

# Unleashing the Power of Mindset: How Psychological Attributes Shape Entrepreneurial Inclination?

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## Abstract

The advancement of a nation's economy is heavily reliant upon entrepreneurial individuals and their innovative undertakings. It is widely acknowledged in literature that intention is the first step towards entrepreneurship. This paper aims to deliver deeper into this realm by analyzing the influence of specific psychological attributes on the entrepreneurial intention of young university students from two Lebanese universities.

The present investigation centers on elucidating a set of key psychological factors, namely risk propensity, need for achievement, innovativeness, and locus of control. The study involved 481 students from two Lebanese universities who completed a self-administered online questionnaire. Factor analysis and multiple regression were utilized to scrutinize the data. The results showed a strong and significant association between students' need for achievement, inclination towards risk-taking, internal locus of control, innovativeness, and students' inclination towards entrepreneurship. Based on the analysis results, insights were provided to educational institutions aiming to foster entrepreneurship by identifying and developing the characteristics in students, through a better design of curriculums that support and encourage entrepreneurial practices.

## Keywords

Entrepreneurship, Innovativeness, Intention, Locus of Control, Need for Achievement, Risk Taking

## INTRODUCTION

Countries around the globe encounter numerous economic and social challenges that necessitate solutions and interventions aimed at promoting innovation, fostering market competition, and generating employment opportunities, particularly for university students (Mawlawi et al., 2023). It is widely acknowledged in literature that entrepreneurship plays a pivotal role in generating employment opportunities and economic growth, as entrepreneurs leverage technology, introduce new goods and services to the market, and lead the way into technological advancements (Shabbir et al., 2022; Szirmai et al., 2011). The increase in a country's entrepreneurial activities impacts different sectors of society through

creating employment opportunities and capital and contributes to countries reaching stable economic development (Barba-Sanchez et al., 2022).

Post-pandemic governments worldwide are putting great emphasis on creating and applying policies that enhance entrepreneurial culture (Guo et al., 2020). Ratten and Jones (2021) ascertained that countries that promote a culture of entrepreneurship have a more dynamic and sustainable economic system, and by promoting creativity and innovation, they provide more opportunities for aspiring graduates. Developed countries rely on entrepreneurial activities for developing new technologies and enhancing products and market innovations, whereas in developing countries, entrepreneurship is critical for economic growth and a decrease in the unemployment rate (Bazkiaei et al., 2021). In 2018, the World Economic Forum recommended the encouragement of entrepreneurship as a solution for reducing youth unemployment (Kaya et al., 2019).

Given the significance of entrepreneurship, greater attention is being paid to examining the elements that influence an individual's choice to engage in entrepreneurial practices. The role of intention in driving behavior, specifically in the context of entrepreneurship, is of paramount importance. Li et al. (2020) posit that an individual's intention is frequently the most precise indicator of entrepreneurial behavior in the context of commencing a business venture. This view was also supported by different studies (Youssef et al., 2023; Krueger, 2000; Bird, 1988). Hence, it is of high importance to understand an individual's inclination towards entrepreneurship. Through an extensive literature study, it was ascertained that while there is a common understanding of intention, there is a gap in knowledge in relation to influencing factors and activities that could promote and enhance entrepreneurial activities within higher education institutions in underdeveloped countries. While entrepreneurship has gained significant attention in developed and developing nations, Lebanon and other similar regions lag far behind in this area.

The study enrolled a total of 481 students from two esteemed Lebanese universities who actively participated by completing a comprehensive self-administered online questionnaire. Rigorous analytical techniques, including factor analysis and multiple regression, were employed to meticulously scrutinize the amassed data. This investigation aimed to discern the specific psychological attributes influencing the entrepreneurial inclinations of Lebanese students, particularly in the dynamic landscape of the post-pandemic era. The research delved into the nuanced interplay between psychological factors and students' propensity for entrepreneurship within Lebanon, offering a detailed analysis of their choices amidst the evolving socio-economic conditions. The results underscored a robust and statistically significant correlation between several key psychological traits—namely, need for achievement, risk propensity, internal locus of control, and innovativeness—and students' inclination towards entrepreneurship.

These findings carry significant implications for various stakeholders, providing actionable insights for practitioners, policymakers, and educational institutions. Moreover, the study contributes to bridging a critical knowledge gap by shedding light on entrepreneurial intentions within the context of both post-pandemic economies and the specific challenges faced by developing nations.

