

DEVELOPING ENTREPRENEURIAL MINDSET OF UNDERGRADUATE STUDENTS: A SYNTHETIC LITERATURE REVIEWAalungir Shah¹ (Corresponding Author), Dr Rakhshanda Kaukab²**Original Article**

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Abstract

The objective of this paper is to explore an overview of the factors that influence entrepreneurial mindset (EM). The study also aims to outline the theories, areas of effective EM program structure, and attributes of a successful Entrepreneur, especially the areas left under-addressed. A comprehensive method of a synthetic literature review was employed to present the areas of EM concepts. A four-step process was applied to select and classify relevant papers. Research methods and sampling were analyzed from the perspective of EM development. Factors influencing EM were recommended through synthesis data of literature. No mutually considered EM concept was found. Instead, scholars have suggested and explored various number of attributes for developing EM. These attributes can be divided into antecedents of EM, Environment based attributes, and attributes associated with university program structure, and meta-cognitive attributes of EM. There is no consistent theory and definition found for EM related studies. To check the validity, The EM concept might be investigated with more socio-economic backgrounds, cultures, or families with diverse backgrounds people. This review of literature suggested the latest literature ranges between 2011 to 2021 by compiling core attributes of the EM concept at University, and at its antecedents. The study identified recent gaps and provided recommendations to overcome the problems and promote EM among university students.

Keywords: Entrepreneurship, Entrepreneurial Education (EE), Entrepreneurial Mindset (EM), Entrepreneurial Traits and Behaviors, Program Structure

Introduction

The term entrepreneurship is neither distinct nor easy and no direct definition has been provided by the researchers yet (Alberti, 1999). Several ways have been adopted to describe entrepreneurship clearly as a visionary progression, Innovations, and change. It prioritizes energy with zeal to implement critical thoughts and innovative solutions (Sharma and Chrisman et. al., 2004). According to Rowel (2011), Entrepreneurship Education (EE) aims to prepare young people to be responsible and entrepreneurial thinkers by practicing the EE skills and traits in real-life EE scenarios where various traits, namely, risk-taking, management of the results, and learning from the outcomes are focused.

Scholars argue that entrepreneurship was a learned behavior. A paradigm shift occurred in 2019 where such arguments have gone by the wayside once and for all. It is a fact that entrepreneurship is no longer considered to be the interest area of the rich, professional business

families or gender-specific but also a social group of middle-class families, Women, disabled, youth, and families, and the disabled, particularly, are transforming and developing their nation and using the sense of entrepreneurship to be in them to boost their economies.

According to Smith-Nelson (2011), the nature of EE should be to develop an opportunity-oriented entrepreneurial mindset for undergraduate students of business studies as the recent market requires graduates who not merely seek employment but those who are entrepreneurial-minded and generate jobs. Lourenco et al. (2013) points out that the development of an entrepreneurial vision and mindset is not the only agenda to enhance employability but employers are also looking for graduates that are equipped with Entrepreneurial skills. Such skills can enable them to deal with the difficult business environment, and personal life uncertainties, challenges, and complexities.

Research Problem

Entrepreneurship education is not only the teaching of certain skills or models to students but training them with certain competencies and behavior to become businessmen or entrepreneurs (Kuratko et al., 2005; Kalpana et al., 2019). Entrepreneurship education has been globally considered a source of strengthening the economy, especially in underdeveloped countries. However, one question of the area addressed in the literature review that why some people find or seek entrepreneurial opportunities and others do not.

There are still a great number of undergraduate students who seek jobs rather than create jobs after Entrepreneurial programs and therefore the scholars recommend that the research problem needs to be addressed with a cognitive approach while developing Entrepreneurship as a cognitive process (Gartner, 1989; Palich & Bagby, 1995; Shaver & Scott, 1991).

During the last decade, scholars have explored the dimensions and developing factors of EM and provided in-depth insight to work on the attributes and traits. However, these pieces need to be merged together to reveal a global picture. Moreover, EM has various perspectives as considered dominant in meta-cognitive by meta-perspective school of thought (Haynie, Shepherd, Mosakowski, & Earley, 2010), on other hand, some reveal a single attribute which is the influencing factor to think, adapt, and act like an entrepreneur (Baron, 1998, 2006; Shane & Venkataraman, 2000).

The objective of Entrepreneurial Education, therefore, is mostly restricted to providing the attributes to develop the entrepreneurial approach and cognition of students to think, adapt, and act like an entrepreneur. Moreover, the research also explores the theories adopted by researchers to develop the Entrepreneurial mindset. The study also proposed some core areas recommended by the various curriculums to develop EM.

Research Objectives

This study aims

1. To explore the dimensions and attributes which contribute to developing EM,
2. To provide the factors that develop the EM concept
3. To outline a framework for EM areas left unaddressed in university program.

