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**“EMBA as an Entrepreneurship inductor:
The ISCTE Executive Education case”**

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"I'm convinced that about half of what separates successful entrepreneurs from the non-successful ones is pure perseverance"

Steve Jobs

Abstract

Entrepreneurship is today a cornerstone in the construction, remodelling and rehabilitation of companies and the world economy. It is undoubtedly the spark that links the ignition of this engine (knowledge) and allows the transition from theory to practice.

It is extremely important to understand how executive schools are dealing with Entrepreneurship, whether they are in the "loop" or if they are still stuck in time and concepts. And if the focus is on Executive Education, it is normal that we chose their top education, the Master of Business Administration (MBA), as the focus of research.

In this project-company Master's thesis, EMBA as an Entrepreneurship inductor: The ISCTE Executive Education case is investigated with ISCTE Executive Education's Executive Master of Business Administration (EMBA), a program known and recognized in the academic, business and social world.

The great conclusion was that EMBA is a program that stimulates the entrepreneurial mind of its students, through the development of behaviours and knowledge that are registered in the *alumni's* DNA. However, ISCTE Executive Education does not incorporate Entrepreneurship in its strategy and culture, neither offers its students the transition from theoretical knowledge to practice, namely by providing access to incubators and accelerators, creating idea labs, and supporting the birth of new businesses. The school does not provide the ideal environment for students to feel and experience creation and development, and to bring together possible investors and financing.

The suggested improvement actions, once implemented, will make way for an entrepreneurial future in a school of executives.

Resumo

O Empreendedorismo é hoje uma pedra basilar na construção, remodelação e reabilitação das empresas e da economia mundial. É, sem dúvida, a faísca que liga a ignição do motor “conhecimento”, possibilitando a passagem da teoria à prática.

Torna-se de extrema importância compreender como as escolas de executivos estão a lidar com o Empreendedorismo: se estão no “loop” ou se ainda estão paradas no tempo e nos conceitos. E se o foco é o ensino de executivos, foi com naturalidade que escolhemos a sua formação de topo, o Executive Master of Business Administration (EMBA) como foco de investigação.

Nesta tese de Mestrado do tipo projeto-empresa, é investigada a influência do Ensino Executivo no Empreendedorismo, tendo como projeto de estudo o Executive Master of Business Administration (EMBA), do ISCTE Executive Education, programa conhecido e reconhecido no mundo académico, empresarial e social.

Como grandes conclusões, o EMBA é um programa que estimula a mente empreendedora dos seus alunos, nomeadamente através do desenvolvimento de comportamentos e conhecimentos que ficam registados no seu ADN. No entanto, o ISCTE Executive Education não incorpora na sua estratégia e cultura o Empreendedorismo. Não oferece também aos seus alunos a passagem da teoria à prática com acesso a incubadoras e aceleradoras, a laboratório de ideias, e possível nascimento de negócios. Não fornece o ambiente ideal para os alunos sentirem e experimentarem a criação, desenvolvimento e camarem até si possíveis investidores e financiamento.

As ações de melhoria sugeridas, quando implementadas, abrirão o caminho para um futuro empreendedor nesta escola de executivos.

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The completion of this thesis is one very important step in my life. And because life is made of stages that contribute to the whole, I must thank everyone who passed through and made a contribution to the person I am today.

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1. Executive summary

Over the past decade, Entrepreneurship has become part of our daily lives and our vocabulary. In a few years, hundreds of organizations, movements, associations and delegations were created based on Entrepreneurship, and with the aim of assisting the Entrepreneur.

Important world organizations recognize Entrepreneurship as one of the main drivers of the Fourth Industrial Revolution and the reason why the World Economic Forum and the Global Entrepreneurship Monitor created a partnership to exploit it in one of the crucial economic engines in the World: Europe (World Economic Forum, 2016). Engle *et al.*, (2008) state that the relationship between entrepreneurial activity with long-term economic development and growth has long been established.

All countries are looking for more and faster economic development. By increasing their wealth, countries cannot only give voice on the World Market, but also provide their citizens with better conditions of well-being, as well as security and quality of life, with Entrepreneurship being a great lever for this desire. It is an undeniable driver of the economic and social development of any organization, association or cluster of companies, of everyone and in all countries. The role of the Entrepreneur, its executor, is to target, idealize and conceive opportunities, and put into practice and raise resources to transform them into a sustainable business from an economic, social and environmental point of view.

The Author of this thesis has always felt the urge and inner call to bet and believe in instincts and dreams. Throughout the professional life, the need to acquire more skills, more knowledge, learn more and feel prepared for the obstacles of everyday life was a constant and obstacles have always been a great source of motivation and resilience.

In her last two years, she had a strong and close connection with the Executive School, ISCTE Executive Education, when undertaking the Executive Master of Business Administration (EMBA), opening up horizons and rethinking her future.

Combining these two themes, it seemed obvious to interconnect them and study the theme of “EMBA as an Entrepreneurship inductor: ISCTE Executive Education case”.

2. Introduction

The search for the unknown, as well as discovery, adventure and resilience, have always been in the Human Genesis. There have always been Entrepreneurship and Entrepreneurs, who over the centuries have been called discoverers, inventors, conquerors, to name a few. Nowadays, it has become an integral part of the context of economic growth, innovation and sustainability.

Entrepreneurship, by its very nature, is risky for individual Entrepreneurship and destabilizing the market, but it is the main factor that enables economic development (Cantino, Devalle, Cortese, Ricciardi, & Longo, 2017).

3. Literature review

3.1. Entrepreneurship

3.1.1. Entrepreneurship evolution through history

The concept of Entrepreneurship was popularized by J. Schumpeter (1934), an economist, as the basis of his theory of “Creative Destruction”, in which the Entrepreneur was somehow versatile, possessing the technical skills to produce, to capitalize and to gather financial resources, organizing the different operations inherent to the business process and delivering profit (Castor, B; Zugman, 2009). Although, Schumpeter (1942) had already attributed to the Entrepreneur the role of innovating when he described the difference between the concepts of “inventor” and “innovator”.

Nevertheless, Entrepreneurship began with “*Ancient Assyrians carried out innovation transfer and developed business communication; Civilisations of Sumer and Babylon had free enterprise; Scholars believe the eleventh century BC civilisation of Phoenicia built a commercial empire on seaborne trade; In Biblical times, many free market activities were viewed negatively since usury, the charging of a fee for the use of money, was considered a crime and Romans permitted usury, but not by Roman nobility, creating opportunities for freed slaves to accumulate wealth; In ancient China, the Emperor owned all property, which discouraged free enterprise, since assets could be seized at the Emperor’s whim; instead scholarship and officialdom were the routes to success; In the Middle Ages, wealth came not from business acumen but military success and Over time, however, merchant entrepreneurs, such as the Medici, gained political and economic*

power, and entrepreneurial activity flourished during the Industrial Revolution in the late eighteenth and early nineteenth centuries. Through history, the entrepreneur is recognized as an agent of change” (Frederick, Connor, & Kuratko, 2017).

Richard Cantillon (1680) is the oldest scientist known to identify the concept of Entrepreneurship, although other authors refer to the concept of “Entrepreneur” already in the late 12th century, with Greatti, L. & Senhorini (2000) ascribing the term “Entrepreneur” to those who were in charge of leading military expeditions.

In the 18th, the Capitalist is distinguished from the Entrepreneur — an individual who needs capital —, but, from the end of the 19th century to the beginning of the 20th century, there was often a lack of distinction between entrepreneurs and managers. In the middle of the 20th century, the Entrepreneur started to be seen as an innovator.

In the middle of the 20th century, Knight (1967) and Drucker (1970) introduced into Entrepreneurship the idea of the need to take risks in some businesses in order to be able to set up an organization. Pinchot (1985) introduced the concept of “intrapreneurship”, referring to an entrepreneur who works within an organization. However, during that time, Baumol (1968) lamented the paucity of Entrepreneurship theory by protesting the singular view of Entrepreneurship within a traditional economic paradigm.

Another definition of Entrepreneurship was advanced by Filion (1999), who emphasized the individual's creative capacity, but also acknowledging variable risks: Entrepreneurship as being the result of an action carried out by someone with creative and individual capacities. Also, in the opinion of Hisrich, R.D. & Peters, (2002), *“it is a process full of dynamism whose purpose is to create prosperity through individuals who face high risks with respect to equity, time and providing a product or service with an added value,, the process of creating something different and with value, dedicating the necessary time and effort, taking the corresponding financial, psychological and social risks and receiving the consequent rewards of economic and personal satisfaction”*.

In this century, Lanstrom (2010) states that Entrepreneurship is already considered an open theory, being transversal to the different sciences and not only to Economics, while simultaneously being structured as an area of its own knowledge, with specific

terminology and models coming from a new generation of researchers such as Hjorth (2006).

Lee-Ross (2017) confirms this theory by saying that “*evidence suggests that Entrepreneurship depends on the presence of ‘pull’ and ‘push’ facts*” that influence the individual externally. It has little to do with internal predispositions or personality characteristics of a person, but rather with those which are uncontrollable contextual factors (Zimmerer, T.W. & Scarborough, 2005). However, Krueger, Reilly & Carsrud (2000) consider contextual factors to have poor predictive ability. In other words, both opportunities and the exploitation depend on the capabilities and motivation of the individual (Segal, Borgia & Schoenfeld, 2005). Attitude towards entrepreneurial behaviour concerns a general evaluation of that behaviour, whether it is attractive or not. This is based on perceived consequences of the behaviour and whether it will lead to desired positive or negative outcomes, such as autonomy, personal wealth and achievement motivation (Engle *et al.*, 2008).

The decision to create a firm does not depend only on knowing how to do it and feeling able, as there are other important elements that also have to be acknowledged. According to the literature, the intention to be an entrepreneur would be the single best predictor of actual firm-creation behaviour (Alain Fayolle & Gailly, 2004).

In recent years, the concept of “Entrepreneurship” has been broadened, with authors referring to Entrepreneurship as an intrinsic characteristic of the Entrepreneur and not as something learned: “*Entrepreneurship and business leadership refer less to academic training and technical skills and more to trust, self-discipline, personal character and availability to work hard and to determine not only what the entrepreneur is, but also what the Entrepreneur should not do*” (Ataíde, 2015).

On the other hand, Gallagher (2015) refutes this theory: “*Intensive training, of a theoretical-practical nature, will offer participants a framework of the fundamentals of Entrepreneurship, namely its historical framework, key concepts, personalities, applications, innovations, challenges, problems, opportunities and trends*”.

“*However, the decision to create a firm not only depends on knowing how to do it and feeling able. There are other important elements that also have to be taken into account*”

(Liñán, F, 2005). For other authors, Entrepreneurship is much more the *“recognition that Entrepreneurship is not about the mechanics of how to start and grow a new business, or the art and science of opportunity discovery and exploitation. It is about empowerment and transformation, where students from across the campus are encouraged to dream big; are given the tools to make such dreams come true; are challenged to do things greater than themselves; and are allowed to fail”* (Kuratko, D. F., & Morris, 2018).

Nowadays, Entrepreneurship is a subject that can meaningfully advance the modern university, producing (1) an atmosphere that develops new products and innovations, while helping society to expand and grow; (2) a workforce that can help any company maintain an entrepreneurial posture; and (3) an environment prone to high achievers that create the innovations of tomorrow (Kuratko, 2005).

3.1.2. The Entrepreneurship

“Entrepreneurship represents the potential for individuals to change the world” (Kuratko, D. F., & Morris, 2018). It *“is more than the mere creation of a business. Seeking opportunity, taking risks, and having the tenacity to push ideas into reality, are special characteristics that permeate entrepreneurial individuals. Entrepreneurship is an integrated concept that has revolutionised the way business is conducted”* (Frederick et al., 2017).

As per Kuratko, Morris & Schindehutte (2015), an overview of *“entrepreneurial revolution has spread throughout the world. Entrepreneurs are an integral part of the renewal process that pervades and defines modern economies. Entrepreneurship represents the most critical source of economic growth in most countries”*. The impact of entrepreneurial activity is felt in all sectors and at all levels of the society, especially as it relates to innovation, competitiveness, productivity, wealth generation, job creation and formation of new industry (Kuratko, D. F., 2014).

Although the popular image of an entrepreneur is the one who starts an independent business, Sarreal & Reyes (2019) provide evidence that people can be entrepreneurial in several ways, such as: operating by their own; executing entrepreneurial ideas inside organizations they work for; involving their family; and taking short-term gigs. Although these situations may not always be visible or perceived as entrepreneurial, they provide incomes for individuals and families and contribute to national economies.

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In this scenario, it would be important to investigate why, most of the time, Entrepreneurship is only seen and identified as the creation of companies.

“Entrepreneurs are the heroes — they make the world liveable for everyone else. They are the ones who question, who challenge; they are the ones who take responsibility for change; they are what the human spirit is all about; they are the hope for a better life, for the end of poverty, for the destruction of discrimination; they are the quiet revolutionaries” (Kuratko, D. F., & Morris, 2018). It would be interesting to assess the reasons for the resilience of many institutions and companies to embrace Entrepreneurship.

While Shane & Venkataraman (2010) state that Entrepreneurship is a *“process of discovering, evaluating and exploring opportunities; and a set of individuals who discover, evaluate and explore them”*, for others, it is rather a result than a continuous process, allowing entrepreneurs to develop and to grow, in addition to allowing organizations to engage in strategic renewal processes (Cope, 2005; Corbett, 2005; Crick, 2011; Kenworthy & McMullan, 2013). As such, this requires entrepreneurs to continually engage in learning processes that are not an optional extra, but instead a central process for the development of Entrepreneurship (Leitch & Harrison, 2008).

There are, currently, several types of Entrepreneurship:

- Social Entrepreneurship, which is focused on non-profit entrepreneurial activities, while being an area that has been gaining research enthusiasts — described by (Corner, P. D., & Ho, 2010);
- Entrepreneurship in education — described by (Klofsten; Jones-Evan, 2000);
- Entrepreneurship in women — described by Kyro, P. and Hyrsky (2008), Thompson, P.; Jones-Evans, D.; Kwong (2009);
- Ethnic Entrepreneurship — described by Clark, K. ; & Drinkwater (2010) and Smallbone, D. & Welter (2001).

In fact, there is a growing interest in lines of research focused on the relationship between Entrepreneurship and Environmental Sustainability. These lines of research are developing concepts, such as “Sustainable Entrepreneurship” (Parrish, 2010), “Transformative Entrepreneurship” (Tobias, Mair, & Barbosa-Leiker, 2013) and

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“Corporate/Situational Entrepreneurship” (McKeever, Jack, & Anderson, 2015). Entrepreneurship is transdisciplinary, with a strong link to issues related to employability, innovation, knowledge transfer, sustainability, ethics, commercialization and intellectual property (QAA, 2012).

From the different fields of application of Entrepreneurship, the core has been mainly the same: education for new companies (L Pittaway & Cope, 2006).

Is, in fact, Entrepreneurship a subject or a theory transversal to the various disciplines, being a way to innovate, to create and continue developing the best path for each of these same disciplines, or can and should it be both?

In addition to everything that has been said and discussed about Entrepreneurship as something acquired, improved, enhanced and perfected, there is another very controversial territory that is the influence of genetic inheritance on the Entrepreneur's behaviour, as something naturally innate (Nicolau & Shane, 2008). New lines of research in the 21st century have been developing, and, increasingly, new paradigms and approaches will tend to emerge, as well as new issues related to the boundaries of Entrepreneurship.

However, we cannot refer to Entrepreneurship without mentioning “Enterprise”, the latest being defined in this context as “*the application of creative ideas and innovations to practical situations. This is a generic concept that can be applied in all areas of education, combining creativity, developing ideas and solving problems with expression, communication and practical action. In short, having an idea and making it happen*” (QAA, 2012). Meanwhile, Entrepreneurship is defined as the next phase, “*of applying entrepreneurial initiative specifically to create and develop organizations, in order to identify and seize opportunities*” (QAA, 2012).

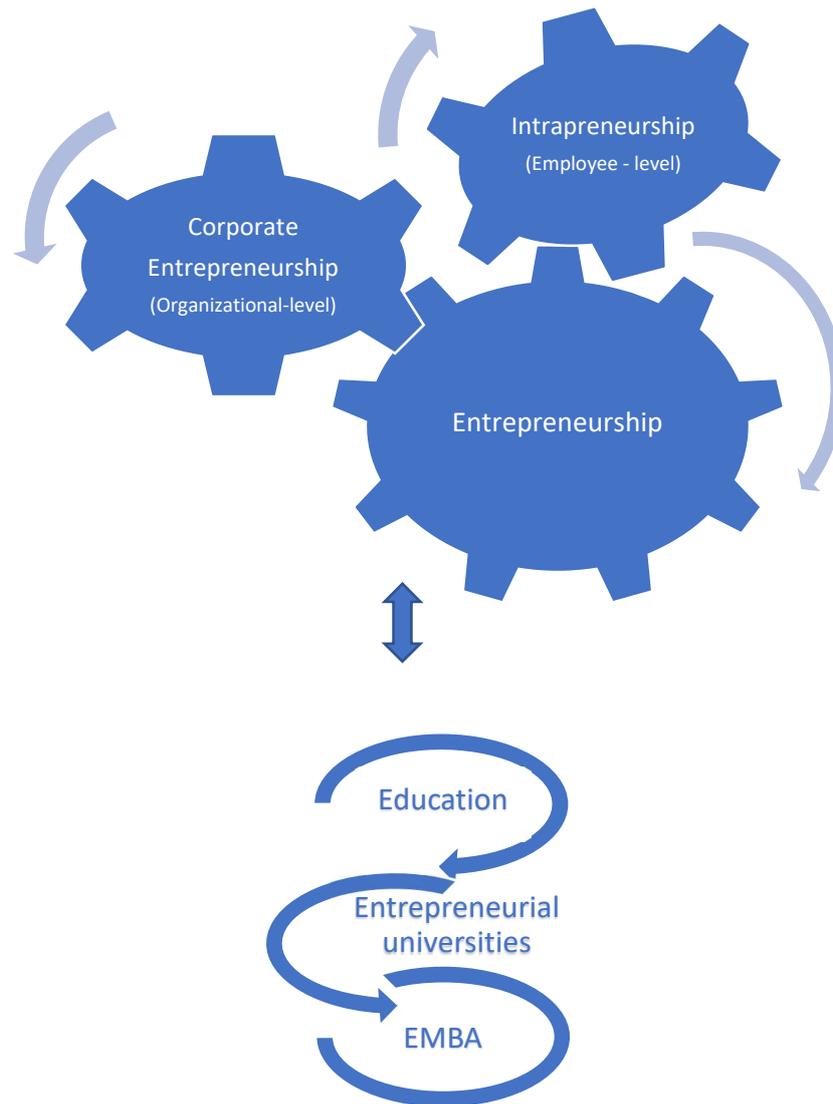


Figure 1 — The Entrepreneurship correlation: the 3 fields (covered in the EMBA — Entrepreneurship 2017-2019 program) and the inter-connection with Education.

3.1.3. The importance of Entrepreneurship

Governments around the world have not only accepted the functional economic theory of Entrepreneurship as a path to economic development, but have adopted Entrepreneurship education programs as an integral and dynamic component of Entrepreneurship ecosystems and national Entrepreneurship systems (Audretsch, 2015; Ács, Autio & Szerb, 2014; Thomas & Autio, 2014; Kenny, 2015). The relationship of entrepreneurial activity with long-term economic development and growth has long been established (Engle *et al.*, 2008). Entrepreneurship has been identified as a key element in solving development imbalances globally (GEM, 2016).

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GEM introduces a composite index, the National Entrepreneurship Context Index (NECI), which assesses the environment for Entrepreneurship in an economy. The NECI is derived from 12 framework conditions, and weighs the ratings on these conditions by the importance experts place on them.

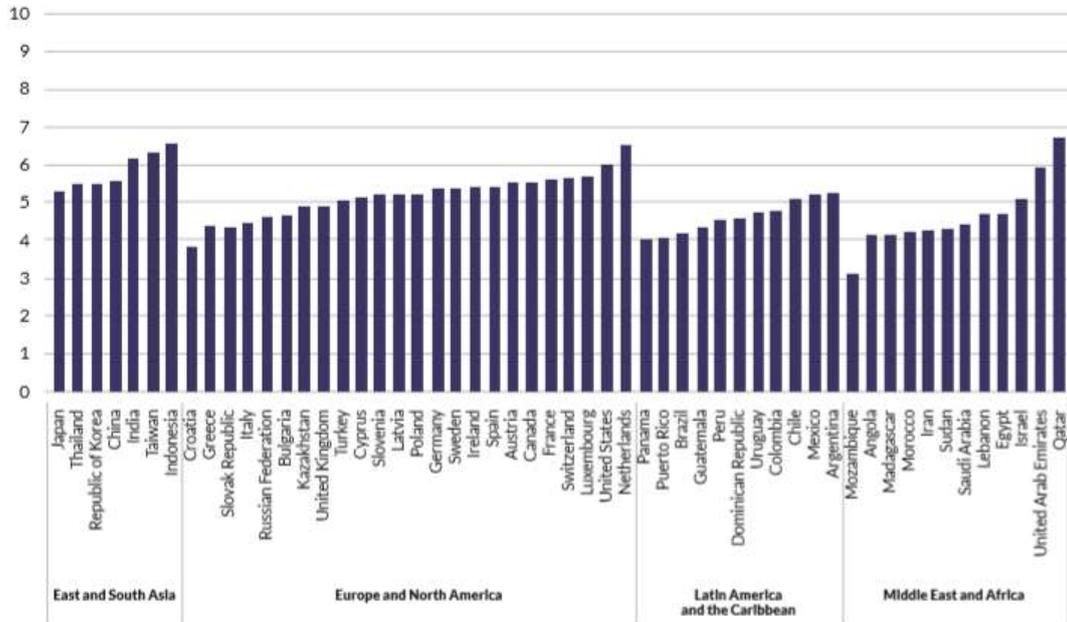


Figure 2 — National Entrepreneurship Context Index (NECI) Results for 54th Economies in Four Geographic Regions; GEM (2019)

NECI results represent an inaugural effort to inform policy, practitioner and other key stakeholder audiences about the strength of their overall environment for Entrepreneurship.

