

Deciphering the Dynamics of Entrepreneurial Motivation and Critical Entrepreneurial Intention among Lebanese Graduates: Unveiling the Role of Perceived Risk in the Post-Pandemic

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Abstract

Amidst the post-pandemic paradigm, this study delves into the interplay between entrepreneurial motivation factors and the intention of Lebanese students towards entrepreneurship. Employing a quantitative approach, a survey was administered to 326 randomly selected students. Through Principal Component Analysis (PCA) and structural modeling, the research examines how entrepreneurial motivation influences entrepreneurial intention, with a focus on the mediating role of perceived risk. The findings underscore the pivotal role of motivational drivers, including autonomy, achievement, locus of control, participation in entrepreneurial education, and profit motives, all significantly shaping Lebanese university students' entrepreneurial intention. Notably, the correlation between entrepreneurial motivation and intention is mediated by risk perception. In a world recalibrating post-pandemic, universities are pivotal in fostering entrepreneurship through robust education, enhancing students' motivation for entrepreneurial pursuits. Thus, bolstering entrepreneurial motivation augments students' intention to embark on entrepreneurial endeavors. Moreover, this study acknowledges the significance of sustainable development in the post-pandemic context, where fostering entrepreneurship aligned with sustainable goals can contribute to both economic growth and societal well-being. This study contributes to understanding student entrepreneurial motivation, risk perception, and intention, offering a validated framework for future research. These findings hold practical implications for educators, advocating the integration of entrepreneurship in post-pandemic higher education curricula, enriching knowledge dissemination in an evolving environment.

Keywords: Entrepreneurship motivation, Perceived risk, Entrepreneurial intention, Education, Sustainability, Post-pandemic

1. Introduction

Today, practically all countries grappled with a severe problem with entrepreneurship after COVID-19 (Dvorakova & Polents, 2021). Entrepreneurs establish start-ups to create jobs, innovate, and rejuvenate the economic fabric (Shabbir et al., 2022). Start-ups are specially tasked with creating disruptive technologies that make entirely new markets or dramatically disrupt existing industries and discover new, unexplored opportu-

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-nities and creative solutions to various issues. Entrepreneurship is essential to economic development and progress (Pinto et al., 2019). Students at universities can become entrepreneurs and boost the economy. Additionally, entrepreneurship education has shown to be a potent integration strategy because university education dissolves obstacles based on disparities in social class, ethnicity, age, gender, and race (Kosmynin, 2022). Universities are offering various courses related to entrepreneurship. Formal academic education and training exist in entrepreneurship. Programs ranging from social entrepreneurship to project management aim to motivate students to launch their start-ups. Despite having similar goals for fostering entrepreneurship and entrepreneurial activities, their particular goals differ. Entrepreneurial training programs aim to give the skills required to establish a business (Wan Nur Azlina Ibrahim et al., 2022).

Due to its goal of preparing students for the workplace, entrepreneurship education is crucial. It should equip students with the knowledge and abilities to become engaged citizens committed to advancing their nation. Well-prepared students with entrepreneurial knowledge possess high environmental awareness while upholding social and environmental responsibility (Bello et al., 2021). Students who receive entrepreneurial education are more equipped to shape the future, comprehend how different disciplines interact, foresee both the short- and long-term, create specific, attainable goals, and anticipate the effects of their decisions (Syam et al., 2018). When these students graduate, they can launch new firms that will boost the economy by generating jobs, promoting competition, and promoting innovation. Additionally, group practical entrepreneurial experiences foster teamwork, respect, and tolerance. Experience supports critical thinking and helps to acquire problem-solving capabilities and potential problem resolution (Özsungur, 2019). The management model, which concentrates on the ability to define the objectives of planning, organizing, and controlling in a small business, and the business venture methodological approach, which emphasizes the creation of business plans, can be broadly divided into two pedagogical approaches to entrepreneurship education (Marniati & Witcjaksono, 2020). However, most courses universities provide in the business management and economics department restrict students' opportunities and chances from other fields to get entrepreneurial prerequisites and information (Philipus & Gheta, 2022).

Despite the rising interest in entrepreneurship among college students, it is still essential to comprehend the variables that affect entrepreneurial intention and motivation. The influence of education, inspiration, personality traits, motivation, and environmental factors on entrepreneurial intention has been studied (Alamineh, 2022). It is necessary to understand these components' interactions and influences and how they alter in various cultural and educational contexts. It is also vital to comprehend how the features of the motivation and ability model and theory of planned behavior influence entrepreneurial intention. Universities and policymakers can create successful programs to encourage entrepreneurship among college students and assist in expanding new enterprises by better understanding these aspects (Prabandari & Sholihah, 2015).

Universities have been obliged to innovate fast and recreate due to the COVID-19 epidemic (Ratten & Jones, 2021), severely influencing the entire service industry, including higher education. The body of research on the variables influencing university students' entrepreneurial inclinations is expanding (Thao & Shahrokh, 2021). Some research has examined how COVID-19 has affected Lebanese university students' coping abilities and mental health. The effect of COVID-19 on college students' entrepreneurial inclinations has also been studied from the perspectives of personality traits and emotions (Saleh, 2014). The factors influencing university students' entrepreneurial intentions in Jordan and Yemen have been the subject of several studies. In addition, a study looked at the characteristics university students in Lebanon possess to engage in entrepreneurial activities and launch their businesses (Fabeil, Langgat, Pazim, & Mahmud, 2022).

However, the topic of entrepreneurship among Lebanese university students after COVID-19 has received relatively little research. However, more investigation is required to pinpoint the particular problems

with entrepreneurial intention among Lebanese university students following COVID-19. Entrepreneurial motivation and intention among university students in Lebanon following COVID-19 should be thoroughly investigated (Yahya et al., 2019).

Promoting entrepreneurship requires understanding the aspects of entrepreneurial motivation that impact entrepreneurial intention among university students (Koe et al., 2019). This study investigates the influence of entrepreneurial motivational factors on entrepreneurial choice among senior-level students of Lebanese private universities in north Lebanon. The objective is to examine the influence of students' entrepreneurial intentions and antecedents. It assesses five components of entrepreneurial motivation: the need for achievement motive, the locus of control, the desire for authority and independence, profit motivation, and entrepreneurial education programs (Vliamos & Tzeremes, 2012; Obschonka & Stuetzer, 2017).

In the wake of the post-pandemic era and the growing importance of sustainable development, understanding the factors driving entrepreneurial intentions becomes even more crucial. Universities have been at the forefront of innovation and adaptation in response to the COVID-19 pandemic, reshaping their curricula and educational approaches (Ratten & Jones, 2021). The disruptions caused by the pandemic underscore the need for robust entrepreneurship education that equips students with the skills and mindset to navigate dynamic and uncertain environments while contributing to sustainable economic growth. Thus, investigating the interplay between entrepreneurial motivation, intention, and sustainable development in the context of post-pandemic curricula is paramount.

This research aims to answer the following question: "How to explain the motivation, intention, and behavior of social entrepreneurs during critical times?" In other words, "To what extent do personal and contextual variables affect the motivation, intention, and behavior of social entrepreneurs in a volatile environment?"

The main contribution of this study is raising awareness among Lebanese students pursuing graduate degrees concerning the necessity to start planning their businesses after graduation. This study explored the essential determinant affecting entrepreneurial intention. Second, it contributed to instructing universities teaching entrepreneurship development to pay close attention to students by probing their minds to learn about risk perception in launching a start-up. As a result, universities would be better able to shape graduates' minds and thinking to support their goal of starting their businesses after graduation. The conceptual framework in this paper would undoubtedly direct the entrepreneurial thinking of the graduate to be an entrepreneur.

2. Literature Review

Discovering a business opportunity and completing the necessary procedures to launch a new business, often to generate profit, is known as entrepreneurship (Morovati Sharifabadi & Mofateh Zadeh, 2020). It entails creating and launching a new start-up, implementing a business marketing strategy, and accepting the risks of its launch and operation. Entrepreneurs identify needs that no existing company fulfills and devise a plan (Benavides-Sánchez et al., 2022). They are frequently regarded as pioneers and developers of fresh concepts and commercial methods. Innovation, taking risks, and a zeal for sharing a healthy vision are characteristics of the entrepreneurial spirit. To alter or, at the very least, improve upon these established patterns, there is a need for a willingness to think outside of the box while keeping local laws and regulations in mind (Salun, Zaslavska, & Zmicerevska, 2019). Entrepreneurs frequently display positive biases in their perception, which means they lean toward finding new chances and spotting unmet market demands. They tend to identify new opportunities effectively (Neves & Brito, 2020). Additionally, they are more inclined to take advantage of the opportunity due to their pro-risk mindset. Entrepreneurs with an entrepreneurial spirit can approach each day

with a mindset that helps them overcome obstacles and tackle problems with a positive attitude (Secundo et al., 2019). Syed et al. (2023), Bienkowska & Klofsten (2012), and Criaco et al. (2014) have demonstrated numerous variables affecting college students' intentions to become entrepreneurs. Three different types of incentives might influence an entrepreneur's intention to start a business: the need for success, autonomy, and both authority and autonomy (Lanero et al., 2011). Another element influencing entrepreneurial intent is education, as higher levels of university education are linked to a more encouraging impact on intention. The relationship between perceived entrepreneurial motivation and entrepreneurial intention can also be mediated by attitudes toward entrepreneurship and the perceived risk associated with entrepreneurial motivation (Hülsbeck & Pickavé, 2014). In the context of the post-pandemic era, where economic landscapes are evolving, entrepreneurship takes on a renewed significance, as individuals seek innovative ways to navigate challenges and contribute to economic recovery and growth.

2.1 Entrepreneurship Motivation

Entrepreneurial success requires motivation. Entrepreneurship motivation plays a critical role in determining an entrepreneur's success (Taha et al., 2017). An individual's motivation serves as a driving force that can provide them with the determination and direction necessary to achieve a goal, in this case, entrepreneurship. Entrepreneurs lacking motivation may struggle with the persistence and drive required for success (Nyock Ilouga et al., 2014). Motivation sustains vitality, creativity, and determination. Entrepreneurs are renowned for their achievements, perseverance, and commitment to lofty ideals. Motivation is essential for maintaining this vitality, originality, and resolve (Guerrero & Urbano, 2014). Motivated entrepreneurs are more dedicated to and focused on their objectives. An entrepreneur's long-term success hinges on motivation. Entrepreneurs need to master persuasive skills to secure shareholder support. They must secure agreements, harness and sustain their enthusiasm for launching a startup enterprise (Díaz-Casero et al., 2012). Entrepreneurs are driven to persist on the path to success. Transforming a creative business idea into a profitable, enduring organization can cause an entrepreneur to experience anxiety and frustration. Entrepreneurs channel their energy into implementing their innovative ideas through motivation (Adnan et al., 2020). Motivation drives innovation, and entrepreneurs are inherently driven individuals passionate about realizing their concepts. Entrepreneurs drive change in established markets by developing improved or novel products/services. Regardless of their motivations, entrepreneurs fuel the creation of innovative business solutions (Alshumaimri et al., 2012). Especially in the post-pandemic era, where economic landscapes are evolving, the importance of entrepreneurial motivation becomes even more pronounced as individuals seek to adapt and thrive in changing circumstances (Dayour & Adam, 2022).

