

Nuno Abranja*

Learning entrepreneurship in higher education tourism: Proposal of a conceptual model for evaluating the entrepreneurial capacity of students

<https://doi.org/10.2478/ejthr-2025-0001>

received November 30, 2023, accepted April 5, 2024

Abstract: Entrepreneurship is crucial to the economic and social growth of any place. The development of entrepreneurial attitudes and behaviours should be a priority for everyone to develop the ability to generate employment, income, and foreign exchange and satisfy the needs of specific niche markets. Entrepreneurship helps to obtain more action flexibility, natural availability for innovations and control of risk, training, and qualification of labour, constant activation of the local economy, and the reduction of regional asymmetries. This is intended to present an article that proposes a model of an instrument for evaluating the entrepreneurial capacity of students in the higher education area of tourism in Portugal. It is underpinned by a deep exploratory study, that was carried out through PhD research during the past decade, about this reality that is little or poorly studied. A non-experimental model has supported the methodology once no new situations were constructed.

Keywords: Entrepreneurship; Tourism; Higher education; Metrics

1 Introduction

The multiple impacts of the recent Covid-19 pandemic, as well as the war conflict between Russia and Ukraine and its effects related to the supply chain and the increase in energy costs, present themselves today

and shortly as enormous challenges. To cope with this global context, it is vital to carefully define new dynamics for promoting entrepreneurship. Agreeing with International Data Corporation (2021) and Abranja et al. (2022), the pandemic has redefined the state of change, considering that the survival of the fittest is no longer linked to size or strength, but to resilience and the ability to change or move quickly, adapt, and seize opportunities.

Due to the Covid-19 pandemic, since the beginning of 2020, the 24 million Small and Medium-sized Enterprises (SMEs) of the EU-27 and, more generally, SMEs around the world, are faced with unprecedented economic uncertainty and instability, a drastic increase in inflation rates, especially during 2022, and the consequent increase in interest rates and reduced access to finance, rising energy costs, rising commodity prices and major difficulties in hiring new employees to allow for an unexpectedly strong recovery in demand (Di Bella et al., 2023).

According to the DGAE (2023) of the Portuguese government, the Member States of the European Union (EU) recognise that the development of entrepreneurial attitudes and behaviours should be a priority for everyone, so it has been fostering entrepreneurship as a key element of competitiveness. It has already highlighted the relevance of promoting European entrepreneurial culture. In this sense, this Directorate-General advocates the active participation of organizations, citizens, companies, and other *stakeholders* to encourage entrepreneurship education.

Entrepreneurship is defined by Global Entrepreneurship Monitor (GEM) (2023, p. 15) as “the act of starting and running a new business. (...) it is the act itself that is important”. Entrepreneurship has the possibility of creating stability and continuity to the development of a

*Corresponding author: Nuno Abranja, Instituto Superior de Lisboa e Vale do Tejo, CiTUR, CI-ISCE, Email: nunoabranja@gmail.com

region and, mainly, providing the emergence of truly national companies. In line with Carland et al. (1992) and their created model, all people are entrepreneurs what changes is the intensity. In this context, pedagogical intervention acquires a central participation in the development of entrepreneurial minds capable of operating better in a constantly changing world.

To achieve the objectives set by the EU on the issues of equality, sustainability, and digitalization of Europe, innovation and entrepreneurship will be elements that are both catalysts for short-term growth and truly structural transformers in the economy through increased competitiveness and employment, transition and cohesive societies (DGAE, 2023). In this context, in 2021 the Europe Startup Nations Alliance (Europe Startup Nations Alliance, 2022) was launched, the new European entity to support entrepreneurship (with permanent representation in Lisbon), which marked its appearance with the signing of the declaration on the “Standard of Excellence of Startup Nations” - European Startup Nation Standard Declaration by 27 countries (26 EU Member States and Iceland). The goal was to harmonise the startup ecosystem across Europe through support and the creation of eight standards: to accelerate and simplify the creation of start-ups; attract and retain talent; stock options; innovate in regulation; facilitate the acquisition of innovation; facilitate access to finance; social inclusion, diversity and protection of democratic values; and digital-first (Europe Startup Nations Alliance, 2022).