For what has been revised, in terms of the importance of Entrepreneurship, when consulting the 2019 edition of the GEM in the 49 countries studied, should the absence of Portugal be interpreted as a long way to go?

Entrepreneurship is seen as a general remedy for several accentuated social and economic problems that politicians face at all levels of society (Hoppe, 2016). The enormous economic, social and educational benefits resulting from Entrepreneurship have caused

the proliferation of business education programs at colleges and universities around the world (Canziani, Welsh, Hsieh, & Tullar, 2015).

"Education for Entrepreneurship is fundamental for the development of entrepreneurial skills, attitudes and behaviours that are the basis of economic growth" (Volkman, Mariotti, S., Rabuzzi, & Vyakarnam, 2009), being enshrined in the European Union's agenda since the Lisbon Summit in 2000 (C. E. de Lisboa, 2000). Prior to this summit, some business sectors already insisted on the need for the school to commit itself to the needs of the economic and work market, and to the need to educate for Entrepreneurship.

The European Union (EU) supports Innovation and competitive advantages in Europe through planned initiatives with the aim of creating the *"innovation union"* in 2020 (P. D. Hannon, 2013). *"As a way of promoting entrepreneurial attitudes among young people and creating an entrepreneurial culture, the Commission started promoting business education as a flag"* (Evangelista *et al.*, 2014). The EU (Johnson *et al.*, 2014) is launching guidelines for universities to invest in activities to promote Entrepreneurship, stimulating students' soft skills — current and future. Recognizing the importance of the training of potential and new entrepreneurs, universities have made an effort, in recent years, to promote in their students, teachers and researchers an entrepreneurial culture: *"The European Commission invites and directs all member states to integrate Entrepreneurship education into school programs at all levels"* (Hoppe, 2016). There is an effort on the part of the Portuguese authorities to promote the entrepreneurial spirit in Portugal (Evangelista *et al.*, 2014).

It is well known that students with a degree in Entrepreneurship show personal initiative, a proactive attitude and creativity, and have the necessary tools to face uncertainty when implementing new ideas (Bucha, 2009). This will allow them to develop recognition, innovation and management skills, as well as business opportunities, in order for the individual to find in Entrepreneurship a job opportunity (Pimpão, 2011).

Currently, given the constant and changing needs of the job market, university institutions have the challenge of identifying and shaping the profile of students that respond effectively to the demands of that same market: *"Universities have the role of agents of change, constantly monitoring the needs of society and finding new ways to position*

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themselves in relation to education in general. In this sense, they constantly seek to innovate and be disruptive” (Moreira, 2009).

In conclusion, *“Entrepreneurship is a multi-dimensional concept that includes owning a small business (risk theory), being innovative (dynamic theory), acting as a leader (traits school), or starting up a new company (behavioural school). It includes spotting opportunities to drive the market toward equilibrium (Austrian school) or causing disequilibrium through “creative destruction” (Schumpeter). It includes doing this on your own, in a team or inside a company. It involves starting without any resources and creating new values in the realm of business, social values, government or academia” (Gedeon, S., 2010).*

Donald F. Kuratko & Morris (2018) also state that *“Entrepreneurship today is truly everywhere, however, if it is everywhere then it may also be nowhere in the future. That is, it may be dispersed into other disciplines without the true appreciation for the foundations and theories that form this field”.*

3.1.4. Intrapreneurship, Employee-level Intrapreneurship

Intrapreneurship is one of the Sub-Field of Entrepreneurship. In the 1980s, Pinchot (1985) introduced the concept of “Intrapreneurship” as a combination of “*intracorporate*” and “*Entrepreneurship*”, and stated that intrapreneurs “*closely resemble entrepreneurs (...) who turn ideas into realities inside an organization*”. The author received widespread attention for highlighting the importance of entrepreneurial employees who create value for the organization and help gain competitive advantage. The concept of “Intrapreneurship” is based on the idea that valuable human capital resides in entrepreneurial employees within existing organizations (M. Guerrero & Peña-Legazkue, 2013; Parker, 2011).

“Entrepreneurial individuals in Europe frequently choose to start new ventures or projects while working for their employers rather than start their own business. Where this occurs, a shift into intrapreneurship is observed, also known as Entrepreneurial Employee Activity (EEA)” (GEM, 2016), which is an important indicator of economic development and Entrepreneurship.

Intrapreneurship is currently defined as an organizational venture creation and strategically brought by employees when it becomes crucial for the organizations to survive and maintain their competitive advantage (Morris, Webb, & Franklin, 2011). *“Theoretical advancement in the field of employee Intrapreneurship is hampered”* (Gawke, Gorgievski, & Bakker, 2019), while being recognized as the key to an organization’s new venture creation and strategic renewal (Ireland, 2009).

“The best approach to the employee Intrapreneurship characterization is the behaviour base approach where is conceptualized in the basis of employee activities that contribute to firm-level Intrapreneurship, and more recently as employees an agentic and anticipatory behaviours aimed at creating new business for the organization (i.e. venture behaviour) and enhancing an organization’s ability to react to internal and external advancements (i.e. strategic renewal behaviour)” (Gawke et al., 2019). This approach would fit along with motivation, well-being and good performance of the employees.

“Intrapreneurship involves workers formulating and implementing new ideas within organizations rather than starting their own businesses. In other words, Europe doesn’t lack entrepreneurs, they just choose to innovate inside larger organizations. This is part of the reason economies like Denmark, Sweden and the United Kingdom maintain such vibrant, cutting-edge economies despite low levels of business starts. The innovation and vitality European workers are injecting into the global economy come from entrepreneurs within organizations whose existence is masked by competing methods of measurements” (World Economic Forum, 2016).

“While entrepreneurs are often viewed as operating outside the mainstream of mature, often large, organizations, these organizations need to create new sources of top-line growth, EEA, results from the pursuit of new business activities inside an existing organization, where entrepreneurs seek to leverage internal advantages and the organization may initiate and/or support their efforts” (GEM, 2018). However, EEA helps some European economies to narrow the gap with other regions, and, due to EEA tending to be of higher quality in terms of growth potential, this helps explaining why Europe remains highly competitive despite of low rates of business starts (World Economic Forum, 2016).

In fact, intrapreneurial roles and actions of both managerial and non-managerial employees are argued to be at the heart of an organization’s new venture creation. Strategic renewal and top management’s vision of innovativeness and employees’ entrepreneurial initiatives are both necessary to bring intrapreneurship to action (Blanka, 2019).

3.1.5. Corporate Entrepreneurship, Organizational-level Intrapreneurship

Corporate Entrepreneurship is the other Sub-Field of Entrepreneurship. Chen & Nadkarni, (2017) referred to Intrapreneurship as “*a broad, multi-dimensional concept that lies at the intersection of Entrepreneurship and strategic management, defined as a set of firm activities encompassing innovation, corporate venturing, and strategic renewal*”. Because innovation, corporate venturing and strategic renewal are all considered major strategic initiatives, Corporate Entrepreneurship has a strong prescriptive value and has been shown to be an effective way of achieving superior financial performance (Simsek & Heavey, 2011).

Today’s “*firm’s top level are expected to play a central role in creating an organizational vision and architecture that facilitate intrapreneurship*” (Gawke et al., 2019). “*Research has examined two broad sets of antecedents to corporate Entrepreneurship: environmental and organizational. Environmental factors such as dynamism, complexity, and munificence have been shown to influence corporate Entrepreneurship* (Simsek, Veiga, & Lubatkin, 2007), *as have organizational factors such as technological and management capabilities* (Yiu, Lau, & Bruton, 2007), *corporate governance* (Zahra, 1996), *resources* (Yiu & Lau, 2008), *strategic decision-making processes* (Heavey, Z. Simsek, & Kelly, 2009), *and management practices and systems* (Barringer & Bluedorn, 1999)” (Chen & Nadkarni, 2017).

Corporate Entrepreneurship is a key for the Entrepreneurship process for several reasons: first of all, Entrepreneurship’s literature increasingly regards “*Corporate Entrepreneurship behaviours as prerequisites for improving a firm’s financial performance*” (Zahra, 1996); second of all, strategic “*leadership scholars contend that CEOs’ performance can best be represented by such intermediate outcomes because executives typically exert influence on the firm’s performance through behaviours such as adaptation to environmental changes and innovation*” (Waldman & Yammarino,

1999) — based on this premise, several studies have used Corporate Entrepreneurship or one of its components, innovation, as a dependent variable in examining the strategic effects of CEOs’ traits and leadership styles (Ling, Simsek, Lubatkin, & Veiga, 2008); finally, Corporate Entrepreneurship is particularly susceptible to CEOs’ temporal dispositions because it presents significant temporal challenges for top executives. An acute focus on and sensitivity to time, the temporal sequencing of key activities, and the determination of time-sensitive priorities are all crucial to successfully recognizing and executing Corporate Entrepreneurship activities (Bird & West, 1998).

According to Mercer, Justine, Barker, & Bird, (2010), “*the effects of globalization are evident in education policy around the world—governments from the USA to China are driving their education systems to produce more skilled, more flexible, more adaptable employees*”. The dynamic global business environment requires employees to be innovative and entrepreneurial. Given this multi-layered relevance of Entrepreneurship to the world of work and careers, there is a strong interest in the emerging entrepreneurial mindset (Obschonka, Hakkarainen, Lonka, & Salmela-Aro, 2017).

The development of human capital is strongly linked to the entrepreneurial spirit, as it helps to discover, create and exploit business opportunities (Jayawarna, Jones, & Macpherson, 2014). Qualifications acquired in postgraduate education also influence entrepreneurial prospects through the acquisition of employment-related skills (Greene, J., & Saridakis, 2008).

“*Entrepreneurial attitudes and skills are also important for managers, providing creativity and innovation essential for internal Entrepreneurship in the organization. Moreover, the entrepreneurial activity on the part of the employees of the company can result in new spinoff firms, which is an interesting way for corporate growth*” (Entrialgo, Iglesias, & Müller, 2019).

It is also stated that Corporate Entrepreneurship does not automatically result in Intrapreneurship behaviour as “*the decision to opt for intrapreneurship remains an individual and personal decision*” (Rigtering JPC & U, 2013), and, based on the results, it can be argued that Corporate Entrepreneurship is “*a top-down approach*” and that Intrapreneurship is “*a bottom-up approach*” (Blanka, 2019).

3.1.5.1. Entrepreneurial Universities

The new “*entrepreneurial societies knowledge-based Entrepreneurship has emerged as a driving force for economic growth, employment creation and competitiveness. In this context, entrepreneurial universities play an important role as both knowledge-producer and a disseminating institution*” (Guerrero, M., & Urbano, 2012).

Many definitions have been suggested for Entrepreneurial Universities. One perspective is the notion that “*an institution that creates an environment, within which the development of entrepreneurial mindsets and behaviours are embedded, encouraged, supported, incentivised, and rewarded*” (Hannon, 2013).

As such, what is needed at Entrepreneurial Universities is Entrepreneurship Education, as previously mentioned: “*Many theories and definitions are cited in relation to entrepreneurial universities, however, there is no generally agreed upon definition, nor coherent theory that integrates the various elements of an entrepreneurial ecosystem*” (Allahar & Brathwaite, 2017). The tendency is to import policies and practices from successful ecosystems while disregarding the relevant cultural and economic features of the local setting (Spigel, 2017). It should be investigated if universities in Portugal, are adopting policies of becoming entrepreneurial entities.

The role of university-based Entrepreneurship in the stimulation of economic activity and enterprise creation is acknowledged, but the role of universities in building entrepreneurial institutions, creating new ventures, and fostering effective triple helix relationships continues to be debated (Davey, Hannon, & Penaluma, 2016). As such, the questions of how the university can contribute through education, entrepreneurial support and network functions and be entrepreneurial in its endeavours have lacked academic focus and rigour, particularly in relation to fostering entrepreneurial mindsets (Allahar & Sookram, 2018).

Since the concept of “Entrepreneurial Universities” appeared referring to any entrepreneurial organizations, their members started needing to become potential entrepreneurs, and their interaction with the environment started needing to follow an entrepreneurial pattern (Ropke, 1998).

As any organization, the outcome of an entrepreneurial university is linked with its mission. The concept of the “Entrepreneurial University” has three objectives: teaching, researching and promoting entrepreneurial activity. This has the ultimate function of converting its efforts into economic development activities (Zawdie, 2010).

“In recent years, there has been an increasing pressure on universities to deliver on their third mission in addition to their core functions, namely research and education. Third mission involves knowledge exchange in its broader sense, including commercialisation of research, university–industry partnerships, and all related enterprise engagements” (Abreu, Demirel, Grinevich, & Karataş-Özkan, 2016). The policy debate has only recently started to acknowledge that university-business partnerships should be aimed not only at technology transfer and research-intensive activities, but also at employability solutions and entrepreneurial options embedded within university teaching activities (Drager, 2016).

The success of innovation systems is based on strong linkages between academia/universities, the industry and the government, whose interactions form the triple helix model of collaboration. This established entrepreneurial university model was seen as comprising close interaction with industry and government (Etzkowitz & Leydesdorff, 2000). This meant relatively independent operations, a hybrid organization that deals effectively with the tensions between external interactions and independence for attaining objectives, as well as constant modification of the structure to sustain triple helix relations (Ranga & Etzkowitz, 2013).

With the emergence of “*knowledge economies*”, the effectiveness of triple helix collaboration in delivering the expected amount of innovation and economic development was questioned, which led to the addition of a fourth helix, comprising the media, creative industries, culture, values, lifestyles and art, extending the concept to a quadruple helix system (Carayannis & Campbell, 2009).

The extension of the triple helix to the quadruple helix was meant to acknowledge the critical role of the general public and community for achieving the knowledge objectives and innovation policies (McAdam & Debackere, 2018). Given what was previously exposed about Entrepreneurial Universities, universities should think and rethink of ways of calling and interact with all stakeholders.

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An example is the progress of business schools towards the achievement of an “entrepreneurial ideal” with pursuing a third mission of regional/national economic development initiatives (Philpott, Dooley, O’Reilly, & Lupton, 2011).

In conclusion, entrepreneurial ecosystem is the umbrella of university + industry + government + civil society participation, in a quadruple helix system (McAdam & Debackere, 2018; Carayannis & Campbell, 2009; Ranga & Etzkowitz, 2013).

The relatively new notion of an entrepreneurial ecosystem can be viewed as “*the union of localized cultural networks, investment capital, universities, and active economic policies that create environments supportive of innovation-based ventures*” (Spigel, 2017).

Despite of research in this field being recent, it has been established that the components of Entrepreneurship Education — business incubation and forming partnership arrangements among stakeholders within universities and with external players — are vital to building successful ecosystems: Entrepreneurial Universities (Maribel Guerrero, Urbano, Fayolle, Klofsten, & Mian, 2016). There is a growing body of research on university-led incubators that are considered catalysts for the development of sustainable university-based entrepreneurial ecosystems (Dahms & Kingkaew, 2016).

“*There appears to be a consensus that entrepreneurial ecosystems are built to neighbor specific pillars comprising: 1) access to markets, 2) adequate human resource capacity, 3) appropriate funding from various sources, 4) support mechanisms and comprising advisors, 5) networking arrangements, professional services, incubators or accelerators, 6) a business friendly environment, 7) university Entrepreneurship education and training that promotes a culture of Entrepreneurship, idea generation, and graduates with a venture orientation, and, 8) a culture that respects research, entrepreneurs, and innovation*” (World Economic Forum, 2014), with a true focus on people, networks and institutions. There is, however, no single path to create an entrepreneurial ecosystem, but rather this process involves multiple stages that are ill-defined as the university proceeds through them (Rice, Fetters, & Greene, 2014).

Strengthening existing stakeholder collaborative efforts is critical to the development of a nascent entrepreneurial ecosystem. This climate represents a new model of an

entrepreneurial ecosystem that involves open collaboration with key stakeholders, as well as *“intensive cooperation and interaction, human and social capital development, spill over effects, and mutual reinforcement”* (DeCleyne, Gielen, & Coppens, 2013).

It is a relatively long-term undertaking to build a university-based entrepreneurial ecosystem. Such an ecosystem undergoes a dynamic process that requires at least 20 years for full development (Rice *et al.*, 2014). Entrepreneurial ecosystems are *“highly variegated, multi-scalar phenomena”*, which is reflected in the fact that every ecosystem is unique and displays distinct *“idiosyncrasies and characteristics which are spatially, relationally and socially embedded”* (Brown & Mason, 2017).

As mentioned by Rice *et al.* (2014), *“for a successful entrepreneurial ecosystem, relevant guidelines should be offered: comprising of senior and positive leadership vision and engagement, faculty and administrative leaders, commitment to teaching, research and building the ecosystem elements, creating or participating in wide global networks of partners, developing an effective organizational structure in support of entrepreneurial initiatives, curriculum development, networking, and business incubation, internationalization, promoting continuous innovation as a cultural norm, unremitting pursuit of financial resources, and attention to succession planning for long-term success”*.

Academia has been experimenting with several cultural, educational, institutional and legislative challenges, in order to be a survivor inside a global competitive environment (Maribel Guerrero & Urbano, 2012). As a result of these challenges, the phenomenon of “Entrepreneurial Universities” has emerged with a common strategy focused on being entrepreneurial at all university levels (Kirby, 2005).

Such situation is not surprising, mainly because, since universities first appeared, they have been considered an innovation to cover the societies necessities. However, universities are complex organizations comprising a number of overlapping and nested communities of practice (Finlay, 2004), and the economic benefit of universities for the local area is not highly visible. It should be a priority to think about possible paths to increase and to improve the visibility and work done by universities.

In this respect, Feldman & Desrochers (2003) found that this might be attributed to the lack of incentives and encouragement for commercial activity that could potentially benefit the local area. The Entrepreneurial University is therefore an instrument that not only provides a workforce and value added with the creation or transformation of knowledge, but also improves the individual's values and attitudes towards these issues.

During the last years, at the academia level, this has represented a profitable research opportunity area, in order to bring examples of good practices, strategies, solutions and recommendations to the university authorities and the policy makers.

Guerrero & Urbano (2012) studied one model of Entrepreneurial Universities. The most critical factors identified were the attitudes towards Entrepreneurship from academics and students.

The main explanation for this phenomenon is that each university community is unique and its attitudes towards Entrepreneurship are defined by a combination of factors, such as Entrepreneurship education, teaching methodologies, role models and reward systems. Besides that, there is empirical evidence of several stages of Entrepreneurial Universities, where each university is a different and unique stage of the entrepreneurial process (Tijssen, 2006).

Entrepreneurial Universities are the result of Corporate Entrepreneurship and Intrapreneurship. While Corporate Entrepreneurship are “*firm activities encompassing innovation, corporate venturing, and strategic renewal*” (Simsek & Heavey, 2011), “*Intrapreneurship, in the academic context, has gained in importance, research also provides recommendations for academia. The current challenges faced by universities, such as tightening budgets and intensive competition, are forcing academia to redefine strategic capabilities by developing an intrapreneurial and innovative mindset.*” as study by (Blanka, 2019). *If we have these two fields together, the congregating in Corporate Intrapreneurship could be a hypothesis in future studies.*

“*Therefore, innovative and intrapreneurial staff at universities play a key role. The underlying motivation for these so-called academic intrapreneurs is the opportunity to use their acquired academic knowledge for a wider purpose than teaching and research*” (Blanka, 2019). More studies should focus on the rethinking of Entrepreneurial Universities by stimulating the intrapreneurship environment.

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Being more specific in this thesis’ theme: “*the objective of a business school serving as an entrepreneurial ecosystem hub, is important to stimulate economic development, generate employment, and create innovative technology-based ventures or service businesses*” (Allahar & Sookram, 2018).

3.2. Entrepreneurship and Education

“*Consistent with the theme of this special issue, Entrepreneurship today is truly everywhere...across campuses, across communities, and across borders. With the dramatic advances in Entrepreneurship scholarship, academic programs, and pedagogy over the past 40 years, there is no question the discipline has achieved academic legitimacy. More importantly, as the theme indicates, Entrepreneurship has moved beyond business schools to achieve relevance and impact in a wide range of arenas*” (Kuratko, D. F., & Morris, 2018).

Can Entrepreneurship be taught? As long time authors such as Henry, Hill, & Leitch (2005) and Klein & Bullock (2006) are asking this question, there is indeed a wide range of answers depending on the guidelines and the universe of authors who studied this topic.

Ferreira, Santos, & Serra (2008) state that a higher education degree is not necessary for the creation of a company, but all entrepreneurs will need knowledge in the areas of management, marketing, leadership, finance, strategy and communication, with the need for these topics to be taught by those who have the competence to do so. It is possible that schools and their teachers can encourage students to Entrepreneurship, which will, consequently, lead to the appearance of new entrepreneurs.

On one hand, there is evidence of the positive effects of education on innovation and growth, but, on the other, education has no impact on innovation or growth. Such research statements are based on quantitative analyses (P. Jones, Beynon, Pickernell, & Packham, 2013).

In fact, there are even several studies which will suggest negative and discouraging effects on the teaching of Entrepreneurship, as students are aware of their true entrepreneurial skills and the demands of entrepreneurial careers (Oosterbeek, van Praag, & Ijsselstein, 2010). Another study shows that Executive Education — Masters of Business Administration — predispose their students to have a less innovative attitude, with a

decrease in investments in Resources and Development, being instead more focused on short-term profit (Miller & Xu, 2019).

It seems that, in certain circumstances, the Entrepreneurship learning approach is not suited to the planned and normative approach that is often used in university education (Brink & Madsen, 2015), with certain researchers arguing against the educational development of entrepreneurs because they believe “*it inhibits the creative and challenging nature of Entrepreneurship*” (Aronsson, 2004).