2.2 Critical Entrepreneurship Motivation factors

The literature on entrepreneurial motivation enhances the intention to create a start-up. A work opportunity, the need for profits, authority and independence due to unemployment are essential motivational factors for start-up creation. Following this viewpoint, the terms "push" and "pull" are two distinct incentive aspects (Bozeman, Fay, & Slade, 2013). In a post-pandemic scenario, the understanding of these motivational factors becomes even more critical as individuals reconsider their career trajectories and explore business opportunities (Fregnan et al., 2022). The "push" strategy aligns with entrepreneurship arising out of necessity. It comprises two dimensions. The economic dimension is linked to unemployment, while the non-economic facet manifests as unhappiness and job dissatisfaction (Guerrero et al., 2014). In contrast, the entrepreneur embodies opportunity in the "pull" strategy, which also consists of two parts, economic and non-economic. The first relates to identifying a business prospect, while the second pertains to the desire for independence. A unique aspect of this tactic is the exclusive nature of the "push/pull" dimensions (Mahdavi Mazdeh et al.,

2013). In the post-pandemic landscape, individuals seeking avenues for both financial recovery and personal growth might be drawn towards the "pull" strategy, as they explore inventive and autonomous business concepts.

2.2.1 *The Need for Achievement Motive*

The drive to succeed and complete objectives represents an achievement motive. Since entrepreneurs frequently aspire to attain and fulfill their objectives, it holds significant motivational value (Arslan & Kartal, 2022). For entrepreneurs, the accomplishment incentive serves as both an intrinsic and extrinsic motivator. An entrepreneur's pursuit of substantial success, mastery of skills, control, or high standards aligns with the concept of the Need for Achievement (Sadikovich, 2020). A persistent focus on establishing and attaining elevated standards of success sets apart distinctive personality traits. Intrinsic motivation, the internal desire to take action, as well as external motivation arising from others' expectations, influence this driving force (Baidi & Suyatno, 2018). Consequently, an individual's need for achievement propels them to excel in competitions and thrive in endeavors that hold personal significance. Entrepreneurs can be characterized by their relentless pursuit of success, often referred to as an accomplishment orientation or an ambition to thrive, progress, and expand (Wiramihardja et al., 2022).

The global pandemic has reshaped various aspects of entrepreneurship, introducing new challenges and opportunities. As economies recover and adapt, the drive for success remains a crucial factor for entrepreneurs (Ufua et al., 2022). The altered business context may have led to shifts in objectives, with a heightened emphasis on flexibility, innovation, and resilience (Bouzakhem et al., 2023). Entrepreneurs who possess a strong achievement motive are likely to navigate these changes with determination, aiming to achieve meaningful goals even in the face of uncertainty. Additionally, the balance between intrinsic and extrinsic motivations may have evolved, as individuals reassess their priorities and the sources of their drive. The post-pandemic era underscores the enduring importance of the need for achievement in propelling entrepreneurs forward, shaping their strategies, and contributing to their overall success.

2.2.2 *Locus Of Control*

The locus of control is another aspect of motivation that has drawn the attention of scholars. It is the degree to which people think their choices and unique traits impact outcomes (Xiabao et al., 2022). According to research, those with an internal locus of control frequently express their need for Achievement more strongly (Khabibah et al., 2019). Locus of control is a psychological concept referring to the extent to which a person believes they can influence events and outcomes in their life. The idea of the locus of control denotes entrepreneurs' principles and beliefs concerning their determination for success (Dos Santos Braum & Jorge Nassif, 2018). Business owners who believe that their fate and organizational performance mainly depend on themselves are characterized by an internal locus of control. It is a relatively stable personality trait over time (Hermawan et al., 2016).

Understanding the locus of control helps entrepreneurs make effective decisions and develop a sense of professional fulfillment. Entrepreneurs with a locus of control are autonomous, make better decisions, and are happier in their jobs (Mahdaly & Usman, 2020). The locus of control plays a vital role in entrepreneurial success. People with an internal locus of control are generally more proactive, persistent, and goal-oriented, allowing them to overcome obstacles and challenges. Therefore, adopting an internal locus of control is essential for entrepreneurs who want to succeed and feel fulfilled (Estay, Durrieu, & Akhter, 2013).

In the context of the post-pandemic world, the concept of locus of control takes on heightened relevance. The global crisis disrupted established business norms and forced entrepreneurs to confront unprecedented uncertainties (Sharma et al., 2022). The ability to influence outcomes through personal

choices and traits became even more critical as entrepreneurs navigated through uncharted waters. Entrepreneurs with a strong internal locus of control were better equipped to adapt swiftly, pivot their strategies, and identify new opportunities in the midst of adversity (Alshebami, 2022).

2.2.3 *The Desire for Authority and Independence*

Personal desire is related to individuals' ability to make choices, issue commands, and enforce compliance. Authority encompasses essential facets, namely decision-making and power. Independence refers to the ability to act or think for oneself, free from the influence or control of others (Hsieh & Lee, 2020). In entrepreneurship, authority and independence are essential traits that empower entrepreneurs to make decisions and take actions without relying on others (Alghamdi et al., 2021). Entrepreneurs need to be able to act independently and take control of their businesses to succeed. The ability to make choices, issue commands, and enforce compliance is referred to as having authority. Independence is the capacity to make decisions or behave autonomously, unaffected by the influence or control of other people (Skydan et al., 2019). Independence and authority are crucial characteristics for entrepreneurs, as they enable them to make choices and take actions without depending on others (Mohd Romzee Ibrahim et al., 2018).

The pandemic underlined the importance of entrepreneurial autonomy and the capacity to shape outcomes, not only for individual success but also for contributing to economic recovery and innovation on a broader scale (Zakhem et al., 2022). As the business scene continues to evolve in the wake of the pandemic, the locus of control remains an enduring factor shaping entrepreneurial attitudes, decisions, and achievements.

2.2.4 *Profit Motivation*

Entrepreneurs, as defined by Kirzner, are individuals who perceive profit opportunities. Entrepreneurs seek to modify the market's equilibrium to make a profit (Pinzón et al., 2022). Start-ups are created for profit. The drive to achieve financial gain or profit is called profit motivation. It is essential to entrepreneurship because many business owners start with the intention of turning a profit (Douglas & Prentice, 2019). Entrepreneurs might be motivated by money in both intrinsic and extrinsic ways. The first refers to pursuing self-interest, while the second looks at the rewards following determined behavior, such as money and status (Qosasi, 2021). In a post-pandemic context, the significance of profit motivation in entrepreneurship takes on new dimensions. The global crisis reshaped market dynamics and imposed unprecedented challenges on businesses. As economies recover and adapt, entrepreneurs who are profit-driven find themselves in a unique position to contribute to revitalizing economies and industries (Dias et al., 2022). The pursuit of financial gain not only fuels individual success but also plays a pivotal role in stimulating economic growth and job creation. Moreover, the pandemic-induced changes in consumer behavior and market preferences have opened up new profit opportunities in areas such as digitalization, healthcare innovation, and sustainable solutions (George & Schillebeeckx, 2022). Entrepreneurs with a keen eye for profit potential are well-positioned to harness these emerging trends and drive transformative changes that align with evolving post-pandemic demands. As the business world continues to evolve, profit motivation remains a driving force for entrepreneurs seeking to rebuild, innovate, and thrive in the aftermath of the pandemic.

2.2.5 *Entrepreneurial Education Programs*

Entrepreneurship education programs are growing rapidly and globally. This growth reflects recognition of the importance of programs resulting in entrepreneurial outcomes such as developing an entrepreneurial culture, improving skills and entrepreneurial attitudes, and creating entrepreneurial activities and employment (Maritz & Brown, 2013). Entrepreneurship education influences culture and encourages business creation. Several researchers were attracted to this field, and several studies proved that entrepreneurship is taught (Shekhar

& Huang-Saad, 2021). As proof, several entrepreneurship education programs have participated in developing the entrepreneurial process at the global level. The efficiency of entrepreneurial education programs depends on the role of university professors (Din et al., 2016).

Instructors' classical positions and jobs in educating the young generation face challenges. An educational system with the critical elements of success considers the role of the teacher as a person guiding and facilitating student learning through discovery, autonomous learning, analysis, reflection, and group interactions (Maritz et al., 2022). The instructor's responsibility is to establish an engaging learning environment, create observable genuine opportunities, develop creative ideas, assist in theory transformation into practice, and guide the implementation of solutions (Ardyan & Wijaya, 2018).

In the post-pandemic context, the importance of entrepreneurship education has been further featured. The global crisis prompted rapid shifts in industries, employment patterns, and economic structures. Entrepreneurship, with its potential to drive innovation, create employment, and foster resilience, has gained even greater significance in navigating the uncertainties brought about by the pandemic. As economies recover and rebuild, entrepreneurship education becomes a vital tool for equipping individuals with the skills, mindset, and practical knowledge needed to navigate the evolving business landscape (Bouzakhem et al., 2023). The challenges posed by the pandemic have highlighted the need for educators to adapt and innovate, using creative approaches to foster entrepreneurial thinking and action (Hayudini et al., 2023; Ben Hassen, 2022). The role of instructors in guiding students through the entrepreneurial journey is essential for preparing the next generation of entrepreneurs to address emerging challenges and seize opportunities in a rapidly changing world (Frolova et al., 2021).

2.3 Perceived Risk

The role of risk perception holds substantial importance in motivating and shaping entrepreneurial intentions. A well-developed theoretical framework underscores the impact of entrepreneurial risk perception on the intention to engage in entrepreneurship, drawing upon the foundations of the person-situation transactions theory (Hoogendoorn et al., 2019).

Undertaking significant risks stands as a pivotal element when embarking on a startup venture. The perceived level of risk is inversely linked to entrepreneurs' intentions to initiate their businesses. García Lirios (2020) and Zirit Trejo et al. (2018) have corroborated that the association between entrepreneurial intention and motivation is inversely influenced by the apprehension of failure and the perception of risk. Entrepreneurs often lean towards selecting risk-averse or even low-risk entrepreneurial endeavors. Fanea-Ivanovici and Baber (2021) along with Havierniková and Kordoš (2019) have inferred that the ambitions and intentions that drive entrepreneurship impact personal attributes among entrepreneurs, such as self-assuredness, willingness to take risks, and the drive for achievement. Notably, Iglesias-Sánchez et al. (2016) and Shi et al. (2022) have discerned a positive mediating effect of perceived risk. This underscores that the correlation between push-pull motivational factors and entrepreneurial intention finds mediation through the lens of perceived risk. In sum, the perception of risk holds a substantial influence over entrepreneurs' intentions to initiate and lead their enterprises. Skillful risk management remains an essential facet for entrepreneurs, with a willingness to embrace uncertainties serving as a cornerstone for establishing startups. The presence of perceived danger and fear connected to potential failure can potentially cast a negative shadow over entrepreneurial aspirations and behaviors. Core personality traits, such as self-assurance and an inclination for risk-taking, significantly shape entrepreneurial intentions (Ndofirepi, 2020). Moreover, the interplay between motivational factors that drive entrepreneurs and their intentions is intricately interwoven with the mediating force of perceived risk.

In the post-pandemic landscape, the dynamic of perceived risk in entrepreneurship takes on new nuances. The pandemic highlighted the importance of adaptable risk management strategies, with

entrepreneurs needing to assess and navigate new types of risks that emerged as a result of the crisis (Croteau et al., 2021). The relationship between perceived risk and entrepreneurial intention became even more intricate, as entrepreneurs evaluated risks related not only to market dynamics but also to health and safety considerations, supply chain disruptions, and shifting consumer behaviors (Karmaker et al., 2023). As economies recover and rebuild, entrepreneurs who can effectively balance risk perception and innovation are poised to thrive in the ever-evolving post-pandemic business environment.