## LITERATURE REVIEW

### Background

Lebanon, like many other developing economies, is facing a severe global predicament that ranks among the most challenging conditions experienced since the mid-nineteenth century. Today, millions in Lebanon are in desperate circumstances due to an unprecedented socioeconomic disaster that has also caused significant damage to essential infrastructure. The already existing economic crisis has been worsened by the impact of the COVID-19 pandemic and the consequences of the devastating Beirut blast in 2020 (BBC, 2020). Reports from the World Bank (2020) estimate economic losses exceeding \$15 billion. The effect of the pandemic was compounded by the fact that the Lebanese government defaulted on its \$1.2 billion Eurobonds (March 2020), which triggered a default on all its outstanding bonds totaling \$31 billion and a devaluation of the Lebanese pound of more than 90% (Reuters, 2023; Rickards, 2020). In addition to the continuous increase in the inflation rate, which reached around 111% in January 2023 in the year-on-year index (Audi, 2024), Lebanon's GDP is estimated to be \$20.5 billion in 2021, a drop from \$55 billion in 2019, thus having the highest GDP contradiction in the world (World Bank, 2022). This resulted in an increase in unemployment from 11.4% in 2018 to 29.6% in 2022, where youth unemployment is almost 50% and informal employment is 60% (International Labor Organization, 2022).

### Education and Entrepreneurial Attributes

As entrepreneurship is found to be fundamental to socio-economic development, it has been recognized that countries with higher entrepreneurial activities are economically progressing better than countries with limited engagement in entrepreneurial endeavors. There has been a growing focus on promoting the desire to start businesses among young people, especially those enrolled in university programs, by providing entrepreneurship education (Bauman & Lucy, 2021; Urban, 2006). Globally, policymakers, practitioners, and scholars are giving great attention to entrepreneurship education in order to promote and encourage the concept of entrepreneurship among students and increase awareness of entrepreneurial activity as a future career (Wang et al., 2021; Bauman & Lucy, 2021; Barba-Sanchez and Atienzo-Sahuquillo, 2018). The European Commission (2006) emphasized the role of education as a significant means to encourage and support entrepreneurial mindsets and skills among students.

As posited by Reynolds et al. (1999), Boldureanu et al., (2020), and Easley CE & Lee (2021), the implementation of effective entrepreneurship education and training initiatives is anticipated to foster an increase in the number of individuals choosing entrepreneurship as a viable career trajectory. This expectation is grounded in the understanding that a populace equipped with quality education is more inclined to engage in entrepreneurial pursuits. Wilson et al. (2009) defined entrepreneurship education as the development of one's perspective, acts, and skills that can be applied in accordance with entrepreneurship needs. Whereas, for Linan (2004), the education of entrepreneurship is related to all activities or training found in the educational system with the purpose of developing students' intentions towards entrepreneurial behaviors. Entrepreneurship education aims to cultivate a passion for exploration, self-reliance, understanding of opportunities, adaptability to change, and comfort with taking risks and navigating uncertainty. It seeks to accomplish this by shaping mindsets, developing motivations, encouraging proactive behaviors, honing skills, and building capabilities that empower individuals and groups to actively engage in various aspects of life, create something valuable, and attain either financial freedom or personal fulfillment (Steenekamp, 2013). Different researchers support the concept that entrepreneurs are not born, and like any other career, it can be learned; however, not every student taught the skills towards entrepreneurship will be an entrepreneur; hence, not all skills learners are talented or even base their career on what they learned or trained in the university (Mwasalwiba 2010). It can be ascertained that entrepreneurial education is the foundation of entrepreneurial behaviors, as it tends to affect students' intentions to behave entrepreneurially (Li et al., 2021; Souitaris et al., 2007). In research conducted by Tian et al. (2022), it was suggested that educational institutions should make an attempt to include advanced entrepreneurship expertise in relevant curriculum activities. Due to its importance, entrepreneurship education is widely taught in different education institutions across the world (Jones & English, 2004).

Entrepreneurship within higher education institutions includes different methods and resources that aim to enhance students' mindsets and motivate them towards entrepreneurial activities (Cui et al., 2021; Mukhtar et al., 2021; Lee & Wong, 2004). However, in order for a university to be considered entrepreneurial, it needs to concentrate on transforming students from job hunters to job creators (Ramayah et al., 2022). As the entrepreneurship process involves challenges and unknown steps, entrepreneurship education must prepare students not only with the knowledge and competencies of starting a new venture, but it should also prepare them to develop the resilience to deal with uncertainty and ambiguity. Entrepreneurship involves a continuously altering environment, which requires individuals to be able to flex and adapt in unstable and unknown environments. It is therefore essential that students are educated on the basis of open learning approaches to develop and practice the skills and attributes to seek resolutions and responses tailored to their business requirements within a fluid environment (Lober, 2006).