Others authors, such as Walter & Block (2016), will argue that “*Entrepreneurship education stimulates entrepreneurial activity in Entrepreneurship-hostile institutional environments rather than in Entrepreneurship institutional environments . To promote Entrepreneurship activities, many countries have substantially invested in Entrepreneurship education. This has led to a scholarly interest in the outcomes of such efforts. Most studies find a positive effect of Entrepreneurship education on entrepreneurial intention. Some studies, however, find a negative, discouraging effect of entrepreneurship education*”.

Nevertheless, there are authors who reiterate the importance of Entrepreneurship Education, Morris, Kuratko, and Cornwall (2013) recently noted that “*a new wave of economic development is sweeping the world, with Entrepreneurship and innovation as the primary catalysts. Yet the entrepreneurial imperative involves much more than encouraging people to start new ventures. Rather, it encourages a mindset that centers on seeking opportunities, taking risks beyond security, tolerating failure, bootstrapping, creatively leveraging resources, and having the tenacity to overcome obstacles and push an idea to implementation*” (Morris, Kuratko, & Cornwall, 2013).

The essential skills and abilities for entrepreneurial behaviour are built up through primary, secondary and higher education (Jayawarna *et al.*, 2014). Embedding Entrepreneurship studies in the curricula of universities and business schools is thus increasingly viewed as a way of fostering entrepreneurial behaviour and mindsets in business and technology disciplines (L. Pittaway & Edwards, 2012; DeCleyne, Gielen, & Coppens, 2013).

Entrepreneurs need to learn to adopt a problem-solving approach to increase social value creation, act responsibly with investors and key stakeholders, practice environmental sustainability and ethical behaviour, recognize the community’s stake in the success of the venture, and provide appropriate rewards for responsible Entrepreneurship (Rae, 2010).

Anyone who studies both Entrepreneurship and Behaviour comes to the conclusion that “(...) *there would be a solid base for designing and implementing Entrepreneurship courses trying to affect personal preferences and perceived social valuation of Entrepreneurship.* (F Liñán, 2005). “*We have to go further upstream and teach skills, ideas, stimulate thinking so that it can become disruptive at any time of need. However, the decision to create a firm does not depend only on knowing how to do it and feeling able. According to the literature, the intention to be an entrepreneur would be the single best predictor of actual firm-creation behaviour*” (Alain Fayolle & Gailly, 2004).

The decision to be an entrepreneur or an intrapreneur does not only depend on knowing how to do it and being able to do so. There are other important elements that also have to be taken into account. According to the literature, the intention to be an entrepreneur or an intrapreneur would be the single best predictor of actual firm-creation or firm-development behaviour.

In this sense, an entrepreneur/intrapreneur would make his decision based on three elements: his personal preference or attraction towards Entrepreneurship; the perceived social valuation of that career option; and, thirdly, his perceived feasibility (self-efficacy perceptions) (Liñán, F., 2005).

As the decision to become an entrepreneur may be plausibly considered as voluntary and conscious (Krueger *et al.*, 2000), it seems reasonable to analyse how that decision is made. Hence, the entrepreneurial intention would be a previous and determinant element towards performing entrepreneurial behaviours.

External circumstances would not determine firm-creation behaviours directly, but rather they would be the result of the analysis — conscious or unconscious — carried out by the person about the desirability and feasibility of the different possible alternatives in that situation.

Intention is measured as indicating the effort that people are planning to exert to perform the entrepreneurial behaviour. Intention becomes the fundamental element towards explaining behaviour, indicating the effort that someone will make to carry out that entrepreneurial behaviour (Liñán, F., 2004).

The 2016 edition of the Global Entrepreneurship Monitor (GEM, 2016) revealed the key role that school-based education plays in encouraging future entrepreneurs. An average of 22 per cent of the adult population that is receiving education in Entrepreneurship considered themselves to be entrepreneurs, whereas only 11 per cent of the adult population that is not receiving it considered themselves to be entrepreneurs. Elert, Andersson & Wennberg (2014) made similar observations in their longitudinal study of education and Entrepreneurship in Europe.

In fact, Pittaway & Cope (2007) concluded that *“there is a sound evidence base on student propensity for Entrepreneurship and Entrepreneurship education”* and *“there is little doubt that education plays a vital role in nurturing Entrepreneurial Intent. Students who have a positive attitude and the confidence to choose Entrepreneurship as a likely career do not require approval from friends, family and influential others. This is interesting because it calls into question the value of “networking” through various industry groups. It is here that education plays a vital role. Students who want to become entrepreneurs must be equipped with the tools to do so”* (Lee-Ross, 2017).

New discoveries show that managers and directors of small and medium-sized enterprises (SMEs) can create value in several ways through their participation in Entrepreneurship teaching programs. They tend to apply only the inputs that provide meaning to them and their companies. In addition, an open attitude towards the useful application of learning is required to enable innovation and growth in their organizations (Brink & Madsen, 2015).

“Ultimate program success requires a well-coordinated team, including clinical faculty with entrepreneurial backgrounds, but the nature of the academic culture suggests a need for a respected champion who combines political skills and academic credibility with an entrepreneurial mindset How an educator views himself or herself may be critical to the development of a champion. Conventional role definitions include such concepts as educator, scholar, student mentor, program developer, program administrator, and grant

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seeker. We contend that Entrepreneurship programs realize their full potential when those who deliver them define themselves as academic entrepreneurs” (Donald F. Kuratko & Morris, 2018).

More than ever, the main social, demographic and ecological challenges that humanity face are today demanding a new role for the teaching of Entrepreneurship that must be focused on the collaborative development of a new generation of business models, based on intelligent co-management, sustainable and adaptable to common critical issues (Cantino *et al.*, 2017).

However, evidence from the literature states that Entrepreneurship teaching curricula are still eclectic and diverse, with no universally accepted structure and approach (Rideout & Gray, 2013). There are actually authors who refute the existence of problems in curriculum design and at “*contextualization, implementation, monitoring, evaluation and output*” of Entrepreneurship teaching programs (Maritz & Brown, 2013).

“Entrepreneurship as a potential force for good. Entrepreneurship scholars tend to make the implicit assumption that Entrepreneurship is inherently good-people benefit from engaging in Entrepreneurship, and increased Entrepreneurship rates lead to regional and national development. Rarely are these assumptions tested” (Wiklund, Wright, & Zahra, 2019).

Many schools are currently exploring different forms of designing Entrepreneurship programs or remodeling existing ones (Duval-Couetil, Reed Rhoads, & Haghighi, 2012; Lobler, 2006; Morris & Kuratko, 2014), as well as searching for critical success factors (Kingma, 2014). For example, is still unclear, in a MBA program, what strategies and investments will be needed to motivate individuals with different educational backgrounds and at different stages of their professional career to develop a taste for an entrepreneurial career (Fellnhofer, 2019).

Increasingly, the need to embed Entrepreneurship studies in the curricula of universities and business schools is emphasized as a means of fostering entrepreneurial behaviour and mindsets in business and technology disciplines (L. Pittaway & Edwards, 2012; DeCleyne *et al.*, 2013).

In a deeper level, there is a hot debate on who should teach new Entrepreneurs — Lecturers or Entrepreneurs? What should and how should it be taught? Are the expectations too high in relation to the proposed objectives? It is thus suggested that the focus of this concept should be to encourage entrepreneurial behaviour, allowing the correlation of the materials learned, transposing them into practice, and there must be an equal commitment from the whole community (Henry, 2013).

On the other hand, if the policy aims to improve Entrepreneurship through education, it must, first of all, aim at raising the educational level in general (Kolstad & Wiig, 2014) and, secondly, to support educational contexts in which Entrepreneurship it appears naturally (Falck, Heblich, & Luedemann, 2012).

But, in addition to establishing an entrepreneurial teaching policy, it is now recognized that students are only one pillar of the audience, representing only one of the many areas of involvement of stakeholders in the Entrepreneurship Education Process (Maritz & Brown, 2013). The involvement of several stakeholders has received outstanding attention recently (Blenker, Elmholdt, Frederiksen, Korsgaard, & Wagner, 2014), identifying their expectations as complex and varied, reflecting a heterogeneous range of individual, group and community needs.

However, in projecting the future of Entrepreneurship, Kuratko & Morris (2018) argue that *“Entrepreneurship education will not be about the mechanics of starting up and growing new ventures, or opportunity identification and implementation techniques, rather, it will be about empowering and transforming students through encouragement to dream big along with the tools to realize their dreams, while at the same time being allowed to fail”*.

In conclusion, nowadays, *“Entrepreneurship education encompasses holistic personal growth and transformation that provides students with knowledge, skills and attitudinal learning outcomes. This empowers students with a philosophy of entrepreneurial thinking, passion, and action-orientation that they can apply to their lives, their jobs, their communities, and/or their own new ventures”* (Gedeon, S. A., 2014).

3.2.1. Entrepreneurial Education

“Entrepreneurial Education has become one of the hottest topics in business and engineering schools throughout the world. The number of schools teaching an Entrepreneurship or similar course has grown from as few as a dozen 30 years ago to more than 2,500 at this time” (Kuratko, D. F., et al., 2015).

Teaching Entrepreneurship has been a central issue for business schools since the end of World War II (Mogollón, Casero, & Escobedo, 2015), being transversely accepted that the nature of Entrepreneurship, especially its complexity, variability and contingency, makes it a difficult topic to teach (A. Gibb, 2002). Nevertheless, it is a means for students to understand that Entrepreneurship *“is not necessarily a taught or learned behaviour, but innate and that, therefore, can be developed through experience and training, soft skills, essential qualities that can be improved and in the steps and practical tools that will support the entrepreneur in his process”* (Gallagher, 2015).

“The study of Entrepreneurship has gained impetus over the past 20 years and is now common in many institutions of higher learning” (Allahar & Sookram, 2018). The trend points to employing experiential learning techniques, involving experienced entrepreneurs, utilizing lessons from failure, adopting Entrepreneurship as a practice, training in opportunity identification, and adapting content to cultural contexts (Blenker, Frederiksen, Korsgaard, & Al, 2012; Naia, Baptista, Januário, & Trigo, 2014).

“There seems to be no universal pedagogical recipe on how to teach Entrepreneurship” (A. Fayolle & Gailly, 2008) — this finding is one of the explanations for the variety in curricula, as well as in the teaching methods visible in executive schools today.

Evidence from the literature reveals that, in terms of studies on models applied to the teaching of Entrepreneurship, *“they are abundantly heterogeneous taking into account the philosophy, objectives, contents, methodologies and effectiveness”* (Nabi & Linán, 2011). These parameters have indeed to be acknowledged when building Entrepreneurship teaching programs (Haase & Lautenschlager, 2011).

The educational methods in teaching Entrepreneurship are as diverse as the definition of Education for Entrepreneurship (Neck & Greene, 2011). Many structures and models of Entrepreneurship education and learning have been referred to in the literature among

them: the “*triadic model*” (RAE, 2005b), the “*new model of education for Entrepreneurship*” (Boyle, 2007), “*teaching model*” (A. Fayolle & Gailly, 2008), “*unification model*” (C. Jones, Matlay, Penaluna, & Al, 2014), “*learning dynamics — new era*” (Rae, 2010), “*typology of Entrepreneurship education and its evaluation*” (L. Pittaway & Edwards, 2012), “*Entrepreneurship program*” (S. A. Gedeon, 2014), “*knowledge of pedagogical content*” (Jones *et al.*, 2014), “*unifying progression model*” (Lackéus, 2015) and “*structural skills*” (Bacigalupo, Kampylis, Punie, & Al., 2016).

Through the practical application of Entrepreneurship learning methodologies, it is possible to develop new sustainable business models that require intense learning as well as advanced scientific research. Sometimes it is through the identification of success factors and not by competitive advantage that new and successful business models are developed based on Entrepreneurship. (Cantino *et al.*, 2017).

Different models highlight different aspects of Teaching Entrepreneurship such as “*the learning context, the personal and social component, opportunities, teaching methodologies and strategies, relationships and learning experience, evaluation results, pedagogical methods, skills, teamwork, ethics, motivation, learning from experience*” (Allahar & Brathwaite, 2017).

G. T. Solomon, Duffy & Tarabisky (2007) argue that mastering the entrepreneurial process requires countless talents, skills and knowledge. Furthermore, the question of what we teach as Entrepreneurship also manifests itself in how we can and how we should teach Entrepreneurship (Blencker *et al.*, 2006). As such, constructive learning theories offer solutions (Mueller & Anderson, 2014).

“*Since Entrepreneurship is an intra-disciplinary as well as a trans-disciplinary process, it can be embedded into the curriculum of different disciplinary contexts, e.g., sciences, engineering, humanities and arts*” (A. Gibb, 2011).

What are the guidelines that help us making decisions for one or other process? Will it be a matter of common sense, through what we want to achieve, with the integration of Entrepreneurship? It should be an in-depth study of the university ecosystem in question, its needs and future vision to make a holistic decision.

When speaking about Entrepreneurship Education, one must know that it has complementary fields to help students to have a holistic view of their entire scope. These complements are: Entrepreneurship Teaching, which is the development of an individual’s skill set (for example, the ability to identify opportunities and establish a business, and manage its growth); Entrepreneurship Learning, which is the creation of an "entrepreneurial mindset", the latter meaning the shaping of an individual’s personality or business attributes (for example, an individual’s creativity, innovation and risk-taking attitude — Fayolle, Gailly, & Lassas-Clerc, 2006; Weber, 2011); and, lastly, initiatives that focus on small business survival and progress, which are also emerging with the intent of providing the necessary abilities through entrepreneurial methodologies. They are known as “educating through Entrepreneurship” or “growth education”.

3.2.1.1. Entrepreneurship Teaching

Entrepreneurship Teaching (Education about Entrepreneurship) is an education field of Entrepreneurship, having a broader meaning in the United States of America (USA), also encompassing the concept of Entrepreneurship Learning. In the United Kingdom (UK), its definition has as main focus the development of companies and business plans (Blenker, Frederiksen, Korsgaard, & Al, 2012; Hannon, 2006; Lackéus, 2015; QAA, 2012; RAE, 2010), being oriented for business development (Allahar & Brathwaite, 2017).

Teaching programs — “Education about Entrepreneurship” — are designed to help students assimilating and reflecting on existing knowledge and resources that improve their understanding of a topic or theme, such as business creation and business growth strategies.

They tend to resort to a more traditional pedagogy, involving lectures and definition of texts to explore the theoretical foundations of the company and Entrepreneurship. Students can learn how Entrepreneurship evolved as a discipline and can critically evaluate the relevant literature.

As a discipline, Entrepreneurship Teaching has gained notoriety in the field of research, with transversal coverage covering different disciplines, cultures and several different regions of the world (Henry, 2013).

From a teaching standpoint, the conventional academic unit is evaluated on a mix of criteria, ranging from numbers and characteristics of students enrolled program

s to ratings from teaching evaluations and successful job placements for graduates.

However, new variables should be considered, such as business models developed, business plans written, prototypes developed, patents or IP protection applied for, customer surveys completed, seed money proposals made, and related activity-based metrics — these will also reinforce the experiential nature of Entrepreneurship Education.

New approaches that lead to learning through engagement are: the generation of original knowledge regarding how entrepreneurial behaviour is facilitated; the development of alternative business models that ensure the sustainability of universities; and the establishment of richer and more impacting ways to interact with the external community.

In conclusion, the programs related to the identification of opportunities for business development, venture creation and growth — in other words, becoming an entrepreneur (A. Fayolle & Gailly, 2008) —, can be labelled as “start-up education” (Francisco Liñán, 2007) or “educating for Entrepreneurship”.

3.2.1.2. Entrepreneurship Learning

Entrepreneurship Learning (Education for Entrepreneurship) is another Entrepreneurship Education field (a concept used in the UK, separate from Entrepreneurship Education), based on personal development, mindset, skills, experimental learning and daily practice of Entrepreneurship (Blenker *et al.*, 2012; P. Hannon, 2006; Lackéus, 2015; QAA, 2012), with entrepreneurial learning being an essential aspect of entrepreneurial behaviour (Brink & Madsen, 2015).

It is oriented towards the development of behaviours, skills and personal attributes to respond to business and non-business contexts (Henry, 2013; Jones & Iredale, 2010; Lackéus, 2015; QAA, 2012).

“Learning is a socially incorporated phenomenon, which influences and is influenced by the rules, values and needs of the actors involved; thus, the co-production of knowledge

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at the social level is the main trigger and result of learning Entrepreneurship” (Schuttenberg & Guth, 2015).

In conclusion, these “Education for Entrepreneurship” programs intended to create creativity, self-reliance, personal development, initiative-taking, action-orientation and entrepreneurial mindset, being interpreted as “*awareness education*” (Francisco Liñán, 2007).

Entrepreneurship Learning — “Education for Entrepreneurship” — focuses on creating entrepreneurial mindsets, helping to discover what it is to be an entrepreneur, in addition to offering ideas on how to be an entrepreneur. Programs that use this approach are usually taught through experimental learning opportunities that involve and enhance students’ skills and competences, defined in a relevant context. They challenge students to think about the future and visualize opportunities. Students usually engage in scenarios that challenge their thinking, as studied by the Quality Assurance Agency for Higher Education (QAA, 2015).

When Canziani *et al.* (2015) investigated pedagogical variables that could contribute to raising student scores on constructs of change, risk-taking, goal-setting, feedback and achievement, the effectiveness of the experimental-learning method for teaching Entrepreneurship is high, in opposition to teamwork and quantitative methods.

“There is a gap in our theoretical understanding of what it takes to become entrepreneurial. Research suggests that beyond acquiring knowledge and skill to act entrepreneurially, entrepreneurial learning also involves the development of an entrepreneurial identity, ..., in order to act entrepreneurially, individuals need a set of capabilities which are personal, organizational and societal....Entrepreneurial learning scholars find that learning in this context leads to consideration of ‘who I want to be’ and construction of an identity that enacts this aspiration” (Donnellon, Ollila, & Williams Middleton, 2014).

“Universities are considered as “entrepreneurial” when they adopt an entrepreneurial perspective in teaching and learning that incorporates a blended and interactive approach, among the main causes is building a creative society as an imperative of the knowledge society” (Ratten, 2017).

3.3. Master of Business Administration (MBA) program

“Master of Business Administration (MBA) programs are under intense pressure to improve efficiencies, lower tuition, and offer refreshed curriculum that is of high quality and regarded as relevant by the Marketplace” (Busing & Palocsay, 2016).

Some authors, such as Wiklund, Wright, & Zahra (2019), will even say that business school, as academic institutions, are under threat. Increasingly, business schools are becoming focused on teaching, with tenure track positions being converted to non-tenure track appointments focused on teaching.

Executive education audiences turn out to be quite heterogeneous in terms of age, gender, qualifications, experience, behaviour and ambitions, forcing a huge interconnection of program content, both theoretically and practically with real life components (Allahar & Brathwaite, 2017). *“This change in audience demand requires a targeted teaching approach given the participants background and experience. They seek professional education, introduction to a team-based context using learning methods” (Allahar & Brathwaite, 2017).*

Elliott & Soo (2013) found that the demand for European MBAs is constantly increasing, which has thus caused the MBA program industry to grow rapidly in response to the demands of firms that feel that they need to improve the training of their managers (Busing & Palocsay, 2016).

“The increasing number of universities and business schools provide MBA’s programs in different forms: full time, part time, executive, general management, distance learning, thematic or industry-focused programs, and soon” (Entrialgo et al., 2019). As the global business environment continues to change, MBA programs must adapt to prepare students for the latest trends and challenges in the business world (Entrialgo et al., 2019).

This phenomenon is mainly why universities and business schools need to give a response to the needs of preparing students with the necessary skills to be globally competitive (Sam & van der Sijde, 2014).

An MBA program is very common in *“the context of a university business school that is independently structured, managed, funded, and staffed, with teaching personnel mainly*

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recruited from business as adjunct lecturers, and with aboard of predominantly business sector members” (Allahar & Sookram, 2018).

Students must develop productive thinking and interpersonal competence, as well as embracing diversity (Ploum, Blok, Lans, & Omta, 2018; RezaeiZadeh, Hogan, O’Reilly, Cunningham, & Murphy, 2017).

Although there is a lack of agreement about the core facts and components (Guerrero & Urbano, 2012; Rothaermel, Agung, & Jiang, 2007), some features or practices may be considered good practices in the process to become an Entrepreneurial University. According to Guerrero & Urbano (2012), these features include formal characteristics such as Entrepreneurship education, informal characteristics such as an entrepreneurial climate, resources such as human capital and capabilities such as networks or alliances.

The presence and availability of subjects that are linked to Entrepreneurship may be important for the generation of a positive entrepreneurial climate (Bergmann, Geissler, Hundt, & Grave, 2018). In this sense, Geissler, Mario, Jahn, & Haefner (2010) found that the existence and the quality of Entrepreneurship courses is the most relevant variables that are affecting the perceived entrepreneurial climate of a university.

“The offering of specific courses on Entrepreneurship in an MBA program not only provides students with capabilities but also generates a positive climate that can foster their entrepreneurial intentions” (Entrialgo *et al.*, 2019).

There are several models that rank MBA programs. One of the most used models was designed by Guerrero, M., & Urbano (2012), and included categories as key points in the ranking such as the language of instruction, the workload internationality, international accreditations, lessons at international partner institutions and students prior work.

Entrepreneurship Education at university level may be the key to success in the development of entrepreneurial competences (Barba-Sánchez, Virginia, & Atienza-Sahuquillo, 2018). This is important not only for future entrepreneurs, but also for employees of entrepreneurial firms, and it is also why it is absolutely necessary to include Entrepreneurship education in MBA programs.

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“An effective Entrepreneurship program can empower students to create their own job; create their own future; create their own wealth; create their own sense of pride and self-worth; create their own identity; create their own facilities and operations; create jobs for others; create their own contribution to the world; and create their own ability to give back. If a properly structured and developed Entrepreneurship program can offer this type of empowering potential for students, the outcomes can be transformative” (Kuratko, D. F., & Morris, 2018).

