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The Dynamics of Entrepreneurship Education in Higher Education: The Role of Family Background and Environment in Developing Entrepreneurial Skills

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ABSTRACT

Purpose of the Study: This study aims to investigate the influence of entrepreneurship education at the university level on the development of students' entrepreneurial skills, with a particular focus on the potential moderating role of entrepreneurial family background. As entrepreneurship education becomes increasingly prioritized in higher education, understanding how familial entrepreneurial exposure interacts with formal education is crucial for shaping effective curricula.

Methodology: Quantitative research approach was adopted, using descriptive and inferential statistical analysis. The study involved a sample of 189 university students in Padang, selected through purposive sampling. Data were collected through a validated Likert-scale questionnaire measuring students' experiences with entrepreneurship education, entrepreneurial skills development, and family background characteristics. The analysis was conducted using SmartPLS to explore both direct and moderating effects.

Main Findings: The results revealed that entrepreneurship education has a significant positive impact on students' entrepreneurial skills development. Surprisingly, students' entrepreneurial family background did not exert a direct influence nor moderate the relationship between education and skills acquisition. The findings emphasize that while family background may offer exposure, formal entrepreneurial training is critical for equipping students with practical and theoretical competencies. Furthermore, a supportive academic environment emerged as a key factor in enhancing students' entrepreneurial capabilities.

Novelty/Originality of this Study: This study introduces a new perspective by exploring the often-overlooked moderating role of family background in the Indonesian context. It offers empirical evidence that challenges assumptions about the primacy of family influence, reinforcing the necessity of structured entrepreneurship education to nurture future entrepreneurs in diverse socio-cultural settings.

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1. INTRODUCTION

Numerous methods for teaching entrepreneurship have already been created and described. However, no genuinely effective model that can be used to the establishment of start-up businesses in academic institutions

has yet to be created. The main focus of entrepreneurial education remains on teachers. Students can develop their entrepreneurial talents in a variety of social contexts, including families and academic institutions. Universities provide courses on entrepreneurship to help students better understand the advantages of entrepreneurship education and to equip them with the skills they need to start their own businesses. Universities also create and carry out training initiatives for entrepreneurship education [1]-[4]. However, the effectiveness of entrepreneurship education is still unclear [5]. Including entrepreneurship education does not impact students' entrepreneurial intentions. However, research findings [6] indicate that an entrepreneurial mindset has a relationship with students' entrepreneurship education in Indonesia.Many students view entrepreneurship as an option [7]. Therefore, it is not uncommon to understand how entrepreneurial motivation changes after the entrepreneurship program is completed [8]. Therefore, teachers must enhance the program's theoretical content and teach entrepreneurship theory in order to improve students' cognitive abilities for making better business decisions.

The author makes the case that students would be motivated to launch their own companies if entrepreneurship education were done well. Another illustration of this is the team of seasoned lecturers who need to cooperate in order to maximize the stimulating effect. Making ensuring the curriculum is up to date and appropriate is also very important. In addition to classroom instruction, the curriculum should include career showcase events and employer interviews. This is necessary to maintain the expansion and improvement of the courses and programs focused on starting new enterprises and entrepreneurship.

Entrepreneurial families and family businesses are two research topics related to the family business environment. Naturally, they want their children to follow in their parents' footsteps and become entrepreneurs. However, it should be emphasized that young entrepreneurs' comprehension of entrepreneurial skills motivates them to start their own businesses [10]-[15]. This influences the choice to engage in entrepreneurial activities, such launching new businesses or successfully running family businesses [16], [17]. The success of parents' businesses and their role as role models for their children can influence the intention to become entrepreneurs [18]. In line with this, Georgescu & Herman [19] reveal that a family background in entrepreneurship is a significant factor in encouraging someone to engage in entrepreneurial activities compared to those who do not have a family background in entrepreneurship. A study by Minola et al [20] shows that families with an entrepreneurial background are capable of carrying out entrepreneurship from generation to generation. Entrepreneurship education refers to the development of students' skills and ways of thinking, enabling them to transform creative ideas into entrepreneurial activities [21].