It has been acknowledged that there are several factors that affect individuals' decisions to become entrepreneurs, and education is one of the critical factors (Turker & Selcuk, 2009; Boulton & Turner, 2005). According to Lee et al. (2006), education has a direct impact on evolving students' entrepreneurial psychological attributes. Ndofirepi (2020) argued that students' involvement in entrepreneurship education affects their psychological development and preparedness to take the risks required to succeed.

### **Psychological Attributes and Entrepreneurial Intention**

In the process of understanding entrepreneurship, great attention is given to cognitive approaches, especially entrepreneurial intention (Alshebami et al., 2020). Intention towards being an entrepreneur is generally recognized as a determinant of future behavior and is also a leading indicator for actual behavior (Arasti et al., 2012). Recent studies have emphasized entrepreneurial intention as opposed to the more traditional language of entrepreneurship (Youssef et al., 2023; Wu et al., 2022). According to Schlaegel & Koenig (2014), the first step towards launching a business and becoming an entrepreneur is intention, and thus, entrepreneurial behavior is an intentional act. Intention is defined as the desire to conduct an act to achieve a specific goal (Ajzen, 1991), and this desire in entrepreneurship is related to the identification of opportunities and needs (Krueger et al., 2000). Early investigations in the field of entrepreneurship extensively concentrated on recognizing traits that differentiate entrepreneurs from non-entrepreneurs.

In this paper, we acknowledge the importance of understanding the traits and incentives of entrepreneurs who engage in start-ups and the importance of translating this knowledge into the development of coherent educational and training entrepreneurship programs. According to Leon et al. (2008), earlier investigations into entrepreneurial intentions are strongly linked to the discipline of psychology. As defined by Mitton (1989), entrepreneurs are individuals who have specific psychological attributes such as having high levels of dedication and accepting challenges and uncertainties. Thus, psychological attributes reflect one's thoughts and feelings. Personality is a salient domain of inquiry in the sphere of psychological entrepreneurship because it helps researchers comprehend and forecast how individuals will behave in various contexts (Baluku et al., 2020).

Literature shows a favorable influence of psychological attributes on an individual's intention towards being an entrepreneur. Research conducted in developed and developing nations identified that students who were engaged with entrepreneurship training had higher entrepreneurial attributes and thus higher intention towards entrepreneurial activities (Linan et al., 2011; Zhao et al., 2010). McClelland's (1961) work argued that the need to achieve something is a crucial and typical trait shared by entrepreneurs. In spite of the existence of a large number of studies that took into consideration the psychological attributes of entrepreneurs and found their importance in the process of developing an entrepreneurial

intention, psychological attributes are still criticized, and there is no current generalization of a framework to link psychological attributes with entrepreneurial intention (Krueger et al., 2000; Hisrich et al., 2007).

The work presented was grounded in four key psychological constructs: locus of control, need for achievement, propensity for risk-taking, and innovativeness (Fini et al., 2012; Florin et al., 2007; Robinson et al., 1991). The following is a description of the psychological attributes that formed the hypothesis presented in the paper. Figure 1 illustrates the conceptual model used for the formulation of research: locus of control (LoC), need for achievement (NfA), risk taking (RT), and innovativeness (INN) on the entrepreneurial intention (EI) of university students.

### ***Locus of Control***

Rotter (1996) was the pioneer in relating the trait locus of control to entrepreneurship; he aimed to distinguish between individuals who are internally controlled and individuals who are externally controlled. The idea of locus of control pertains to how individuals perceive their level of control in their lives (Hisrich et al., 2005); it is related to the recognition of an individual's ability to control or not control life events (Leone & Burns, 2000). Individuals who possess an external locus of control predominantly trust that they lack control over the happenings in their lives. Conversely, people with an internal locus of control depend less on luck and chance and have greater confidence in their ability to shape outcomes. According to research, those who have an internal center of control tend to display a greater inclination towards entrepreneurial behavior (Robert & Vandenberghe, 2020; Rosique-Blasco et al., 2018). This is likely because individuals who put themselves in the position of searching for new prospects and adopting innovative attitudes cannot process this by relying on the fact that circumstances are beyond their own control (Peng et al., 2012). Moreover, Gatewood et al. (1995) have emphasized the connection between the internal locus of control and the success of enterprise-related activities. Therefore, the first hypothesis is proposed:

**H1:** Locus of control positively influences students' intention to engage in entrepreneurship.

### ***Need for Achievement***

In the realm of entrepreneurship, the need for achievement has received the greatest attention (Tia et al., 2020; Ozaralli & Rivenburgh, 2016). McClelland (1961) was the pioneer in explaining how the desire for success affects one's entrepreneurial intention. The urge for achievement attribute is connected to a person's motivation to complete a certain activity or achieve a specific goal; it is the incentive that pushes an individual to fight for success. Individuals with an intense desire for achievement have a tendency to grasp strong self-confidence and are willing to face challenging conditions, continually pushing themselves to achieve more since they are not easily satisfied with their performance (Entrialgo et al., 2000). As per McClelland's theory, the need for achievement is associated with the aspiration to excel beyond others or even surpass one's own prior achievements. The second hypothesis proposed is:

**H2:** Need for achievement positively influences students' intention to engage in entrepreneurship.

### ***Risk Taking***

As stated by Kuip & Verheul (2003), the inclination toward taking risks is related to an individual's inclination to either engage in or avoid risky and uncertain behaviors when confronted with a specific situation. Entrepreneurs are often associated with being risk-takers, and previous research has shown that individuals who have a natural inclination to take risks are more inclined to pursue entrepreneurial activities (Steenkamp, Meyer, & Bevan-Dye, 2024; Rosique-Blasco et al., 2018; Brown et al., 2011; Lüthje & Franke, 2003). However, entrepreneurs do not blindly take risks; instead, they accept and undertake calculated risks (Zimmer et al., 2008). Learning how to be cautious in everyday work helps entrepreneurs handle risks effectively (Kumar & Sihag, 2012). Accordingly, the third hypothesis is suggested:

**H3:** Risk taking positively influences students' intention to engage in entrepreneurship.

### ***Innovativeness***

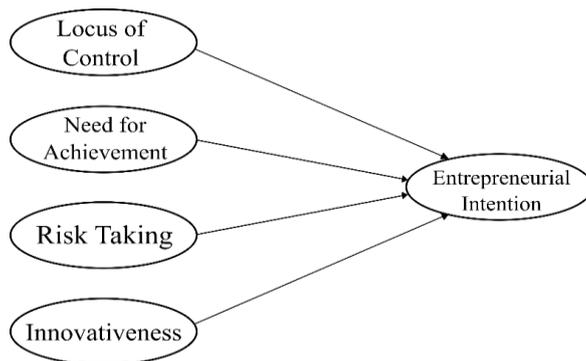
Innovation plays a crucial role in influencing a nation's economic expansion, and it's a main element in entrepreneurship (Santandreu-Mascarell et al., 2013). Ali et al. (2012) considered innovation to be one of the principal traits of entrepreneurs. Innovativeness refers to the ability to recognize and pursue entrepreneurial endeavors in a unique manner (Robinson et al., 1991); it is related to an individual's capacity and propensity to come up with new and original ideas and spot possibilities to turn these ideas into the launch of new goods and services or opening up new markets (Chen, 2007). Innovation is related to the act of reaching new and creative ideas that are reflected in new products, processes, businesses, and the exploitation of new markets (Al Mamun et al., 2016).

According to Armstrong & Hird's (2009) studies, there is a connection between an individual's creativity and their inclination towards becoming an entrepreneur. Moreover, this inventiveness also shapes their attitudes toward entrepreneurship and their confidence in their capacity to participate in entrepreneurial activities. Additionally, a study performed by Hamidi et al. (2008) discovered that there is a strong correlation between scoring high on a creativity assessment, having previous entrepreneurial experiences, and having intentions to become an entrepreneur. Koh (1996) also discovered that students with greater entrepreneurial intentions exhibited higher levels of innovativeness compared to those without such intentions.