Entrialgo *et al.*, (2019) state that MBA programs do not have to be necessarily oriented to Entrepreneurship, as they may have other priorities, but the total absence of a subject of this nature will indeed limit their students’ future achievements.

3.3.1. ISCTE Executive Education

ISCTE (ISCTE-IUL, 2019) was founded in 1972 with 296 students, and, in 1988, the Institute for the Development of Business Management — INDEG — was created (INDEG, 2019). A few decades later, in 2020, the original name changed for “ISCTE Executive Education” (ISCTE Executive Education, 2020).

ISCTE Executive Education is the first business school in Portugal, being a pioneer in the university-business association, and, since its foundation, it has been a center of excellence in the training of executives. Throughout its activity, the school has been anticipating the challenges that are facing the management of organizations, exploring innovative themes, and building impacting solutions in the development of executives and organizations of excellence.

“ISCTE Executive Education is all about Getting Ahead” and *“Real Life learning is our signature”* (ISCTE Executive Education, 2020) are the main claims of the institution, and how it is defined in terms of actual project.

ISCTE Executive Education recognizes a set of rankings, affiliations and accreditations that demonstrate the work of this school over the decades.

The excellence of the teaching staff, in line with the highest standards of reference, is absolutely crucial, combining top academic training with extensive business experience.

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It is connected to AUDAX, ISCTE’s Innovation and Entrepreneurship Center (ISCTE, 2020).

3.3.1.1. Product portfolio

Currently, ISCTE Executive Education’s portfolio is divided into two main ranges: Corporate Programs, which are specific programs taught at the request of a company (Business to Business — B2B); and Open Programs, which are those of general application (Business to Consumer — B2C). All programs are aimed at training executives.

The B2C range consists of 5 product lines with different depths, including the Executive MBA (the focus of this thesis):

- Executive Master of Business Administration (EMBA): Premium product providing general training in management, comprising four semesters. During the program, students are accompanied by a career management program. Upon completion, you can apply for a Master's degree at ISCTE Business School.

Annex 1 presents a table that summarizes ISCTE Executive Education’s portfolio.

Given the profiles of former students that attend the EMBA taught by ISCTE Executive Education, in terms of age, gender, training, function and sector of activity, it is possible to perceive the heterogeneity of students and the requirement of the programs so that they can meet across the board everyone’s expectations.

As ISCTE Executive Education is a school of high recognition in today’s society, offering its students the tools and skills necessary for the business world and with Entrepreneurship being one of the essential tools for economic development, it is important to analyze and understand if the institution — as a whole, and its EMBA in particular — is aligned with the following purpose:

“To shape ideas about what Entrepreneurship is, not to promote an ideology of Entrepreneurship, and to create critical awareness that contributes to that of entrepreneurs to society” (Rae, 2010).

3.3.1.2. EMBA — Executive Master of Business Administration

At ISCTE Executive Education, the Executive Master of Business Administration (EMBA) is characterized by *“theoretical and practical classes with a view to acquiring hard skills and soft skills in advanced management, seminars and executive talks in a close connection, interaction and networking with business leaders, individualized monitoring program with the acquisition of skills for better development personnel and professionals and an immersion in the theme of social responsibility with innovative content and applied experiences”* (ISCTE Executive Education, 2020).

The EMBA’s students have a different profile than a regular MBA: an age range of around 40 years old, and several years of professional experience. Moreover, the diversity in terms of training, professional career and sectors of activity, combined with individual potential, also characterizes the EMBA’s students.

“According to the significant heterogeneity, no ‘typical’ MBA program can be defined, the diversity of students and requirements reflects the heterogeneity of the programs. Nevertheless, we can identify the Entrepreneurship-promoting characteristics that are more widespread” (Entrialgo *et al.*, 2019).

3.4. Conclusion from the Literature review

“Research on Entrepreneurship has exploded over the past two decades, attracting worldwide attention. Showing greater rigor and creativity, this research has achieved greater academic legitimacy and approval. But much of this research goes unused perhaps because it focuses more on what researchers want to study, rather than what our different stakeholders care about” — having this statement as the basis of our study, we decided to study the students’ opinion in order to realize where we are now and where we should and need to be in the future.

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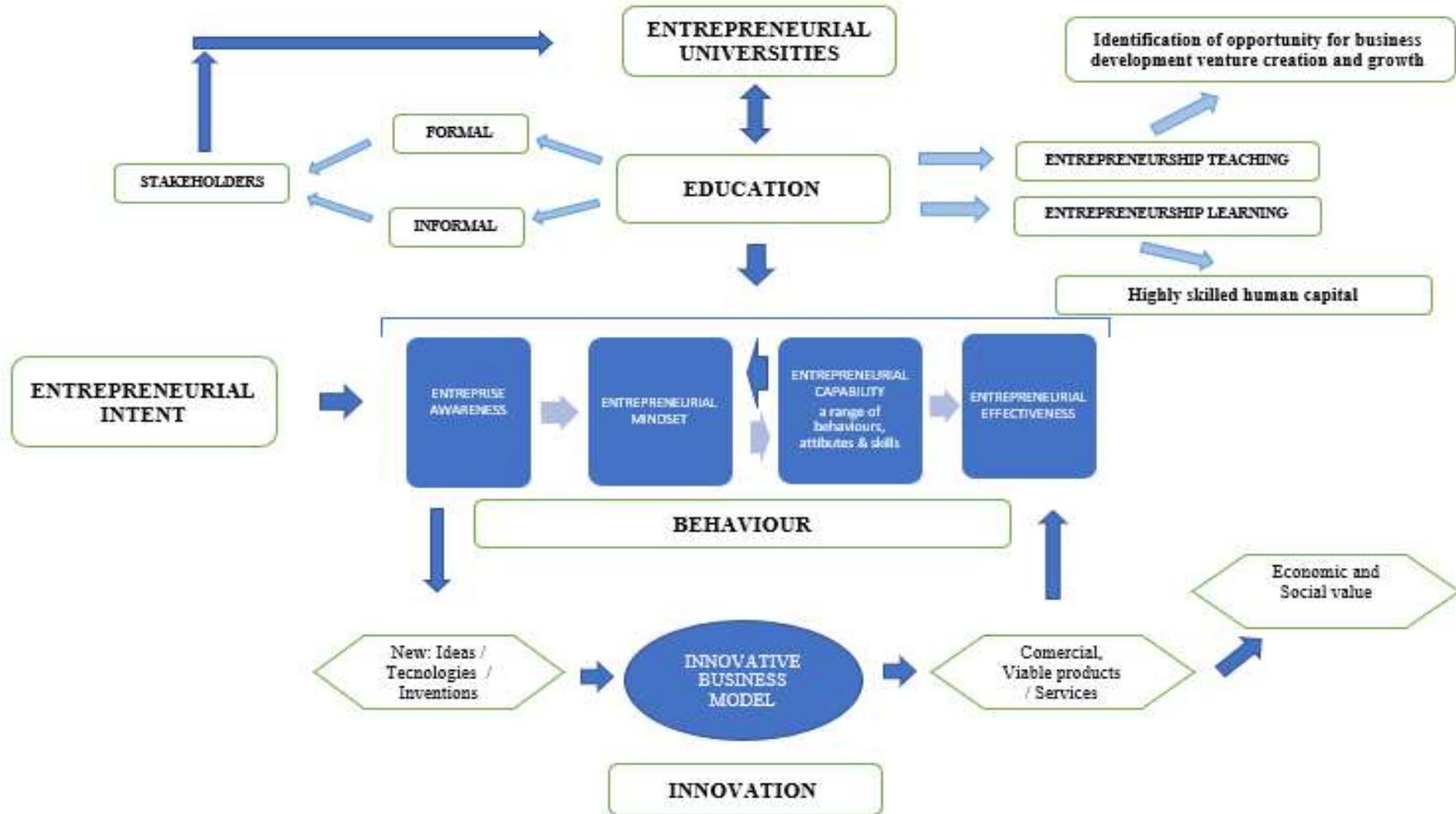


Figure 3 — Major conclusions from bibliographic research on Entrepreneurship

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Three research questions (RQ) were used to direct this case study:

- RQ1. Are executives that undertake the EMBA aware of Entrepreneurship and its importance?
- RQ2. If and what knowledge degree, tools and experience in Entrepreneurship are available and stimulated during the EMBA?
- RQ3. What is the position of *alumni* vis-à-vis Entrepreneurship when the EMBA ends?

Aligned with these questions and for the idealization and structuring of the questions used as the basis of our focus group, we selected the dimensions and variables from the literature review based on the most important researchers: Donald F. Kuratko, Maribel Guerrero, Haven Allahar, Luke Pittaway, and Monteserrat Entrialgo, Niels Bosma and Donna Kelley from the Global Entrepreneurship Monitor (GEM).

Please refer to Annex 2 for the revised authors and the selected dimensions, variables and citations that formed the basis of “Focus Group” questions.

These dimensions were analyzed, adapted and enumerated according to findings from the case study and the subsequent selection of the most appropriate variables.

DIMENSIONS	VARIABLES
D1. ENTREPRENEURIAL INTENTION	V1. Intention
	V2. Opportunity
	V3. Social attitudes/Affiliations
D2. BEHAVIOUR	V4. Taking risk
	V5. Skills
	V6. Motivation
	V7. Attitudes
	V8. Mindset
	V9. Knowledge
D3. EDUCATION	V10. Entrepreneurship teaching
	V11. Entrepreneurship learning
D4. ENTREPRENEURIAL UNIVERSITIES	
D5. INNOVATION	

Table 1 — Key dimensions and variables coding, the topic issues of the “focus group” questions

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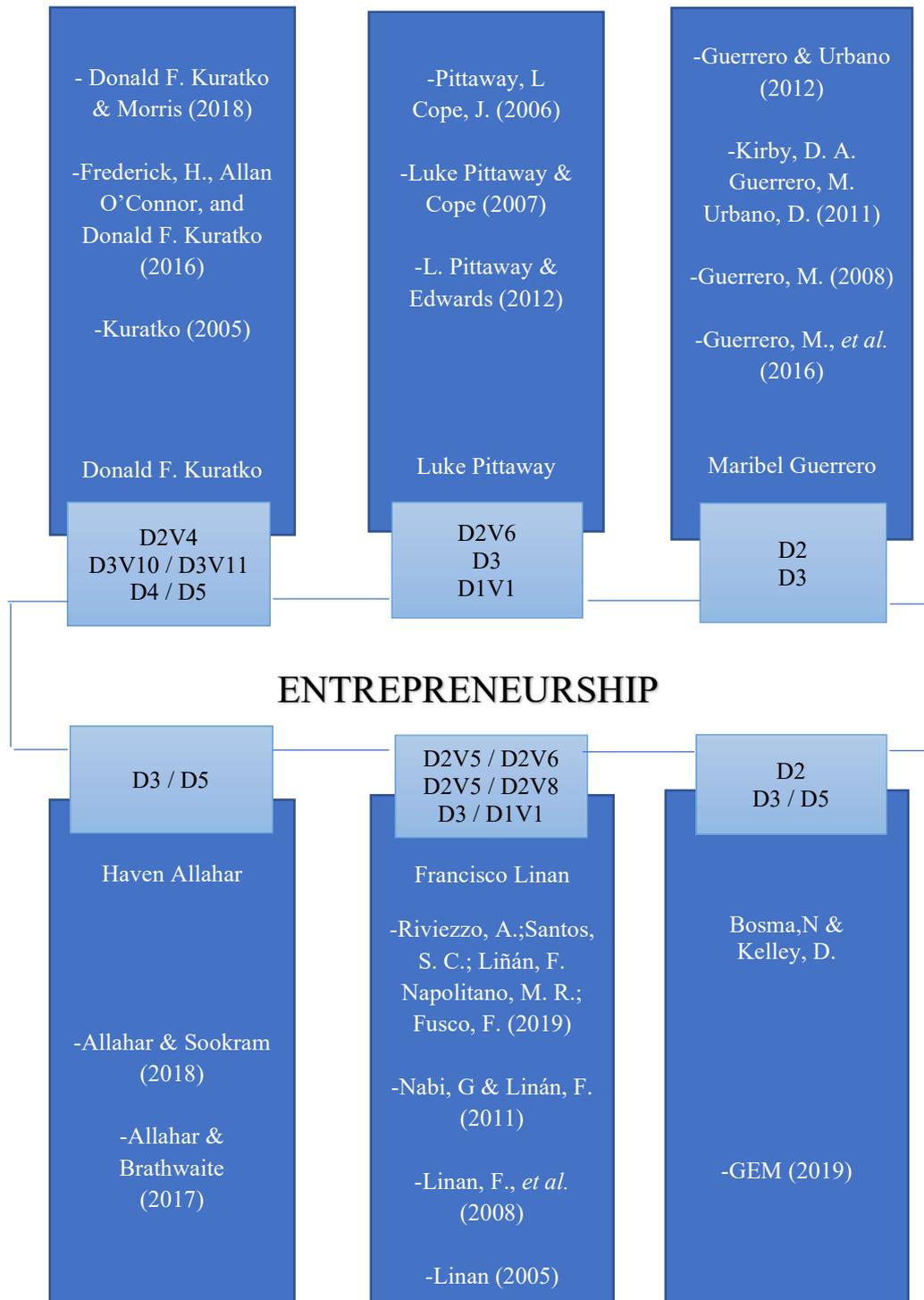


Figure 4 — Selected authors, dimensions, variables and nomenclature, taking into account the literature review, that formed the basis of the focus groups’ questions.

4. Methodology

“All theory must be made to be put into practice and all practice must obey a theory. Only superficial spirits turn off the theory from practice, not looking at what the theory is but a theory of practice and practice is nothing but the practice of a theory. (...) In the higher life theory and practice complement each other. They were made for each other” — (Pessoa, 2011).

The following Methodology is the way to achieve the conclusion data, giving us insight about the evaluation of “EMBA as an Entrepreneurship inductor: the ISCTE Executive Education case.”. We studied the particular case of this Portuguese public institution directed and dedicated to executive education, and asked *alumni*’s opinion — one of the most important stakeholders.

The methodology was divided into the following sections:

4.1. Research Design

The investigation was based on the evaluation of EMBA as an Entrepreneurship inductor: ISCTE Executive Education case.

A semi-structured focus group was conducted on a group basis, where the interviewer asked questions to the group of participants — *alumni* — and recorded their answers and the interactive discussion between them.

To conceive a theoretical or descriptive structure, it was necessary to identify the main dimensions, variables, components, themes and issues in the research project and the predicted or assumed relationships between them (Yin, 2003). The researcher had a list of themes and questions to be covered based on the dimensions and variables acknowledged during bibliography review and students’ general perspective on the EMBA program.

The fact that focus groups should not take longer than 1 to 1,5 hours, as participants get tired and unmotivated and start answering in an unthinking way, was the main key to structure the questionnaire. All dimensions needed to be present, as well as variables, each question focused on the main points that were being studied, and each possible answer focused on the possible options to choose.

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Each answer has been structured with a number of possible options: 1, 2, 3 or all options — depending on whether we wanted a very focused or more comprehensive answer. There were only two questions where there was a chance of free answering, allowing the participants to express an opinion that was different from the key ones.

The aim of semi-structured answers being the basis of the focus group was to assure focus on the theme, which would not let participants to disperse in terms of their answers, and therefore guiding them and cancelling the hypothesis of each answer being as disparate and diverse as the number of participants. If that happened, there would be no chance of having a set of opinions with greater intensity and relevance, that would guide us and lead us to this thesis’ conclusions and possible improvements and implementation. Nevertheless, openness was given, so that all answers could be justified and correlated with their experiences and with their peers.

Please refer to Annex 4 for regarding the questionnaire that had been prepared as an interview script.

The *alumni* who participated in the focus group were invited to a meeting on Zoom, a video communications platform, during the Covid-19 pandemic, which was the reason why it was not possible to use a presential focus group method. Data was recorded by Zoom throughout the conversation and notes were taken. The duration of each focus group was around 90 minutes.

The moderator (researcher) was always the same one in the different focus groups that were held, and the questions were always the same ones, at the same order, given a specific organizational context that was encountered in relation to the research topic. On the other hand, additional development of the questions required to explore some ideas and objectives given the nature of theme.

The use of this method is to assure a balance, encouraging participants to provide answers to a particular question or the questions that were introduced, allowing them to range more freely in discussion. This could possibly reveal data that would provide important insights.

Through the data obtained in the several focus groups, a qualitative assessment of them was carried out, creating an information database. From this database, it was possible to

assess the perception of the *alumni*: is the EMBA thought and prepared to give training in Entrepreneurship (either directly or indirectly)?

References to the connection between the EMBA and Entrepreneurship showed up naturally throughout the focus groups, and, in the cases where the topic of Entrepreneurship was not fully developed, the interviewees were asked to expose their visions, as well as to give general ideas about their relationship with Entrepreneurship. After the transcription of all interviews, the data was coded and analyzed.

4.2. Sample

As the information given by the *alumni* was of high importance in the theme of this thesis, it would be soon decided that it would be the source of data. Only the EMBA's *alumni* were selected to participate in the focus groups, as they have certain characteristics in common that relate to the topic that was being discussed. Therefore, they were encouraged to discuss and share their points of view without any pressure, in order to reach a consensus (Krueger *et al.*, 2000).

For the focus group, all of the EMBA's *alumni* received an e-mail from the school secretary with detailed information about the focus group, asking if they were interested in participating. However, only a few of them accepted the challenge. Then, we tried networking between some *alumni*, managing to develop and schedule 7 focus groups with four to seven participants. Initially, the focus groups were designed to have 6 to 7 participants, but there were a few last minute dropouts. All participants were preliminarily informed about the aims and purposes of the study, as well as the voluntary and confidential nature of their participation. In conclusion, sample consists of focus groups with 4 to 7 *alumni* of the EMBA program, with a total of 7 focus groups and 38 *alumni*.

The main issue with the focus group method is that, unlike quantitative studies, it is difficult to measure the sample size (N) of content analysis research (Rego, Cunha, & Meyer Jr, 2018). Rego *et al.* (2018) used the idea of “information power”, suggesting that the number of participants needed for the study is based on: 1) the aim of the research, 2) the sample specificity, 3) the use of established theory, 4) the quality of the data provided by the dialogue, and 5) the analysis strategy that is used.

4.3. Data collection

From the data obtained, it was possible to further study all the content, analyzing the *alumni*'s perspective, in relation to the variety of activities held during the program that can encourage and develop Entrepreneurship, and to the variety of possible experiences that may contribute to this. The interactive nature of the collection allowed to find important themes, patterns, correlations and relationships that enabled to process the data of this same collection.

4.4. Analyze

There are different methods of analyzing qualitative data, and there are in fact no better ways than others. Given the situation, there are methods that are more appropriate than others (Wanlin, 2007).

The analysis carried out, in the whole scope of education, allowed to qualify the degree of induction of the EMBA program in Entrepreneurship in each *alumni*, who had access to a complete EMBA contents with all the theory, theory-practice and practice experiences.

During the analysis, the non-standard and complex nature of the data collected needed to be condensed (summarized), grouped (categorized) and/or restructured in order to support meaningful analyses (all discussed later); otherwise, it could result in an impressionistic view of what they mean (Saunders, Lewis, & Thornhill, 1970).

The collection and analysis of data was carried out from a deductive perspective. This perspective shaped the approach adopted in the qualitative research process and in the aspects of data analysis.

This data was associated with the structuring of meanings through topics/narrative in order to understand them by integrating related data extracted from different transcripts and notes, identifying key themes or patterns from them for further exploration, developing and/or testing theories based on these apparent patterns or relationships, and finally drawing the respective conclusions.

4.5. Coding

To summarize all the language-based data resulting from the focus groups, coding was used for words or short-phrases that highlight and capture the essence of the message. Although somewhat subjective, coding was done to classify, by arranging things in a logical order and make it part of a classification (Saldana, 2013). Coding was not used simply to reduce data into intensity, but also to add value to the research story, by distilling the data, its main goal.

Two types of answers were created: theoretical question with several possible theoretical answers (one or more answer options selected); and scale answers where the *alumni* scores on a predetermined scale. In both types of questions, pieces of text were created, acknowledging the several dimensions and variables that are being questioned in this thesis.

In theoretical questions with a theoretical answer option, the answers given by the *alumni* were counted and compared to the total of possible answer options, and subsequently converted into an intensity scale from 1 to 7, with subsequent connection to an agreement scale. We used an intensity scale from 1 to 7 to code the answers information, allowing us to convert data into an agreement perspective, with a qualitative scale. This intensity scale is called “Likert Scale”, which is the technical name given to the response scale used in this type of question. Created in 1932 by the North American Rensis Likert, the Likert Scale measures the respondent’s attitudes and degree of agreement with a question or statement. However, care should be taken when using this feature, as questions may be somewhat biased.

ANSWERS	SCALE	COMMENTS
selected answers with intensity of choice, taking into account the total of answers	1	strong disagreement
	2	disagreement
	3	slight disagreement
	4	neither agreement nor disagreement
	5	slight agreement
	6	agreement
	7	strong agreement

Table 2 — Correlation between selected answers, followed by conversion in intensity scale and agreement scale, to code focus group answers

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Theoretical questions with scale answers can be scored on a predetermined scale. The answer is selected, with a correspondent’s comments, and the total of answers are measured in an intensity of choice.

SCALE	COMMENTS	INTENSITY OF CHOICE
1	strong disagreement	selected comments with intensity of choice comparing with all the possible answers
2	disagreement	
3	slight disagreement	
4	neither agreement nor disagreement	
5	slight agreement	
6	agreement	
7	strong agreement	

Table 3 — Correlation between intensity scale and agreement scale, with intensity of choice, to code focus group answers

In scale answers, there are several benefits: it is easy to build the survey questionnaire; the question of scale is the simplest way to ensure that all response scenarios are covered; and, above all, the answers are not mixing different subjects. It is easier for those who will answer the survey questionnaire, as, after all, this will increase response rates and also the quality of results. Moreover, it is easier to analyze survey data, as it is possible to group negative and positive data together to get a better idea of the result.