Entrepreneurial Mindset (EM)

The term mindset is abstract of the Greek word "Metanoia", interpreted as a process of changing the mind and perception, and also from "Kairos" which means the right time to avail an opportunity (Myers, 2011). Similarly, the mindset is the source of liberty for people to avoid narrow-mindedness. McMullen and Kier (2016, p. 663) define EM as the potential to "*liberate entrepreneurs*

from erroneous preconceptions, such as that they can identify and exploit emerging profit opportunities”.

Dweck (2017) argues that mindset may not be necessarily fixed as claimed by some scholars; it can be dynamic and leads to continuous adaptation and growth. Gollwitzer (2012) further describes that the core reason why some believe mindset is to be fixed, it has various stages of development and some milestones need to be achieved without which progress to the next level is impossible.

McMullen and Kier (2016) believe that the entrepreneurial mindset is the skill to explore limited resources at the entrepreneur's disposal, considering risk-taking as a prerequisite to performing the entrepreneurial activity. According to Outsios and Kittler (2018), educational experiences are one of the factors which influence a person's entrepreneurial mindset.

Fayolle (2012) considers the Entrepreneurial mindset as the state of mind in organizing and aligning entrepreneurial activities and outcomes. According to Pollard and Wilson (2014), EM can be developed at all levels through performing various activities. Thus, if the students are not engaged in such activities, their mindset cannot be developed properly. However, Krueger (2015) claims that the Entrepreneurial mindset is a consistent cognitive phenomenon with a flexible mental structure, and this structure reflects the performance of entrepreneurial activities as added by Jena (2020).

Research Design

The method implemented for this research was a critical and comparative review of the results and findings found in the published research papers. A multi-step process for the pool of selected papers was used to include the more relevant papers in the research data. To search the papers published for the term “entrepreneurial mindset”, screening was done in the databases of (i) JSTOR, (ii) Emerald Insight, and (iii) Tylor & Francis.