The specific gap in the literature covered in this study is how the In several socio-economic contexts, entrepreneurship education is considered an effective means to enhance the entrepreneurial skills necessary for economic growth [22]. Because entrepreneurship education can also shape students' cognitive skills and entrepreneurial competencies[23]. According to Boldureanu et al, if educators want to improve the efficiency of education, they should focus on developing entrepreneurial skills [24]. This is because the intention and entrepreneurial skills are highly needed by today's youth for sustainable development [25], as well as having business literacy and the ability to face risks [26] and strategic planning [27]. In line with this, according to Pinto Borges et al, the more prepared a student is to start a business, the greater the likelihood that they will become an entrepreneur [28]. This is because entrepreneurial intention grows from the entrepreneurial skills possessed [29]. According to universities, they are in a much better position to respond to challenges than business schools.

Entrepreneurship education in higher education [30]. In line with the research of Floris et al., regarding the role of universities in spreading an entrepreneurial mindset [31]. Because entrepreneurship lecturers, course content, and university policies are determinants of the influence on students' entrepreneurial intentions [32]. The results show that entrepreneurship education has a positive impact on students' entrepreneurial behavior [33]. Because according to Janowski & Szczepańska–Przekota, the application of a practice-oriented approach in reconstructing the curriculum of entrepreneurship education is very important [34]. This triggers the potential for youth entrepreneurship to develop in leisure activities.

The family background of entrepreneurs influences the entrepreneurial potential of adolescents [35]. The school environment has limited possibilities for developing entrepreneurial potential. Meanwhile, teaching methods are crucial in entrepreneurship education [36], including Assessment Rubrics for Entrepreneurial Competence [37]. Entrepreneurship education and the entrepreneurial ecosystem are very important according to Stănciulescu & Scarlat, which also encourages students to learn an entrepreneurial mindset in entrepreneurship education [38]. In line with this, the relationship between entrepreneurship education is influenced by social factors and teaching and learning [39], [40]. This includes the role of educators in entrepreneurial development [41]. Entrepreneurship education can enhance students' entrepreneurship as well as cross-cultural skills and competencies [42]. Bernadó & Bratzke, reveal the need to develop entrepreneurial competencies for entrepreneurship education [43]. In line with research findings [44] on entrepreneurship learning and its potential to redesign entrepreneurship education.

Unlike conventional learning approaches, entrepreneurship education should be accompanied by experiential learning approaches [45]. Planning a business and conducting workplace case studies are examples

of approaches that will increase students' interest in entrepreneurship and their desire to participate in experiential entrepreneurship learning activities [46]. Based on research [47], entrepreneurship education helps students acquire entrepreneurial skills, and the impact of entrepreneurship education depends on how students perceive their parents' performance as entrepreneurs.

The social environment also influences the desire to become an entrepreneur. The characteristics of each individual are influenced by interpersonal relationships. Thus, a person's role in their social life tends to stem from their social networks. A person's confidence in entrepreneurship will increase if they have a supportive social environment [48]. Selcuk H & Burak, E state that the environment is the physical, biological, social, economic, and cultural environment in which humans and other living beings maintain relationships and interact with each other throughout their lives [49]. Social identity plays an important role in the transition to entrepreneurship through the use of new knowledge, according to Obschonka et al. Social networks are a primary source of a person's social identity.The relationship of students with their peers is part of their social environment at the university. Support from parents and relatives enhances students' confidence in entrepreneurship [50].

The author contends that social environments are vital to human existence and that without them, a person cannot develop correctly. A poor social environment will negatively affect a person's mindset and attitude [51]. Similarly, it has been stated that the learning environment plays an important role in shaping entrepreneurial competence and in developing entrepreneurial skills in students [52]. Essentially, research has objectively shown that environmental factors influence the entrepreneurial process, leading to differences in the amount of time spent establishing new businesses, maintaining them, and growing [53], [54].

The aim of this research is to determine whether entrepreneurship education moderated by an entrepreneurial family background can enhance students' entrepreneurial skills or, conversely, whether the role of an entrepreneurial family background does not affect students' entrepreneurial skills. This research is expected to make a significant contribution to the development of better entrepreneurship learning strategies. Furthermore, the results of this study can also serve as a basis for creating policies and educational materials that are more suitable for improving the entrepreneurship education provided to students.