On the other hand, the lack of depth of the answers are a disadvantage of the question of scale. However, it must kept in mind that, in quantitative research, the main purpose is not to obtain in-depth answers. In order to understand the motivations and intentions behind respondents’ dissatisfaction, it is recommended to do a qualitative research.

When we build a Linkert Scale, some points have to be acknowledged:

- Subtitle — the minimum and maximum points on the scale must be very well defined and have the exact opposite meaning;
- Symmetry — with the same number of negative and positive points;
- Odd scales — in addition to being symmetrical, it is important to have a neutral point, an intermediate note for those who have no opinion or are indifferent to them;

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- Similar scales — if different questions have the same scale intensity answers, it is easier to answer, and the results between one question and another can be compared.
- Open comments — it is possible to deepen the answer to any question, understanding the motivations and interests behind an answer. It is correct to include an open-ended question asking to explain why this grade was given.

The correlations between answers, scale of intensity, scale of agreement and intensity of choice (in the scale of intensity) were therefore the step in the direction of a more rigorous and suggestive analysis and interpretation for research, linking and clustering the essence of data collection. A summary of the main points that emerged from the performance of this activity was carried out to allow a reliable analysis. As a result, it was possible to categorize the collected data thus validating themes, patterns and relationships.

As Entrepreneurship is an important tool in the development of students, allowing to respond to stimuli from the business world in a natural, safe and, most of all, entrepreneurial way, the correct characterization, in ISCTE Executive Education’s EMBA, is fundamental to perceive correctly if *alumni* have all the Entrepreneurship tools, as well as knowledge and stimuli in their own and corporate benefit.

We investigated whether all dimensions and variables of Entrepreneurship were the object of presence and teaching concern, as well as in which part of the program they are present, whether they are influenced by external factors and on what extent they impact and shape students.

4.6. Methodology goals

At the end of the research, in terms of methodological framework, it is intended to obtain two major views or assessments of the case:

1) AS IS — At the time of the thesis, which serves as a basis for assessing the impacts and outcomes of the options taken in focus group and which will be demonstrated in the results of the case;

2) TO BE — Critical analysis of what could still be done in the scope of the project under the light of the focus groups’ results.

5. Results

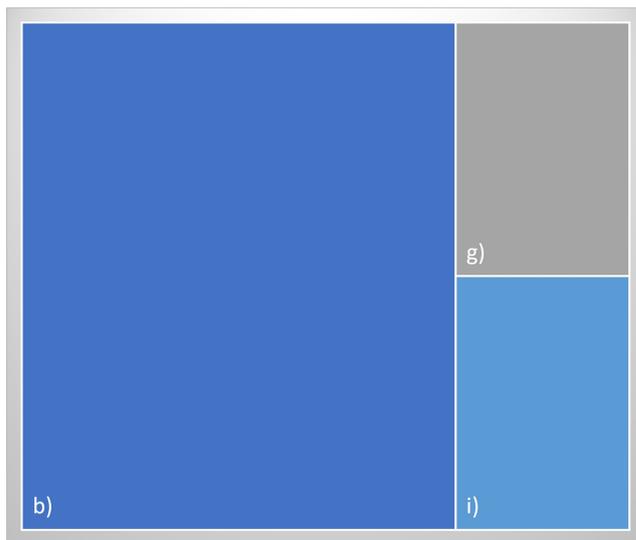
The interconnection research between ISCTE Executive Education and Entrepreneurship, regarding the EMBA as an Entrepreneurship inductor: ISCTE Executive Education case, sets specific questions and situations. *Alumni* were the key and relevant actors in the feedback process, information impact and training experimentation, in order to assess the current status and identify possible solutions to improve the reality of the EMBA program and relevant references for the quality of the teaching and learning processes. The selection of *alumni* answers and testimonies were very valuable.

The results obtained using focus group answers, based on the various dimensions and variables studied and selected, as well as their interactions, are presented in the following chapter. The intensity of the answers was analyzed and graphically presented below.

5.1. Entrepreneurial Intention

To assess the Entrepreneurial Intention dimension, a set of 4 questions were selected. The first part (question 1 and 2) aimed at validating which variables are present: Intention, Opportunity and Social attitudes / Affiliations, in terms of the enrolment on the EMBA and the stimulus before, during and after. In the second part (question 3 and 4), the research is focused on corporate entrepreneurial intention and the stimulus in the executive training of its employees.

a) Why did you choose the EMBA? (choose 1 option)



	ANSWERS	COMMENTS
a)	Recommended by colleagues/friends/family	strong disagreement
b)	Improve my functions and capabilities	slight agreement
c)	Develop new ideas in my work/department	strong disagreement
d)	Promotion	strong disagreement
e)	Notoriety	strong disagreement
f)	Job search/new job	strong disagreement
g)	Personal fulfilment	disagreement
h)	Creating my own business	strong disagreement
i)	Seize opportunity to improve my knowledge	general disagreement
j)	Admiration by entrepreneurs	strong disagreement

Figure 5 — Answers to question No. 1 — Tree map graphic representation and table of agreement

Using the scale of agreement of the highlight goes to:

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- option b) with slight agreement;
- followed by option g) with disagreement.

b) **What else drove you before joining the EMBA and still drives you?** (choose 3 options)

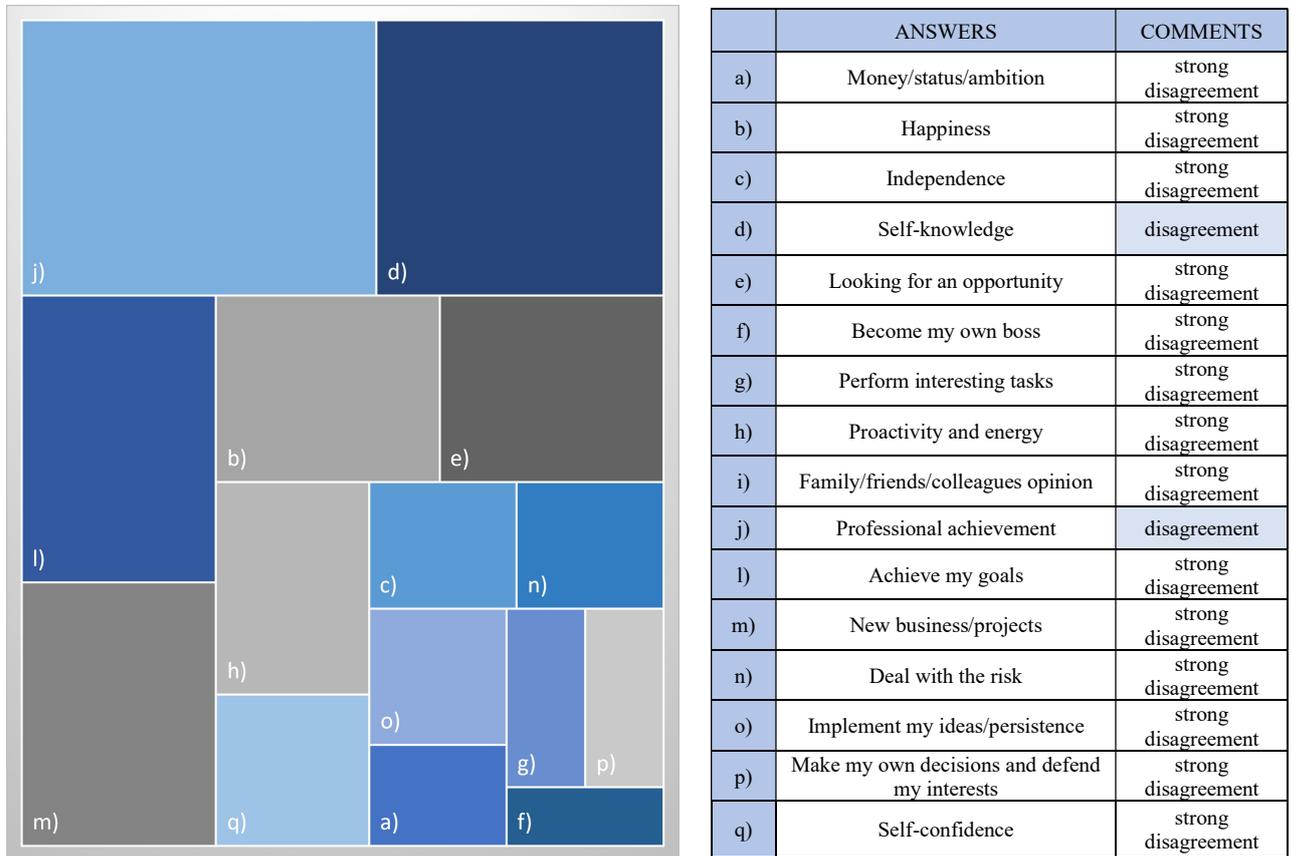


Figure 6 — Answers to question No. 2 — Tree map graphic representation and table of agreement

This question obtained a wide range of answers, therefore, with individual low intensity. Options d) and j) are the ones presenting the higher intensity, which, in this case, is disagreement.

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c) **Was the organization where you worked for when you joined the EMBA an entrepreneurial organization?** (scale from 1 to 7, with 1 being the lowest and 7 the highest)

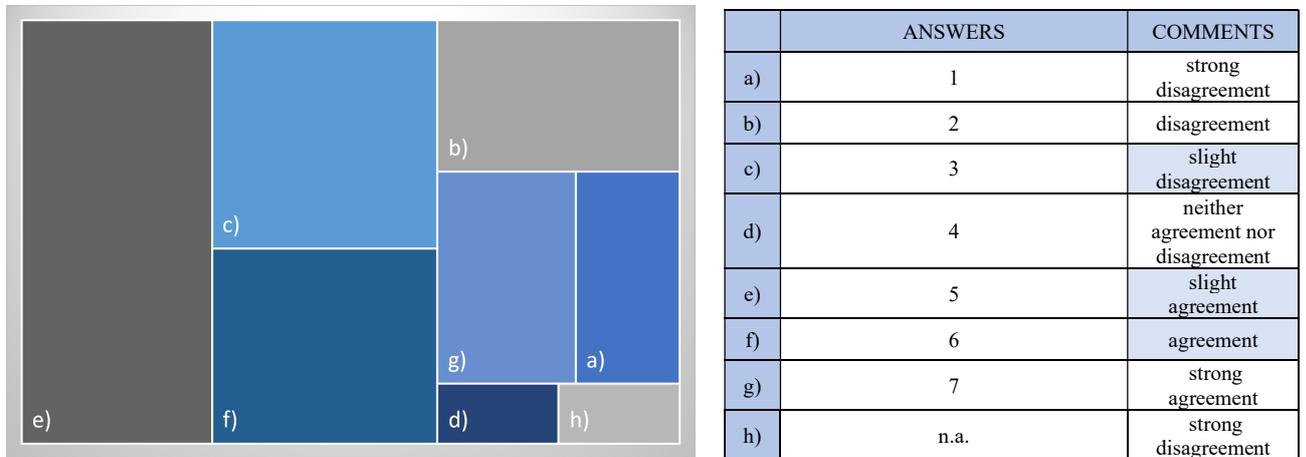


Figure 7 — Answers to question No. 13 — Tree map graphic representation and table of agreement

In a transversal way, there was a wide expression of intensity chosen in this question.

The most intensity options selected were:

- option e) with slight disagreement intensity;
- followed by option c) with disagreement intensity;
- followed by option f) with agreement intensity.

d) **Did that motivate you to choose the EMBA?** (Y/N)



Figure 8 — Answers to question No. 14 — Tree map graphic representation and table of agreement

The answer selected, with a high agreement intensity, was option b) with slight agreement.

5.2. Behaviour

To study and validate the behaviour dimension, 2 questions were structured with the objective of perceiving if there was a stimulus and development of behaviours and, more specifically, of competences.

e) Which of the following characteristics did I develop the most at the EMBA?

(choose 1 option)

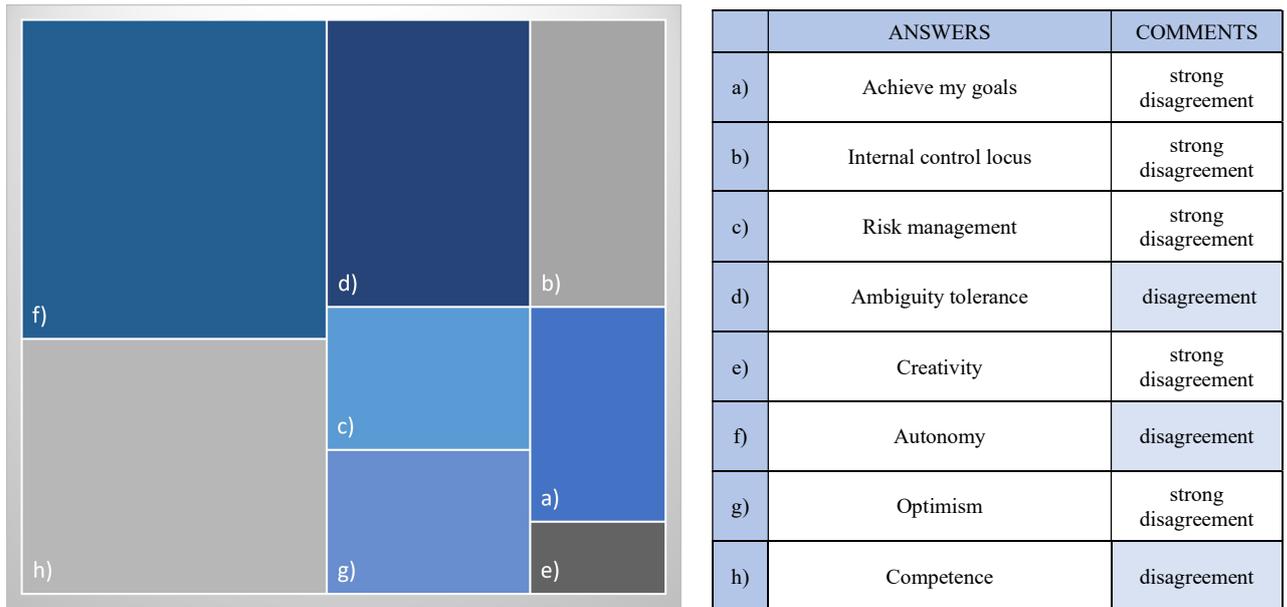


Figure 9 — Answers to question No. 3 — Tree map graphic representation and table of agreement

All the possible presented options, on the scale of intensity, were selected. Those who had more intense agreement were option d) f) and h) with disagreement.

f) **What skills have I learned and/or improved in the EMBA?** (choose 3 options)

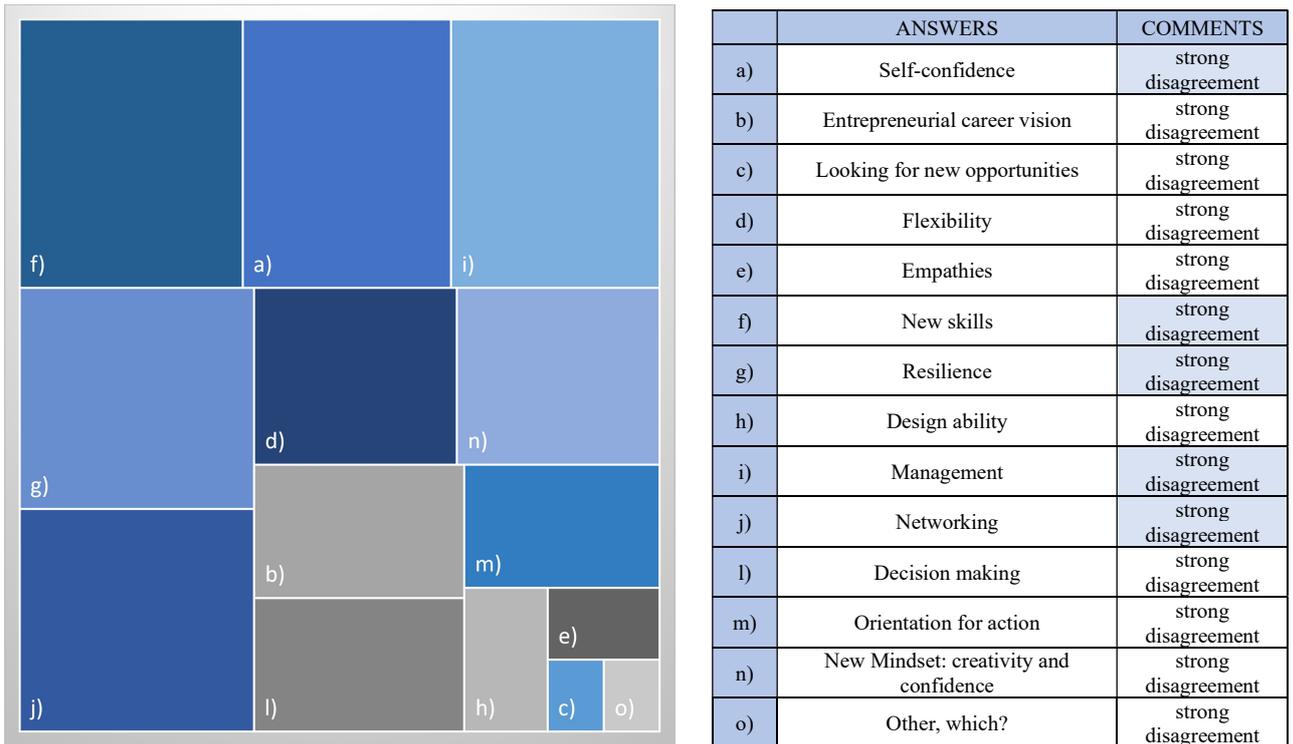


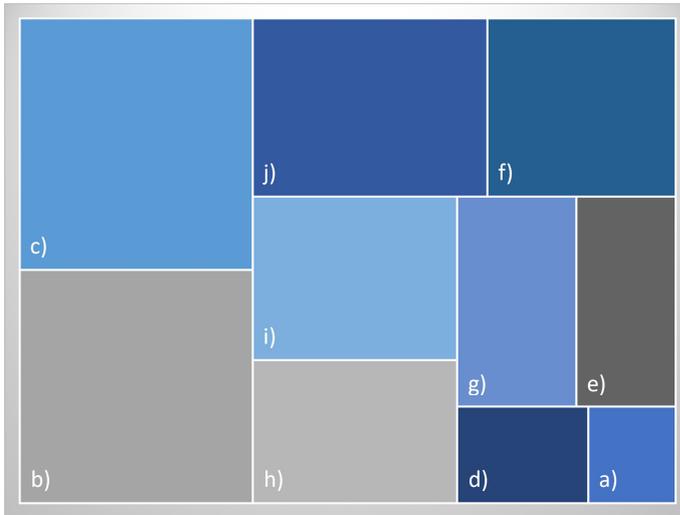
Figure 10 — Answers to question No. 4 — Tree map graphic representation and table of agreement

In a transversal way, there was a wide expression of low intensity with the question. Within the most expressed intensity, the chosen ones were options a) f) g) i) and j) with strong disagreement.

5.3. Education

In order to validate the education profile present in the EMBA, two questions were constructed: the first focusing on Learning Education; and the second focusing on Teaching Education. It is important to understand the tools and forms of learning that have had the most impact on *alumni*.

g) What tools do you think you have acquired throughout the program? (choose 2 options)



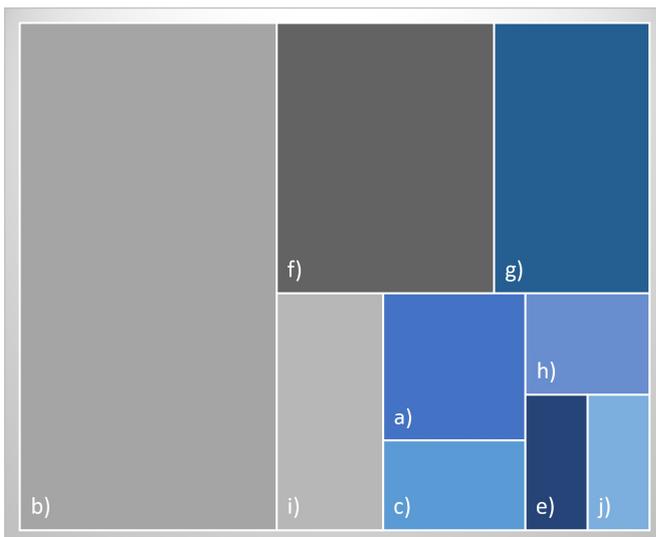
	ANSWERS	COMMENTS
a)	Ideas	strong disagreement
b)	Networking	slight disagreement
c)	Knowledge	slight disagreement
d)	Soft skills	strong disagreement
e)	Alert for new opportunities	strong disagreement
f)	New mindset	disagreement
g)	Believe in myself	disagreement
h)	Willingness to risk	disagreement
i)	New perception of the world	disagreement
j)	Willingness to implement and boost	disagreement

Figure 11 — Answers to question No. 5 — Tree map graphic representation and table of agreement

The options selected with the highest intensity scale were options b) and c) with slight disagreement.

It is also important to understand Teaching Education inductor.

h) In what forms of teaching there has been greater learning, during the EMBA? (choose 2 options)



	ANSWERS	COMMENTS
a)	Study of companies and in companies	strong disagreement
b)	Group work	slight disagreement
c)	Idea/company creation and development	strong disagreement
d)	Visits to companies	strong disagreement
e)	Business plan	strong disagreement
f)	Case studies presented and discussed by students	disagreement
g)	Interactive lessons	strong disagreement
h)	Reading	strong disagreement
i)	Workshops and seminars	strong disagreement
j)	Other, which?	strong disagreement

Figure 12 — Answers to question No. 6 — Tree map graphic representation and table of agreement

Of all the possible options presented, on the scale of intensity, the ones selected were:

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- option b) with slight disagreement; followed by option f) with disagreement.