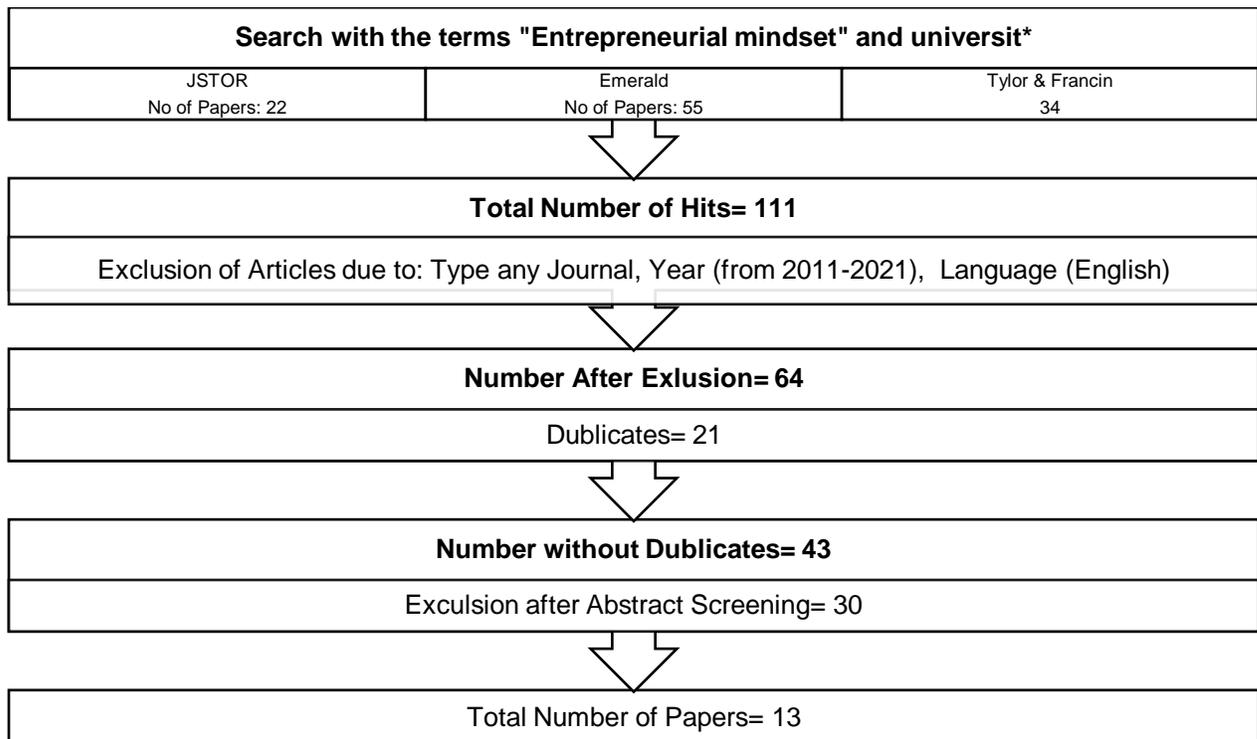


Figure 1: Flow Chart of Selecting Relevant Articles

Source: Own Representation

The screening applied four steps (See Figure 1) which include a screening of 111 papers, Limitation of papers filtered by the abstract and reduced number to 64 articles, and further narrowing down to headlines and the key words “Entrepreneurial Mindset” and reviewed and all the duplicate papers were removed included from different databases. Moreover, those papers which did not meet the criteria of “Only Journal Article” and “Language other than English” were further removed ranges from 2010 to 2021. Finally, the abstracts of these 30 papers were filtered and 17 papers not aligned with the research topics were further removed. Final 13 papers were selected for synthetic literature review.

Table 1: The Final List of the Articles

Author	Year	Title	Journal	Volume/ Issue/ Page
Giustina, S. and Gioconda, M.	2020	Entrepreneurship Education Centers in universities: evidence and insights from Italian “Contamination Lab” cases	International Journal of Entrepreneurial Behavior & Research	Vol. 26 No. 6
SoroushSaadat and Aliasghar Aliakbari	2021	“The effect of entrepreneurship education on graduate students’ entrepreneurial alertness and the mediating role of the entrepreneurial mindset”	Education & Training	
Sascha Kraus et. al.	2021	Video Gaming and Entrepreneurial Mindsets	Journal of Small Business and Enterprise	1462-6004
MME ‘Tshidi’ Mohapeloa	2017	Developing an entrepreneurial mindset within the social sector:	African Journal of Science, Technology	Vol. 9, No. 5
Silvia CarniniPulino	2022	Embedding the entrepreneurial mindset at a liberal arts university	Journal of the International Council for Small Business	VOL. 3, NO. 1,
Wang, J., et al.	2021	Impact of Entrepreneurial Education, Mindset, and Creativity on Entrepreneurial Intention: Mediating Role of Entrepreneurial Self-Efficacy	Frontiers in Psychology ORIGINAL RESEARCH published: 23 August 2021	Volume 12
Olawale, D., Spicklemire, D., Sanchez, J., Ricco1, G., Talaga, P., Herzog, J	2020	Developing the Entrepreneurial Mindset in STEM Students: Integrating Experiential Entrepreneurship into Engineering Design	International Journal of Process Education	Volume 11 Issue 1
Joshua J. Daspit , Corey J. Fox, and S. Kyle Findley	2021	Entrepreneurial mindset: An integrated definition, a review of current insights, and directions for future research	Journal of Small Business Management	
Dean A. Shepherd J. Michael Haynie	2010	Entrepreneurial Spirals: Deviation-Amplifying Loops of an Entrepreneurial Mindset and Organizational Culture	ET&P Baylor University	

Mark H. Davis, and Jennifer A. Hall	2015	Developing a new measure of entrepreneurial mindset:	Consulting Psychology Journal Practice and Research	
Emmanuel L.	2018	Entrepreneurial Mindset And Performance Of Small And Medium Scale Enterprises	Journal of Innovation,	Volume 6(2),
Lundmark, E, Krzeminska, A, & Dean A. Shepherd	2019	Images of Entrepreneurship: Exploring Root Metaphors and Expanding Upon Them	Entrepreneurship Theory and Practice	Vol. 43(1) p. 138–170
Janice Black & Leann Mischel	2020	Grassroots entrepreneurial program: developing best practices	Journal of Small Business & Entrepreneurship,	

Table 1: Bibliographical sources of the articles

Source: Own representation

Findings and Discussion

The articles were synthetically reviewed and analyzed to collect the findings for the research questions. The research intends to explore the factors of the research question. This study aims to explore and identify the dimensions and attributes which contribute to developing EM, and to provide the factors that develop the EM concept and framework for EM areas left unaddressed. Additionally, it also investigates and recommends the core practices and areas of EE curriculum at universities. The analysis reveals that although all articles deal with an area of the entrepreneurial mindset, the approaches to developing EM are different.

The first issue explored is the different approaches adopted by different researchers for EM. Entrepreneurship is an area that cannot be dealt with with a single theoretical approach; therefore led to multiple combinations of theoretical approaches. Secondly, the study explored the attributes and dimensions which effects EM not only at university but as an antecedent from pre-university contexts. Educational factors at university can have personal factors, group factors, and environmental factors that influence the Entrepreneurial mindset.

Furthermore, analyzing the articles, some practical and theoretical recommendations for the best teaching methods and contents were found. In designing the EE program structure, various teaching models, techniques, and content for the lecture are required for Entrepreneurial mindset and Entrepreneurial Intention.