By using educational theory, build a framework that supports entrepreneurship education based on experience [55]. One appropriate method and way to teach entrepreneurship is through the design thinking method [56]. This research is increasingly important due to the government's goal of encouraging youth entrepreneurship and fostering established entrepreneurs in Indonesia. Therefore, this research not only helps enhance entrepreneurial knowledge but also has real benefits for improving the quality of education in Indonesia, particularly entrepreneurship education at the university level [57]. Additionally, the results indicate that entrepreneurial skills, entrepreneurship education, and environmental factors are crucial in determining entrepreneurial behavior and individual entrepreneurial intuition [58]. Therefore, the study's conclusion focuses on how university-level entrepreneurship education influences students' entrepreneurial potential, particularly for those with a family history of entrepreneurship.

2. RESEARCH METHOD

This research is quantitative, using descriptive data analysis to provide an objective overview of student information. The researcher carefully considers population features that support the study's goals while choosing a sample. The chosen sample is suitable for the intended context and represents the traits of the vast majority of the population. Respondents are students from several universities in the city of Padang. Data was obtained through random sampling of 189 students taken from all faculties and levels of education. Descriptively, it shows that 81.9% of participants are male and 28% are female, all within the age range of 20-30 years. In this study, purposive sampling was used to select a sample of 189 students from various study programs who have taken entrepreneurship courses.

Data was collected through the distribution of questionnaires using an online survey method conducted via Google Forms. To assess different factors, scores and averages are computed using a Likert scale. A Likert scale, which is intended to gauge an individual's or a group's thoughts and impressions, is employed in this study. Data processing and analysis were done using SmartPLS. Among the methods employed in SmartPLS research include hypothesis testing, theory evaluation, and analysis to forecast correlations between components.

In order for the statement items to be deemed valid in line with the guidelines of a two-sided test with a significant level (0.05) and a rcount> rtable value, this analysis was conducted by examining the total score on the statement items. According to the results of the validity test, every assertion is deemed legitimate and can proceed to the following phase. An instrument can be regarded as reliable if its alpha value is greater than 0.60. The reliability test results for each statement item in the questionnaire used in this study were considered reliable because the number was more than 0.60.

The research framework supporting this topic is shown in the following figure. How entrepreneurship education influences entrepreneurial skills. How entrepreneurial skills are influenced by their surroundings and how this influence is mitigated by family background.

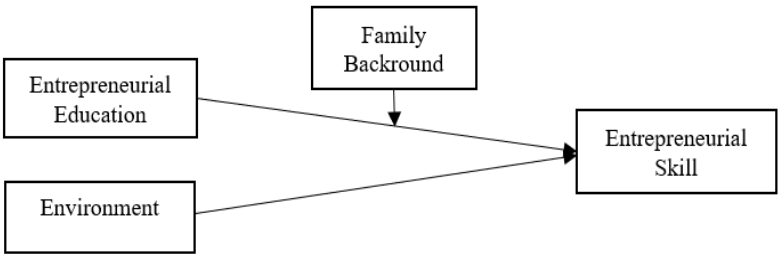

Figure 1. Research framework

3. RESULTS AND DICUSSION

Interpretation of Moderation Test

1. Significance of mediation effect (does family background significantly moderate the effect of entrepreneurship education on entrepreneurial skills)
2. Moderation effect (F square Moderation Test) if significant, is the moderation effect at a low, medium, or high structural level
3. Interpretation (simple Plot Analysis)

To state that the measurement model satisfactorily meets both internal consistency reliability, convergent validity, and discriminant validity. Thus, it is valid and reliable for further analysis. Hair Jr. et al. state that four main criteria are used to assess the structural model of PLS-SEM: significance of path coefficients, coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2) [59].

Table 1. Results Table *Outer loadings*

	Entrepreneurial Education (X1)	Entrepreneurial Skill (Y)	Environment (X2)	Family Background (Z)	Moderating Effect 1
EE1	0.746				
EE10	0.804				
EE11	0.838				
EE12	0.868				
EE13	0.758				
EE14	0.777				
EE2	0.754				
EE3	0.773				
EE4	0.785				
EE5	0.803				
EE6	0.828				
EE7	0.820				
EE8	0.814				
EE9	0.811				
ES11		0.725			
ES12		0.719			
ES4		0.729			
ES5		0.811			
ES6		0.713			
ES7		0.775			
ES8		0.726			
ES9		0.705			
L1			0.959		
L2			0.948		
LBK				1,000	
LBK * EE11					0.802
LBK * EE12					0.748

	Entrepreneurial Education (X1)	Entrepreneurial Skill (Y)	Environment (X2)	Family Background (Z)	Moderating Effect 1
LBK * EE4					0.737
LBK * EE5					0.750
LBK * EE6					0.710
LBK * EE7					0.746
LBK * EE8					0.713

The significance of convergent validity, as seen from the interaction based on the image above, shows that the outer loading values of all variable indicators are greater than 0.7, thus they are considered valid. It can be concluded that all statement indicators used in this research are valid. Next, determine Construct Reliability and Validity by examining the AVE value.