5.4. Entrepreneurial Universities

The way a university looks and interacts with Entrepreneurship is the mirror of its entrepreneurial component. The evaluation of the characteristics and subjects of an entrepreneurial university is the fingerprint of this correlation.

i) **What characteristics of the Entrepreneurial University are presented at ISCTE Executive Education?** (choose 2 options)

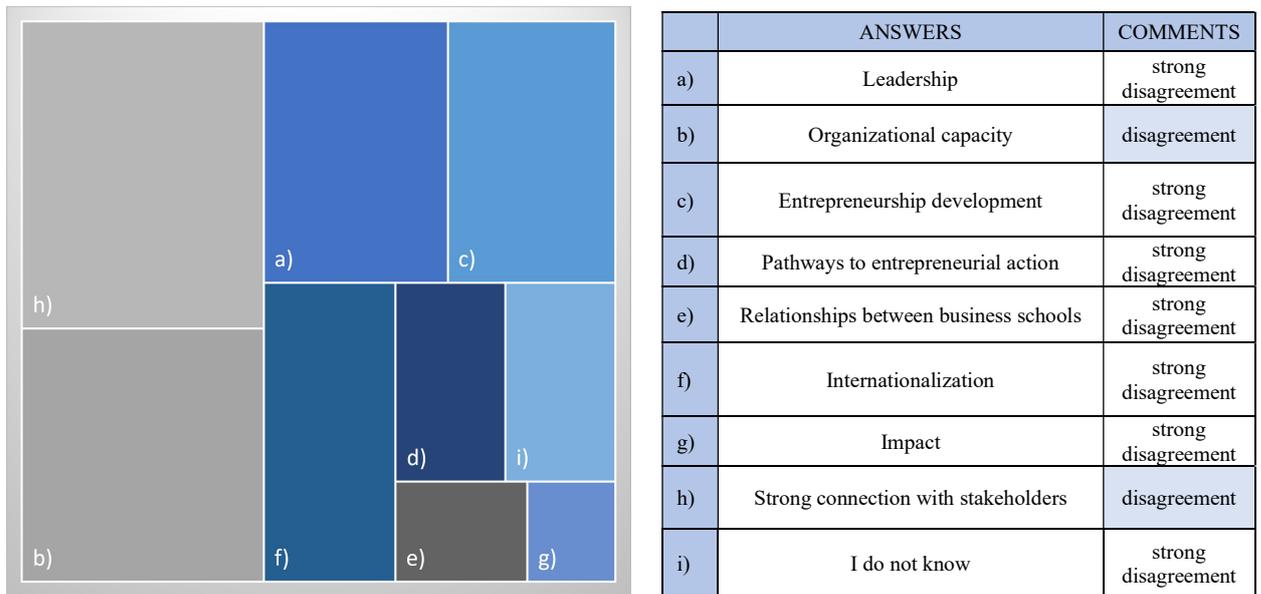


Figure 13 — Answers to question No. 7 — Tree map graphic representation and table of agreement

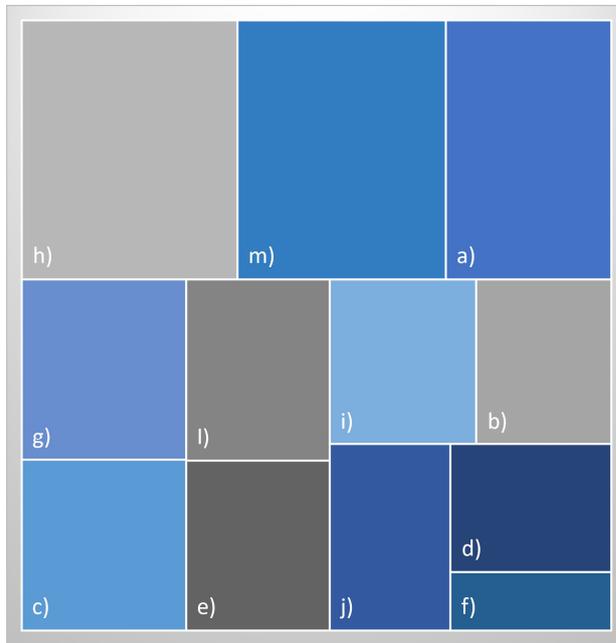
a)	Entrepreneurship is one aspect of the business school’s strategy; there is a high level of commitment.
b)	A variety of funding sources are adjusted to ensure a sustainable financial strategy and to provide support and incentives, to support the entrepreneurial agenda.
c)	Stimulating the development of sets of business ideas and an innovative approach to teaching.
d)	Entrepreneurial activity is encouraged by supporting the movement of shares, providing mentors and establishing incubators.
e)	Research, Entrepreneurship education, industry and community activities to improve the knowledge system.
f)	The entrepreneurial strategy incorporates an international perspective on teaching, participating networks and global exchanges.
g)	The business school assesses the impact of Entrepreneurship in teaching, learning and initial support at regular intervals.
h)	It is based on a close connection with all stakeholders in the EMBA: teachers, companies, authorities, suppliers, community and others.
i)	No answer.

Table 4 — Correlation between characteristics of entrepreneurial university and significance

“EMBA as an Entrepreneurship inductor: the ISCTE Executive Education case”

The options selected with more intensity, in the scale, were options h) and b) with disagreement.

j) **ISCTE Executive Education does not offer...?** (choose 2 options)



	ANSWERS	COMMENTS
a)	Entrepreneurship Division (Department)	strong disagreement
b)	Integrative learning with entrepreneurs	strong disagreement
c)	Innovative Curriculum	strong disagreement
d)	Development of pedagogies and innovative teaching material — current case studies	strong disagreement
e)	Teaching with initiatives and entrepreneurial Lecturers	strong disagreement
f)	Workshops with <i>alumni</i> and invited entrepreneurs	strong disagreement
g)	Entrepreneurship as a theme (discipline)	strong disagreement
h)	Access to entrepreneurs/investors and credit	disagreement
i)	Access to university resources: laboratory/researchers/knowledge transfer	strong disagreement
j)	Methods experimental participation in social and company projects	strong disagreement
l)	Education extended to social/family/corporate	strong disagreement
m)	Incubator of ideas	disagreement

Figure 14 — Answers to question No. 8 — Tree map graphic representation and table of agreement

The options selected, with the highest intensity of scale, were:

- options h) and m) with disagreement; followed by all other options, with strong disagreement.

5.5. Innovation

Entrepreneurship and innovation go hand in hand in the creation and social, business and educational development. It is therefore important to understand their connection to the universe of executive education and the way that *alumni* view this same innovation.

l) **Do you consider ISCTE Executive Education an innovative university?** (choose 1 option)

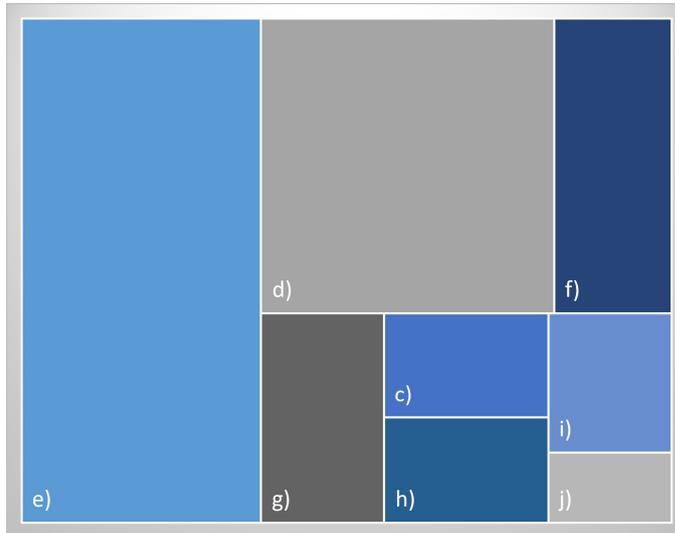


	ANSWERS	COMMENTS
a)	Yes	disagreement
b)	No	agreement
c)	I do not know	strong disagreement

Figure 15 — Answers to question No. 9 — Tree map graphic representation and table of agreement

The answer with the highest concordant intensity selected was option b) with agreement.

m) What is innovation for me? (choose 1 option)



	ANSWERS	COMMENTS
a)	Utopia	strong disagreement
b)	Headache	strong disagreement
c)	The future	strong disagreement
d)	Improvement	disagreement
e)	Disruption	slight disagreement
f)	The way I look at the present	strong disagreement
g)	Action	strong disagreement
h)	Implementation	strong disagreement
i)	Will	strong disagreement
j)	Risk	strong disagreement

Figure 16 — Answers to question No.10 — Tree map graphic representation and table of agreement

The options with the highest intensity scale selected were:

- option e) with slight disagreement;
- option d) with disagreement.

5.6. The EMBA program

Besides the impact of the dimensions, it is important to evaluate the relation between the *alumni*, Entrepreneurship and the EMBA. How the *alumni* idealized their journey throughout the EMBA program and how it really happened is crucial to understand the connection and feelings that run through their mind when they remember this experience.

n) What were the general expectations when the EMBA started?

(Scale from 1 to 7, with 1 being the lowest and 7 the highest)



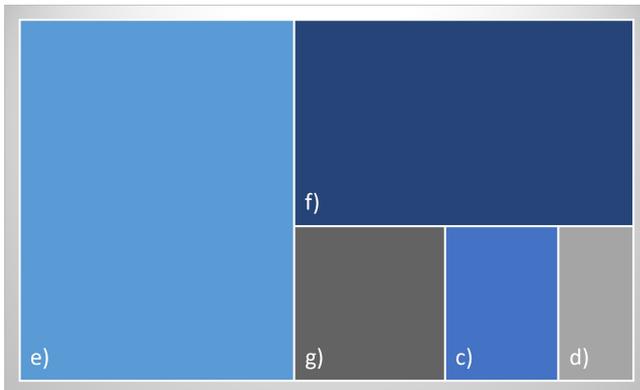
	ANSWERS	COMMENTS
a)	1	strong disagreement
b)	2	disagreement
c)	3	slight disagreement
d)	4	neither agreement nor disagreement
e)	5	slight agreement
f)	6	agreement
g)	7	strong agreement

Figure 17 — Answers to question No.11 — Tree map graphic representation and table of agreement

The options with the most representative intensity selected were options f) and g) with highest intensity choice. This options together had positive intensity.

o) What are the general expectations when the EMBA ended?

(Scale from 1 to 7, with 1 being the lowest and 7 the highest)



	ANSWERS	COMMENTS
a)	1	strong disagreement
b)	2	disagreement
c)	3	slight disagreement
d)	4	neither agreement nor disagreement
e)	5	slight agreement
f)	6	agreement
g)	7	strong agreement

Figure 18 — Answers to question No. 12 — Tree map graphic representation and table of agreement

The options with highest scale intensity selected were:

- option e) with slight disagreement intensity;
- option f) with agreement intensity.

These options, together, still had positive intensity.

The way the *alumni* consider themselves towards Entrepreneurship, before and after undertaking the EMBA, is critical to this thesis. Realizing the importance that this theme has and the impact that this training had on *alumni* allows us to draw important conclusions.

p) Did you consider yourself, before joining the EMBA, an entrepreneur, intrapreneur or none of them? (choose 1 option)

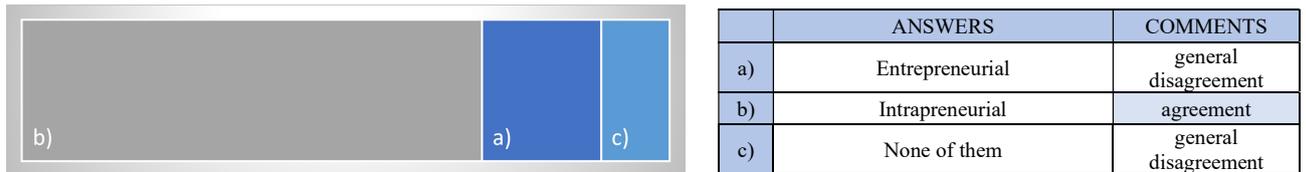


Figure 19 — Answers to question No. 15 — Tree map graphic representation and table of agreement

The option selected with the biggest high agreement intensity was option b) with agreement.

q) Do you consider yourself, after joining the EMBA, an entrepreneur, intrapreneur or none of them? (choose 1 option)

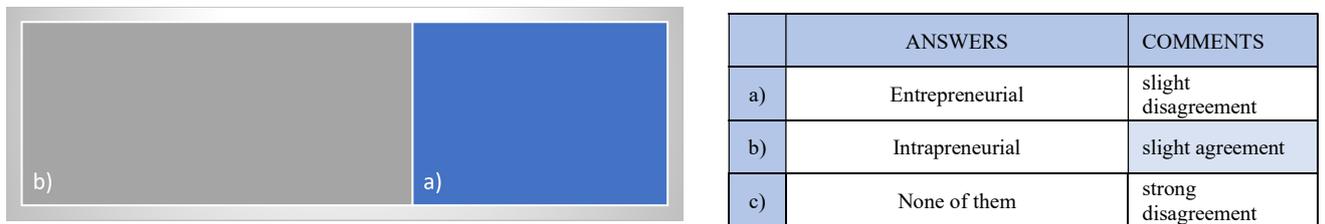


Figure 20 — Answers to question No. 16 — Tree map graphic representation and table of agreement

The option selected with the biggest high agreement intensity was option b) with slight agreement.

As the last question, it made perfect sense to ask the *alumni* directly about the research topic of this thesis. The most direct way of obtaining an answer is to ask the participant to assess the intensity with which the institution related to Entrepreneurship.

r) Is EMBA an Entrepreneurship inductor, in the case of the EMBA? (scale from 1 to 7, with 1 being the lowest and 7 the highest)

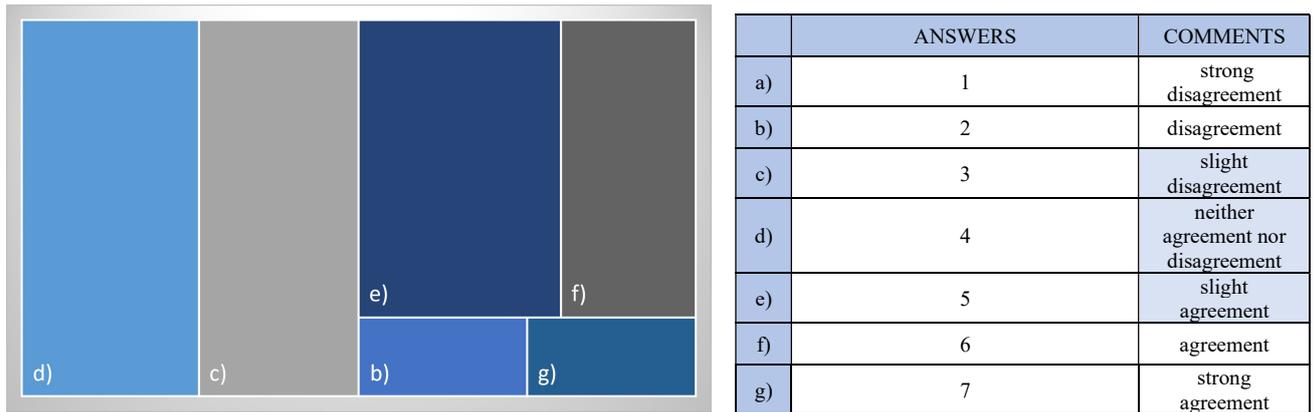


Figure 21 — Answers to question No. 17 — Tree map graphic representation and table of agreement

All options were selected, with a dilution of the results intensity. The options with highest scale intensity selected were options c) d) and e) with the same agreement scale, lower intensity. These options together had intensity in the middle of the scale.

5.7. Other answers and comments

Besides the chosen options, the *alumni* interact actively, justifying some choices whenever they found it pertinent. They also developed and discussed some topics between them in order to characterize their experience and opinion. Of all comments, those with the highest scale of agreement intensity are summarized below.

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These comments, used during the discussion of results, also have a fundamental part as a justification for those same discussion.

No.	OTHER ANSWERS / COMMENTS	COMMENTS
1	Quality/ price relationship, important point	general disagreement
	More differentiating value face to other MBA's	disagreement
	Expand horizons	slight agreement
	Also looking for networking	agreement
2	All different in terms of graduation and experience	agreement
3	Multidisciplinary gain / transversability to interact	slight agreement
	Thought: despite thinking " I don't Know nothing I have the ability to do everything	slight agreement
	Clearly there are more than 1 option to choose	agreement
5	Ideas are not stimulated. Even when we do team work we don't pass from theory to practice	agreement
6	Other experiences in different contexts , example the Marine School Experience	general disagreement
7	Organizational capacity, although variety of funding sources are adjusted to ensure a sustainable financial strategy they don't provide incentives to support the entrepreneurial agenda.	slight agreement
	Mentoring is a constant	slight agreement
	Content little focused on entrepreneurship, classical university teaching	slight agreement
	No great characteristics of entrepreneurial university / without initiative	slight agreement
	Connection with stakeholders growing currently	agreement
	Touch in some points of entrepreneurship but with some disabilities	agreement
	Very critical at this point	strong agreement
	Entrepreneurship should be in the truck of the curriculum as a project figure, lack in the DNA institution	strong agreement
	There is the ethical question but it's outstanding	disagreement
	It is necessary to practice, university still theoretical	disagreement
ISCTE E.E: is distant from the industry, where it is already focused on interconnection with universities	slight agreement	
Ideas should be created to involve in business creation and go to investment routes	slight agreement	
First has incubator in EMBA own and left	slight agreement	
After reading the question ALUMNI wanted to choose all options	slight agreement	
There is organizational part but not the experimental part, that spark is needed	agreement	
8	The school has knowledge, students and teachers but does not dynamize / has everything but is not connected	agreement
	Each feature presents should be more explored and improved	agreement
	Focused on the stimulation and development the corporate management component	agreement
	In the first impact of reading answers everyone has to think more than in the other questions	agreement
	Incubating, accelerating lack, creation of business and enterprise models, investment and credit	general agreement
	Little connection with ALUMNI	general agreement
	No one knows what AUDAX does, it is not connected with ISCTE Executive Education	strong agreement
9	Excuse for reviewing programs	slight disagreement
	Classic University and with strong connections to patrons	slight agreement
10	Innovation is a natural consequence of being an entrepreneur	agreement
	Some programs and teachers are very competent, others out of touch with reality. Need to revise curriculum to be more in line with current events	slight agreement
12	Expectations facing the advertiser fell by land	slight agreement
	Initial topics and ideas fell short of expectations	slight agreement
13	First editions alumni were sponsored by their organizations	slight agreement
	CEO, CFO want to take these courses	slight agreement
	Organizations are afraid of losing employees and being absent for a long time	agreement
	Last editions a large part had to pay the EMBA	agreement
15	Difficulty in perceiving / assuming that an intrapreneur is na entrepreneur	agreement
16	It allowed you not to stop, together with more skills	slight disagreement
	More entrepreneur	slight agreement
	We refine and improve competence connected to entrepreneurship	slight agreement
	If you born entrepreneur , EMBA will enhanced	slight agreement
	Intrapreneur is a difficult issue when companies do not allow to be	slight agreement
	No one is indifferent to EMBA	agreement
17	Little linked to business tissue	slight agreement
	Each school offers a type of teaching and model that captives a type of students	slight agreement
	Depends on our motivations and motivational capacity, it is a greater stimulation	slight agreement
	Gives an overview and gives skills/ with a great strengthening of soft and hard skills	slight agreement
	Trigger for those who are entrepreneurs, for those who have entrepreneurs "blood"	agreement
	You are entrepreneur/ intrapreneur as a result of some characteristics	agreement
	There should be more symbiosis between school and business	agreement
	The practical part is lacked with investors and credit	general agreement

Table 5 — Other answers and comments from the focus groups

6. Discussion of results

After describing each choice and comments made by each of the *alumni* who participated in the focus groups, as well as the results on the intensity scale and scale of agreement, we are in possession of all the information to interpret those same results.

Each answer has its evaluation, taking into account the chosen dimensions, the *alumni*'s choices individually and as a whole, as well as the correlation with the respective comments and additional observations.