2.4 Entrepreneurial Intention

The term "intention" carries distinct connotations in the fields of management and psychology. Intention, in this context, denotes a psychological state that guides an individual's attention, experiences, and behaviors within a purposeful process aimed at achieving specific objectives (Barba-Sánchez et al., 2022). According to Kowang et al. (2021) and Nowiński & Haddoud (2019), the formation of entrepreneurial intention emerges from the interplay between an individual's personality, the contextual features of their social environment, and their capacity for both logical and intuitive reasoning. As proposed by Krueger and Casrud (1993), this process originates from an individual's desires, values, habits, and beliefs. It embodies the extent of an individual's readiness to engage and the concerted efforts they intend to exert in adopting a particular behavior (Ajzen, 1991). The realm of entrepreneurship significantly underscores this concept, particularly concerning university students who have successfully initiated start-ups. The entrepreneurial intentions of students are molded by factors such as their parents' perspectives, encouragement, and motivations (Amofah & Saladríguez, 2022).

Hence, the inclination or readiness of university students to establish their own ventures or pursue entrepreneurial pathways is encapsulated in the term "entrepreneurial intention." Entrepreneurship education programs play a pivotal role in fostering entrepreneurial motivation and cultivating entrepreneurial intention, as they bridge the gap between intention and action. The resolute academic entrepreneurial intentions of scholars can be catalyzed by motivation and personality traits characterized by openness to new experiences (Rusu et al., 2022). Disruptions caused by the pandemic have accentuated the importance of translating intention into action, particularly in the entrepreneurial realm. As economies recover and reshape, the intentions of university students and aspiring entrepreneurs become central to driving economic recovery and transformation. Entrepreneurial intention is not only about personal ambition but also about contributing to job creation, innovation, and addressing emerging challenges (Iwu et al., 2021). The pandemic has demonstrated that the alignment of intention with action is essential for resilience and growth, both for individual entrepreneurs and for the broader entrepreneurial ecosystem. As the world navigates the post-pandemic landscape, fostering and supporting entrepreneurial intention remains a key driver for fostering economic revival and building a more resilient and innovative future (Elia et al., 2021).

2.5 Theoretical Foundation & Hypotheses Development

According to Astuti & Martdianty (2012a) and Botsaris & Vamvaka (2016), intention is the most robust predictor of entrepreneurial activity. Ajzen (1985) and Ajzen and Fishbein (1975) similarly contend that intention serves as the prime predictor of entrepreneurial behavior, essentially signifying the likelihood of the occurrence of entrepreneurial actions. Tanduklangi et al. (2020) emphasize that intention formulation is contingent on judgments of feasibility and desirability. The theory of planned behavior stands as a cornerstone in entrepreneurship literature (Astuti & Martdianty, 2012b), intricately encompassing individual cognitive attributes to expound upon the entrepreneurial phenomenon. The work of Rueda Barrios et al. (2022) and Praswati et al. (2022) extends Fishbein and Ajzen's theory of reasoned action by integrating perceived risk as an additional determinant. Originating to elucidate the process underlying planned activities,

this theory's scope extends to assert intention as a comprehensive predictor of entrepreneurial engagement (Tatarko & Schmidt, 2013). Furthermore, Shabbir et al. (2022) and Kosmynin (2022) highlight specific variables influencing university students' intentions to venture into entrepreneurship. Syam et al. (2018), Özsungur (2019), and Philipus & Gheta (2022) have illuminated the potency of various motives, including the quest for success, independence, and achievement, alongside the role of education in inspiring students to initiate their businesses. Alamineh (2022), Yahya et al. (2019), and Benavides-Sánchez et al. (2022) have probed the interplay between factors derived from the theory of planned behavior, motivation, and an individual's inclination to commence a business venture. Extensive research has underscored the most pivotal determinants influencing university students' intentions to embark on entrepreneurship, with these factors being meticulously explored.

2.5.1 Entrepreneurial Motivation as a leverage tool for Entrepreneurial Intention

Entrepreneurial intention among university students can exert a substantial impact on entrepreneurial motivation (Malebana, 2021). Motivation serves as the driving force behind the realization of entrepreneurial goals, offering aspiring student entrepreneurs the impetus they need to channel their efforts effectively. The engagement of students in enterprise programs elevates their motivation levels to initiate their own business endeavors, subsequently enhancing the likelihood of transitioning from intention to actual startup launch (Hue et al., 2022). Individuals propelled by motivation are inclined to explore innovative concepts and untapped market opportunities, and the aspiration to establish a novel enterprise necessitates a foundation of pre-existing knowledge and insights (Alam et al., 2019). These findings underscore the pivotal role of entrepreneurial motivation in shaping the entrepreneurial intention of university students. Enterprise education programs that actively foster entrepreneurial motivation can heighten students' potential to venture into entrepreneurship. Consequently, these conclusions derive support from the research conducted by Vrontis et al. (2022), Koe et al. (2019), and Secundo et al. (2019).

In the context of the post-pandemic era, the relationship between entrepreneurial intention and motivation assumes heightened significance. The uncertainty and evolving market dynamics post-pandemic demand a deeper level of motivation, driving students not only to envision entrepreneurial endeavors but also to persistently pursue them in the face of obstacles (Dwivedi et al., 2020). The pandemic has spotlighted the need for innovative solutions and the capacity to seize upon untapped opportunities, both of which are intricately interwoven with entrepreneurial motivation (Bibri, 2022). In this context, fostering and nurturing the entrepreneurial motivation of university students holds promise for not only personal success but also as a catalyst for driving economic recovery, innovation, and resilience in the aftermath of the pandemic. Based on the aforementioned, the following hypothesis is derived:

Hypothesis 1: *Entrepreneurial motivation influences university students' entrepreneurial intention.*

2.5.2 The Need for Achievement Motive and Entrepreneurial Intention

Multiple empirically supported findings validate a positive correlation between the demand for Achievement and entrepreneurial decision-making and success (Bjekić et al., 2020). Notably, the need for Achievement underpins a sense of internal fulfillment. Maran et al. (2021) have pinpointed the desire for Achievement as a fundamental prerequisite for both Entrepreneurial Intention and eventual success. This distinct aspect is considered independently of the desires for power and affiliation. Their study concludes that the drive for Achievement and self-actualization serves as a discriminative factor in identifying diverse groups of entrepreneurs and assessing their degrees of accomplishment (Ramsay et al., 2017).

Conversely, limited research has been conducted to underscore the considerable impact of the achievement motive on entrepreneurial intention. Drawing from these insights, Hermawan et al. (2016) and

Khabibah et al. (2019) have posited that the urge for achievement and self-actualization are potent markers of entrepreneurial intention. The "need for achievement" may prove instrumental in comprehending entrepreneurial activities. Thus, the hypothesis is deduced from the research conducted by Ramsay et al. (2017) and Maran et al. (2021).

Hypothesis 1.1: *The need for achievement affects university students' entrepreneurial intention.*

2.5.3 Locus Of Control and Entrepreneurial Intention

Alghamdi et al. (2021) and Hsieh & Lee (2020) emphasized the significance of the locus of control in predicting the establishment of new start-ups. Alam et al. (2019) discovered a correlation between an internal locus of control, entrepreneurial intention, and an organization's potential for success. These studies on entrepreneurs, however, were conducted without considering the potential influence of perceived risk.

Annisa et al. (2021) and Kusumawijaya (2019) have identified the locus of control as a pivotal psychological trait that shapes entrepreneurial intention. Therefore, Mamun et al. (2021) and Sudarmiati & Hermawan (2020) have contributed to the formulation of the following hypothesis.

Hypothesis 1.2: *The locus of control has an influence on the entrepreneurial intention of university students.*

2.5.4 The Desire for Authority and Independence and Entrepreneurial Intention

Li et al. (2022), Antončič & Auer Antončič (2023), and Usman & Nabilla (2020) encompass entrepreneurial personality and motivations such as the desire for achievement, risk-taking behavior, ambitions, and the aspiration for independence and responsibility, as factors influencing entrepreneurial intention. The central driving force revolves around the need for authority and independence, with a close alignment to entrepreneurial intention. Entrepreneurs' yearning for authority and independence holds greater significance than mere financial success. Yoon et al. (2011), Alshammari et al. (2020), and Uddin et al. (2016) confirmed that students are motivated to embark on business ventures due to their yearning for independence. The paramount motivation for entrepreneurs in establishing a business is their pursuit of independence, driven by a profound desire for autonomy. The perception of risk and the propensity to take risks exert a direct influence on entrepreneurial intention. Therefore, Lihua (2022), Mei et al. (2022), and Mónico et al. (2021) have contributed to the formulation of the subsequent hypothesis.

Hypothesis 1.3: *The desire for authority and independence affects university students' entrepreneurial intention.*

2.5.5 Profit Motivation and Entrepreneurial Intention

El Nemar et al. (2016) and Saleh & Ibrahim (2021) verified that COVID-19 influenced the economic situation in Lebanon and degraded salary purchasing power. Tlais & McAdam (2021) and İpek (2022) confirmed that fresh graduates are not attracted to traditional jobs. Therefore, profit motivation has a direct influence on entrepreneurial intention. In other words, these studies verified that start-ups are generating higher income than conventional jobs. Thus, profit motivation is an essential determinant of entrepreneurial intention (Dabbous & Boustani, 2023).

Profit motivation as a variable influencing university students' entrepreneurial intention has been the subject of comprehensive review. Ramsay et al. (2017) and Maran et al. (2021) have found that the personal entrepreneurial goal to generate profits has a significant statistical effect on the entrepreneurial intention of university students. Based on the above studies, it can be hypothesized that profit motivation positively influences Lebanese university students' entrepreneurial intention. However, further research is needed to confirm this hypothesis.

Hypothesis 1.4: *Profit motivation has an influence on the entrepreneurial intention of university students.*

2.5.6 Entrepreneurial Education Programs and Entrepreneurial Intention

The most dominant result in studies on the impact of entrepreneurial education on entrepreneurial intention is a positive and weak effect, which has been confirmed through two meta-analyses. Students who have taken university-level entrepreneurship courses show greater intention to start a business compared to those who have not participated in such courses (Saleh & Ibrahim, 2021). This impact aligns with findings from several other studies. Yassine & Al-Harithy (2021) have demonstrated a lack of impact of entrepreneurial education programs on entrepreneurial intention. Student participation in these programs did not lead to improved entrepreneurial intentions, and these education programs showed no influence on intentions in the short or long term. The absence of impact could stem from reduced contact with the training environment, teachers, or other motivational sources after the training period. In an exceptional case, studies such as El Nemar et al. (2016) and Tlaiss & McAdam (2021) found an increase in entrepreneurial intention following exposure to entrepreneurship courses. This modest yet notable decrease may appear disappointing for proponents of entrepreneurship education. The reduction in intention affects students with both a weak and robust entrepreneurial culture and experience (El Chaarani & Raimi, 2022). Research posits that various factors could potentially impact the relationship - positively or negatively - such as familial entrepreneurship background, engagement in para-university experiences (Vrontis et al., 2022), extended periods abroad, or previous entrepreneurship training (Alam et al., 2019). Gender (Tlaiss & Kauser, 2019), culture (Al & Mostafa, 2019), and context-specific factors are additional variables that might influence the relationship between entrepreneurial education programs and entrepreneurial intention. Therefore, Yassine & Al-Harithy (2021), El Chaarani & Raimi (2022), and Hendieh et al. (2019) have helped in the synthesis of the following hypothesis:

Hypothesis 1.5: *Entrepreneurial education has an influence on the entrepreneurial intention of university students.*

2.6 Entrepreneurial Motivation and Perceived Risk

Shi & Wang (2021), Zhang & Xing (2023), and Stroe et al. (2018) studied the influence of Entrepreneurial orientation motivation, namely risk-taking, on organizational performance. These studies emphasized that an increase in entrepreneurial motivation led to an increase in perceived risk. Hence, the perception of risk is affected by entrepreneurial motivation factors. The perception of risk or change can significantly impact their intention and willingness to embark on new organizations. Sharma et al. (2023), Li et al. (2020), and Tyszka et al. (2011) underlined that students associate entrepreneurship with creating their own business, organizing and managing their own business, taking risks, and developing new products. Students with entrepreneurial motivation derived from educational programs, profit motivation, and the desire for authority and independence perceive risk and have a higher intention to start their business (Sun et al., 2023). Students are significantly less likely to associate the entrepreneurial spirit due to the perception of high risk-taking associated with financial loss. Entrepreneurial motivation decreases perceived risk, particularly due to developed skills. Consequently, the hypothesis is deduced from the work of Yin & Wu (2023), Sun et al. (2023), Yongchun et al. (2021), and Li et al. (2020).