Table 2. Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Entrepreneurial Education (X1)	0.956	0.958	0.961	0.639
Entrepreneurial Skill (Y)	0.895	0.898	0.914	0.515
Environment (X2)	0.873	0.943	0.903	0.760
Family Background (Z)	1.000	1.000	1.000	1.000
Moderating Effect 1	0.957	1.000	0.940	0.532

Based on the data above, it can be seen that the AVE value for each variable is greater than 0.5, which indicates that discriminant validity is met for each variable. Next, for the reliability value, we observe that the Cronbach's Alpha (CA) is > 0.7. This means that the indicators of each statement are reliable; in the data, it can be seen that each CA value is greater than 0.7, which indicates that the statements are reliable. It can also be seen from the Composite Reliability (CR) value, which is > 0.6, thus indicating reliability. The next step is to look at the square root of the AVE, which involves examining the Fornell-Larcker Criterion in the following table:

Table 3. Discriminant Validity Table

	Entrepreneurial Education (X1)	Entrepreneurial Skill (Y)	Environment (X2)	Family Background (Z)	Moderating Effect 1
Entrepreneurial Education (X1)	0.799				
Entrepreneurial Skill (Y)	0.732	0.718			
Environment (X2)	0.134	0.123	0.872		
Family Background (Z)	-0.028	0.025	0.005	1.000	
Moderating Effect 1	0.106	0.114	0.119	0.081	0.729

From the data, it can be seen that the square root of the AVE of each variable is greater than the square root of the AVE of its correlation with other variables, thus it can be said that its discriminant validity is fulfilled. Next, we look at the collinearity values, which are analyzed by examining the Collinearity Statistics (VIF) values.

Table 4. Outer VIF Values

Item	VIF
EE1	2.939
EE10	2.957
EE11	3.748
EE12	4.155
EE13	3.100
EE14	2.979
EE2	3.183
EE3	2.440
EE4	2.452
EE5	2.774
EE6	3.170
EE7	3.330
EE8	2.905
EE9	3.171
ES11	2.502
ES12	2.056
ES4	2.044
ES5	2.489
ES6	1.956
ES7	2.310
ES8	1.948
ES9	1.769
L1	3.260
L2	3.240
LBK	1.000
LBK * EE11	4.052
LBK * EE12	4.777
LBK * EE4	3.065
LBK * EE5	3.528
LBK * EE6	3.579
LBK * EE7	3.507
LBK * EE8	3.284
LBK * EE9	3.067

From the data above, it can be seen that all outer values are less than 0.5, which means that there is no multicollinearity issue, indicating that there are no problems. As stated, a VIF value < 0.5 indicates no multicollinearity issues [60]. Next, an assessment is conducted using the structural model test or inner model. This is done by looking at the R Square (R^2) value, which is a measure of the proportion of the value of the influenced (endogenous) variable that can be explained by the influencing (exogenous) variables.

Table 5. Quality Criteria R Square

	R Square	Adjusted R Square
Entrepreneurial Skill (Y)	0,539	0,529

The criteria for R^2 is that if the value is ≥ 0.75, it can be categorized as strong; if the value is ≥ 0.50, it can be considered moderate. And if the value is ≥ 0.25, it can be deemed weak. From the data above, it can be seen that the Adjusted R Square value is 0.529, which means that the ability of the exogenous variables to explain variable Y is 52.9% (moderate), thus it can be stated that the ability of the entrepreneurship education variable and the environmental variable to explain entrepreneurial skills is 52.9 percent, which is categorized as quite strong. Meanwhile, the remaining 47.1% is the influence of other independent variables that are not measured in this study.