6.1. Entrepreneurial Intention

The main results, taking into account the answers in the Entrepreneurial Intention dimension, are:

a) Why did you choose the EMBA? (choose 1 option)
<p>The option with greater intensity — slight agreement — takes into account the component of personal development “improve my functions and capabilities”, which is based on the Entrepreneurial Intention dimension’s “Intention” variable. Future students are aware of the needs to become more professional and capable of respond to new challenges.</p>
<p>Moreover, the other option chosen — “personal fulfilment” —, despite low intensity of choice and agreement (disagreement), had some weight in some <i>alumni</i>'s decision to choose the EMBA.</p>
<p>The variables “Opportunity” and “Social attitudes/Affiliations” do not have a strong impact and weight in the <i>alumni</i>'s decision. When deciding to choose an executive program, issues such as what other people do and think, as well as their interactions, are not important to take this academic step.</p>
<p>The variables “Opportunity” and “Social attitudes/Affiliations” of the Entrepreneurial Intention dimension are based on looking for a new professional future and other cultural and/or social factors, such as recommendation by others or following the footsteps of other entrepreneurs, and <i>alumni</i> were more interested in their own knowledge.</p>

<p>b) What else drove you before joining the EMBA and still drives you? (choose 3 options)</p>
<p>When choosing three possible options, we want to validate whether the variables selected in the previous question continue to be chosen. The options selected, in this second question, confirm that the most intense variable is still “Intention”, followed by “Opportunity”. Moreover, in this question, the “Social attitudes/Affiliations” variable was not selected.</p> <p>This scenario is justified by the posture of most of the future EMBA’s students, senior executives from companies with several years of experience, who desire and seek knowledge. These choices are in line with Entrepreneurial Intention — the intent to become entrepreneurs and/or intrapreneurs with the improvement of skills, knowledge and tools, a necessary pillar to undertake with solid bases, at the right timing or when it is requested. These options are refuted by the additional comments of agreement on the choice of the EMBA for opening horizons (“Intention”) and the search/sharing of networking (“Opportunity”).</p> <p>Some of the <i>alumni</i> stated that “<i>the differences that exist between alumni in terms of what drives them are very different</i>”. This argument is a mirror of the divergence of choices. However, they are a general reflection of the <i>alumni</i>’s entrepreneurial intention.</p>
<p>c) Was the organization you worked for when you joined the EMBA an entrepreneurial organization? (scale from 1 to 7, with 1 being the lowest and 7 the highest)</p>
<p>In the <i>alumni</i>’s general opinion, the organization’s entrepreneurial “will” is very different, with the slight agreement in the intensity scale. There are all kinds of organizations, from non-entrepreneurial, such as banking, to organizations that are a full entrepreneurial engine, such as the <i>alumni</i>’s companies.</p> <p>It was clearly stated in the selected options by the participants that the employing organizations were not the ones that motivated the EMBA training.</p> <p>In the first editions of the EMBA, there was monetary and motivational support from the employer, but, in the latest editions, the situation was the exact opposite. This is mainly due to the fact that senior executives of companies that want to carry out this type of training have to dismiss their employees for extended periods of time, also combined with a strong probability of losing them.</p>

d) Did that motivate you to choose the EMBA? (Y/N)
<p>The vast majority of the <i>alumni</i>, with a slight agreement intensity, did not choose the EMBA motivated by the employer. As mentioned in points a) and b), the <i>alumni</i> opted for the EMBA with personal development as the main driver, followed by a sense of opportunity. There is no correlation between the <i>alumni</i>'s decision to join the EMBA and eventual different levels of entrepreneurial organizations they work for.</p>

Table 6 — Discussion of the results of the Entrepreneurial Intention dimension

6.2. Behaviour

In the Behaviour dimension, the most important results and comments were summarized in the following table, taking into account each question.

e) Which of the following characteristics did I develop the most at the EMBA? (choose 1 option)
<p>Although the choices were similar in terms of the intensity of the characteristic that most of the <i>alumni</i> developed at the EMBA, “autonomy” was the one that had the most intense in the scale, despite being disagreement (most of the choices were selected), followed by “competence” and “ambiguity tolerance”. These behaviours are undoubtedly the ones that most of the <i>alumni</i> identified in terms of development. The EMBA embodies an improvement in capacity of making decisions, tool leverage and resistance.</p> <p>One of the greatest learnings developed at the EMBA is undoubtedly the behavioural area (Behaviour), which transversely personifies itself in all the characteristics questioned (covering all the variables chosen in this dimension).</p> <p>In a significant way, most of the <i>alumni</i> consider having developed more than one characteristic during the program, if not all, but with different intensities. The fact that there is only one answer option aims to understand which behaviour is most stimulated and improved in the EMBA training.</p> <p>There is a slight agreement that — and despite of some answers such as “<i>I think that I did not learn anything</i>” —, when faced with situations, the <i>alumni</i> bring in their luggage “<i>a box full of behaviour</i>”. This often allows them in any task to give assertive answers, to be up to the task itself and to develop a whole line of best practices. There was undoubtedly a multidisciplinary gain and, crosswise, an interaction between all the characteristics and variables chosen.</p>

f) What skills have I learned and/or improved in the EMBA? (choose 3 options)
<p>This question focused on one of the most talked behaviours today: soft skills. The skills with a greater choice turn out to be quite diverse due to the fact that the <i>alumni</i> had the possibility to choose 3 options. The intensity is therefore low.</p> <p>“Entrepreneurial career vision” and “looking for new opportunities”, which are skills that stimulate enterprises and, consequently, Entrepreneurship, had a very low intensity of choice, showing that, in the <i>alumni</i>’s opinions, they were not the most stimulated and developed during the EMBA program.</p> <p>The skills referred to in this question are all in the scope of soft skills and not in the scope of hard skills, and this point was not addressed by any <i>alumni</i>.</p>

Table 7 — Discussion of the results of the Behaviour dimension

6.3. Education

Education is the journey of this program. As such, the *alumni* testified their connection and ability to acquire knowledge with the following conclusions.

g) What tools do you think you have acquired throughout the program? (choose 2 options)
<p>When we refer to tools, we refer to Learning Education, one of the variables of the Education dimension.</p> <p>The two most voted tools were “Networking” and “Willingness to implement and boost”, despite being of low intensity. Most options were chosen, thus diluting the intensity of choice.</p> <p>“Networking” was one of the most used words during the focus group, which, as such, means that there is a desire and willingness among the <i>alumni</i> to expand their network of contacts in the business world. The main purpose of this widening of contacts is not only the search for new professional opportunities but also the possibility of mutual help and calls at key moments.</p> <p>“Willingness to implement and boost” has a lot to do with improving and optimizing education, on how to do better and have confidence in its execution.</p> <p>The only tool that had no choice was “Ideas”. For the <i>alumni</i>, there is a clear notion that, during the EMBA period, new ideas are not instilled or stimulated. Moreover, there is no focus in the</p>

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genesis of any discipline to encourage the transition from theory to practice, and to validate the extent to which this idea would work as a project and possible business.
h) In what forms of teaching there has been greater learning, during the EMBA? (choose 2 options)
On the other hand, when we refer to forms, we refer to Teaching Education, which is the other variable of the Education dimension. The form with a greater intensity and more cherished by the <i>alumni</i> , as the great catalyst for study and learning, was “Teamwork”. During the EMBA program, the <i>alumni</i> had many hours of sharing, dedication and commitment, not only to deepen the subject, but also obliging each one to give their contribution, help and opinion. The following most selected form was “Case studies”. Sharing experiences and reality situations is also a great way to lead to greater learning and interest by the <i>alumni</i> .

Table 8 — Discussion of the results of the Education dimension

6.4. Entrepreneurial Universities

The essence and structure of the university where the EMBA is taking place are of extreme importance to evaluate its relation with Entrepreneurship. The most important results are recorded in the following table.

i) What characteristics of the Entrepreneurial University are present at ISCTE Executive Education? (choose 2 options)
The <i>alumni</i> were very critical at this point, as some of them did not choose any option. The option with the greatest intensity of choice, in terms of characteristics of the Entrepreneurial University, was “Strong connection with stakeholders”, but not in a strong way, although the <i>alumni</i> think that there is a stronger and more visible relationship with them, nowadays. The following most selected option was “Organizational capacity”. Although several funding sources are adjusted to ensure a sustainable financial strategy, they still cannot provide incentives to support the entrepreneurial agenda. They would undoubtedly serve as a stimulus for Entrepreneurship at ISCTE Executive Education.

Characteristics such as “Leadership”, “Entrepreneurship development” and “Internationalization” had some comments:

- “Leadership”: Despite being chosen as one of the characteristics, it was mentioned by the *alumni* that the level of commitment should be higher, and Entrepreneurship should be in the truck of the curriculum as a project figure, as it lacks in the institution’s DNA.
- “Entrepreneurship development”: The *alumni* believe that the EMBA stimulates the development of business ideas, as it is easier to start developing entrepreneurial ideas in an innovate environment.
- “Internationalization”: the network of contacts with international schools such as HEC Paris and, more recently, the London Business School is an important starting point for a full international opening. Moreover, the existing exchange with Lecturers from other foreign universities is undoubtedly a strong link of stimulus and sharing.

However, with slight agreement, the *alumni* stated that the EMBA’s content is little focused on Entrepreneurship. The institution still follows a classical university teaching method, with few characteristics of the Entrepreneurial University, and with no initiative.

j) ISCTE Executive Education does not offer... (choose 2 options)

In this question, the *alumni* could choose all the answers, allowing us a greater critical capacity on one of the most important points studied in this thesis — the offer by ISCTE Executive Education in terms of Entrepreneurship subjects.

All options were chosen, leading to answers with the lower intensity of choice, general disagreement: “Entrepreneurship Division”, “Innovative Curriculum”, “Access to entrepreneurs/investors and credit”, “Education extent to social/family/corporate” and “Ideas Incubator”.

- “Entrepreneurship Division”: ISCTE Executive Education does not have any Entrepreneurship division to support and promote Entrepreneurship. The institution is instead focused on the stimulation and development of the corporate management component. The school has expertise, students and Lecturers, but it does not dynamize. In conclusion, it has all the key points but they are not connected.
- “Innovative Curriculum”: the *alumni* said that “*ISCTE Executive Education is distant from the Industry, being instead focused on the interconnection with other universities and schools. It is also a theoretical university finding it hard to be part of innovation*”. Due to the EMBA having an organizational part but not an experimental part, that spark is needed.

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<ul style="list-style-type: none"> • “Access to entrepreneurs/investors and credit”: During the EMBA program, the <i>alumni</i> did not have any access to business angels and/or investors and credit, to whom they could present new ideas, new business models or new business plans. Ideas should be created to stimulate business creation, enabling the <i>alumni</i> to discover the word of investment routes. • “Education extent to social/family/corporate”: in the <i>alumni</i>’s opinion, the EMBA has little connection with <i>ALUMNI</i>, the society in general and organizations. • “Ideas incubator”: ISCTE Executive Education does not have any ideas lab or ideas incubator. The <i>alumni</i> do not know what is the AUDAX project (ISCTE’s incubator) and how it could help them during the program or even now.

Table 9 — Discussion of the results of the Entrepreneurial Universities dimension

6.5. Innovation

One of the biggest drivers of Entrepreneurship is, undoubtedly, Innovation and everything that it involves. Understanding the correlation of Innovation with ISCTE Executive Education is also an important point to be evaluated. The considerations of the *alumni* are recorded in the following table.

<p>l) Do you consider ISCTE Executive Education an innovative university? (choose 1 option)</p>
<p>The <i>alumni</i> did not consider ISCTE Executive Education an entrepreneurial institution, with an agreement opinion. They believe that the institution is still very attached to patterns, following a classic education method that is naturally afraid of taking risks and helping to build and to develop ideas, with difficulty in changing programs.</p>
<p>m) What is innovation for me? (choose 1 option)</p>
<p>The <i>alumni</i> consider the word “innovation” a synonymous of the variable “Disruption”, followed by “Improvement” as the second choice.</p> <p>Given their training, the <i>alumni</i> have a clear sense of what innovation is and its importance at all social, cultural, economic and educational levels, considering innovation as a consequence of being an entrepreneur and looking for change.</p>

Table 10 — Discussion the results of Innovation dimension

6.6. The EMBA program

<p>n) What were the general expectations when the EMBA started? (scale from 1 to 7, with 1 being the lowest and 7 the highest)</p>
<p>The <i>alumni</i>'s expectations, before starting the EMBA, were more intense in scale, with comments of “agreement” and “strong agreement”. Initially, most of them thought that there would be a strong component of contact and interactivity with companies, as well as close contact with entrepreneurs, visiting companies in order to learn about their needs, problems and solutions, and encouraging innovation with an equally innovative curriculum.</p>
<p>o) What are the general expectations when the EMBA ended? (scale from 1 to 7, with 1 being the lowest and 7 the highest)</p>
<p>The <i>alumni</i>'s expectations, compared to the beginning of the EMBA, have decreased. The main options became “slight agreement” and “agreement”, in intensity scale.</p> <p>Given what was announced, expectations were a little short. When the EMBA finished, the considerations for the program have not been fulfilled or, if so, they were at a low level.</p> <p>There are actually some units and Lecturers that have exceeded expectations, having shared not only theoretical but also experiential knowledge. However, there were units which had programs that were too theoretical, with concepts often not applied to daily practice and programs needing to be restructured.</p>
<p>p) Did you consider yourself, before joining the EMBA, an entrepreneur, intrapreneur or none of them? (choose 1 option)</p>
<p>Before the EMBA began, most of the <i>alumni</i> considered themselves to be an intrapreneur.</p> <p>Although, curiously, some of them found it hard to perceive / assume that an intrapreneur is an entrepreneur. Although they were working at a company and were not thinking about opening a business, they want to improve themselves and their departments/organizations.</p> <p>Some of them consider themselves neither an entrepreneur or an intrapreneur. Only an employee.</p>

<p>q) Did you consider yourself, after joining the EMBA, an entrepreneur, intrapreneur or none of them? (choose 1 option)</p>
<p>When the EMBA ended, many of the students started to consider themselves as entrepreneurs. During the EMBA, there was an incentive for entrepreneurs to be more entrepreneurial. If one was born an entrepreneur, the EMBA would enhance or refine and improve the competences connected to Entrepreneurship.</p> <p>If one is an intrapreneur and wishes to stay intrapreneur, the EMBA will give them the skills and tools to engage with their company. Although, it seems that, sometimes, companies do not allow their employees to be intrapreneurs.</p> <p>Nevertheless, no one is indifferent to the EMBA.</p>

Table 11 — Discussion of the results of the EMBA program

<p>r) Is EMBA an Entrepreneurship inductor, in the case of the EMBA? (scale from 1 to 7, with 1 being the lowest and 7 the highest)</p>
<p>Being the thesis question, there were undoubtedly increased expectations in the results that were going to be obtained.</p> <p>There was no unanimous option. The intensity options “slight agreement”, “neither agreement nor disagreement” and “slight agreement” were the options with the highest intensity of choice. The three options in the middle of the table were chosen, which shows a middle of intensity scale — neither agreement nor disagreement.</p> <p>In a general way, the EMBA is little linked with the Industry. As such, there should be more symbiosis between the school and companies. There is a lack of practice, with incubators, investors and credit.</p> <p>In a positive way, the EMBA gives an overview and skills, with a great strengthening of soft and hard skills. It is a trigger for those who are entrepreneurs and who have “entrepreneur blood”. In a way, it will end up depending on our motivations and motivational capacity, but it is a great stimulation.</p>

Table 12 — Discussion of the results of this thesis’ theme

7. Conclusions

7.1. Research conclusions

The aim of this thesis was to answer the following three research questions:

- RQ1. Are executives that undertake the EMBA aware of Entrepreneurship and its importance?
- RQ2. If and what knowledge degree, tools and experience in Entrepreneurship are available and stimulated during the EMBA?
- RQ3. What is the position of *alumni* vis-à-vis Entrepreneurship when the EMBA ends?

The answers to these questions are:

All executives are aware of Entrepreneurship when they choose the EMBA, as they recognize the importance and its actual positioning. After discussion, all of the *alumni* who did not assume an entrepreneur position assumed themselves as intrapreneurs.

There is a high degree of acquisition of hard and soft skills, but they are not focused on Entrepreneurship. It is assumed, crosswise, that these skills will also allow them to answer to Entrepreneurial issues. Entrepreneurship tools and experience are not available nor stimulated during the EMBA.

The *alumni* with a transversal opinion consider that there is a lack of Entrepreneurship stimulation and development. One of the most important parts that is absent in this training is the beginning of the entrepreneurial process (from the creation to the opening of a company, going through all the necessary steps for its realization). Although, students with an entrepreneurial desire will absorb teaching and learning processes for the next phase of a company: the growth and development phase.

7.2. Main Conclusions

In addition to hard skills — which are indeed a big focus of the EMBA program —, soft skills are extremely important to give the *alumni* both reaction and decision capabilities. The most stimulated skill — “New skills” — was the one that the *alumni* think that is new to them.

This is very subjective, as it could be any skill: “Resilience” is a very important acquired skill, in the *alumni*’s opinion, as it gives to the individual the ability to deal with problems, to adapt to changes, to overcome obstacles or to withstand the pressure of adverse situations; “Management” is crucial in order to be able to manage businesses, people or resources, and to achieve defined goals; and “Networking” is key as it is an ability to set up a network of contacts or a connection to something or someone, being stimulate throughout the EMBA program. All of the *alumni* are different, with different interests, relations and knowledge. This mix is a multi-professional environment for multi-connections, and each of the *alumni* is responsible for the use of this networking. Networking is also very important in the Learning Education dimension, as connection and project realization depend on the participants.

Skills such as “Entrepreneurial career vision” and “Looking for new opportunities” stimulate entrepreneurial minds but are actually not the core of this program. Sometimes, they appear during one project, but it is not the focus of most units.

The Learning Education and Teaching Education dimensions are well recognized by the *alumni*. It is also mentioned as an important absence the lack of practical and theoretical insight on the idealization of a company, as well as understanding the legal, financial and creation issues. Students are only taught to lead departments of medium and large-sized companies, already established and in need to continue growing.

There is also no initiative on rethinking a company’s business model in order to face major problems that are being targeted.

As the name implies, ISCTE Executive Education is a school of and for Executives, designed to educate the Executive. The EMBA gives students hard skills and soft skills which will allow them to improve their work, and it also gives a global view of the characteristics, dynamics and interactions between the various departments that make up

a company. Moreover, the program gives an overview on the structure of a company and teaches students on how to lead each of its departments.

Given the literature review and the focus group’s outputs obtained in this thesis, this study cannot conclude that ISCTE Executive Education is an Entrepreneurial University. Although some of the characteristics of this concept are present, they do not characterize the core of the institution, and it also does not follow the four-helix concept. It is not close to the social/networking and company environment.

Entrepreneurship is not embedded in the mission, vision or culture of this Executive School. Some of the big components of Entrepreneurial Universities, such as incubators, access to business angels, investors and credit, are not available to students, as mentioned by the *alumni*.

Entrepreneurship and Innovation are strongly interconnected, as Innovation is the way through which an idea can eventually become a business. ISCTE Executive Education is still very attached to patterns, following a classic education method that is naturally afraid of taking risks and helping to build and to develop ideas, with difficulty in changing programs.

The *alumni* had higher expectations in the beginning of the EMBA, as, during their journey, some important points were not fulfilled, such as Entrepreneurship, Innovation, Project Management. There was also a lack of actual study cases. Some units were too theoretical and, in general, there was little contact with companies and entrepreneurs.

Some of the *alumni* do not think that Entrepreneurship should be seen as the reducing concept of “setting up a business”. In fact, Entrepreneurship is much more than that. It should be stimulated and trained, and everyone should have experimental contact with it and an opportunity in the Entrepreneurship world. In a transversal way, at the end of the talk, all of the *alumni* consider themselves an entrepreneur or intrapreneur.

EMBA as an inductor in Entrepreneurship is neither agreement nor disagreement: it is in the middle of the intensity scale. On one hand, the EMBA gives skills and knowledge to administrate and to manage an organization, but there is a lack when it comes to the phase of opening one — from the concept idea to the setting up of a business.

But why is it important to correlate Entrepreneurship and Executive Education?

From the literature review and the testimonies obtained from the focus groups, it is clear and undeniable that Entrepreneurship is important, mainly as a key driver of the world, the Economy and Innovation. One needs to look at Entrepreneurship in a broad and comprehensive view: providing and perfecting knowledge in all its aspects. One needs to think of an organization with an ideal business model, with an ideal strategy and an ideal culture, and each department must be well thought out. With all of this being already taught at business schools, it is only necessary to connect with the first phase of Entrepreneurship: to have the key idea, to innovate and to conceive the best forms and options of concretization. The EMBA’s program fosters entrepreneurial minds in entrepreneurial students, but it is not designed to stimulate Entrepreneurship.

Executive schools advocate a direct connection between the business and the academic world, where experienced and willing professionals would “drink information”. This is the best environment to stimulate Entrepreneurship in the executive world.

In a world of constant change, improvement and disruption, it is not only imperative but also urgent to provide the “protagonists of this film” with basic principles, concepts and fundamental pillars, aiming to win and thrive in a competitive and global environment. One of the main pillars of the modern world is undeniably Entrepreneurship.

Every day, knowledge is questioned at all times with the discovery of more knowledge, more information and ideas, and this theoretical contribution is expected to be a stimulus, a model and an example for future programmatic evaluations, and a study base for other programs. It also alerts to the need and urgency to integrate Entrepreneurship teaching and learning throughout Teaching and, particularly, in Executive Education.

The EMBA program plays a very important role in giving students technical knowledge about Entrepreneurship and, through it, they also increase their self-efficacy perceptions.

7.3. Limitations

It was not possible to interview all of the EMBA's *alumni*. The methodology was influenced by the fact that we are facing a pandemic, which indeed had impact on the results.

7.4. Further investigation

At the moment, the world is undergoing an unprecedented transformation, with the Covid-19 Pandemic. Aligned with everything that has been said, one thing is certain: nothing should be as it was before.

Just like everyone, ISCTE Executive Education will have to think of reinventing itself, as well as changing, innovating, breaking free of preconceptions and dogmas and opening up to all stakeholders. There should be a rethinking of what should be done to improve the students' perception and opinion after finishing the EMBA.

To improve the EMBA as an inductor in Entrepreneurship, it would be interesting to study the best option for the development of Entrepreneurship: an Entrepreneurial University or an Entrepreneurial Hub/Center aligned and partnered with ISCTE Executive Education. It could be the beginning of a new era, with the development of a new mindset at ISCTE Executive Education.