Different definitions are found for the term innovativeness, but when relating it to entrepreneurship, innovativeness means reaching something new and of added value. According to Lundvall (2002), innovation in

entrepreneurship does not need to be in high technology; entrepreneurs can be innovative in improving their work. Therefore, the following proposition is put forward:

**H4:** Innovativeness positively influences students' intention to engage in entrepreneurship.



**Fig. 1** Research Framework

## MATERIALS AND METHODS

This study applied a quantitative method through the use of a self-administered questionnaire distributed to business students at two different universities in Lebanon. A total of 526 students participated in the study. The study employed a dual sampling approach. Firstly, a non-probability sampling method, specifically convenience sampling, was utilized to select the participating universities. This method was chosen due to the practical considerations of selecting universities that were readily available and easily accessible to the researchers. Convenience sampling facilitated efficient data collection by targeting institutions that could be engaged with minimal logistical constraints.

Secondly, random selection was employed for the enrollment of students from the selected universities. This approach ensured that each student in the population had an equal opportunity to be included in the study, thereby enhancing the representativeness of the sample. The determination of the sample size was guided by the established sampling size estimation table developed by Krejcie and Morgan (1970), which provided a systematic and statistically grounded method for determining the appropriate sample size for the research endeavor.

By integrating convenience sampling for university selection and random selection for student recruitment, the study aimed to strike a balance between practical feasibility and methodological rigor. This comprehensive sampling strategy facilitated the collection of robust data while maximizing the generalizability of the study's findings to the broader student population within the selected universities. Following the removal of duplicate submissions and incomplete survey questionnaires, the final sample comprised 481 respondents, accounting for 91.4% of the initial participant pool.

The initial section of the questionnaire consists of inquiries concerning the primary demographic and background details of the student. In the second section, a total of 19 questions were adopted for measuring entrepreneurial intention (5 items), locus of control (4 items), need for achievement (4 items), propensity for risk-taking (3 items), and innovativeness (3 items). All answers were based on a five-point Likert scale, where 1 indicated the highest level of disagreement and 5 signified the highest level of agreement. The reliability of variables is evaluated using Cronbach alpha ( $\alpha$ ), which gauges how well the responses collected for each item in the test are correlated to each other. In accordance with the suggestion of Hair et al. (2017), a cut-off point of 0.7 is used in this study.

The study tested the measurement model (validity and reliability) and the connection between the independent variables and the dependent variable structural model (testing the relationship among variables). Multiple regression analysis was also carried out to analyze the impact of the selected psychological traits on entrepreneurial intention. For statistical analysis, SPSS is used.

## Descriptive Analysis

Participants demographic information is presented in Table 1, as it is shown the questionnaire was equally distributed between males (53%,  $n = 257$ ) and females (47%,  $n = 224$ ). The majority of respondents aged between 21 and 24 years old (34%,  $n = 164$ ), 31% ( $n = 148$ ) aged between 17 and 20 years old, followed by 26% of participants aged between 25 and 28 years old ( $n = 126$ ), and the minority (9%,  $n = 43$ ) aged between 28 and 34 years old. The majority of respondents were enrolled in bachelor degrees (68%,  $n = 327$ ), and the remaining are enrolled in master degrees (32%,  $n = 154$ ). In addition, 97% of students are unmarried ( $n = 468$ ), and 3% ( $n = 13$ ) are married. Reflecting the high unemployment situation the Lebanese country is facing, especially among its youth, the majority of students declared to be unemployed (62%;  $n = 297$ ), and in addition, 13% were in internships ( $n = 61$ ). Regarding students that are currently working, 15% ( $n = 74$ ) are part-timers, 7% ( $n = 33$ ) are full-timers, and the minority (3%,  $n = 16$ ) are self-employed.

## Measurement Model

The measurement model was evaluated by scrutinizing both convergent and discriminant validity. Following, composite reliability (CR), average variance extracted (AVE), and factor loading were used to assess the convergent validity. Findings affirmed the adequacy of all criteria, with item loading and CR surpassing 0.7 and AVE values exceeding 0.5.

Consequently, according to Hair et al. (2017), the scale measurement successfully meets the requirement for convergent validity (Table 1). Finally, reliability was measured by Cronbach alpha ( $\alpha$ ), which also reflects that all measures are reliable (Table 1).