Hypothesis 2: *Entrepreneurial motivation affects the level of perceived risk of university students.*

2.7 The Mediating Role of Perceived Risk

Numerous academic articles have experimented with the effect of perceived risk on students' intentions to start their businesses (Ramli et al., 2018). A study looked into the impact of perceived risk and perceived educational assistance on the entrepreneurial intention of university students. According to the study,

perceived risk has a detrimental effect on one's desire to start a business. Another study looked at the impact of perceived risk on entrepreneurial desirability and feasibility as determining factors in the intention to become an entrepreneur. According to Krichen & Chaabouni (2022), perceived risk has a detrimental effect on the intention of starting a business. Related to perceived risk, the fear of failure can potentially interfere negatively with the relationship between entrepreneurial purpose and intention. Entrepreneurs are likelier to choose risk-free or low-risk actions (Ilevbare et al., 2022). Liu et al. (2022) investigated the role of perceived risk as a mediating variable between the entrepreneurial need for achievement and opportunities recognition and perceived intention in an empirical investigation. They discovered a beneficial association between linking these variables. In other words, perceived risk mediates the relationship between entrepreneurial motivation and intention. Attitudes, fear of failure, subjective norms, and perceived risk mediate the relationship between entrepreneurial motivation and intention (El Chaarani & Raimi, 2022). In conclusion, perceived risk has a detrimental effect on college students' intention to start their businesses. The relationship between entrepreneurial purpose and conduct can be negatively regulated by the fear of failure, which is related to perceived risk. However, entrepreneurs must manage risks to launch and sustain a successful start-up. Consequently, the following hypotheses are deduced from the work of El Nemar et al. (2016), Tlaiss & McAdam (2021), and İpek (2022).

Hypothesis 3: *Perceived risk affects entrepreneurial intention of university students.*

Hypothesis 4: *Perceived risk mediates the influence of entrepreneurial motivation on entrepreneurial intention among university students.*

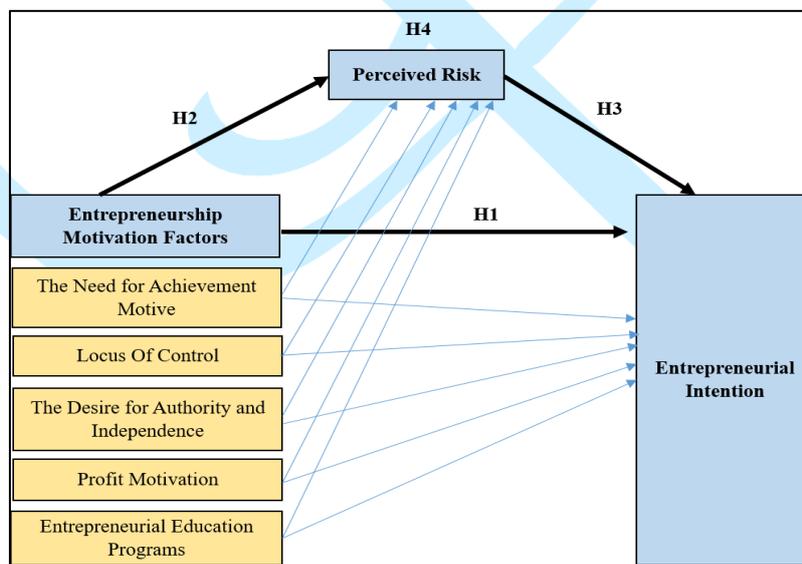


Fig. 1 Research Model

3. Research Methodology

The quantitative methodology employed in this study hinges on a survey approach, meticulously designed to conform to essential statistical prerequisites and ensure a comprehensive representation of the targeted population. The survey instrument, structured as a questionnaire, was systematically administered to gather insights from a cohort of university students from 5 universities in Lebanon, particularly addressing business potential graduates. The central objective of this questionnaire was to ascertain the causal linkages between entrepreneurial motivational factors and entrepreneurial intention, within the context of student entrepreneurship in the post-pandemic era. Furthermore, the survey aimed to elucidate the intricate role of perceived risk as a pivotal mediating variable in this framework. The survey instrument comprised a series of closed-ended questions, adopted to validate the previously synthesized hypotheses. The selected sample

encompassed senior university students (3rd year students) representing a diverse array of business majors. In relation to the sample size, this research employed G*power software, adhering to a statistical power of 80% and an effect size of 0.01, as suggested by Faul et al. (2007). Additionally, a significant Min R² value of 0.10 and α value of 0.01 were taken into account. The outcome of these parameters yielded a calculated range spanning from 143 to 194 participants, signifying that any sample size exceeding 194 individuals is deemed appropriate for the analysis of outcomes and the formulation of generalizable conclusions.

The survey was distributed electronically among 500 students using the simple random technique, and the number of collected responses was 326 (i.e. response rate: 65.2%). The questionnaire consisted of three major parts: the first part is related to the measurement of entrepreneurship motivation factors, including the need for achievement motive (5 items), locus of control (3 items), the desire for authority and independence (5 items), profit motivation (3 items), and entrepreneurial education programs (4 items). The second and third parts pertained to the measurement of perceived risk (3 items) and entrepreneurial intention (3 items), respectively.

This empirical section presents and discusses the outcomes of principal component and confirmatory analyses. The aim is to corroborate the research hypotheses and assess the model's fit concerning each facet of entrepreneurial motivation factors. An exploratory factor analysis (PCA) has been undertaken, and subsequently, the structural equation model confirms the five-dimensional scale after verifying its construct validity. The reliability, convergent validity, and discriminant validity of the constructs have been established. Each indicator displays shared variances with its corresponding construct, thereby demonstrating convergent validity. The objective of ensuring discriminant validity is to prevent one construct dimension from inadvertently defining another.

4. Results

The analysis is carried out in two stages. The first statistical analysis retained the most relevant items and dimensions. The second analysis confirmed the results using CFA indices and examined the research hypotheses.

Table 1 Rotated Component Matrix

		Factor loading	Communalities	KMO	AVE
Entrepreneurship Motivation Factors				0.708	57.4%
The Desire for Authority and Independence	DA1 I enjoy freedom in decision making	.789	0.663		
	DA2 At every step of business operations, I can make independent decisions.	.726	0.566		
	DA4 I aim to establish my work to manage my time better.	.636	0.513		
	DA3 I like to be my boss.	.633	0.564		
	DA5 I prefer to have the final decision	.531	0.584		
The Need for Achievement Motive	NAC2 I like circumstances where I can put my skills to use.	.812	0.711		
	NAC1 I enjoy circumstances when I can demonstrate my capabilities.	.681	0.507		
	NAC3 I possess an inner commitment to complete this assignment successfully.	.671	0.611		
	NAC4 I have clear goals and objectives for my career.	.633	0.549		
	NAC5 If I'm uncertain of my ability to succeed, I hesitate to take action.	.584	0.555		

	LC1 I'm always willing to admit and correct mistakes.	.772	.688		
Locus Of Control	LC3 I can start a business successfully with internal and external control over future events.	.720	.585		
	LC2 My future actions determine my life path	.709	0.585		
Entrepreneurial Education Programs	EEP1 The university collaborates with entrepreneurs and graduates to co-design the curriculum and courses.	.787	0.638		
	EEP2 The university has adopted entrepreneurial learning outcomes that direct the development and implementation of the curriculum.	.783	0.625		
	EEP3 The university offers a variety of informal learning opportunities (free training courses, entrepreneurship days, pre-incubation) to encourage the development of entrepreneurial abilities.	.725	0.551		
	EEP4 The university structural unit head encourages the participation of business owners, professionals, and practitioners in the educational process.	.516	0.537		
Profit Motivation	PM3 I have a financial plan for the next five years.	.803	0.660		
	PM1 Profit is the only aim of establishing an independent enterprise.	.796	0.679		
	PM2 I have no other way to get money, so I want to start my own business.	.625	0.508		
Perceived Risk			0.743	45%	
	PR2 My professional career would suffer if I failed to launch my enterprise.	.799	0.648		
	PR3 If I weren't successful in starting my own business, it would negatively impact my self-esteem.	.731	0.553		
	PR1 Taking on new projects will be tricky if I fail to start my enterprise.	.659	0.590		
Entrepreneurial Intention				0.656	55%
	EI1 My entrepreneurial endeavors will prioritize expanding the economy.	.835	0.835		
	EI3 I have the skills to succeed as an entrepreneur. Therefore, that's why I want to be one.	.781	0.781		
	EI2 The primary goal of my entrepreneurial endeavors will be to utilize my abilities and knowledge.	.578	0.578		

The EFA procedure identified the factorial axes, calculating the total explained variance and item factorial contributions. Entrepreneurship motivation factors, the independent variable, account for 57.4% of the explained variance. This multi-dimensional variable encompasses five constructs: the desire for authority and

independence, the need for achievement motive, locus of control, entrepreneurial education programs, and profit motivation. The sampling adequacy after purification reached 0.708, highlighting result reliability. Factor analysis results for perceived risk and entrepreneurial intention indicate excellent representation quality with communality > 0.5. The structure of these variables, as indicated by the principal components matrix, is unidimensional, with all retained items belonging to a single factor, demonstrating excellent loading (> 0.5). This supports the feasibility of further analysis.

The determinant of the correlation matrix being non-zero suggests it is positive definite, indicating the absence of multicollinearity or information redundancy.

To ensure construct reliability, Cronbach's alpha, an internal consistency indicator, was used, yielding values between 0.651 and 0.737 for entrepreneurship motivation constructs. These values indicate construct reliability based on the 0.6 threshold. Perceived risk and entrepreneurial intention, each with 3 items, exhibited satisfactory Cronbach's alpha values (0.657 and 0.771), thus demonstrating good internal reliability.

