desire to own one's own business (Johara, Sofri, Shehnaz, 2017, p. 85). It is regarded as the best indicator of planned behavior and other researchers have concluded that intention is the correct decision to carry out or not to undertake entrepreneurial behavior in a context that is both conscious and planned (Sebayang & all, 2023, p. 62). It is also possible to interpret as interest in entrepreneurship, participation in entrepreneurial activities, bravery in overcoming difficulties, having a sense of enjoyment in entrepreneurship activities and desire to realize ideals in entrepreneurship (Christianingrum & Rosalina, E, 2017). The other line of research addresses entrepreneurship defines an individual's entrepreneurial intention as a "self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future" (Clara, 2019, p. 1606).

It is a mental model of actions for exploiting a business opportunity by applying entrepreneurial learning (TUNG, 2011, p. 34)

Ozaralli and Rivenburgh claimed that intention act as a direct cause of real behaviour, and the stronger the intention for behaviour, the greater the behavior's success prediction or actual behavior (Hossain & all, 2023), in theory, there are two models which describe the entrepreneurial intention, the model of planned behavior (TPB), and Shapero's model of the entrepreneurial event (SEE). First model proposed by

Shapero and Sokol (1982) is the first model to clarify the theory of entrepreneurial intention. (Maheshwari & all, 2022), according to this theory, the intention event as being driven by perceived desirability, propensity to act and perceived feasibility. The second (TPB) suggests that behaviour is driving by intention, which intention motivated by attitude, subjective norms, and perceived behavioural control.

3. Research methodology

In view of existing research on the subject, we adopt a hypothetico-deductive approach.

3.1. Measurement Instrument

The research instruments used in this study derived from several previous studies. To operationalize the concept of entrepreneurial self-efficacy, we adopted the St Jean and Mathieu measurement scale (ST-JEAN & Cynthia, 2011, p. 22), In order to explore this scale, respondents are given five dimensions (Ability to define the fundamental purpose, Human and conceptual competence, Ability to recognize opportunities, Ability to manage financially and Ability to plan formally). Each dimension is measured by items that are measured on a 5-point Likert scale, where 1= strongly disagree 2= Disagree 3= Not Sure 4= Agree 5=strongly agree.

The measure of entrepreneurial intention was developed and adapted on the basis of a combination of the scales proposed by Gundry, Welsch and Fayolle et al (DELANOË & BRULHART, 2011, p. 53).

3.2. Characteristics of the sample

Table (3) shows that 244 survey questionnaires received. Of these, 15 (6.15%) were rejected. This left an acceptance of 229 (93.85%).

Table (1): Composition of net delivery

Item	number	%
Questionnaires received	244	100
Questionnaires rejected	15	6.15
Questionnaires accepted	229	93.85

Source: made by researcher

Table (4) shows that 47.18% of the respondents were male and 52.82% of them were females. The result indicates that there was small difference (5.64%) in the number of male and female students studying entrepreneurship.

Table (2): Composition of net delivery

Sex	Male	92 (47.18%)
	Female	103 (52.82%)
Age	62.1% of the sample are between 20-25 years old; 13.6 % of the sample are between 25-30 years old; 24.3% of the sample are over 30 years old;	
Diplôme	63% of the sample have a master's degree; 47% of the sample have a licence degree	
specialty	65% of the sample are enrolled in the “management sciences and Marketing “; 19.3% of the sample are enrolled in the «information sciences, engineering and architecture»; 15.7% of the sample are enrolled in the « Entrepreneuriat »	
University	60% of the sample registered in M’hamed Bougara university. 40% of this sample are distributed among the following universities: U BATNA, u bechar ,u beskara, u constantine, u laghouat , u m'sila ,u mustaganem, u oran ,u saida, u setif, u sidi belabes , uamo bouira, ula blida	

Source: made by researcher using the outputs of SPSS 21

3.3. Statistical analysis

3.3.1. Evaluation of Reflective Measurement Models

- **Factor Loadings** : If the indicator has an outer loading value above 0.70, it is considered valid and highly recommended., however the loading factor of 0,50-0,60 can

still be tolerated with p-value <0,05. The results of the test and evaluation of the latent variable measurement model of this study presented in Table 3.