It is possible to affirm that most of the entrepreneurs were made by the influence of the family or by a close and regular reality. In this context, it is understood that the entrepreneurial culture has been fundamentally acquired by professional practice or experience. However, entrepreneurship education is proven to be a fundamental contribution to the development of new and more entrepreneurs. In the perspective of Paim (2001), the economy acts with new relational norms in the context of work and that training is probably the most effective factor of cultural change. The author argues that the entrepreneurial culture in the university allows the integration of the student in the context of global change in question, providing various inductions and interventions.

One of the world’s leading researchers in entrepreneurship, Trigo (2005, p. 23), states:

“The entrepreneurship initiative can be taught; this education must be introduced very early in the system and be

generally available; its objective must be much broader than the immediate creation of companies and aspire to the development of enterprising people. (...) Entrepreneurship concerning our present and our future: it is fashionable, but it is not a fashion.”

What is learned in school is ‘saved’ throughout our lives, and most people learn more easily and quickly when they are young. The Associação Juvenil de Empreendedorismo (2010) defends that children and young people are entrepreneurs by nature, proven by the spontaneous action they have, always asking more questions than answers. For this partnership, they bring what is called the ‘essence of entrepreneurship’: Energy, creativity, and spirit for innovation.

Current higher education institutions face challenges of high mutation, such as professional education, the ability to produce knowledge, and the training of citizens (Siqueira, 2005). According to Fowler (2001), to respond to the challenges mentioned above, higher education institutions must introduce new educational strategies in their didactic-pedagogical practices to contribute to the development of competencies in students. As Sexton and Landstrom (2000, as cited in Cunha et al., 2006) defend, entrepreneurship is a multidisciplinary field of study in which each discipline tends to present its own vision of the subject, not suffering great influence from other disciplines.

The existence of training that promotes the acquisition of entrepreneurial attitudes that lead to the creation of new business units and qualified jobs aimed at individuals with intra-entrepreneurial attitudes and skills is imperative. The education of entrepreneurship requires a very specific and unconventional vocation. This training must be based on “learning by doing”, with strong recourse to practice and research, where each teacher must update their education methods, becoming more motivating and take guiding actions. According to Scabeni and Crisóstimo (2008), teachers must assume a new approach to education and use pedagogical mechanisms and procedures that stimulate the birth and development of basic entrepreneurial skills, bringing education closer to the reality of the market, training professionals adapted to the new global economic situation.

The teacher must also be an entrepreneur (Malheiros, 2004). The teacher can’t evaluate whether the student’s profile corresponds to that of a successful entrepreneur. However, their function is to analyse the characteristics of students to see if they have characteristics similar to

those found in entrepreneurs, which will contribute to their development (Filion, 1991; Scabeni & Chrysostimo, 2008).

We wonder, then, who will be more prepared to teach the discipline of entrepreneurship. The researcher? Or the person who practices entrepreneurial behaviour? It is considered that the correct answer is a mixture of the two, to the extent that university students tend to privilege elements of concept and abstraction, while entrepreneurs usually prefer the concrete (Dolabela, 1999b). Thus, Schultz (Luís, 2004) believed that entrepreneurship could be promoted and learned through education and experience.

The main purpose of this research is to propose a model of an instrument for evaluating the entrepreneurial capacity of students in the higher education area of tourism in Portugal, which is underpinned by a deep exploratory study that was carried out through doctoral research during the past decade about a little or poorly studied topic.

This instrument was then elaborated based on the following empirical assumptions:

- i. identifying the opinions and actions of the coordinators of undergraduate courses in tourism in Portugal on the importance of entrepreneurial education and the encouragement and promotion of the study and practice of entrepreneurship among students and teachers, through no structured and undirected interviews;
- ii. recognising the differences between the institutions of the polytechnic subsystem and the university subsystem, regarding the commitment to entrepreneurship;
- iii. recognising the differences between institutions of public and private natures when it comes to the commitment to entrepreneurship;
- iv. identifying and analysing the most enterprising degree(s) model(s); and
- v. determining the propensity of tourism undergraduate students towards the entrepreneurial spirit through instruments of collecting prime data (questionnaire).

We think that this instrument may have a preventive character, since it will alert the directors of the degree courses in tourism of the greatest deficiencies that the respective formations may present concerning entrepreneurship, and they will be in time to act and adjust the pedagogical model to the reality of the market.

2 Literature review

2.1 Entrepreneurship in higher education in Portugal

Following the European Commission (2021), the Covid-19 pandemic and the consequent political decisions, 2020 was a difficult year for SMEs in Portugal, and these are of particular importance for the country's "non-financial business economy". However, its productivity, calculated as value added per person employed, was around half the EU's average. The accommodation and restaurant sector contracted sharply, with SME value added falling by 42.9%.