Table 2 Correlation Matrix and Internal Consistency

	DA	NAC	LC	EEP	PM	PR	Tolerance	VIF	Cronbach Alpha	Items
DA The Desire for Authority and Independence	1						.896	1.117	0.718	5
NAC The Need for Achievement Motive	0.206**	1					.808	1.238	0.735	5
L.C. Locus Of Control	0.190**	0.391**	1				.811	1.233	0.737	3
EEP Entrepreneurial Education Programs	0.186**	0.096	0.080	1			.721	1.388	0.692	4
PM Profit Motivation	0.131*	0.026	0.022**	0.078**	1		.976	1.025	0.651	3
P.R. Perceived Risk	0.093**	0.173**	0.059**	0.489**	0.091*	1	.739	1.354	0.675	3
EI Entrepreneurial Intention	0.580**	0.334**	0.488**	0.288**	0.144**	0.318**			0.771	3

The correlation is significant at the 0.01 level (bilateral). It disclosed that student entrepreneurship motivation has a positive effect on entrepreneurial intention. Table 3 depicts that the quality of the model is satisfactory because the χ^2 is lower than 3. Besides, GFI, AGFI, NFI, and CFI are satisfactory. These indices have not met the established threshold. A structural equation model confirms five dimensions of entrepreneurship motivation and the satisfactory goodness of fit.

Table 3 Model Fit Indices

Fit indices	Results	Threshold
Cmin/df	1.9	< 5
χ^2	1.2	< 3
NFI	0.906	> 0.9
CFI	0.910	> 0.9
RMSEA	0.006	<0.05
RMR	0.007	<0.05
GFI	0.919	> 0.9
AGFI	0.974	> 0.9

The analytical framework of entrepreneurial motivation and Entrepreneurial Intention is validated using path analysis. All fit indices ($\chi^2 = 1.2$; GFI=0.919; AGFI=0.974; CFI=0.910; RMSEA =0.006) meet the validity criteria.

Table 4 Results of Regression Weights

		Estimate	B	T	S.E.	C.R.	P
The Desire for Authority and Independence	➔ Perceived Risk	.039	-.039	.769	.048	7.818	0.00
The Need for Achievement Motive	➔ Perceived Risk	.116	-.109	2.055	.051	6.289	0.00
Locus Of Control	➔ Perceived Risk	.055	-.062	1.165	.043	11.301	0.00
Entrepreneurial Education Programs	➔ Perceived Risk	.452	-.486	9.791	.044	10.197	0.00
Profit Motivation	➔ Perceived Risk	.048	-.054	1.122	.042	10.142	0.00
The Desire for Authority and Independence	➔ Entrepreneurial Intention	.042	.034	.607	.049	9.850	0.00
The Need for Achievement Motive	➔ Entrepreneurial Intention	.077	.049	.838	.052	8.473	0.00
Locus Of Control	➔ Entrepreneurial Intention	.060	.056	.952	.043	7.387	0.00
Entrepreneurial Education Programs	➔ Entrepreneurial Intention	.135	.273	4.993	.052	2.601	0.00
Profit Motivation	➔ Entrepreneurial Intention	.091	.121	2.268	.043	2.102	0.00
Perceived Risk	➔ Entrepreneurial Intention	.234	0.318	6.039	.056	4.151	0.00

Hypotheses testing involves verifying the “C.R.” test, beta value and p-value. Table 4 depicts these standardized regression coefficients. This table clearly shows that the effect of entrepreneurial motivation on perceived risk and entrepreneurial intention is confirmed, with a C.R.> 1.96 and a p of 0.00 < 0.001. Accordingly, the research hypotheses are supported.

5. Discussion, Conclusions, and Recommendations

This paper represents an additional step toward validating a scale for measuring entrepreneurial motivation and its influence on Entrepreneurial Intention by considering the perceived risk as a mediating variable. Findings verified that entrepreneurship motivation factors significantly influence entrepreneurial intention among Lebanese university students.

The data collected granted a significant influence above the critical thresholds Cronbach α higher than 0.6; p -value < 0.00). Therefore, increasing students' motivation motivates them to create their organizations after graduation.

Entrepreneurial motivation drives students' actions to launch independent businesses and therefore achieve their entrepreneurship goals. Students enrolling in entrepreneurial education programs tend to be more motivated and likelier to become entrepreneurs. Based on the results, entrepreneurial motivation factors influence risk perception and entrepreneurial motivation among university students.

First, the desire for authority and independence is the initial motivational facet influencing entrepreneurial intention among university students. It is verified that this need decreases their risk perception. These results reconcile with current literature (Li et al., 2022, Antončič & Auer Antončič, 2023; Usman & Nabilla, 2020). Second, the need for achievement motives influences entrepreneurial intention among university students, showing compliance with extant literature (Maran et al., 2021). Similarly, the results have shown that the locus of control and entrepreneurial education programs reduce risk perception and increase entrepreneurial intention. The higher the level of university education, the more likely students are to start a business and become entrepreneurs, hence showing consistency with the existing literature (Alghamdi et al., 2021; Hsieh & Lee, 2020; El Nemar et al., 2016; Tlaiss & McAdam, 2021). Lastly, profit motivation leverages the perception of risk and students' intentions, creating a dynamic where the pursuit of profit not only influences risk perception but also shapes their intentions. Consequently, fostering an effective educational environment becomes crucial as it plays a pivotal role in supporting entrepreneurship, ultimately enhancing student motivation to embark on the journey of starting their own businesses. These results also comply with existing literature (Ramsay et al., 2017; Maran et al., 2021). It is verified that perceived risk is vital in entrepreneurship motivation and intention. Students, as future entrepreneurs, are planning to manage risks. High risk-taking seems to be essential for starting a business. However, the fear of failure can negatively affect entrepreneurial intentions and behavior. Perceived risk has a mediating effect on the relationship between motivation factors and entrepreneurial intention. In the post-pandemic age, where uncertainties and disruptions have become prevalent, the concept of high risk-taking remains pivotal for initiating new businesses. Nevertheless, the fear of failure, potentially amplified by the uncertainties brought about by the pandemic, can cast a shadow on entrepreneurial intentions and behaviors. It is in this context that the role of perceived risk gains prominence, as it not only directly impacts entrepreneurial decision-making but also serves as a mediator between the various motivation factors and the ultimate intention to engage in entrepreneurial activities.

From a theoretical perspective, this paper contributed to the literature on entrepreneurial motivation, perceived risk and entrepreneurial intention among university students. It depicted a verified conceptual framework for future studies. Findings have practical implications for policymakers and educators, especially in the post-COVID19 era, pushing them to promote entrepreneurship mindsets among university students. The identified dimensions of entrepreneurial motivation influencing entrepreneurial intention should motivate policymakers and educators to design effective programs and policies promoting entrepreneurship among university students.

From a practical perspective, the findings of the study reveal a significant link between entrepreneurial motivation, perceived risk, and entrepreneurial intention. This research underscores that an individual's motivation to embark on entrepreneurial endeavors influences their perception of risk associated with starting a business. Importantly, this perception of risk subsequently impacts their intention to pursue entrepreneurship. These results hold significant implications, particularly in the post-pandemic era. In contexts such as Lebanon, where economic growth has stagnated post-pandemic, the need for innovative solutions and fresh economic avenues becomes crucial. To address this, universities and ministries should

consider integrating entrepreneurship-focused curricula. By nurturing an entrepreneurial mindset among students, these institutions can foster a willingness to think beyond conventional boundaries, effectively reducing perceived risks associated with entrepreneurship. Consequently, this shift in mindset can drive increased entrepreneurial intention, spurring a wave of new businesses and initiatives. Ultimately, such initiatives have the potential to invigorate the economic cycle, contributing to much-needed growth in Lebanon's post-pandemic landscape.

However, potential drawbacks of a strong motivation for authority and independence in entrepreneurship may include three critical facets that students and policymakers need to be aware of. First, the feeling of overconfidence due to a wrong calculation of potential risks. In other words, a strong motivation for authority and independence may lead to overconfidence, resulting in poor decision-making and risk-taking behavior. Second, the lack of collaboration originated from the high level of authority needed. That is to say that a strong motivation for authority and independence may lead to a lack of collaboration with others, limiting access to resources and expertise that could benefit the business. Third, students as entrepreneurs may face difficulties in delegation. A strong motivation for authority and independence is an obstacle for the entrepreneur to delegate tasks and responsibilities to others, which can limit the growth and scalability of the business.

Hence, universities should incorporate applied courses related to entrepreneurship. For instance, students should be motivated to apply a realistic business model and business plan. Besides, applied training on entrepreneurial projects provides students with the ability to master the tools and techniques to carry out all the missions related to the creation of a business and the management of small structures. University education must move from a logic of training to support. Indeed, the entrepreneurial culture universities are called upon to put in place must highlight the student's characteristics and stimulate his desire to achieve and take risks. The university is thus called upon to contribute directly to creating jobs and wealth by developing a new generation of entrepreneurs. The challenge, therefore, remains to develop teaching practices while preserving the initial mission of teaching and research.

Consequently, universities must develop their educational approaches to guarantee students the possibility of improving their entrepreneurial skills and therefore contribute to offering them a better integration chance into the labor market. Courses at the university level must be centered on creativity and the aspiration for independence. It is essential to guarantee efficient knowledge allowing students to realize their ideas while possessing the right skills to calculate precise risks.

6. Limitations and Future Research

This study is associated with a number of limitations that serve as gaps for future research. One of the main limitations of this research is the cross-sectional time horizon. A longitudinal study would have enabled better identification of entrepreneurial motivation and intention dynamics among students. The second limitation is related to the research method. The adoption of quantitative research could affect the reliability of the results. Qualitative research following an unstructured interview with fresh graduates could enrich motivation factors and highlight natural obstacles to becoming entrepreneurs. To consider prospects for generalizing results, similar studies could focus on samples from diverse geographical areas. Moreover, a multicultural approach could bring to light differences in the dimensions to be retained within the scale of entrepreneurial motivation and bring out new paths leading to a specific logic of implemented action. Finally, an exciting extension of the present study would be to model the determinants of business creation. Another alternative to factors stimulating entrepreneurship is conducting a comparative study with other universities in different areas or countries, thus showing the impact of entrepreneurship curricula on the students' perception of risk and intention to become entrepreneurs.

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All authors contributed equally to this research work.

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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.