Table (3): Composition of net delivery

Latent variable		Reflective indicators	Λ	T	P
Entrepreneurial self-efficacy	Ability to manage finance	ESEcapfin1 <- ESEcapfin	0,750	14,468	0,000
		ESEcapfin2 <- ESEcapfin	0,777	15,435	0,000
		ESEcapfin3 <- ESEcapfin	0,817	23,085	0,000
	compétence humaine et conceptuelle	ESEcompetance<-ESEcompet	0,745	12,844	0,000
		ESEcompetance2<- ESEcomp	0,829	28,923	0,000
		ESEcompetance3<- ESEcomp	0,836	26,046	0,000
	human and conceptual competence	ESEfinality1 <- ESEfinality	0,864	32,694	0,000
		ESEfinality2 <- ESEfinality	0,850	27,756	0,000
		ESEfinality3 <- ESEfinality	0,683	10,706	0,000
	Ability to recognize opportunities	ESEopportunity1 <- ESEoppo	0,801	16,258	0,000
		ESEopportunity2 <- ESEoppo	0,689	8,775	0,000
		ESEopportunity3 <- ESEoppo	0,790	29,657	0,000
	Ability to plan formally	ESEplanification1 <- ESEplan	0,797	21,525	0,000
ESEplanification2 <- ESEplan		0,816	25,016	0,000	
ESEplanification3 <- ESEplan		0,801	19,772	0,000	
Entrepreneurial education		formation2 <- formation	0,773	17,984	0,000
		formation3 <- formation	0,790	14,261	0,000
		formation4 <- formation	0,738	15,014	0,000
		formation5 <- formation	0,888	47,110	0,000
		formation6 <- formation	0,882	40,254	0,000
		formation7 <- formation	0,798	15,599	0,000
Entrepreneurial intention	Intention	intention1 <- intention	0,851	29,981	0,000
		intention3 <- intention	0,862	32,384	0,000
	Determination	determinantion1 <- determi	0,869	46,892	0,000
		determinantion2 <- determi	0,811	15,722	0,000

Source: made by researcher using the outputs of smartpls v4

- **Internal Consistency Reliability:** the composite reliability examines the reliability value between the indicators of the construct; the result of composite reliability is good, if its value is above 0.70. Table 4 displays the composite reliability

value of the (ESE) variables, ESEcomp , ESEfinalité , ESEopportunité, ESEplanification and formation have good composite reliability because the value is higher than 0.70, also for (IE).

Table (4): Consistency Reliability

	α Cronbach's	C R (rho_a)	CR (rho_c)	(AVE)
ESE	0,908	0,915	0,923	0,505
ESEcapfin	0,681	0,683	0,825	0,611
ESEcompet	0,727	0,737	0,846	0,647
ESEfinalité	0,721	0,743	0,844	0,645
ESEopport	0,648	0,668	0,805	0,580
ESEplanif	0,729	0,729	0,847	0,648
IE	0,676	0,680	0,805	0,508
determinantion	0,588	0,598	0,828	0,707
formation	0,899	0,923	0,921	0,662
intention	0,637	0,638	0,846	0,734

Source: made by researcher using the outputs of smartpls v4

- **Discriminant Validity:** Fornell-Larcker validity test achieved by ensuring that the square root of the AVE of each variable is higher than the correlation score with other constructs, the same for cross-loading tests, achieved when the outer loading value of the indicator toward its variable is higher than the score of the correlation of an indicator correlating with other variables. Table 4 and table 5 illustrate this.

Table (4): Fornell-Lecker Criterion Test

	ESE capfin	ESE compet	ESE finalité	ESE oppo	ESE plan	determ	form	EI
ESEcapfin	0,782							
ESEcompet	0,686	0,804						
ESEfinality	0,556	0,706	0,803					
ESEoppo	0,634	0,683	0,702	0,761				
ESEplan	0,491	0,788	0,769	0,633	0,805			
determi	0,519	0,756	0,653	0,668	0,649	0,841		
formation	0,473	0,504	0,459	0,372	0,563	0,463	0,813	
intention	0,557	0,521	0,485	0,386	0,552	0,414	0,537	0,857