The DGAE (2023) declare that entrepreneurship is considered an attractive career option in Portugal and the Portuguese government aims to continue to foster and strengthen a national entrepreneurial ecosystem capable of attracting investors and accelerating the growth of Portuguese startups in foreign markets through its National Strategy Startup Portugal+ program. Portugal has been one of the best-performing countries in EU entrepreneurship, showing significant progress above the EU-27 average since 2008, due to its robust business ecosystem underpinned by technology-based start-ups, supported by vouchers, dynamic non-governmental organizations, and training. In addition, the European Commission (2021) states that the government has inserted entrepreneurship into the educational curriculum, adopted strong sustainability measures, defined incentives to improve energy efficiency, and subsidies for renewable energy sources. In addition, more than half of Portuguese SMEs innovate internally and/or have introduced innovations in products and processes, compared to only 3 in 10 SMEs on average in the EU. GEM (2023) reveals that younger people are more likely to start new businesses than older ones. The Total Entrepreneurial Activity Rate (TEA) in the initial age group of 18 to 34 years exceeded the age group of 35 to 64 years in 37 of the 49 economies analysed by the GEM, which can be a good indicator for the economies of the future and the populations in formation.

However, in opposition to this scenario, SEDES (2021) states that the Portuguese economy recorded very slow growth between 2001 and 2019 (0.73%/year), compared to the average growth of 4.44% per year on average, between 1961 and 2000. It also attests that the Portuguese economy occupies only the 37th place in the IMC World Competitiveness Ranking of 2020, and in 2000 it was considered the 28th most competitive country in the world, as well as in the performance indicator in the economic component,

in which it occupied the 16th position in 2000 going to 41st in 2020. It also states that the country occupies only the 38th position in the UN Human Development Index (28th in 2000), highlighting that 37 countries provide a better quality of life to their citizens. This organization also highlights that the number of people employed in Portugal decreased by 77.7 thousand, and in the EU as a whole it grew by almost 25 million (19.1 in the Eurozone), thus revealing itself as an economy unable to create jobs or one that turns low value-added employment (average wages in real terms were 3% lower compared to 2000). It argues (SEDES, 2021), then, that it is urgent to create jobs of greater added value, accumulate capital, stimulate the productivity growth of the labour factor, and invest more and better.

According to Abranja (2017), in the hectic reality that Portugal and the world are currently experiencing, entrepreneurial attitudes must emerge and make a difference, implying a bet on entrepreneurship in tourism training, considering that tourism and entrepreneurship together form a synergy that, although still very incipient, already envisioned situations that alert us to the need and importance of articulation between the two fields. Thus, according to the DGAE (2023), entrepreneurship can play a key role in the globalised and competitive market economy, as a driver of employment and economic growth, through the creation of new companies, greater investment in the economy, the creation of new jobs, and the promotion of competitiveness and innovation. He argues, then, that educating for entrepreneurship should therefore be encouraged.

The teaching of entrepreneurship in Portugal has changed significantly in recent years. Universities, which acted randomly in the promotion of this activity, are adopting a new position that involves the inclusion of curricular units of an entrepreneurial nature, compulsory practices, creation of departments to support entrepreneurial behaviours, incubators of ideas, nuclei, and offices of innovation, initiative and employment, among other aspects (Abranja, 2020). However, Pessoa and Gonçalves (2006) affirm that in an area of knowledge eminently of behaviour, it should have a three-dimensional approach, composed of a person and their company and environment, although a methodology that is too theoretical persists.

The concentration of the effort of entrepreneurship teaching is strongly directed to the elaboration of business plans, relegating to the background the components of behaviour and organization, which are determining factors in the entrepreneurial process. According to Barata (2007), without an education aimed at taking risks, implementing entrepreneurial initiatives, and knowing how to

value the lack of success, as a source of learning, at the level of basic, secondary, and university education, it will not be possible for Portugal to reach the level of development and growth needed by all. Although this timid advance in what concerns the Portuguese entrepreneurial culture, we can affirm that some important measures are already being taken in the training and awareness for the exercise of this activity, where the personal interest of teachers is shown as a proactive tool to enhance education and entrepreneurship (SEDES, 2007).

We believe that higher education can be its driving force, provided that three determinants are applied for the success of this activity (Girão, 2007):

- training / entrepreneurial culture;
- promotion of creativity/identification of technologies; and
- transfer of ideas/technologies in commercial products.