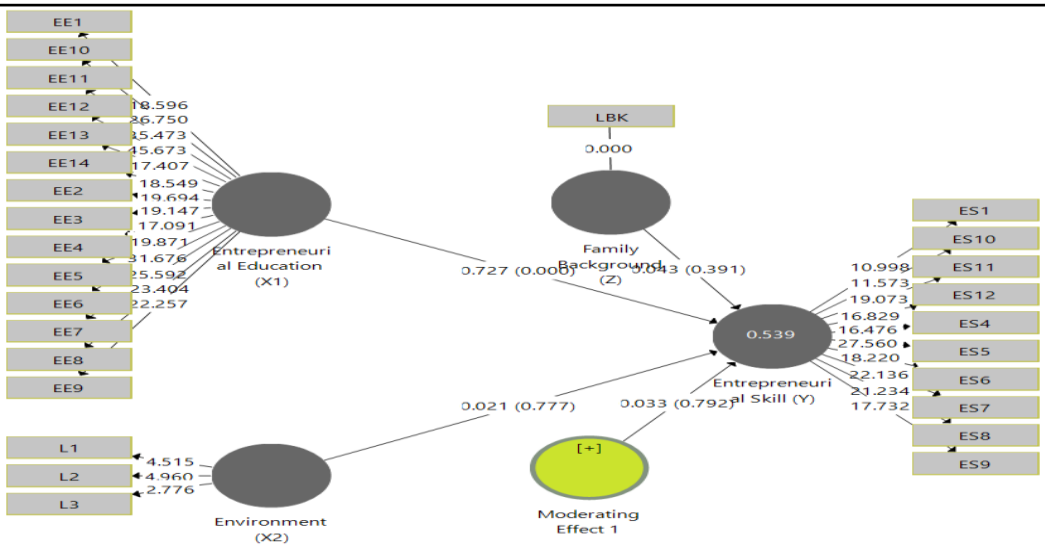

Figure 2. Structural model bootstrapping diagram

Next, we will test the research hypothesis by examining the Path Coefficients. This analysis is useful for testing the hypothesis of the influence of exogenous variables on endogenous variables, with the criterion that if the Path Coefficient value is positive, the influence of a variable is direct. That is, if the value of an exogenous variable increases, the value of the endogenous variable also increases. Conversely, if the Path Coefficient value is negative, the influence of a variable is in the opposite direction, where if the value of an exogenous variable increases, the endogenous variable decreases. The significance value can be seen in the P Value. If the P Value < 0.05, it is significant, and if the P Value > 0.05, it is not significant.

Table 6. Hipotesis Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Description
Entrepreneurial Education (X1) -> Entrepreneurial Skill (Y)	0.727	0.728	0.040	18.293	0.000	Significant
Environment (X2) -> Entrepreneurial Skill (Y)	0.021	0.027	0.074	0.284	0.777	Not significant
Family Background (Z) -> Entrepreneurial Skill (Y)	0.043	0.036	0.050	0.859	0.391	Not significant
Moderating Effect 1 -> Entrepreneurial Skill (Y)	0.033	-0.010	0.125	0.263	0.792	Not significant

From the data above, it can be explained that the relationship between Entrepreneurial education and Entrepreneurial Skill is 0.727 (positive), with a P Value of 0.000 < 0.05 (significant). Then, the relationship between Environment and Entrepreneurial Skill is 0.021 (positive), with a P Value of 0.777 > 0.05 (not significant), and the relationship between Family background and Entrepreneurial Skill is 0.043 (positive), with a P Value of 0.391 > 0.05 (not significant). This is a Moderated Regression Analysis. The criterion is that if the P Value > 0.05, it is not significant, meaning the moderating variable does not play a role in moderating the relationship of an exogenous variable to an endogenous variable. Conversely, if the P Value < 0.05, it is significant, meaning the moderating variable plays a role in moderating (strengthening or weakening) the relationship of an exogenous variable with an endogenous variable. Thus, the moderating effect of EE*FB on ES is 0.033 (positively strengthening), with a P Value of 0.792 > 0.05 (not significant), which means that family background strengthens the influence of entrepreneurial education on entrepreneurial skills but is not significant. According to Kenny in Hair et al regarding the interpretation of moderating effects with criteria of 0.005 low, 0.010 moderate, and 0.025 high.