Source: made by researcher using the outputs of smartpls v4

Table (6): cross Loadings

	ESE capfin	ESE compet	ESE finalité	ESE opport	ESE plan	determ	Form	EI	P values
ESEcapfin1	0,750	0,552	0,569	0,581	0,597	0,424	0,351	0,395	0,000
ESEcapfin2	0,777	0,716	0,573	0,573	0,601	0,711	0,421	0,503	0,000
ESEcapfin3	0,817	0,582	0,750	0,568	0,654	0,556	0,342	0,412	0,000
ESEcompetance4	0,556	0,745	0,508	0,522	0,487	0,572	0,265	0,347	0,000
ESEcompetance6	0,640	0,829	0,548	0,502	0,801	0,586	0,499	0,460	0,000
ESEcompetence3	0,694	0,836	0,642	0,625	0,590	0,667	0,429	0,440	0,000
ESEfinality1	0,696	0,602	0,864	0,607	0,744	0,547	0,484	0,486	0,000
ESEfinality2	0,817	0,582	0,850	0,568	0,654	0,556	0,342	0,412	0,000
ESEfinality3	0,532	0,514	0,683	0,501	0,419	0,468	0,259	0,245	0,000
ESEopportunity1	0,532	0,514	0,683	0,801	0,419	0,468	0,259	0,245	0,000
ESEopportunity2	0,421	0,392	0,409	0,689	0,285	0,399	0,156	0,241	0,000
ESEopportunity3	0,675	0,613	0,688	0,790	0,661	0,618	0,385	0,370	0,000
ESEplanification1	0,619	0,543	0,677	0,552	0,797	0,476	0,489	0,418	0,000
ESEplanification2	0,651	0,517	0,637	0,473	0,816	0,501	0,367	0,455	0,000
ESEplanification3	0,640	0,729	0,548	0,502	0,801	0,586	0,499	0,460	0,000
determinantion1	0,672	0,698	0,573	0,580	0,534	0,869	0,413	0,418	0,000
determinantion2	0,528	0,565	0,524	0,542	0,563	0,811	0,363	0,267	0,000
formation2	0,292	0,373	0,320	0,173	0,427	0,246	0,773	0,352	0,000
formation3	0,284	0,317	0,244	0,178	0,355	0,308	0,790	0,416	0,000
formation4	0,281	0,293	0,258	0,130	0,361	0,225	0,738	0,310	0,000
formation5	0,460	0,500	0,463	0,394	0,553	0,477	0,888	0,483	0,000
formation6	0,479	0,499	0,467	0,398	0,519	0,487	0,882	0,534	0,000
formation7	0,430	0,404	0,401	0,410	0,475	0,408	0,798	0,458	0,000
intention1	0,472	0,415	0,438	0,351	0,534	0,332	0,522	0,851	0,000
intention3	0,481	0,476	0,394	0,310	0,415	0,377	0,399	0,862	0,000

Source: made by researcher using the outputs of smartpls v4

3.3.2. Evaluation of Inner Model (Structural Model)

According to table 7, the R-square for the entrepreneurial intention variable is 0.657, which falls under the moderate category. These results indicate that

entrepreneurial self-efficacy and entrepreneurship education explain 65.7% of the variation in Entrepreneurial Intention, other variables outside the study explain the remainder of 34.3%.

Furthermore, the coefficient of determination (R-square) for entrepreneurial self-efficacy is 0.290, which is included in the moderate category. According to the results mentioned, entrepreneurship education can account for 29% of entrepreneurial self-efficacy, while the rest attributed to other variations.

The f^2 index of the entrepreneurial self-efficacy is high ($f^2 = 0.884$), However, the entrepreneur education has significant effect on the students' entrepreneurial intention ($f^2 = 0.11$). In addition, the data analysis indicates that the Q square values of all endogenous constructs are above (0), which demonstrates an acceptable predictive relevance.