References

1. Adnan, G., Lailatussaadah, L., Bin Jamil, A. I., Jannah, M., Muslim, B., & Erfiati, E. (2020). The Problems and Alternative Solutions for the Implementation of Entrepreneurship Education in the Higher Education: A Literature Review. *Tadris: Jurnal Keguruan Dan Ilmu Tarbiyah*. <https://doi.org/10.24042/tadris.v5i2.7264>
2. Al, R. A., & Mostafa, R. (2019). Entrepreneurial motivation and firm performance in Lebanon. In *Go-to-Market Strategies for Women Entrepreneurs: Creating and Exploring Success*. <https://doi.org/10.1108/978-1-78973-289-420191020>
3. Alam, M. Z., Kousar, S., & Rehman, C. A. (2019). Role of entrepreneurial motivation on entrepreneurial intentions and behaviour: theory of planned behaviour extension on engineering students in Pakistan. *Journal of Global Entrepreneurship Research*. <https://doi.org/10.1186/s40497-019-0175-1>
4. Alamineh, H. G. (2022). A Comparative Study on Influencing Factors of University and Technical and Vocational Education and Training (TVET) Graduate Students Intentions Toward Entrepreneurship: Evidence from Addis Ababa City, Ethiopia. *Journal of Global Entrepreneurship Research*. <https://doi.org/10.1007/s40497-022-00310-8>
5. Alghamdi, H., El-Hassan, A. K., Aldossari, W. S., & Alrasheed, A. T. (2021). Toward a female entrepreneurship education curriculum in Saudi Arabia. *Journal of Entrepreneurship Education*.
6. Alshammari, N. G. M., Al-Mamary, Y., Alwaheeb, M. A., Balhareth, H., Abdulrab, M., Ben Soltane, H., & Saleem, I. (2020). Factors Influencing Entrepreneurial Intentions among University Students in Saudi Arabia: Integrating the theory of planned behavior (TPB) and the Entrepreneurial Orientation Model (EO). *Journal of Industrial Integration and Management*. <https://doi.org/10.1142/s2424862220500189>
7. Alshebami, A. S. (2022). Psychological features and entrepreneurial intention among Saudi small entrepreneurs during adverse times. *Sustainability*, 14(13), 7604.
8. Alshumaimri, A., Aldridge, T., & Audretsch, D. B. (2012). Scientist entrepreneurship in Saudi Arabia. *Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-011-9230-y>
9. Amofah, K., & Saladrigues, R. (2022). Impact of attitude towards entrepreneurship education and role models on entrepreneurial intention. *Journal of Innovation and Entrepreneurship*. <https://doi.org/10.1186/s13731-022-00197-5>
10. Annisa, D. N., Tentama, F., & Bashori, K. (2021). The role of family support and internal locus of control in entrepreneurial intention of vocational high school students. *International Journal of Evaluation and Research in Education*. <https://doi.org/10.11591/ijere.v10i2.20934>
11. Antončič, B., & Auer Antončič, J. (2023). Psychological and sociological determinants of entrepreneurial intentions and behaviors. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2023.1076768>
12. Ardyan, E., & Wijaya, O. Y. A. (2018). Effect of the effectiveness of entrepreneurship education programs on entrepreneurial competency and business performance. *International Journal of Management in Education*. <https://doi.org/10.1504/IJMIE.2018.095172>
13. Arslan, A., & Kartal, S. (2022). The Effect of Structured Material Supported Collaborative Coding Workshops in Preschool Education on Students' Basic Skills. *International Online Journal of Education and Teaching*.

14. Astuti, R. D., & Martdianty, F. (2012a). Students' Entrepreneurial Intentions by Using Theory of Planned Behavior: The Case in Indonesia. *The South East Asian Journal of Management*. <https://doi.org/10.21002/seam.v6i2.1317>
15. Astuti, R. D., & Martdianty, F. (2012b). Students' Perception and Intention toward Entrepreneurship: Development of Planned Behavior Entrepreneurial Model on Six State Universities in Indonesia Rifelly. *International Conference on Enterprise Marketing and Globalization (EMG). Proceedings*.
16. Baidi, & Suyatno. (2018). Effect of entrepreneurship education, self efficacy and need for achievement toward students' entrepreneurship intention: Case study in FEBI, Iain Surakarta, Indonesia. *Journal of Entrepreneurship Education*.
17. Barba-Sánchez, V., Mitre-Aranda, M., & Brío-González, J. del. (2022). The entrepreneurial intention of university students: An environmental perspective. *European Research on Management and Business Economics*. <https://doi.org/10.1016/j.iedeen.2021.100184>
18. Bello, U. D., Sacramento, O., & Marques, C. S. (2021). Immigration, Entrepreneurial Activities and Social Change in Rural Contexts: A Theoretical Approach. *Revista Portuguesa de Estudos Regionais*. <https://doi.org/10.59072/rper.vi59.91>
19. Benavides-Sánchez, E. P., Moya-Clemente, I., & Ribes-Giner, G. (2022). Sustainable Entrepreneurship and Sustainable Development Goals: a bibliometric analysis. *Tec Empresarial*. <https://doi.org/10.18845/te.v16i1.5994>
20. Ben Hassen, T. (2022). A Transformative State in the Wake of COVID-19: What Is Needed to Enable Innovation, Entrepreneurship, and Education in Qatar?. *Sustainability*, 14(13), 7953.
21. Bibri, S. E. (2022). The social shaping of the metaverse as an alternative to the imaginaries of data-driven smart Cities: A study in science, technology, and society. *Smart Cities*, 5(3), 832-874.
22. Bienkowska, D., & Klofsten, M. (2012). Creating entrepreneurial networks: Academic entrepreneurship, mobility and collaboration during PhD education. *Higher Education*. <https://doi.org/10.1007/s10734-011-9488-x>
23. Bjekić, R., Strugar Jelača, M., Berber, N., & Aleksić, M. (2020). Factors Affecting Entrepreneurial Intentions of Faculty Students. *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*. <https://doi.org/10.7595/management.fon.2020.0024>
24. Botsaris, C., & Vamvaka, V. (2016). Attitude Toward Entrepreneurship: Structure, Prediction from Behavioral Beliefs, and Relation to Entrepreneurial Intention. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-014-0227-2>
25. Bouzakhem, N., Farmanesh, P., Zargar, P., Ramadan, M., Baydoun, H., Daouk, A., & Mouazen, A. (2023). Rebuilding the Workplace in the Post-Pandemic Age through Human Capital Development Programs: A Moderated Mediation Model. *Administrative Sciences*, 13(7), 164.
26. Bozeman, B., Fay, D., & Slade, C. P. (2013). Research collaboration in universities and academic entrepreneurship: The-state-of-the-art. *Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-012-9281-8>
27. Criaco, G., Minola, T., Migliorini, P., & Serarols-Tarrés, C. (2014). "To have and have not": Founders' human capital and university start-up survival. *Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-013-9312-0>
28. Croteau, M., Grant, K. A., Rojas, C., & Abdelhamid, H. (2021). The lost generation of entrepreneurs? The impact of COVID-19 on the availability of risk capital in Canada. *Journal of Entrepreneurship in Emerging Economies*, 13(4), 606-627.
29. Dabbous, A., & Boustani, N. M. (2023). Digital Explosion and Entrepreneurship Education: Impact on Promoting Entrepreneurial Intention for Business Students. *Journal of Risk and Financial Management*. <https://doi.org/10.3390/jrfm16010027>
30. Dayour, F., & Adam, I. (2022). Entrepreneurial motivations among COVID-19 induced redundant employees in the hospitality and tourism industry. *Journal of Human Resources in Hospitality & Tourism*, 21(1), 130-155.

31. Desalegn Fantaye, M. (2019). Factors Affecting Entrepreneurial Intention Among Graduating Students at Debre Berhan University, Ethiopia. *Journal of Investment and Management*. <https://doi.org/10.11648/j.jim.20190801.14>
32. Dias, Á., Patuleia, M., Silva, R., Estêvão, J., & González-Rodríguez, M. R. (2022). Post-pandemic recovery strategies: Revitalizing lifestyle entrepreneurship. *Journal of Policy Research in Tourism, Leisure and Events*, 14(2), 97-114.
33. Díaz-Casero, J. C., Ferreira, J. J. M., Mogollón, R. H., & Raposo, M. L. B. (2012). Influence of institutional environment on entrepreneurial intention: A comparative study of two countries university students. *International Entrepreneurship and Management Journal*. <https://doi.org/10.1007/s11365-009-0134-3>
34. Din, B. H., Anuar, A. R., & Usman, M. (2016). The Effectiveness of the Entrepreneurship Education Program in Upgrading Entrepreneurial Skills among Public University Students. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2016.05.413>
35. Dos Santos Braum, L. M., & Jorge Nassif, V. M. (2018). THE INTELLECTUAL STRUCTURE OF SCIENTIFIC PRODUCTION ON ENTREPRENEURIAL PROPENSITY: AN ANALYSIS IN THE LIGHT OF CO-CITATIONS. *ADMINISTRACAO-ENSINO E PESQUISA*.
36. Douglas, E., & Prentice, C. (2019). Innovation and profit motivations for social entrepreneurship: A fuzzy-set analysis. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2019.02.031>
37. Dvorakova, Z., & Polents, I. (2021). Entrepreneurship Education and Digital Literacy as Element of Innovative Learning. In *Lecture Notes in Information Systems and Organisation*. https://doi.org/10.1007/978-3-030-71397-3_19
38. Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., ... & Upadhyay, N. (2020). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. *International journal of information management*, 55, 102211.
39. El Charani, H., & Raimi, L. (2022). Diversity, entrepreneurial innovation, and performance of healthcare sector in the COVID-19 pandemic period. *Journal of Public Affairs*. <https://doi.org/10.1002/pa.2808>
40. El Nemar, S., Ghazzawi, K., El Danaoui, S., Tout, S., & Dennaoui, H. (2016). Entrepreneurship barriers and entrepreneurial inclination in Lebanon. *Management*, 6(1), 21-28.
41. Elia, G., Margherita, A., Ciavolino, E., & Moustaghfir, K. (2021). Digital society incubator: Combining exponential technology and human potential to build resilient entrepreneurial ecosystems. *Administrative Sciences*, 11(3), 96.
42. Estay, C., Durrieu, F., & Akhter, M. (2013). Entrepreneurship: From motivation to start-up. *Journal of International Entrepreneurship*. <https://doi.org/10.1007/s10843-013-0109-x>
43. Fabeil, N. F., Langgat, J., Pazim, K. H., & Mahmud, R. (2022). Self-Employment among Graduates during the Covid-19 Pandemic: Necessity or Opportunity Entrepreneurship Driven. *Journal of Economics and Business*. <https://doi.org/10.31014/aior.1992.05.01.400>
44. Fanea-Ivanovici, M., & Baber, H. (2021). PREDICTING ENTREPRENEURIAL AND CROWDFUNDING INTENTIONS – A STUDY OF ROMANIA AND SOUTH KOREA. *Amfiteatru Economic*. <https://doi.org/10.24818/EA/2021/S15/1003>
45. Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods*, 39(2), 175-191.
46. Fregnan, E., Scaratti, G., Ciocca, L., & Ivaldi, S. (2022). New working capabilities for coping with COVID time challenges. *Frontiers in Psychology*, 13, 814348.
47. Frolova, Y., Alwaely, S. A., & Nikishina, O. (2021). Knowledge management in entrepreneurship education as the basis for creative business development. *Sustainability*, 13(3), 1167.
48. García Lirios, C. (2020). Specification a model for study of intellectual capital. *Behavior Studies in Organizations*. <https://doi.org/10.32038/jbso.2020.03.01>
49. George, G., & Schillebeeckx, S. J. (2022). Digital transformation, sustainability, and purpose in the multinational enterprise. *Journal of World Business*, 57(3), 101326.
50. Guerrero, M., & Urbano, D. (2014). Academics' start-up intentions and knowledge filters: An individual perspective of the knowledge spillover theory of entrepreneurship. *Small Business Economics*. <https://doi.org/10.1007/s11187-013-9526-4>