Based on these determinants, for an entrepreneurial educational process to develop effectively it is essential that the entrepreneur correctly defines his path and accepts the challenge of transforming ideas into production opportunities, differentiating himself from others through strategic decisions.

The effective methodology of an entrepreneurial educational process means that the student himself learns by solving problems, pressured, in interaction with his peers and other people through exchanges with the environment; problematic situations must be simulated so that each trainee can find a solution and take advantage of the opportunity that exists in each problem; copy from other entrepreneurs, learning from your own mistakes and listening to customers are other efficient ways of learning (Gibb, 1987). To achieve these objectives, the means used must be based on understanding, the use of feedback, the analysis of cases/information, and the formulation of assumptions. The most recommended education techniques for the application of an entrepreneurial education are (Amaral, 2000):

- experiences;
- group dynamics;
- case studies, individual or group, with the identification of theoretical aspects;
- tools/tests for self-knowledge;
- dialogue exhibition (brainstorming and stimulation by debate and reflection);
- reading, study, and individual elaboration of articles and texts;

- testimonials from local entrepreneurs;
- preparation of interview reports with successful entrepreneurs; and
- Presentation sessions in classes.

Entrepreneurship is no longer considered an innate gift (Dolabela, 1999a) and, today, it is considered a human dimension that can be acquired and improved through the learning of a discipline that presents a theoretical foundation (Amaral, 2000), models (Schumpeter cit. by Tjønnedal, 2021; Amaral, 2000), processes (Klofsten, 2007), case studies (Amaral, 2000) and a high level of interdisciplinary convergence (Girão, 2007; Strom, 2007; Brush et al., 2003). Teaching entrepreneurship allows this activity to be learned in other scientific and professional training areas, which need immediate response and the ability to cope with accelerated changes in the environment (Abranja, 2008). It is a mistake to think that it is not possible to teach this competence (Salim, 2001, as cited in Cohen, 2001).

The necessary education will have to change the current culture and promote, on a sustainable basis, the emergence of the entrepreneur. Their education involves training based on real cases since learning is only done when someone can creatively use new information and knowledge. This learning takes place when it is possible to unite theoretical knowledge with how to apply it in practice (Girão, 2007). In sum, according to a study advanced by McMullan and Long (Scabeni & Crisóstimo, 2008) students must work on ambiguity and learn to create innovative solutions for problem solving. Innovative standards are very focused on the vision of the whole, interconnected and interrelated, in the constant search for the reapproximating of the parts (Behrens, 2006).

In recent years, a set of policies, actions, projects, and other incentives have appeared that aim to promote entrepreneurial competence and its training. Among other objectives, the Lisbon Strategy already defined in 2000 that Europe should promote a more entrepreneurial culture and adopt attitudes and cultural values that would empower and encourage such behaviour. The POPH – Human Potential Operational Program highlights support for entrepreneurial initiatives and the transition to working life (types of intervention five), intending to create quality employment. In this Program, we also highlight typology seven which aims to stimulate the emergence of entrepreneurial projects managed by women (Programa Operacional Potencial Humano, 2012). Later, the Programa Operacional Capital Humano was created to contribute to smart, sustainable, and inclusive growth and economic, social, and territorial cohesion in the European area (Programa Operacional Capital Humano, 2023). The

COMPETE program – Operational Program Competitiveness Factors, inserted in the National Strategic Reference Framework, was created to support the productive investment of innovation, entrepreneurship, R&DT, and the use of immaterial competitiveness factors (COMPETE, 2023). Also, the Small Business Act for Europe (EUR-Lex, 2016) adopted by all EU member states sets out several principles designed to encourage entrepreneurship in the EU space and to make it easier for small businesses to thrive. This action aims to improve the overall policy approach to entrepreneurship to definitively link the ‘Think Small First’¹ principle in policy-making. Also, the Europe 2020 Strategy “aims to ensure that the economic revival of the EU following the economic and financial crisis is supported by a series of reforms to build solid foundations for growth and job creation by 2020”. Meeting the Europe 2020 targets is based on five headline targets: 1) promoting success and reducing the amount of people who leave early school (NGE); 2) improving employability by adjusting vacancies to the needs of the labour market; 3) increasing the attractiveness and number of higher education graduates; 4) improving the skills of the adult population; and 5) promotion of the quality and regulation of the education and training system. In addition, the Europe Startup Nations Alliance (Europe Startup Nations Alliance, 2022), a new European entity supporting entrepreneurship, was created in 2021 to support its member countries in becoming “*startup*” nations, by defining leverage standards that allow the active sharing of best practices, providing technical support to member country governments, monitoring member countries’ progress in implementing the best ones to practice, support in the rapid creation of startups, facilitation of entry into different markets, the attraction and retainment of talent, the definition of an adequate regulation and to enable access to financing.