Table (6): Results of inner model assessment

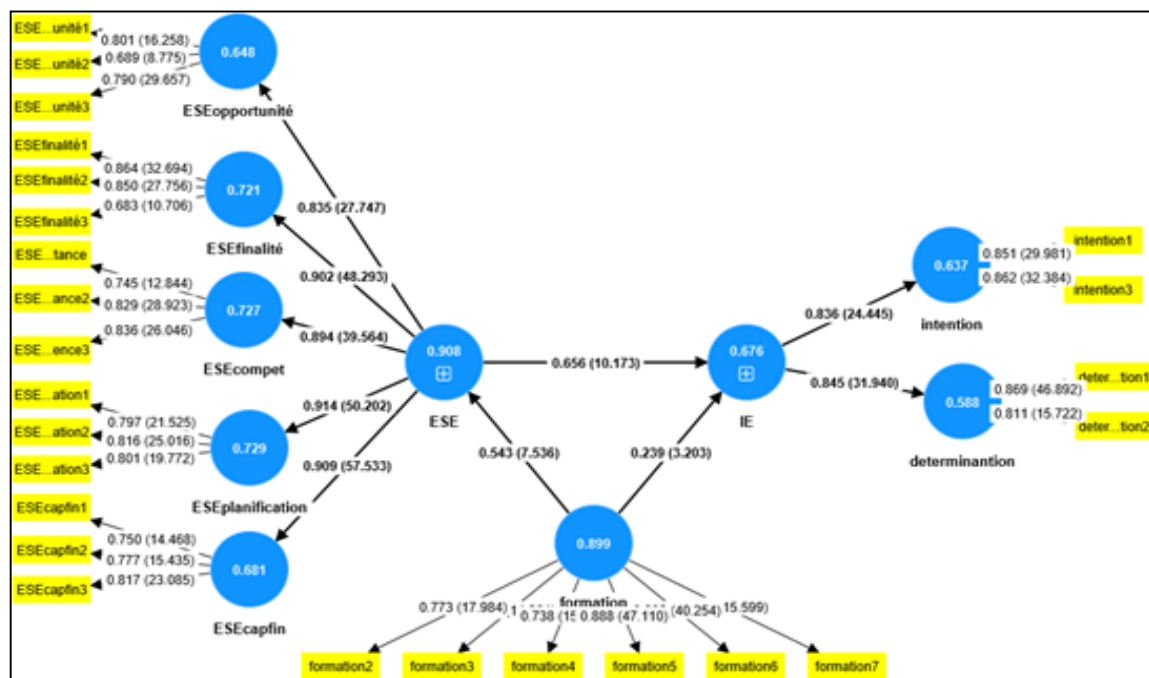
	R-square	R-square adjusted	f-square		Q ² de Stone-Geisser		
			ESE	IE	SSO	SSE	Q ² (= 1 - SSE/BSP)
ESE	0,295	0,290		0,884	1680,000	1436,236	0,145
EI	0,657	0,652			560,000	378,901	0,323
EE			0,418	0,118	840,000	840,000	0,000

Source: made by researcher using the outputs of smartpls v4

4. RESULTS AND DISCUSSION

The hypothesis testing revealed that all hypotheses (H1, H2, H3) in this research are supported. In accordance with table 8, the data supports each hypothesis (Hypothesis 1 to Hypothesis 3) because the "T" Statistics value shows the numbers 10,173 (H1), 7,536 (H2) and 3,203 (H3) which means that it is above the required value. (T-statistics > 1.96 and P-value < 0.05).

Figure (2): Hypotheses testing



Source: outputs of smartpls v4

Entrepreneurial self-efficacy, considered as a strong predictor of entrepreneurial intention ($\beta = 0,656$ $t = 10,173$, $p = 0.00$), to examine the direction of influence considering that the original sample value is 0,543, it is safe to say that entrepreneurship education positively affects entrepreneurial self-efficacy.

Without entrepreneurial self-efficacy, Entrepreneurship education has a positive and significant effect on entrepreneurial intention ($\beta = 0,598$, $t = 9,885$, $p = 0.00$). Results revealed that in the first model, Entrepreneurship education has a significant predictive effect on entrepreneurial self-efficacy (H2) ($\beta = 0,543$, $t = 7,536$, $p = 0$) with the explanatory power of 29.50%, and, the predictive effect of entrepreneurial self-efficacy on entrepreneurial intention significant ($\beta = 0,656$, $t = 10,173$, $p = 0$) explanatory power equal 67.5%. When entrepreneurial self-efficacy was added in the analysis as a mediator, the effect of entrepreneurship education on entrepreneurial intention is still significant (H3) ($\beta = 0,239$, $t = 3,203$, $p = 0.001$). Therefore, entrepreneurial self-efficacy is a complete mediation in the relationship between entrepreneurship education and entrepreneurial intentions (indirect effect = 0,356, 95%), Entrepreneurial self-efficacy is found to