51. Guerrero, M., Urbano, D., Cunningham, J., & Organ, D. (2014). Entrepreneurial universities in two European regions: A case study comparison. *Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-012-9287-2>
52. Havierníková, K., & Kordoš, M. (2019). Selected risks perceived by SMEs related to sustainable entrepreneurship in case of engagement into cluster cooperation. *Entrepreneurship and Sustainability Issues*. [https://doi.org/10.9770/jesi.2019.6.4\(9\)](https://doi.org/10.9770/jesi.2019.6.4(9))
53. Hayudini, M. A. A., Hussin, B. A., Aming, S. E., & Pangandaman, H. K. (2023). Effects and Perceptions of the COVID-19 Pandemic on Graduate School Students. *Kepes*, 21(2), 82-87.
54. Hendieh, J., Aoun, D., & Osta, A. (2019). Students' attitudes toward entrepreneurship at the Arab Open University-Lebanon. *Journal of Entrepreneurship Education*.
55. Hermawan, R. W., Soetjipto, B. E., & Rahayu, W. P. (2016). The Effect of Entrepreneurial Self-Efficacy and Locus of Control on Entrepreneurship Interest through Entrepreneurship Literacy. *International Organization of Scientific Research Journal of Business and Management*.
56. Hoogendoorn, B., van der Zwan, P., & Thurik, R. (2019). Sustainable Entrepreneurship: The Role of Perceived Barriers and Risk. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-017-3646-8>
57. Hsieh, C., & Lee, W. J. (2020). How would autonomist and autocratic teammates affect individual satisfaction on pre-founding entrepreneurship teams? *Journal of Small Business Management*. <https://doi.org/10.1080/00472778.2020.1815471>
58. Hue, D. T. M., Thao, T. P., Toan, P. C., Luong, H. D., Hao, P. T., Huyen, D. T., & Hoa, N. T. (2022). Factors Affecting Entrepreneurial Motivation and Intention of University Students in Hanoi, Vietnam. *International Journal of Modern Education and Computer Science*. <https://doi.org/10.5815/ijmecs.2022.02.01>
59. Hülsbeck, M., & Pickavé, E. N. (2014). Regional knowledge production as determinant of high-technology entrepreneurship: Empirical evidence for Germany. *International Entrepreneurship and Management Journal*. <https://doi.org/10.1007/s11365-011-0217-9>
60. Iglesias-Sánchez, P. P., Jambrino-Maldonado, C., Velasco, A. P., & Kokash, H. (2016). Impact of entrepreneurship programmes on university students. *Education and Training*. <https://doi.org/10.1108/ET-01-2015-0004>
61. Ilevbare, F. M., Ilevbare, O. E., Adelowo, C. M., & Oshorenua, F. P. (2022). Social support and risk-taking propensity as predictors of entrepreneurial intention among undergraduates in Nigeria. *Asia Pacific Journal of Innovation and Entrepreneurship*. <https://doi.org/10.1108/apjie-02-2022-0010>
62. İpek, Y. (2022). Entrepreneurial activism: Ethical politics and class-based imaginations of change in Lebanon. *American Ethnologist*. <https://doi.org/10.1111/amet.13109>
63. Iwu, C. G., Opute, P. A., Nchu, R., Eresia-Eke, C., Tengeh, R. K., Jaiyeoba, O., & Aliyu, O. A. (2021). Entrepreneurship education, curriculum and lecturer-competency as antecedents of student entrepreneurial intention. *The International Journal of Management Education*, 19(1), 100295.
64. Karmaker, C. L., Al Aziz, R., Palit, T., & Bari, A. M. (2023). Analyzing supply chain risk factors in the small and medium enterprises under fuzzy environment: Implications towards sustainability for emerging economies. *Sustainable Technology and Entrepreneurship*, 2(1), 100032.
65. Khabibah, F. U., Sani, F., Nurjanah, A. P., & Salimi, M. (2019). The Influence of Entrepreneurship Education, Self-Efficacy, and Locus of Control on College Student Entrepreneurial Interest in Elementary School Teacher Education. *Social, Humanities, and Educational Studies (SHEs): Conference Series*. <https://doi.org/10.20961/shes.v2i1.36177>
66. Koe, W.-L., Alias, N. E., & Othman, R. (2019). Factors Influencing the Intention towards Sustainable Entrepreneurship among University Students. *International Journal of Academic Research in Business and Social Sciences*. <https://doi.org/10.6007/ijarbss/v9-i9/6283>
67. Kosmynin, M. (2022). Social entrepreneurship organisations and collaboration: taking stock and looking forward. *International Journal of Entrepreneurial Behaviour and Research*. <https://doi.org/10.1108/IJEBR-02-2021-0144>
68. Kowang, T. O., Apandi, S. Z. B. A., Hee, O. C., Fei, G. C., Saadon, M. S. I., & Othman, M. R. (2021). Undergraduates entrepreneurial intention: Holistic determinants matter. *International Journal of Evaluation and Research in Education*. <https://doi.org/10.11591/ijere.v10i1.20733>

69. Krichen, K., & Chaabouni, H. (2022). Entrepreneurial intention of academic students in the time of COVID-19 pandemic. *Journal of Small Business and Enterprise Development*. <https://doi.org/10.1108/JSBED-03-2021-0110>
70. Kusumawijaya, I. K. (2019). The prediction of need for achievement to generate entrepreneurial intention: a locus of control mediation. *International Review of Management and Marketing*. <https://doi.org/10.32479/irmm.8330>
71. Lanero, A., Vázquez, J. L., Gutiérrez, P., & García, M. P. (2011). The impact of entrepreneurship education in European universities: An intention-based approach analyzed in the Spanish area. *International Review on Public and Nonprofit Marketing*. <https://doi.org/10.1007/s12208-011-0067-8>
72. Li, C., Murad, M., Shahzad, F., Khan, M. A. S., Ashraf, S. F., & Dogbe, C. S. K. (2020). Entrepreneurial Passion to Entrepreneurial Behavior: Role of Entrepreneurial Alertness, Entrepreneurial Self-Efficacy and Proactive Personality. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2020.01611>
73. Li, Y. Y., Wang, R. X., & Chi, C. Y. (2022). Who is more likely to start a business? Analysis of the factors influencing undergraduates' entrepreneurial intentions. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.829955>
74. Lihua, D. (2022). An Extended Model of the Theory of Planned Behavior: An Empirical Study of Entrepreneurial Intention and Entrepreneurial Behavior in College Students. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.627818>
75. Liu, M., Gorgievski, M. J., Zwaga, J., & Paas, F. (2022). Understanding and motivating student feedback seeking: Insights from a lean start-up based entrepreneurship program. *International Journal of Management Education*. <https://doi.org/10.1016/j.ijme.2022.100750>
76. Mahdaly, Z., & Usman, O. (2020). The Effect of Entrepreneurship Education, Self Effication, and Locus of Control on Entrepreneurship. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3637688>
77. Mahdavi Mazdeh, M., Razavi, S. M., Hesamamiri, R., Zahedi, M. R., & Elahi, B. (2013). An empirical investigation of entrepreneurship intensity in Iranian state universities. *Higher Education*. <https://doi.org/10.1007/s10734-012-9539-y>
78. Malebana, M. J. (2021). The Effect Of Entrepreneurial Motivation On Entrepreneurial Intention Of South African Rural Youth. *Academy of Entrepreneurship Journal*.
79. Mamun, A. Al, Fazal, S. A., & Binti Wan Mustapa, W. N. (2021). Entrepreneurial traits, competency, performance, and sustainability of micro-enterprises in Kelantan, Malaysia. *International Journal of Asian Business and Information Management*. <https://doi.org/10.4018/IJABIM.20210701.0a23>
80. Maran, T. K., Bachmann, A. K., Mohr, C., Ravet-Brown, T., Vogelauer, L., & Furtner, M. (2021). Motivational foundations of identifying and exploiting entrepreneurial opportunities. *International Journal of Entrepreneurial Behaviour and Research*. <https://doi.org/10.1108/IJEBr-05-2020-0291>
81. Maritz, A., & Brown, C. R. (2013). Illuminating the black box of entrepreneurship education programs. *Education and Training*. <https://doi.org/10.1108/00400911311309305>
82. Maritz, A., Li, A., Utami, W., & Sumaji, Y. (2022). The emergence of entrepreneurship education programs in Indonesian higher education institutions. *Entrepreneurship Education*. <https://doi.org/10.1007/s41959-022-00080-0>
83. Marniati, & Witcjaksono, A. D. (2020). Curriculum implementation, entrepreneurship motivation, and fashion entrepreneurship - case study of student learning outcomes in regular classes and entrepreneurship classes. *International Journal of Fashion Design, Technology and Education*. <https://doi.org/10.1080/17543266.2020.1799078>
84. Mei, H., Ma, Z., Zhan, Z., Ning, W., Zuo, H., Wang, J., & Huang, Y. (2022). University Students' Successive Development From Entrepreneurial Intention to Behavior: The Mediating Role of Commitment and Moderating Role of Family Support. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.859210>
85. Mohd Romzee Ibrahim, Ahmad Shuib, Sridar Ramachandran, & Syamsul Herman Mohammad Afandi. (2018). Community participation in tourism microenterprises among Amanah Ikhtiar Malaysia borrowers in Semporna, Malaysia. *International Journal of Business and Society*.

86. Mónico, L., Carvalho, C., Nejati, S., Arraya, M., & Parreira, P. (2021). Entrepreneurship education and its influence on higher education students' entrepreneurial intentions and motivation in Portugal. *BAR - Brazilian Administration Review*. <https://doi.org/10.1590/1807-7692BAR2021190088>
87. Morovati Sharifabadi, A., & Mofateh Zadeh, E. (2020). The evolution of university entrepreneurship over the past 20 years: a bibliometric analysis. *Entrepreneurship Education*. <https://doi.org/10.1007/s41959-020-00041-5>
88. Ndofirepi, T. M. (2020). Relationship between entrepreneurship education and entrepreneurial goal intentions: psychological traits as mediators. *Journal of Innovation and Entrepreneurship*. <https://doi.org/10.1186/s13731-020-01115-x>
89. Neves, S., & Brito, C. (2020). Academic entrepreneurship intentions: a systematic literature review. *Journal of Management Development*. <https://doi.org/10.1108/JMD-11-2019-0451>
90. Nowiński, W., & Haddoud, M. Y. (2019). The role of inspiring role models in enhancing entrepreneurial intention. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2018.11.005>
91. Nyock Ilouga, S., Nyock Mouloungni, A. C., & Sahut, J. M. (2014). Entrepreneurial intention and career choices: The role of volition. *Small Business Economics*. <https://doi.org/10.1007/s11187-013-9524-6>
92. Obschonka, M., & Stuetzer, M. (2017). Personality System. *Small Business Economics*.
93. Özsungur, F. (2019). The effects of technology acceptance and use behaviour on women's entrepreneurship motivation factors. *Asia Pacific Journal of Innovation and Entrepreneurship*. <https://doi.org/10.1108/apjie-09-2019-0070>
94. Philipus, A., & Gheta, K. (2022). Influence of Entrepreneurship Motivation Factors and Knowledge of Entrepreneurship on Entrepreneurship Interests of Students of the Faculty of Economics Management , University of Nusa Nipa Maumere. *Proceeding 2 Nd International Conference on Business & Social Sciences (ICOBUSS)*.
95. Pinto, S., Pinto, P., Hawaldar, I. T., & Sarea, A. M. (2019). Motivation and blockades for entrepreneurship among graduates. *International Journal of Scientific and Technology Research*.
96. Pinzón, N., Montero, J., & González-Pernía, J. L. (2022). The influence of individual characteristics on getting involved in an entrepreneurial team: The contingent role of individualism. *International Entrepreneurship and Management Journal*. <https://doi.org/10.1007/s11365-021-00768-0>
97. Prabandari, S. P., & Sholihah, P. I. (2015). The influence of theory of planned behavior and entrepreneurship education towards entrepreneurial intention. *Journal of Economics, Business & Accountancy Ventura*. <https://doi.org/10.14414/jebav.v17i3.360>
98. Praswati, A. N., Sari, N. P., & Murwanti, S. (2022). Youth Entrepreneurial Intention: Theory of Planned Behaviour and Social Cognitive Theory. *Benefit: Jurnal Manajemen Dan Bisnis*. <https://doi.org/10.23917/benefit.v7i1.18197>
99. Qosasi, A. (2021). An Investigation of Students' Interest in Entrepreneurship through Career Information Services and a Business Plan. *Quality - Access to Success*. <https://doi.org/10.47750/QAS/22.185.22>
100. Ramli, A., Shabbir, M. S., Bakar, M. S. Bin, Shariff, M. N. M., Yusof, M. S., & Ahmad, I. (2018). Mediating role of E- learning resources in developing entrepreneurial inclinations amongst undergraduate students at Universiti Utara Malaysia. *International Journal of Engineering and Technology(UAE)*. <https://doi.org/10.14419/ijet.v7i4.7.20381>
101. Ramsay, J. E., Pang, J. S., Ho, M. H. R., & Chan, K. Y. (2017). Need for Power Predicts Career Intent in University Students. *Journal of Career Assessment*. <https://doi.org/10.1177/1069072716639690>
102. Ratten, V., & Jones, P. (2021). Covid-19 and entrepreneurship education: Implications for advancing research and practice. *International Journal of Management Education*. <https://doi.org/10.1016/j.ijme.2020.100432>
103. Rueda Barrios, G. E., Rodriguez, J. F. R., Plaza, A. V., Vélez Zapata, C. P., & Zuluaga, M. E. G. (2022). Entrepreneurial intentions of university students in Colombia: Exploration based on the theory of planned behavior. *Journal of Education for Business*. <https://doi.org/10.1080/08832323.2021.1918615>
104. Rusu, V. D., Roman, A., & Tudose, M. B. (2022). Determinants of Entrepreneurial Intentions of Youth: the Role of Access to Finance. *Engineering Economics*. <https://doi.org/10.5755/j01.ee.33.1.28716>