To conclude, the research summary suggests that a higher entrepreneurial mindset is one of the main attributes of a career path. An Entrepreneurial mindset supports an individual to utilize his/her abilities with limited resources to contribute in foster the economy in growth and innovation

Factors Influencing Entrepreneurial Mindset

Theories Developing EM

Research on EM is designed on a multi-theoretical approach. Many designs and research models are used to frame research on EM problems. Describing the various models and theories, the part of the study will review and outline the most frequent models of EM research studies.

Maresch et al. (2016), and Rauch & Hulsink (2015) used the Theory of Planned Behaviour to investigate the effects of EE on the entrepreneurial mindset of undergraduate students and further discovered that students involved in EE program show an increase in entrepreneurial actions and perceived behavioral control. The same fact was also proved through Knowledge Spillover Theory

designed to develop an entrepreneurial mindset (Fyen et al., 2019) at universities, as identified by Acs et al., 2013, the entrepreneurial mindset can be better fostered as universities are knowledge-intensive where it is possible to foster an entrepreneurial mindset and activities (Civera et al., 2019).

Human Capital theory is also recommended for studies related to entrepreneurial mindset, as Universities contribute to innovation, human capital training, and knowledge generation (Audretsch et al., 2016). Human capital is the collection of idiosyncratic skills, motivation, experience, and knowledge to explore and exploit various opportunities of entrepreneurship for the success of a firm. As human capital theory suggests that universities should use strong human capital assets to train the students in a multidisciplinary approach (Fyen et al., 2019). Thus, using the multidisciplinary approach, the professor, researchers, and managers are recommended to work in collaboration. Moreover, universities can use human capital assets to contribute to the local economy (Philpott et al., 2011).

Many scholars recommended Experiential Teaching Models for developing an entrepreneurial mindset (Honig, 2004; Wright et al., 2017). Honig (2004) and Wright et al. (2017) stressed that an entrepreneurial mindset is very challenging to be fostered through education without being actively involved in entrepreneurial learning activities. Similarly, Neck and Greene (2011) also stress that practice and experience are core strategies for EM.

Kraus S. et al. (2021) have stated that Cognitive theory can be used to identify the manners individuals consciously and unconsciously get involved in various forms of mental processes to persuade them to expose behavior as a specific human activity. Moreover, a metacognitive theory of the entrepreneurial mindset which is linked with the theory of cognitive is proposed to identify the level of relationships between the attitudinal and cognitive abilities entrepreneurs use for seeking opportunities and further performing action; however, this theory is still emerging and defined as a set of skills, attitudes, and beliefs required to perceive and avail new opportunities in a relevant context (McGrath and MacMillan, 2000; Endres and Woods, 2007).

Table2: Theory Recommended for EM Development

Author	Theory Recommended for EM Development
Kraus S. et al. (2021)	Cognitive Theory
Dweck (1999; 2000)	Self-Theories Of Intelligence
Maresch et al. (2016), and Rauch & Hulsink (2015)	Theory of Planned Behaviour
Audretsch et al., 2016; Fyen et al. 2019	Human Capital Theory
Liguori et al., (2013)	Trait Activation Theory
Wright et al., (2017)	Experiential Teaching Models
Fiske, 2003; Lehman, Chiu, & Schaller, 2004	Cultural Psychology (Cultural Psychology Framework)
Bandura (1992)	Social Cognitive Theory

Source: Own representation

Bandura (1992) proposed social cognitive theory in Entrepreneurial education to enhance an individual's self-efficacy. It enables individuals to perform entrepreneurial tasks such as seeking an opportunity, designing business feasibility, and implementing a business plan. Additionally, Neneh (2020) pointed out that self-efficacy can be developed through the process of social-cognition as proposed by the social cognitive theory that describes the cognitive mindset of individuals in the shape of entrepreneurial intention and behavior.

Many scholars claim that personality traits and EM are linked. Shane and Nicolaou (2015) explore that creative personalities are the functional part of genetic characteristics and enable individuals to express entrepreneurial behaviors. Moreover, Antoncic et al. (2015) and Miller (2015) find a positive relationship between Big Five personality characteristics and Entrepreneurial potential and further suggest some personalities may have downsides to restrict entrepreneurial tasks. Klotz and Neubaum (2016) also advised exploring the “Dark Side” of personality for the maximum outcome (for example, narcissism and psychopathy). Whether personality traits affect EM or not, the researchers are encouraged to apply the Trait activation theory (see work by Liguori et al., 2013). Similarly, researchers should consider both the positive and negative effects of personality traits on EM, exploring the right time of effects emergence.