positively mediate the relation between entrepreneurship education and entrepreneurial intention (the direct and indirect effect of the relationship of EE to IE are positive and significant). It means that, entrepreneurial self-efficacy is partially mediating the effect of entrepreneurship education to student entrepreneurial intention. Total effects of entrepreneurial education on entrepreneurial intention through entrepreneurial self-efficacy (simultaneously influence) calculated adding their direct effects to respective indirect effects.

Table (8): Hypothesis Testing, Path Coefficients Result

H			PATH	T	P values	DECISION
H1	ESE -> IE		0,656	10,173	0,000	Supported
H2	formation -> ESE		0,543	7,536	0,000	Supported
H3	formation -> IE		0,239	3,203	0,001	Supported
H4	indirect effects	EE -> ESE -> IE	0,356	5,576	0.000	Supported
	Total effects	EE -> IE	0,595	9,610	0,000	

Source: made by researcher using the outputs of smartpls v4

5. CONCLUSION

The results of this research are consistent with previous studies conducted on the same topic, one of the important results in this study is the significant relationship between entrepreneurial self-efficacy and entrepreneurial intention, and self-efficacy plays a crucial role in the development of entrepreneurial intention among the Algeria students, as in previous studies.

The findings of the study demonstrate that high self-efficacy is a crucial factor for entrepreneurs in performing their jobs effectively and achieving success in their intended undertakings. We further that, entrepreneurial self-efficacy helps students to be more creative and innovative, to take the lead in challenging activities, giving them the feeling that they can take control of their surroundings in an optimal way and exploit it and a student to take the risk of deciding to become an entrepreneur or to engage in entrepreneurial behaviour.

Similarly, the stronger the entrepreneurial self-efficacy, the more effectively students can exert their innate entrepreneurial ability, enhance their entrepreneurial potential, stimulate entrepreneurial confidence and passion, and generate entrepreneurial intention, additionally, the findings highlight how crucial self-efficacy is as a medium for strengthening the connection between student entrepreneurial ambition and entrepreneurship education.

Recommendations

Concerning Algeria, The actions taken by the Ministry of Higher Education and Scientific Research to promote entrepreneurship and the entrepreneurial spirit among students through education are:

- The introduction of the "Entrepreneurship" module in the training programs;
- The introduction of the "Entrepreneurship" specialty;
- Creation of entrepreneurship houses for developing the spirit of initiative and spreading the entrepreneurial culture in the university community.

Although our research shows the relationship between entrepreneurial education and self-efficacy on the one hand and entrepreneurial intention on the other hand in the Algerian context are positive, It can be seen that the teaching of entrepreneurship is not yet sufficiently integrated into the programs of educational

Within the pedagogy of entrepreneurship education, we must move from the "traditional model" also called the "supply model" or education "about entrepreneurship", to "education through entrepreneurship" consists of a combination of knowledge transfer, skills learning and developing an entrepreneurial mindset.

To develop entrepreneurial values, attitudes and skills among students. Entrepreneurial education in Algeria must be based on entrepreneurial pedagogy. This approach advocates the integration of different disciplinary content in entrepreneurial-type contextual settings. Students learn by dealing with real world challenges. Mélissa Philippe (Philippe, 2023) bases this approach on four principles:

- Empowering activity to Increase autonomy and the sense of responsibility;
- Experiential activity to include students in tangible experiences and encourage learning through real-world contexts;
- Reflexive activity to help structure ideas by systematically exploiting knowledge, promote mental activity (metacognition) and the construction of knowledge and Stimulate attitudes of commitment, perseverance, creativity, pride and self-confidence;
- Cooperative activity to encourage teamwork at a distance, develop and strengthen social skills, support learning by social interactions (Sociocognitive conflict) and Reinforce team spirit, motivation, active listening, sharing and humility.

Overall, the Kolb and Fried model of reflection should serve as the foundation for entrepreneurship education in Algeria.

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