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9. Annexes

Annex 1 - GEM'S NATIONAL ENTREPRENEURSHIP CONTEXT FRAMEWORK CONDITIONS; GEM, (2019)

GEM'S NATIONAL ENTREPRENEURSHIP CONTEXT FRAMEWORK CONDITIONS

<p>Entrepreneurial finance describes the extent to which experts perceive there are enough funds for current and potential entrepreneurs. Experts evaluate the accessibility and efficient functioning of equity markets and the availability of typical financing channels for entrepreneurs. This includes informal investment, professional business angels, venture capitalists, banks, government loans, grants and subsidies, as well as crowdfunding.</p> <p>Government policies support and relevance assesses whether experts believe their national governments demonstrate support for entrepreneurs: for example, whether policy makers mention entrepreneurship in public discourse and press for specific regulations to improve conditions for the self-employed workforce and small and medium enterprises (SMEs).</p> <p>Government policies, taxes and bureaucracy reflect the degree to which experts think current taxes are affordable and balanced for entrepreneurs, or whether they constitute a burden to starting and growing businesses. This factor evaluates bureaucracy in business processes and in facilities for funding entrepreneurial activities.</p> <p>Government entrepreneurship programs: This factor evaluates whether and how public agencies are providing specific programs for entrepreneurs. This includes subsidies, incubators, and agencies that assess and advise entrepreneurs.</p> <p>Entrepreneurship education at school stage: This factor includes expert evaluation of the degree to which entrepreneurship subjects are included in school programs, and whether schools are instilling students with entrepreneurial values.</p> <p>Entrepreneurial education at post-school stage: This factor measures the inclusion of entrepreneurship subjects in post-school programs, such as colleges, business schools, and</p>	<p>vocational centers. It includes the effectiveness of post-school educational systems in building students' entrepreneurship skills and values.</p> <p>R&D transfer: This synthesizes expert evaluation of R&D transfer from universities and research centers to the business sector and to what degree engineers and scientists can commercialize research findings and bring them to the market.</p> <p>Commercial and professional infrastructure: This factor represents the supply and affordability of professionals and firms providing services to entrepreneurs, including accountants, lawyers, and consultants, to help them start and manage new businesses.</p> <p>Physical Infrastructure: This facilitates communication, transportation, and business operations nationally and internationally through aspects such as high-speed internet and cell phone service, real estate (land, buildings), reliable utilities, and advanced highways, railways, ports, and airports.</p> <p>Internal market dynamics: This factor analyzes whether there is a free and open market where no entity exerts power to influence or set prices, and where changes in demand are met with changes in supply, and vice versa.</p> <p>Internal market burdens or entry regulation: This summarizes the overall state of a market in terms of the absence of burdens entrepreneurs encounter upon entering markets, and regulations that can facilitate, rather than undermine, these efforts.</p> <p>Cultural and social norms: This factor shows whether and how society exhibits an entrepreneurship focus within the culture through behavior, beliefs, language and customs. This can encourage entrepreneurs by demonstrating acceptance, support and high regard for their activity.</p>
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Annex 2 - Portfolio of ISCTE Executive Education Programs

Curso	Área	Produto	Destinatários	Semestres	Horas
EMBA	Managment	EMBA		4	400
Masters	Managment	BUSINESS ADMINISTRATION FOR NON-MANAGEMENT GRADUATES	Licenciados, Profissionais, executivos, quadros e dirigentes sem formação em gestão que pretendam adquirir, aprofundar ou complementar os seus conhecimentos e competências na área da gestão, numa perspetiva global	2	200
Masters	Managment	BUSINESS ADMINISTRATION FOR MANAGEMENT GRADUATES	Executivos com formação na área da gestão, ou similar, que pretendam atualizar e aprofundar as competências chave para atuar com sucesso num contexto de mudança	2	200
Masters	Project Management	PROJECT AND PROGRAM MANAGEMENT	Técnicos, quadros e gestores de empresas ou de organismos públicos, com experiência em Gestão de Projetos, que pretendam aprofundar e enriquecer os seus conhecimentos em Gestão de Projetos	2	200
Masters	Human Resources	STRATEGIC HUMAN RESOURCES MANAGEMENT	Diretores, técnicos e outros responsáveis de recursos humanos	2	200
Masters	Healthcare	HEALTH SERVICES MANAGEMENT	Profissionais que desenvolvem ou pretendem desenvolver a sua atividade profissional na área da Saúde, nomeadamente em Centros de Saúde, Hospitais, Clínicas, Empresas Produtoras ou Distribuidoras de Produtos Farmacêuticos (medicamentos e dispositivos médicos) e Consultoria	2	200
Masters	Marketing	MARKETING MANAGEMENT	Executivos dos mais diversos tipos de organizações e setores de atividade que pretendam obter uma formação sólida e inovadora em marketing	2	200
Masters	Finance	MANAGEMENT CONTROL AND PERFORMANCE	Responsáveis por unidades de negócios, ou centros de responsabilidade, auditores, controllers, consultores, ROC e candidatos a ROC	2	200
Masters	Finance	CORPORATE REPORTING	Profissionais com responsabilidade pelo reporte financeiro e/ou não financeiro	2	200

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Curso	Área	Produto	Destinatários	Semestres	Horas
PostGraduate	Finance	TAX MANAGEMENT	Executivos e quadros superiores ou intermédios que pretendam obter uma formação sólida e inovadora em gestão fiscal	1	140
PostGraduate	Sales	EXECUTIVE SALES MANAGEMENT	Profissionais e Quadros Superiores da área do marketing, trade marketing e vendas	1	140
PostGraduate	Tourism	TOP MANAGEMENT IN HOSPITALITY AND TOURISM	Profissionais, executivos, quadros e dirigentes que pretendam aprofundar ou complementar os seus conhecimentos e competências no setor da hotelaria e do turismo	1	140
PostGraduate	Marketing	DIGITAL MARKETING	Executivos com formação na área de marketing, comunicação ou comercial que pretendam desenvolver conhecimentos de marketing digital	1	140
PostGraduate	Sports	SPORTS MARKETING MANAGEMENT	Executivos e profissionais que pretendem adquirir, atualizar ou aprofundar conhecimentos e competências no âmbito do marketing e gestão do desporto	1	140
PostGraduate	Finance	ADVANCED FINANCIAL ACCOUNTING	Quadros médios e superiores que integram as áreas de contabilidade ou finanças	1	140
PostGraduate	Analytics	ANALYTICS FOR BUSINESS	Quadros superiores das mais diversas organizações que pretendam obter uma formação sólida e inovadora em business analytics	1	140
PostGraduate	Healthcare	MANAGEMENT FOR HEALTHCARE PROFESSIONALS	Profissionais de saúde que exercem ou pretendem vir a exercer funções de gestão e de liderança nas organizações de saúde	1	140
Advanced	Finance	CORPORATE FINANCE	Investment and commercial banking managers, financial executives from large and medium size companies as well as financial consulting practitioners, all searching for state-of-art tools and models of financial management	1	140
Advanced	Managment & Innovation	BUSINESS MANAGEMENT AND INNOVATION	Profissionais, da área da gestão, que pretendam aprofundar e atualizar os seus conhecimentos de gestão, nomeadamente nas áreas de desenvolvimento mais recente	1	160
Advanced	Marketing	APPLIED DIGITAL MARKETING	Profissionais de qualquer setor de atividade que trabalhem habitualmente com Marketing ou Comunicação	1	142
Advanced	Real Estate	INVESTIMENTOS IMOBILIÁRIOS	Executivos e quadros superiores ou intermédios em empresas de promoção, construção, investimento imobiliário e consultoria imobiliária	1	140

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Curso	Área	Produto	Destinatários	Semestres	Horas
Boost	Digital	APPLIED GAMIFICATION PROGRAM: FUNDAMENTALS & ACTION	Responsáveis de negócio, produtos ou marketing	1	16
Boost	Digital	E-COMMERCE PARA GESTORES		1	32
Boost	Marketing	DIGITAL MARKETING IMMERSION PARA GESTORES	Diretores/Gestores de Comunicação, de Marketing, de Marca, de Media/Marketers Gestores interessados em Marketing Digital, em geral	1	32
Boost	Finance	FINANÇAS PARA NÃO-FINANCEIROS		1	36
Boost	Finance	CONTABILIDADE PARA JURISTAS		1	21
Boost	Finance	GESTÃO FISCAL PARA EXECUTIVOS		1	16
Boost	Finance	FUNDAMENTALS OF PROGRAMMING IN PYTHON FOR FINANCE		1	18
Boost	Sales	ESTRATÉGIA COMERCIAL PARA VENDAS COMPLEXAS		1	20
Boost	Marketing	PROGRAMA INTENSIVO EM GESTÃO DE MARCAS		1	31
Boost	Analytics	ANALYTICS PARA GESTORES		1	24
Boost	Analytics	BIG DATA ANALYTICS FOR MANAGERS		1	12
Boost	Finance	6-DAY FORENSIC & INTEGRITY ADVANCED PROGRAM		1	42
Boost	Project Management	DESIGN THINKING		1	20
Boost	Management	GESTÃO DA SUSTENTABILIDADE		1	16
Boost	Finance	HEALTH ECONOMICS AND FINANCE		1	16
Boost	Economics	ECONOMIA PARA NÃO ECONOMISTAS		1	24
Boost	Management	PROGRAMA DE NEGOCIAÇÃO NA PRÁTICA		1	24
Boost	Human Resources	THE 100 DAY LEADERSHIP PROGRAM		1	17,5
Boost	Human Resources	DESENVOLVER LITERACIA EMOCIONAL		1	12
Boost	Human Resources	O MUNDO VICA		1	3
Boost	Human Resources	STORYTELLING: O PODER DE UMA HISTÓRIA BEM CONTADA		1	20
Boost	Operations	SUPPLY CHAIN MANAGEMENT & INNOVATION		1	16
Boost	Project Management	GESTÃO APLICADA DE PROJETOS		1	16
Boost	Operations	BUSINESS PROCESS MANAGEMENT AND AUTOMATION		1	30
Boost	Operations	CIBERSEGURANÇA PARA GESTORES NÃO-TÉCNICOS		1	6

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Annex 3 –Revised dimensions and variables for the “Focus Group” questions, taking into account the most focused authors.

AUTHORS	DIMENSIONS	CLASSIFICATION	VARIABLE	CLASSIFICATION	CITATION
Donald F. Kuratko & Morris, (2018)	BEHAVIOUR:	D2	Taking Risk	V4	<i>“seeking opportunity, taking risks, and having the tenacity to push ideas into reality, are special characteristics that permeate entrepreneurial individuals”</i>
Donald F. Kuratko & Morris, (2018)	EDUCATION	D3	Entrepreneurship teaching	V10	<i>“With the dramatic advances in entrepreneurship scholarship, academic programs, and pedagogy over the past 40 years, there is no question the discipline has achieved academic legitimacy.”</i>
			Entrepreneurship learning	V11	recognition that entrepreneurship is not about the mechanics of how to start and grow a new business, or the art and science of opportunity discovery and exploitation. It is about empowerment and transformation, where students from across the campus are encouraged to dream big; are given the tools to make such dreams come true; are challenged to do things greater than themselves; and are allowed to fail
	ENTREPRENEURIAL UNIVERSITIES	D4			Entrepreneurship is a discipline that can meaningfully advance the modern university, producing (1) an atmosphere that develops new products and innovations helping society to expand and grow; (2) a workforce that can help any enterprise maintain an entrepreneurial posture; and (3) a climate conducive to high achievers that create the innovations of tomorrow
Kuratko, (2005)	INNOVATION	D5			Entrepreneurship is a discipline that can meaningfully advance the modern university, producing (1) an atmosphere that develops new products and innovations helping society to expand and grow; (2) a workforce that can help any enterprise maintain an entrepreneurial posture; and (3) a climate conducive to high achievers that create the innovations of tomorrow
Luke Pittaway & Cope, (2007)	ENTREPRENEURIAL INTENT	D1	Intention	V1	<i>“There is a sound evidence base on student propensity for entrepreneurship and entrepreneurship education”.</i>
L. Pittaway & Edwards, (2012)	BEHAVIOUR	D2	Social attitudes / Affiliations	V3	Embedding Entrepreneurship studies in the curricula of universities and business schools is thus increasingly viewed as a means of fostering entrepreneurial behavior and mindsets in business and technology disciplines
Luke Pittaway & Cope, (2007)	EDUCATION	D3			<i>“There is a sound evidence base on student propensity for entrepreneurship and Entrepreneurship education”</i>
L. Pittaway & Edwards, (2012)	BEHAVIOUR + EDUCATION	D2+D3	Mindset	V8	Increasingly, the need to embed Entrepreneurship studies in the curricula of universities and business schools is emphasized as a means of fostering entrepreneurial behavior and mindsets in business and technology disciplines
Entrialgo et al., (2019)	BEHAVIOUR	D2	Skills	V2	Universities and business schools need to give a response to the needs of preparing students with the necessary skills to be globally competitive
Entrialgo et al., (2019)	INNOVATION	D5			<i>“Entrepreneurial attitudes and skills are also important for managers, providing creativity and innovation essential for internal entrepreneurship in the organization”</i>
Allahar & Sookram, (2018)	EDUCATION	D3			<i>“The study of entrepreneurship has gained impetus over the past 20 years and is now common in many institutions of higher learning”</i>
Allahar & Brathwaite, (2017)	EDUCATION	D3			<i>“the learning context, the personal and social component, opportunities, teaching methodologies and strategies, relationships and learning experience, evaluation results, pedagogical methods, skills, teamwork, ethics , motivation, learning from experience”</i>
Allahar & Sookram, (2018)	ENTREPRENEURIAL UNIVERSITIES	D4			<i>“the objective of a business school serving as an entrepreneurial ecosystem hub, is important to stimulate economic development, generate employment, and create innovative technology-based ventures or service businesses”</i>
Allahar & Sookram, (2018)	ENTREPRENEURIAL UNIVERSITIES	D4			the university can contribute through education, entrepreneurial support and network functions and be entrepreneurial in its endeavours have lacked academic focus and rigour, particularly in relation to fostering entrepreneurial mindsets

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AUTHORS	DIMENSIONS	CLASSIFICATION	VARIABLE	CLASSIFICATION	CITATION
(Liñán, 2005)	BEHAVIOUR	D2	Skills/ Motivation/ Attitudes	V5/V6/V7	"According to the literature, the intention to be an entrepreneur would be the single best predictor of actual firm-creation behaviour: his personal preference or attraction towards entrepreneurship; the perceived social valuation of that career option; and, thirdly, his perceived feasibility (self-efficacy perceptions)"
	BEHAVIOUR	D2	Mindset	V8	The importance of developing an entrepreneurial mindset in Europe is highlighted in several "communications" and European documents
	EDUCATION	D3			Institutions of higher education should integrate entrepreneurship across different subjects and courses. Public authorities' support is especially needed to provide high-level training for teachers and to develop networks that enable to sharing good practice. Teacher mobility between universities and the business world should be encouraged and business people should be involved in teaching.
	ENTREPRENEURIAL INTENT	D1	Intention	V1	intentions has demonstrated their utility for understanding the desition of becoming an entrepreneur and the factors that can influence it, offering a coherent, parsimonious, highly generalizable and robust theoretical framework that provides an excellent opportunity to increase our capacity to comprehend and predict entrepreneurial activity from an interactionist perspective that takes into account both people and the contexts in which they operate. Entrepreneurial intent questionnaire - EIQ
(Liñán, 2007)	EDUCATION	D3	Entrepreneurship learning	V11	"about" programs intended to create creativity, self-reliance, personal development, initiative taking, action orientation and entrepreneurial mindset can be interpreted as "awareness education"
Guerrero & Urbano, (2012).	ENTREPRENEURIAL UNIVERSITIES	D4			"entrepreneurial societies knowledge-based entrepreneurship has emerged as a driving force for economic growth, employment creation and competitiveness. In this context, entrepreneurial universities play an important role as both knowledge-producer and a disseminating institution"
	EDUCATION	D3			"An entrepreneurial society refers to places where knowledge-based entrepreneurship has emerged as a driving force for economic growth, employment creation and competitiveness. In this context, entrepreneurial universities play an important role as both knowledge-producer and a disseminating institution"
GEM, (2019) - Bosma, N & Kelley, D.	BEHAVIOUR	D2	Skills/ Knowledge	V5 / V9	"GEM also asks whether people believe they have the skills and knowledge to start a business"
			Taking Risk	V4	"Another indicator of perceptions about whether one can or would start a business centers on fear of failure. This is measured among those seeing opportunities—given they see opportunities around them, would they elect not to pursue them because they are afraid of failing?"
	ENTREPRENEURIAL INTENT	D1	Oportunity	V2	"Opportunity drives the majority of entrepreneurs in every economy, and many entrepreneurs strive to improve their lives through better income or more independence in their work."; " GEM asks people whether they see opportunities around them. This can indicate whether there are, in fact, many opportunities in an environment. It also reflects, to a greater or lesser extent, the opportunity recognition propensities or abilities of a society. Opportunities may be out there for all to see, but not everyone is cognizant of them."
			Social attitudes / Affiliations	V3	Societal attitudes include whether people think that successful entrepreneurs are conferred high status, whether they believe that starting a business is a good career choice, and the extent to which entrepreneurship receives media attention. Also reported is whether people think it is easy to start a business in their locale."Affiliations with entrepreneurs can provide role models and a range of experienced and eager stakeholders such as investors, board members, partners, and mentors. While people may have impressions about entrepreneurs they hear and read about, knowing an entrepreneur brings them inside an otherwise arm 's length regard for what may sometimes seem larger than life, or at least something other people do. Knowing an entrepreneur presents a peer reference and can make this pursuit accessible (or a clearly non-preferred option) in ordinary life"
			Intention	V1	Perhaps the closest indicator of entrepreneurial potential in society is the extent to which people intend to start a business in the future. Entrepreneurial intentions represent the percentage of working adults (ages 18-64) who state they intend to start a business in the next three years. While it is understandable that not all of those expressing intentions will actually take the steps to do so, it can be argued that those who have started were those who had previously planned, or at least considered, becoming an entrepreneur.
	EDUCATION	D3			Entrepreneurship education at school stage: This factor includes expert evaluation of the degree to which entrepreneurship subjects are included in school programs, and whether schools are instilling students with entrepreneurial values.
	INNOVATION	D5			"GEM also demonstrates the impact entrepreneurs have across the world by introducing innovations into their societies, creating jobs, competing globally, and contributing to the emergence and growth of industries". "Innovative entrepreneurs are those who state their products or services are new to all or some customers and for which there are no or few competitors".

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Annex 4 – Questionnaire – focus group question

No.	QUESTION	ANSWERS
1	Why did you choose EMBA? (choose 1 option)	a) Recommended by colleagues / friends / family
		b) Improve my functions and capabilities
		c) Develop new ideas in my work / department
		d) Promotion
		e) Notoriety
		f) Job search / new job
		g) Personal fulfillment
		h) Creating your own business
		i) Seize opportunity to improve my knowledge
		j) Admiration by entrepreneurs
		2
b) Happiness		
c) Independence		
d) Self knowledge		
e) Looking for an opportunity		
f) Become my own boss		
g) Perform interesting tasks		
h) Proactivity and energy		
i) Family / friends / colleagues opinion		
j) Professional achievement		
l) Achieving my goals		
m) New business / projects		
n) Dealing with risk		
o) Implement my ideas / persistence		
p) Make my own decisions and defend my interests		
q) Self confidence		
3	Which of the following characteristics did I develop the most at EMBA? (choose 1 option)	a) Achieve my goals
		b) Internal control locus
		c) Risk Management
		d) Ambiguity tolerance
		e) Creativity
		f) Autonomy
		g) Optimism
		h) Skill
		4
b) Entrepreneurial career vision		
c) Looking for new opportunities		
d) Flexibility		
e) Empathy		
f) New skills		
g) Resilience		
h) Design ability		
i) Management		
j) Networking		
l) Decision taking		
m) Orientation for action		
n) New Mindset: creativity and confidence		
o) Other, which one?		
5	What tools do you think you acquired in the course? (choose 2 options)	a) Ideas
		b) Networking
		c) Knowledge
		d) Soft skills
		e) Alert for new opportunities
		f) New Mindset
		g) Believe in myself
		h) Willingness to risk
		i) New perception of the world
		j) Willingness to implement and boost
		6
b) Teamworks		
c) Idea / company creation and development		
d) Visits to companies		
e) Business Plan		
f) Case studies presented and discussed by the student		
g) Interactive lessons		
h) Reading		
i) Workshops e seminars		
J) Other, which one?		

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No.	QUESTION	ANSWERS
7	What characteristics of the entrepreneurial university presents ISCTE Executive Education? (choose 2 options)	a) Leadership
		b) Organizational capacity
		c) Entrepreneurship development
		d) Pathways to entrepreneurial action
		e) Relationships between business schools
		f) Internationalization
		g) Impact
		h) Strong connection with Stakeholders
		i) none of the options
		j) none of the options
8	ISCTE Executive Education does not offer? (choose 2 options)	a) Entrepreneurship Division (Department)
		b) Integrative learning with entrepreneurs
		c) Innovative Curriculum
		d) Development of pedagogies and innovative teaching material - current case studies
		e) Teaching with initiatives and entrepreneurial Teachers
		f) Workshops with alumni and invited entrepreneurs
		g) Entrepreneurship as a theme (discipline)
		h) Access to entrepreneurs / investors and credit
		i) University resources: laboratory / researchers / knowledge transfer
		j) Methods experimental participation in social and company projects
		k) Education extended to social / family / corporate
		l) Incubator of ideas
		9
10	What is innovation for me? (choose 1 option)	a) Utopia
		b) Headache
		c) Future
		d) Melhoria
		e) Disruption
		f) The way I look at the present
		g) Action
		h) Implementation
		i) Will
		j) Risk
11	What were the general expectations when EMBA started? (Scale from 1 to 7, with 1 being the lowest and 7 the highest)	a) 1
		b) 2
		c) 3
		d) 4
		e) 5
		f) 6
		g) 7
12	What are the general expectations when the EMBA ended? (Scale from 1 to 7, with 1 being the lowest and 7 the highest)	a) 1
		b) 2
		c) 3
		d) 4
		e) 5
		f) 6
		g) 7
13	Was the organization where you worked (when you joined EMBA) an entrepreneurial organization? (Scale from 1 to 7, with 1 being the lowest and 7 the highest)	a) 1
		b) 2
		c) 3
		d) 4
		e) 5
		f) 6
		g) 7
		h) none of the options
14	Did that motivate you to choose EMBA? (Y / N)	a) yes
		b) no
15	"Did you consider yourself, before joining EMBA, entrepreneur, intra-entrepreneur or none of the people? (Choose an option)"	a) Entrepreneur
		b) Intrapreneur
		c) none of the options
16	"Did you consider yourself, after joining EMBA, entrepreneur, intra-entrepreneur or none of the people? (Choose 1 option)"	a) Entrepreneur
		b) Intrapreneur
		c) none of the options
17	What is the influence of executive education on Entrepreneurship, in the case of EMBA? (Scale from 1 to 7, with 1 being the lowest and 7 the highest)	a) 1
		b) 2
		c) 3
		d) 4
		e) 5
		f) 6
		g) 7