Moreover, Cultural Psychology is proposed to explore the relationship between an individual’s mindset and Culture termed “entrepreneurial news”—the greater the entrepreneurial information, the more mindset, and culture will be. The self-theories of intelligence were designed and developed by Dweck (1999; 2000) to provide insight into the psychological or motivational processes required for goal achievement namely, fixed mindset and growth mindset. Johnson (2009) elaborates that people with a fixed mindset possess low-performance targets and have a lack of confidence to perform tasks which in turn leads them to remain in a helpless manner pattern in challenging situations. On the other hand, growth mindset people believe to set learning goals with multiple strategies for success. These individuals express and learn new ideas in any situation they face. (Dweck, 2006; Johnson, 2009). The core reason behind developing a growth mind is that most successful business leaders are a growth mind (Dweck, 2006).

Development of Effective EM Program

The process of developing an entrepreneurial mindset requires diverse activities and interventions in EE programs at universities to stimulate thinking processes and simultaneously impart knowledge. For this purpose, this study has found some interventions and activities for EE during the literature reviews.

Recently, the focus is shifted from the assumption that entrepreneurs are innately characterized by traits, namely, risk-taking approach, high level of intelligence, and creativity to the development of EE programs (Kuratko, 2005; Hodgetts and Kuratko, 1989). Avramenko (2012), Solomon (2008), Bliemel (2013), and Chang et al. (2014) has recommended that an individual can perceive productive entrepreneurial stimulation if they are engaged in activities of business simulations and entrepreneurial scenarios, presenting and pitching entrepreneurial ideas, studying entrepreneurship case studies, and learning from role models and guest speakers can all have a positive impact.

Olutuase et al. (2018) identify and recommend universities develop an entrepreneurial ecosystem doctored as per the needs of students. Solesvik et al. (2013, p. 748) claim that Universities need to design an entrepreneurially-specific education (ESE) to upgrade students’ risk-taking assets and entrepreneurial alertness required for success in entrepreneurial careers. Entrepreneurship education is a source of potential for young emerging entrepreneurs to seek and produce opportunities (Sierlkhatim and Gangi, 2015). Moreover, to succeed in set entrepreneurial programs, entrepreneurial minds need to be structured through EE developing a mental habit through learning processes (Schmidt and Ford, 2003).

Bell and Bell (2020) have stressed that effective EE programs should be framed not only on theoretical groundings but also on knowledge about entrepreneurship and should while critically applying the knowledge in practical experiences. Nowinsky et al. (2019) claim that involvement in project-based work can enable students to build their self-efficacy along with tangible outcomes. Additionally, specific attention on creating value can drive the students' intentions to identify entrepreneurial opportunities (Lackeus, 2020). Many universities have, therefore, led to various curricular and extracurricular programs with the target to develop entrepreneurial mindsets in the area of knowledge-intensive entrepreneurship (Beckman et al., 2012; Ndou et al., 2018).

Fyen et al. (2019) find that Universities are subjected to providing "out of the box" solutions to complex societal challenges. Modern trends demand that universities adopt interdisciplinary teamwork in EE programs. To achieve this approach, universities need to combine several disciplines and change the complex university organizational structure which is a challenge for policymakers and leaders (Fyen et al., 2019). Moreover, universities are increasing the number of EE courses all over the world (Fretschner and Weber, 2013; Katz, 2003; Kuratko, 2005; Solomon, 2007; Varano et al., 2018). Fiore et al. (2019) have recently developed An interesting entrepreneurship course called the LISTO project. The course is an online project and useful to be addressed in COVID-19 pandemic-like situations. Similarly, EE was enriched by the launching of Contamination Labs (CLabs) in Italy to develop entrepreneurial mindsets of students from different educational backgrounds while creating a linkage with university and local entrepreneurial ecosystems (OECD/EU, 2019). Furthermore, Vesa and Harviainen (2019) stressed the use of games to develop cognitive skills and enhance certain skills like organizational behaviors, administrative control, processing speed, attention control, and spatial ability (Schutter and Abeele, 2010).

Entrepreneurs are intended to be trained to launch ventures for ongoing triple outcomes, namely economic, social and environmental. To develop an entrepreneurial mindset, the universities should incorporate social and environmental issues in the EE curriculum for conscious awareness on different educational levels. Responding to gaps and focusing on social issues should be part of the new generation of entrepreneurs. Such social focus may be obtained by highlighting issues such as gender, hunger, gender, and environment.

The IFE recommended some core objectives and areas to develop an entrepreneurial mindset at universities such as (a) Developing life skills and empowering the students to create social, economic, and environmental issues (Carey et al., 2021) through experiential learning; (b) developing tools for engaging entrepreneurs (c) Persuading students and faculty member to research Entrepreneurship, and (d) creating and capturing synergies for making all initiatives sustainable.

Many scholars have designed personality instruments such as Cattell, Eber, & Tatsuoka, (1970) introduced 16PF, and the Myers-Briggs Type Indicator (MBTI) was developed by Myers, McCaulley, & Most (1985) while measures of the Five Factor Model were published by Costa & McCrae (1992). However, no significant instrument was developed to measure EM none of which was designed as a measure of EM and to predict its entrepreneurial outcomes.