Entrepreneurial skill is positively and significantly impacted by entrepreneurship education. According to the correlation coefficient of 0.727, an individual's entrepreneurial skill increases with the amount of entrepreneurship education they have gotten. A very modest P value of 0.000, which is below the 0.05 significance criterion, supports the relevance of this link. This indicates that there is a significant enough correlation between these two variables to be extrapolated to a larger population.

Entrepreneurial talents are not much impacted by the environment. There is a very modest positive association between entrepreneurial skill and environment, as indicated by the correlation coefficient of 0.021.

Additionally, the observed link is most likely the result of chance variables and cannot be regarded as statistically significant, as indicated by the P Value of 0.777, which is significantly higher than 0.05. To put it another way, there isn't much proof that the environment directly enhances entrepreneurial skill based on the statistics. Additionally, entrepreneurial skill is not significantly impacted by family history. There is a weak positive association between entrepreneurial skill and family background, as indicated by the correlation coefficient of 0.043. As with Environment, this association is not statistically significant, as indicated by the P Value of 0.391, which is higher than 0.05. This indicates that there is insufficient evidence to support the claim that a person's family background has a direct impact on their level of entrepreneurial skill.

According to the analysis's findings, entrepreneurship education is crucial for fostering entrepreneurial skills. On the other hand, this data did not indicate that the environment or family background had a substantial impact on entrepreneurial skill. It's critical to keep in mind that correlation does not imply causation. Even if there is a positive and significant correlation between entrepreneurship education and entrepreneurial skill, more research may be required to pinpoint the precise mechanism by which this education affects entrepreneurial skills.

Education as a way to encourage mindsets, attitudes, and behaviors that raise the number of entrepreneurial people, particularly on college campuses, has been the subject of a thriving study stream in the literature on entrepreneurship. The research's findings can be viewed in the following ways based on the presentation of the data processing results. Specifically, this study found that college students benefited more from entrepreneurship education. The only children who will gain from entrepreneurship education are those who think their parents are more successful in their business ventures. By highlighting the part university students play, this study also explains how exposure to family history moderates the relationship between entrepreneurial abilities and entrepreneurship education.

Novelty in the context of research on the influence of entrepreneurship education moderated by the family environment does not have a significant effect on students' entrepreneurial skills. This research highlights the unique contribution that the environment influences students' entrepreneurial skills. Through this exploration, this research provides valuable contributions. Through this exploration, this research contributes to expanding the perspective on the relationship between entrepreneurship education and entrepreneurial skills. the moderating role of the family environment, as well as the role of the environment on entrepreneurial skills. Thus, this research presents a new perspective that can provide value and deep insights for practitioners and entrepreneurship lecturers in higher education in developing learning strategies for entrepreneurship courses.

4. CONCLUSION

Entrepreneurial education plays an important role in developing entrepreneurial skills. Through both formal and informal education, individuals can acquire the knowledge and skills necessary to start and manage a business. The environment has a significant impact on entrepreneurial skills. A supportive environment, such as the presence of entrepreneurial communities, access to resources, and supportive government policies, can encourage individuals to develop entrepreneurial skills. Family background does not directly impact entrepreneurial skills. However, family support and the entrepreneurial values instilled within the family can influence an individual's motivation and interest in entrepreneurship.It is important to note that the interaction between entrepreneurial education, environmental factors, and family background can influence the development of entrepreneurial skills. Through careful attention to research, it will be revealed how the contribution of entrepreneurship education can enrich students' understanding of entrepreneurship. This research will give a deeper understanding of how entrepreneurship education in higher education is more oriented towards practical benefits, enabling students to directly enhance their skills in entrepreneurial activities. This research opens up space for future studies to understand how entrepreneurship education in higher education can place more emphasis on entrepreneurship concepts and more practice.

This study's conceptual and empirical integration emphasizes the critical role that respondents play in demonstrating the efficacy of educational interventions. educational initiatives designed to improve pupils' capacity for entrepreneurship. the real impact of each and how they work together to affect learning outcomes and processes The truth is that there is still a lack of theoretical and empirical insight into entrepreneurial processes and learning. In light of this, we think that our study makes a number of contributions to the growth of university students' entrepreneurial abilities. Ideas for potential avenues for further research Despite the negligible quantitative results, think about employing a qualitative method (such as in-depth interviews with entrepreneurs) to obtain a broader and deeper knowledge of how environment and family background can influence the development of entrepreneurial skill. Quantitative data could overlook context and insights that qualitative results might offer.

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