105. Sadikovich, T. N. (2020). ... EDUCATION QUALITY MANAGEMENT AND MONITORING (AN EXAMPLE OF ADVANCED TRAINING FOR LEADERS AND SPECIALISTS OF PRESCHOOL of *Research and Reflection in Educational*
106. Saleh, H. A. (2014). The Perceptions of the Lebanese Students of Choosing their Career in Entrepreneurship. *Jordan Journal of Business Administration*.
107. Saleh, L., & Ibrahim, H. (2021). The Determinants of Entrepreneurial Intention among Bank Employees in Lebanon. *Journal of Business Theory and Practice*. <https://doi.org/10.22158/jbtp.v9n1p1>
108. Salun, M., Zaslavska, K., & Zmicerevska, D. (2019). Entrepreneurial universities: literature review. *Economics of Development*. [https://doi.org/10.21511/ed.18\(3\).2019.02](https://doi.org/10.21511/ed.18(3).2019.02)
109. Secundo, G., Ndou, V., Del Vecchio, P., & De Pascale, G. (2019). Knowledge management in entrepreneurial universities: A structured literature review and avenue for future research agenda. *Management Decision*. <https://doi.org/10.1108/MD-11-2018-1266>
110. Shabbir, M. S., Batool, F., & Mahmood, A. (2022). Trends in entrepreneurship education: a systematic literature review. *Higher Education, Skills and Work-Based Learning*. <https://doi.org/10.1108/HESWBL-05-2022-0105>
111. Sharma, G. D., Kraus, S., Liguori, E., Bamel, U. K., & Chopra, R. (2022). Entrepreneurial challenges of COVID-19: Re-thinking entrepreneurship after the crisis. *Journal of Small Business Management*, 1-23.
112. Sharma, S., Jain, E., & Kumar Sharma, S. (2023). Influence of Entrepreneurial Perceived Risk and Perceived Family Support on Entrepreneurial Intentions: Moderating Role of Gender, 13(1), 48–60. Retrieved from <http://eelet.org.uk>
113. Shekhar, P., & Huang-Saad, A. (2021). Examining engineering students' participation in entrepreneurship education programs: implications for practice. *International Journal of STEM Education*. <https://doi.org/10.1186/s40594-021-00298-9>
114. Shi, B., & Wang, T. (2021). Analysis of Entrepreneurial Motivation on Entrepreneurial Psychology in the Context of Transition Economy. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2021.680296>
115. Shi, J., Nyedu, D. S. K., Huang, L., & Lovia, B. S. (2022). Graduates' Entrepreneurial Intention in a Developing Country: The Influence of Social Media and E-commerce Adoption (SMEA) and its Antecedents. *Information Development*. <https://doi.org/10.1177/026666692111073457>
116. Skydan, O., Shvets, T., Plotnikova, M., & Kostyuk, L. (2019). Development model of territorial communities business and public administration. *Scientific Horizons*. <https://doi.org/10.33249/2663-2144-2019-82-9-3-12>
117. Stroe, S., Parida, V., & Wincent, J. (2018). Effectuation or causation: An fsQCA analysis of entrepreneurial passion, risk perception, and self-efficacy. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2018.01.035>
118. Sudarmiati, A. I., & Hermawan, A. (2020). The Effect of Entrepreneurial Self Efficacy, Subjective Norm, and Locus of Control on Entrepreneurial Intention Through Entrepreneurial Attitude in Economic Faculty Students of Universitas Negeri Makassar. *International Journal of Business, Economics and Law*.
119. Sun, J., Shi, J., & Zhang, J. (2023). From entrepreneurship education to entrepreneurial intention: Mindset, motivation, and prior exposure. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2023.954118>
120. Syam, A., Hasbiah, S., Yunus, M., & Akib, H. (2018). Determinants of entrepreneurship motivation for students at educational institution and education personnel in Indonesia. *Journal of Entrepreneurship Education*.
121. Syed, R. T., Singh, D., & Spicer, D. (2023). Entrepreneurial higher education institutions: Development of the research and future directions. *Higher Education Quarterly*. <https://doi.org/10.1111/hequ.12379>
122. Taha, K. A. S., Ramlan, S. N., & Noor, I. M. (2017). The Factors Affecting Entrepreneurial Intentions of University Students in Malaysia. *International Journal of Business and Technopreneurship*.
123. Tanduklangi, A., Muhsin, M. K., & Amri, C. (2020). Entrepreneurial Talent and Intention Among Undergraduate Students: Case Study at English Language Education Department. *International Journal on Advanced Science, Education, and Religion*. <https://doi.org/10.33648/ijoaser.v3i2.52>
124. Tatarko, A., & Schmidt, P. (2013). Is Individual Social Capital Linked to the Implementation of Entrepreneurial Intentions? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2324673>
125. Thao, O., & Shahrokh, N. (2021). Digital Source Adoption and Information-seeking Behaviours of entrepreneurs: A Systematic Literature Review. In *Econstor*.

126. Tlaiss, H. A., & Kauser, S. (2019). Entrepreneurial Leadership, Patriarchy, Gender, and Identity in the Arab World: Lebanon in Focus. *Journal of Small Business Management*. <https://doi.org/10.1111/jsbm.12397>
127. Tlaiss, H. A., & McAdam, M. (2021). Unexpected Lives: The Intersection of Islam and Arab Women's Entrepreneurship. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-020-04437-0>
128. Tyszka, T., Cieřlik, J., Domurat, A., & Macko, A. (2011). Motivation, self-efficacy, and risk attitudes among entrepreneurs during transition to a market economy. *Journal of Socio-Economics*. <https://doi.org/10.1016/j.socec.2011.01.011>
129. Uddin, M. A., Mohammad, S., & Hammami, S. (2016). Influence of demographic factors on the entrepreneurial intentions of university students in Oman. *Investment Management and Financial Innovations*. [https://doi.org/10.21511/imfi.13\(1-1\).2016.08](https://doi.org/10.21511/imfi.13(1-1).2016.08)
130. Ufua, D. E., Olujobi, O. J., Tahir, H., Al-Faryan, M. A. S., Matthew, O. A., & Osabuohien, E. (2022). Lean entrepreneurship and SME practice in a post COVID-19 pandemic era: a conceptual discourse from Nigeria. *Global Journal of Flexible Systems Management*, 23(3), 331-344.
131. Usman, O., & Nabilla, T. (2020). The Effect of Self-Efficacy, Motivation, and Independence to the Entrepreneurial Intention. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3637329>
132. Vliamos, S. J., & Tzeremes, N. G. (2012). Factors Influencing Entrepreneurial Process and Firm Start-Ups: Evidence from Central Greece. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-011-0043-x>
133. Vrontis, D., El Chaarani, H., El Nemar, S., EL-Abiad, Z., Ali, R., & Trichina, E. (2022). The motivation behind an international entrepreneurial career after first employment experience. *International Journal of Entrepreneurial Behaviour and Research*. <https://doi.org/10.1108/IJEBr-06-2021-0498>
134. Wan Nur Azlina Ibrahim, Soaib Asimiran, Arnida Abdullah, & Zulkornain Yusop. (2022). A Thematic Review on The Pattern on Trends on Entrepreneurial Research in Technical and Vocational Education and Training (TVET) from 2010 to 2020. *Journal of Positive School Psychology*.
135. Wiramihardja, K., N'dary, V., Al Mamun, A., Munikrishnan, U. T., Yang, Q., Salamah, A. A., & Hayat, N. (2022). Sustainable Economic Development Through Entrepreneurship: A Study on Attitude, Opportunity Recognition, and Entrepreneurial Intention Among University Students in Malaysia. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.866753>
136. Xiabao, P., Horsey, E. M., Song, X., & Guo, R. (2022). Developing Social Entrepreneurship Orientation: The Impact of Internal Work Locus of Control and Bricolage. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.877317>
137. Yahya, S. F. H., Abdulmalik, A. S., & Saleh, R. (2019). Entrepreneurial Intention among Business Students of the Lebanese International University (LUI). *Global Business & Management Research*.
138. Yassine, B., & Al-Harithy, H. (2021). Entrepreneurial Systems of Syrian Refugees as Stimulators of Host Economy: Case of Ouzaii (Lebanon). *Refugee Survey Quarterly*. <https://doi.org/10.1093/rsq/hdaa013>
139. Yin, L., & Wu, Y. J. (2023). Opportunities or Threats? The Role of Entrepreneurial Risk Perception in Shaping the Entrepreneurial Motivation. *Journal of Risk and Financial Management*. <https://doi.org/10.3390/jrfm16010048>
140. Yongchun, H., Shiliang, H., Zi, Y., & Guangming, L. (2021). Entrepreneurship or employment? The analysis of dynamic utility maximization from the perspective of behavioral economics. *Journal of Industrial Engineering and Engineering Management*. <https://doi.org/10.13587/j.cnki.jieem.2021.06.007>
141. Yoon, D., Tong, K., & Loy, L. C. (2011). Factors Influencing Entrepreneurial Intention Among University Students. *International Journal of Social Sciences and Humanity Studies*.
142. Zakhem, N. B., Farmanesh, P., Zargar, P., & Kassar, A. (2022). Wellbeing during a pandemic: An empirical research examining autonomy, work-family conflict and informational support among SME employees. *Frontiers in Psychology*, 13, 890265.
143. Zhang, Z., & Xing, Y. (2023). Impact of entrepreneurial orientation and risk sharing on organizational performance influencing role of news media and public opinion. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2023.1126743>
144. Ziritt Trejo, G., Taboada Hernandez, R., Moreno, Z., & Isabel Castellano, M. (2018). Public Management and Sustainable Development: Expression of Social Responsibility. *Innovation Management and Education Excellence Through Vision 2020, Vols I -XI*.