Only a few instruments are specifically designed to measure EM and scholars often recommend these instruments for students. For instance, the General Enterprising Tendency (GET) test was developed to assess and evaluate five attributes of entrepreneurship, namely, need for achievement, autonomy, creative tendency, calculated risk-taking, and internal locus of control designed by the Durham University Business School (1988) to measure individuals five facets (e.g., Cromie & Callaghan, 1997). To measure four important EM attributes, such as the need for

achievement, self-esteem, personal control, and innovation, The Entrepreneurial Attitude Scale (EAS; Robinson, Stimpson, Heufner, & Hunt, 1991) test is applied to students.

Another instrument recommended for measuring EM is The Measure of Entrepreneurial Tendencies and Abilities (META; Ahmetoglu, Leutner, & Chamorro- Premuzic, 2011) used to assess entrepreneurial awareness, entrepreneurial creativity, opportunism, and vision. University programs should incorporate these instruments into the curriculum. However, the instruments developed are not comprehensive and the researcher needs to be encouraged to include a larger set of individual traits and attributes of an entrepreneurial mindset to provide a more systematic and comprehensive approach to measuring the facets of EM.

Recent renowned entrepreneurship programs design five classes system: A foundational class to establish an entrepreneurial mindset, two classes to implement EM into practice, a class to focus on applied learning, and one class to understand entrepreneurial finance (Schramm, 2012).

Entrepreneurship education needs to be modeled on effective pedagogies. The review of articles suggests the following recommendation for Entrepreneurial outcomes suggested by various scholars:

Table3: Recommendations for Effective EM Program

Pedagogies/ Strategy/Technique	Content For Curriculum	Instruments for Measuring EM
• Case Studies	• Communication Skills	Myers-Briggs Type Indicator
• Practicums Or Internships	• Money Management,	personality instruments such as the 16PF
• Experiencing Failure	• Hiring People To Selling Products	Five-Factor Model
• Writing Formal Business Plans	• Services, Handling	General Enterprising Tendency (GET) test
• Presentation Skills	• Risk To Handling Ambiguity	The Entrepreneurial Attitude Scale
• Promotional Activities	• Accomplishing Organizational Goals;	
• Ethnographic Approach	• Solving Business Problems	
• Illustrative Case Studies	• Directing Others In Accomplishing Tasks	
• Leading Teams	• Working With Others Of Diverse Backgrounds	
• Problem-Based Learning	• Leading Through Innovation	
• Peer And Personal Coaching	• Having Self-Discipline	
• Service Or Applied Learning	• Managing Professional Networks	
• Active Learning	• Managing Projects	
• Personal Development Of Such Skill	• Being A Self-Starter	
• Student-Driven Initiatives For Personal Development	• Recognizing Business Opportunities	
• Learn Do Share Program To Stimulate Creativity	• Being Adaptable	

• Interacting With Successful Entrepreneurs	• Entrepreneurial Leadership	
• Celebrating International Entrepreneurship Week	• Start-A-Business	
• Celebrating Local Entrepreneurship Week	• Grow-A-Business	
• Offering Survey Class with full-time entrepreneurs' mentorship	• Option Between Start-A-Business Or Grow-A-Business, and A Practicum	
• Taking Action In A Non-Classroom Context	• Web Site Design	
• Attending Regional Or National Business Plan Competition		
• In Service Entrepreneurship By Initiating A Funds-Generating Venture For A Non-Profit		
• Consult With A Small Business		
• Facilitate A Start-Up Project With A Client		
• Experiential Learning Project		
• Multi-Tasking		
• Customized Learning		
• Mentoring and Continues Feedback		
• Just-In-Time Type Of Learning		
• Less Formal Learning Environment		
• Interpersonal Relationship With Faculty Through Customization Of Program		

Table 3: Bibliographical sources of the articles

Source: Own representation

Many scholars have recommended various ingredients of experiential methodologies widely applied in EE programs and they include: problem-based learning, coaching (Personal & Peer) (Falck, Heblich, and Luedemann 2012), applied learning (Gilbert 2010), active learning (DeTienne and Chandler 2004), and 5) having entrepreneurial minds with the ability to take action even in ambiguous situations (Crayford, Fearon, McLaughlin, and van Vuuren 2012).

The university should also incorporate student-driven initiatives for individual development, and Learn Do Share program to stimulate creativity, problem-solving, and research embedded in key courses. Moreover, In the Chinese context of entrepreneurship, universities provide ample opportunities for students to interact with successful entrepreneurs to learn and acquire some innovative ideas regarding launching new ventures. Entrepreneurial intention can be developed through motivation from teachers and peers (Barba-Sánchez and Atienza-Sahuquillo, 2018).