**Table 1** Convergent Validity and Reliability

	Factor Loading	Cronbach	CR	AVE
Construct 1: Entrepreneurial Intention (EnI)		0.8	0.868	0.695
EnI1	0.794			
EnI2	0.842			
EnI3	0.833			
EnI4	0.709			
EnI5	0.66			
Construct 2: Locus of Control (LoC)		0.7	0.838	0.635
LoC1	0.632			
LoC2	0.728			
LoC3	0.614			
LoC4	0.849			
Construct 3: Need for Achievement (NfA)		0.7	0.821	0.732
NfA1	0.756			
NfA2	0.821			
NfA3	0.519			
NfA4	0.764			
Construct 4: Risk Taking (RT)		0.7	0.802	0.61
RT1	0.52			
RT2	0.876			
RT3	0.599			
Construct 5: Innovativeness (INN)		0.8	0.727	0.746
INN1	0.768			
INN2	0.841			
INN3	0.788			

In addition, the overall model of regression statistically predicts the results of the variables, as shown in Table 2, whose p-value is significant ( $p = 0.01$ ), reflecting that there is a good fit between the data and the assumed regression model. A significant regression equation was found:  $F(4,998) = 93,142$ ,  $P < 0.01$ , with R squared 0.274.

**Table 2** ANOVA Results

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	199.303	4	49.826	93.142	.000 <sup>b</sup>
	Residual	528.525	988	0.535		
	Total	727.827	992			

a. Dependent Variable (Entrepreneurial Intention);

b. Predictors (Constant), Innovativeness, Locus of Control, Risk Taking, Need for Achievement

### Structural Model

Multiple regression analysis was employed to investigate the impact of psychological attributes on entrepreneurial intention, with a summary of the analysis presented in Table 3. The dimensions of innovativeness, locus of control, risk-taking, and need for achievement collectively accounted for 27.4% of the variance in students' entrepreneurial intentions. The regression coefficient (R) of 0.523 indicates a moderately positive correlation between entrepreneurial intention and the independent variables. Furthermore, the Durbin-Watson value, close to 2 at 1.979, suggests the absence of multicollinearity among the predictors. The adjusted R-square value of 0.271 signifies that the independent variables (locus of control, need for achievement, risk-taking, and innovativeness) explain 27.1% of the variability observed in the dependent variable (entrepreneurial intention).

**Table 3** Multiple Regression Analysis

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.523 <sup>a</sup>	0.274	0.271	0.7314	1.979

a. Predictors (Constant), Innovativeness, Locus of Control, Risk Taking, Need for Achievement

b. Dependent Variable (Entrepreneurial Intention)

Furthermore, Table 4 shows that need for achievement ( $p < 0.01$ ), locus of control ( $p < 0.05$ ), risk taking ( $p < 0.01$ ), and innovativeness ( $p < 0.01$ ) significantly and positively influence students' intentions towards entrepreneurship. Based on the standardized regression coefficient 'beta', results indicate that need for achievement has the highest impact (0.218) on

students' intention, followed by risk taking (0.180) and innovativeness (0.164), whereas locus of control has the lowest impact (0.081).

**Table 4** Multiple Analysis Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficient	T	Sig.	
	B	Std. Error	Beta			
(Constant)	1.358	0.147		9.21	0.000	
1	Need for achievement (NfA)	0.246	0.044	0.218	5.583	0.000
	Locus of Control (LoC)	0.097	0.042	0.082	2.311	0.021
	Risk Taking (RT)	0.181	0.035	0.18	5.153	0.000
	Innovativeness (INN)	0.167	0.034	0.164	4.852	0.000

Thus, based on the results all hypotheses are accepted at 0.05 significance level.

**H1:** Locus of control positively influences students' intention to engage in entrepreneurship.

**H2:** Need for achievement positively influences students' intention to engage in entrepreneurship.

**H3:** Risk taking positively influences students' intention to engage in entrepreneurship.

**H4:** Innovativeness positively influences students' intention to engage in entrepreneurship.

## DISCUSSION AND CONCLUSION

This study delved into the specific psychological attributes shaping the entrepreneurial inclinations of Lebanese students, with a particular focus on navigating the dynamic landscape of the post-pandemic era. The findings revealed a strong and statistically significant correlation between key psychological traits—such as need for achievement, risk propensity, internal locus of control, and innovativeness—and students' propensity towards entrepreneurship. In essence, the psychological attributes of students towards entrepreneurship are portrayed by the characteristics of a higher desire towards achievement, a higher perception that future life's provision is the result of one's own acts, a higher inclination towards taking risky decisions, and an ambition towards creativity and innovation.