It is verified that these policies, actions, projects, and other incentives referenced have been the reason for the emergence of various support centres for the creation of companies, incubators, associations, networks, innovation centres, offices, and employment, among other actions based on higher education institutions (*Ibid.*). The Poliemprende Competition, the program that stands out most at the level of Higher Education, is a joint initiative to promote entrepreneurial competence, Polytechnic Institutes (IP) and other schools of polytechnic higher education, which is aimed at students of schools of the IP, graduates of the 1st and 2nd cycles of polytechnic higher education

¹ Retrieved from https://ec.europa.eu/commission/presscorner/detail/en/IP_08_1003. Accessed on 24/06/2023.

and teachers of the IP or other individuals, provided that they are integrated into teams made up of students and/or graduates. This competition aims to increase curricula with the development of entrepreneurial competence, to respond to the challenge of the Bologna Process, to the guidelines of the Lisbon Strategy, and to the Contract of Confidence signed with the former Ministry of Science, Technology and Higher Education. It also has as a perspective the creation of new innovative companies located in the region, with growth potential, as well as promoting entrepreneurship in the regions surrounding the IP and the development of SMEs created under the Poliemprende (Poliemprende, 2023).

2.2 Entrepreneurship in tourism higher education

Tourism today has the role of one of the best alternatives for the economic development of a region, with emphasis mainly on the dynamics and growth potential that the activity offers, especially in aspects of job creation, performance, quality of life, peace, low pollution and defence of heritage and the environment. Despite all these and other advantages, tourism must be limited by a set of parameters that control its sustainable development, which will only be possible if tourism development is supported by careful planning and an entrepreneurial conscience that fosters its success.

The education of entrepreneurship in tourism is a virgin subject in Portugal and very little studied in the rest of the world. This issue is understood as a challenge since few sources are available and accessible to our research, which has been the engine of scientific development. There is still, in tourism, a global lack of research interest, and in most of the situations in which research applied to tourism is carried out it is done without any methodological or theoretical basis and, even, without the necessary critical spirit. The 1995 reflection of the World Tourism Organisation (World Tourism Organisation, 1995), is that the main barrier to the development of tourism research continues to be the retrograde mentality of investors and managers in the sector who are completely unaware of its importance and, as such, do not integrate it into their processes, which is still very current.

In the point of view of Frossard (Bahl, 2003) higher education in tourism should not be treated as a simple training, but as an educational process that is a stimulus to research and development of scientific production. Filion (1999) warns about the fact that there is still no scientific

profile for the identification of a potential entrepreneur, it is presumed that it is from the contextualization that the imperative of addressing entrepreneurial competence in training is proven, to achieve the establishment of a scientific corpus integrating its history, conceptualization, and education. Trigo (2005) emphasises that the curricular plans of tourism courses should be focused not only on programmatic content but also on the development of competencies, mainly on the ability to think and express themselves clearly, solve problems, and make decisions.

From the point of view of Re (2002), the tourism professional needs training with a greater impact on the development of skills. According to Beni (2003), the object of study of tourism is tourism itself, by bringing together variables and methods of analysis of other more common sciences, attributing to tourism practice an interdisciplinary and current character that shows the importance of profoundly modifying tourism activity and the attitude of tourism professionals.

Echtner (1995) states that the academic component is one of the best ways to approach an entrepreneurial education in tourism, arguing that it is better to apply it in higher education when the student has a more holistic view of the empirical work on tourism and, especially, its impacts on local communities and the host region. Education according to the logic of the systemic approach should, in this way, stimulate the student to learn by doing, so that he develops all his competencies, skills, and aptitudes (Behrens, 2006).