Janice Black & Leann Mischel (2020) conducted the research and found that the Development of EMIs carried out by Entrepreneurial Leadership in various universities with on creativity and innovation, entrepreneurs' traits and attributes, and identification of opportunities identification. As it is essential to have a similar mindset between the entrepreneur and the intrapreneur, it can be supported by the involvement of students in entrepreneurial clubs and activities such as a week celebrating international entrepreneurship and a week celebrating local

entrepreneurship. The universities also focus on Personal Ejl Skill Development by allocating flexible elective courses in the programs. Moreover, students lacking innovation orientation and creativity can be offered an additional management entrepreneurship course as the advanced electives courses may be very personalized and applied through Survey classes (With Entrepreneurs' mentoring).

Janice Black & Leann Mischel (2020) stresses on the importance of two class options: 1) start-a-business or 2) grow-a-business. Implementing the classes, students work on two-term projects to resolve a problem while implementing an opportunity plan (a business plan or model) or an innovation implementation plan (growth or change in plan or model). Furthermore, EM development needs the students to take action in a non-classroom context. Such context may include: demonstrating interest in global incidences of entrepreneurship, investigating small business setups through internships, presenting effective business plans regionally or nationally, or engaging in service entrepreneurship to generate funds for a non-profit. Finally, students can practically work on their dreams, and start consultation with a small business for a new venture-launch project.

Moreover, Janice Black & Leann Mischel (2020) also found that The Entrepreneurship Course should have major experiential learning projects. Experiential learning can be defined as a learning activity ideally arranged in an external environment. They also explored that three courses should be part of the Entrepreneurship program. The program includes three required courses: Entrepreneurial Leadership class where students are assigned tasks to make a documentary of an entrepreneur or design a feasibility report for a new venture, and a Start-A-Business class to design a full business plan model for launching a new business venture, and a Grow-A-Business class for proposal of growth project and project implementation plan.

The recent generation is multi-tasking with short attention and diverse background (Kraus and Sears 2008). Thus, Sandeen (2008) offers customized learning where the faculty also provides mentorship and feedback throughout the process. Moreover, Price (2011) identified five pedagogical preferences, namely just-in-time type of learning, less formal, learning environment, faculty interpersonal relationship through a customized program, active learning, and directed learning. Similarly, the final step is to review and redeveloped the instructional approach and program structure utilizing entrepreneurship practices and the needs of the students can be crafted to achieve the program goals.

To sum up, the plan should begin with a description of the institutional environment, forwarding to the new entrepreneurial program goals, and finalizing it with an effective selection of pedagogy and assessment tools.

Attributes of Developing EM

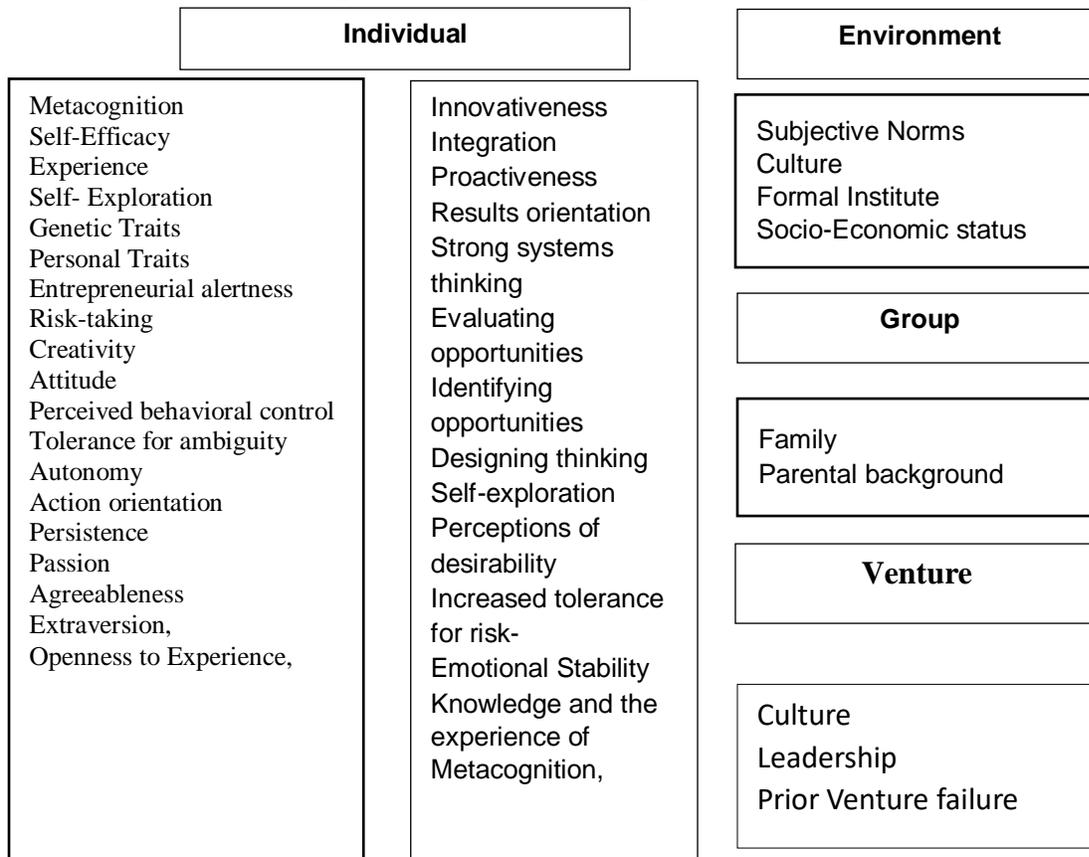
A certain number of attributes and traits are required for EM development in an entrepreneur. Such traits and attributes are indicators and core skills for success in the selection and execution of entrepreneurial activities.