Our results of this study are in line with preceding research that recognized a direct and substantial correlation among entrepreneurial intention and students' psychological attributes (Steenkamp, Meyer, & Bevan-Dye, 2024; Mawlawi et al., 2023; Bauman & Lucy, 2021; Boldureanu et al., 2020; Cui et al., 2021; Eesley CE & Lee, 2021; Mukhtar et al., 2021; Tian et al., 2020; Robert & Vandenberghe, 2020; Linan et al., 2011; Chell, 2008; Florin et al., 2007; Bhandari, 2006).

This study contributes to the understanding of students' entrepreneurial intentions in Lebanon, a country facing a severe socioeconomic crisis. It sheds light on the importance of promoting entrepreneurial characteristics among students to cultivate an entrepreneurial culture by providing valuable information to policymakers. In an unstable country like Lebanon, the significance of entrepreneurship grows by many folds; however, the number of entrepreneurs in the country lacks curbing the problem of unemployment. The implication of these findings is perhaps that psychological attributes related to entrepreneurship, especially the enhancement of their need for achievement, internal locus of control, propensity to take risks, and the development of students' innovative mindsets, should be emphasized through entrepreneurship education. The Lebanese educational system could take advantage of different programs being applied worldwide. Although there is no common standard between researchers, psychological attributes related to entrepreneurship are suggested by some researchers as acquired, have the ability to be changed as the individual's context changes, and can be culturally attained (Vesper, 1990). A study conducted by Lee et al. (2006) unearthed that the education system is a vital component in the development of entrepreneurial attributes. In addition, Irengun & Arikboga (2015) suggested that education and training related to entrepreneurship focus more on individuals' attitudes and not just on providing knowledge. Hence, policymakers should design and develop educational programs that encourage entrepreneurial attitudes and psychological attributes among students (Lundstrom & Stevenson, 2005). Universities should apply various teaching strategies and programs to increase the entrepreneurial self-efficacy of various student groups through specialized instruction and mentoring, enabling them to set an efficient orientation that meets their entrepreneurial goal (Youssef et al., 2023; Zhang et al., 2022).

In contrast with the high interest in entrepreneurship across the world, it is found that Lebanon is standing ahead. No government interventions are found to support entrepreneurial activities, and no direct intervention is found from the Ministry of Higher Education of Lebanon regarding entrepreneurship education. To this extent, it seems critical to embrace entrepreneurship in the broader context of Lebanese educational programs. Entrepreneurship has become an indispensable tool for the development of any economy. Lebanese policymakers need to boost entrepreneurship by boosting individuals' intentions towards it. There is a great role for education in promoting entrepreneurship by positively affecting psychological attributes related to entrepreneurial intention (Do Paço et al., 2011).

The percentage of students who intended to start their business in this study was limited. This can be explained by several reasons: first, the unstable economic and political situation that the country is passing through; second, the lack of incentives towards entrepreneurial activities in the country; and third, low participation from educational institutions in the support and promotion of entrepreneurship. In a review done, it was found that only four universities provide entrepreneurship as a major in Lebanon. In this regard, it is vital to develop strategic policy that takes into consideration

the societal and political challenges the country is facing, taking into consideration practical and applicable policies concerning entrepreneurship in general and entrepreneurship education in particular.

Based on the findings and the available literature review, this study suggests that there is an immediate need to develop a national and strategic outlook on entrepreneurship education in Lebanon to stimulate more universities to get involved in motivating students towards entrepreneurship. By creating courses that have a positive impact on psychological attributes related to entrepreneurship and providing them with the necessary practical skills, as well as by focusing on offering a major in entrepreneurship and creating centers that enhance the entrepreneurship environment inside the university, In addition, the Lebanese government needs to reorient the country's higher education system with regard to furnishing students with entrepreneurial attributes and skills as a key to restrain unemployment. This study encourages the integration of obligatory entrepreneurship education into higher education institutions in Lebanon. While some universities in the country provide entrepreneurship courses, little is known about their quality and content, and thus how they affect students' intentions towards entrepreneurship. Future studies should concentrate on conducting a longitudinal analysis of students registered in entrepreneurship courses or entrepreneurship majors and assess their intentions pre- and post-course. Some limitations are present in this study; regardless of the importance of psychological attributes, they are not the only factor that affects individuals' intentions towards entrepreneurship. Moreover, this study only gathered data from business students; hence, the results cannot be generalized to all Lebanese university students.

If Lebanon desires to get rid of its current situation and decrease the rate of unemployment, entrepreneurship can serve as a catalyst in this process.

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## DECLARATION OF CONFLICT

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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