Entrepreneurial alertness is considered a key concept and attribute in entrepreneurial research (Tang et al., 2012) which is a fundamental concept of opportunistic entrepreneurs (Gaglio and Katz, 2001; Minniti, 2004). Kirzner (1973) defines the word alertness as the identification of entrepreneurial opportunities. Secondly, a scholar considers alertness as an entrepreneurial mindset based on previous knowledge, and the skills of pattern recognition (Cui et al., 2021).

Daspit et al. (2021) consider that entrepreneurial experience is one of the key factors of EM which includes educational experience, broad vision, and recognition of opportunities. Pollard and Wilson (2014) further reveal the factors to develop EM through (1) the capacity of thinking creatively, strategically, analytically, and reflectively, (2) self-confidence, (3) the ability to collaborate, (4) well-developed communication skills and (5) an understanding of the current business context.

As recommended by Krueger and Sussan (2017), EM can be learned, and to become an entrepreneur it is required to be innovative, creative, proactive, and risk-taking (Kollman et al., 2007; Kreiser et al., 2013) associated as soft skills for an entrepreneurial mindset. Moreover, scholars suggest that The EM can be grown and matured by four basic attributes: (a) strong values that align with the overall liberal arts mission; (b) leadership support, with a strong recognition of the value of an EE in shaping motivation, identity transformation, and self-efficacy; (c) a vision of what an EE can look like at a liberal arts university; and (d) meticulous execution that captures internal and external synergies. Moreover, Risk-taking has been considered about perception, propensity, and behavior.

Figure 2: Factors Affecting Entrepreneurial Mindset



Source: Self Representation

Miranda et al. (2017) reveals the influence of attitude, subjective norms, and perceived behavioral control on creativity and entrepreneurial intention and concluded that learner becomes more creative when they are involved in entrepreneurial activities. Perceived behavioral control can be defined approach to achieving and reacting to goal-oriented tasks (Barbaranelli et al., 2019). Self-

efficacy is mostly recommended for researchers for a consistent entrepreneurial approach and goal orientation (Newman et al., 2019). Moreover, the approach to self-efficacy is abstract from social cognitive theory.

According to the literary analysis of Lau et al. (2012), 23 earlier studies ranked various characteristics of entrepreneurs. The attribute of entrepreneurial attributes of innovativeness emerges 14 times, integration with 7 counts, proactiveness with 6 counts, and results in orientation with 5 counts respectively. Moreover, Lau et al., (2012) defined integration as the ability to be involved in all business dimensions and become a strong systems thinker who can deal with a complex situation. Additionally, self-exploration and disposition as antecedents are two other attributes explored by researchers for effective EM. To explore, Moore et al. (2021) find that entrepreneurs with ADHD possess more intuitive cognitive styles, and gain more entrepreneurial alertness than those with no ADHD.

Conclusion

Our overreaching contribution is to find the gaps in program structures designed at universities for Entrepreneurial intention. The study explores and outlines various best practices and focuses on identifying the key factors required for developing EM. The study has found that all the factors influencing the EM of students and development of attributes are not possible in all contexts. However, the program structures can be customized as per the local context with a less formal approach.

Limitations and Future Research

The factors that are influencing the entrepreneurial mindset are culturally and contextually diverse. The cultural context performs the role of an antecedent to influence entrepreneurial mindset and entrepreneurial intentions through different social norms, educational and socio-economic backgrounds, or attitudes. Therefore future research should focus on the customization of EE programs in different national settings while aligning them with best international practices. Moreover, the universities need to conduct various personality or cognitive tests for assessing the pre-requisite skills of EE students before registering at university and focus on developing such testing instruments through research. The researchers are also encouraged to conduct studies in early grades to produce students with an entrepreneurial mindset. All the recommended attributes, theories, and pedagogical techniques of this study may be incorporated in developing university structures and EM testing instruments.

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