It is important to take into account the Guidance Manual for On-Site Verification of the Conditions of Recognition (MEC, 2001) of the Tourism and Hospitality courses, which highlights the skills that the student of these two areas must present after the conclusion of the course:

- Communication and Expression: Establishing interpersonal communication, expressing oneself correctly, and interpreting reality;
- Logical, Critical, and Analytical Reasoning: Operating with values and mathematical formulations and establishing formal and casual relationships between phenomena; expressing themselves critically and creatively in different organisational and social contexts;
- Systemic and Strategic Vision: Demonstrating the understanding of everything in an integrated and systemic way and its relationships within their contexts;
- Creativity and Initiative: Proposing and implementing management models, innovating, and revealing an entrepreneurial spirit;

- Negotiation: Demonstrating flexible attitudes and adaptation to any situation;
- Decision-making: Ordering activities and programs, taking risks and deciding;
- Leadership: Influencing the behaviour of the group with empathy and impartiality, with interpersonal and institutional interests as a goal; and
- Teamwork: Acting interactively and collectively in search of common goals.

When analysing the same type of document, but Portuguese, (from the unpublished document “Opinion of the Tourism Working Group, for Implementation of the Bologna Process”, in 2004), in general terms we can affirm that the competencies to be acquired in any higher education in the area of tourism must be specific according to the academic degree it confers and must be related, in the 1st cycle, with the supervision of operations and/or responsibility for the application and transmission of specialised knowledge of medium-higher level and in the 2nd cycle with the management or direction of companies or institutions and/or responsibility for the resolution of problems and the presentation of solutions in the implementation of tasks of specialised knowledge of a higher level. In both degrees/cycles we observe the presence of general competencies of an instrumental nature and framing of the activity; interpersonal and human resource management, systemic and conceptual, which are subdivided into dozens of competencies. In the first cycle, it is desirable to develop capacities of a more generic nature, and in the second cycle it is advisable to work on contents of a more specific nature associated with the obtaining and development of skills at the levels of resource and product management, destinations and markets and functional domains; In the 3rd cycle, an in-depth investigation is recommended on a delimited aspect of sectoral knowledge, of general and/or applied relevance, whose success translates not into predetermined and formatted competences, but into a high personal qualification.

In this way, Re (2002) attested that for the construction of a new profile of tourism courses, it would be necessary to develop a flexible and innovative pedagogical project, which provides conditions for the student to develop an entrepreneurial vision of tourism activity and can effectively face the challenges and opportunities that society imposes (Trigo, 2005). There must be in the higher courses of tourism a training of entrepreneurs, with a vision of planning and sustainability of the tourism system (Bahl, 2003). However, for this to make sense, the labour market must be sensitive and prepared to receive entrepreneurs

capable of realising visions and motivating, supporting, and perfecting them.

3 Methodology

An investigation should be something that is sought, to contribute to a greater and better future knowledge. To start the research work, it was essential to find a common thread, a guideline. We relied on the guidelines of Campenhoudt et al. (2019), and we started the research project with a starting question that reflected, as accurately as possible, what we intended to know, elucidate, and understand better: What is the entrepreneurial capacity of higher education tourism students in Portugal?

We gathered a small group of six tourism professors, tourism technicians, hotel and catering professionals, and tourism entrepreneurs, to whom we asked this question without advancing further comments to ask individually to explain what they understood and got from the issue presented and we made the recommended changes. We used statistical studies promoted by various Portuguese public institutions, such as the Ministry of Education, the General Directorate of Higher Education, the Agency for Evaluation and Accreditation of Higher Education, the National Institute of Statistics, Turismo de Portugal, I. P., and the Education Committee of the European Union, as well as some scientific articles on tourism. After the balance of the different approaches to the problem, which arise through the readings and exploratory observation as well as the analysis of the connections and oppositions that exist between them, we conceive a new problem that is related to the pedagogical model practiced by higher education institutions in the undergraduate courses in tourism, considering its inadequacy to a teaching practice that is oriented to entrepreneurship capable of creating entrepreneurial students. We approach this object of study with the analysis of the causes and motivation of the students.

The proposal of a model of an instrument for evaluating the entrepreneurial capacity of students in the higher education of tourism in Portugal, the main aim of this research, was created and applied during a deep exploratory study, which was carried out through PhD research over the past decade.

Validation of the instrument

Within the great variety of conceptual designs, given the specificity of what has been studied, we have decided on a descriptive, cross-sectional, and correlational study, which has allowed us to complete the study of

the situation analysed. The connection of the descriptive, transversal, and correlational characteristics has allowed the understanding of the current state of higher education in tourism and defined a future corrective intervention.

This research methodology has been the one that has best suited our work because it has included the collection of data that test the hypotheses and answer related questions. The stages covered by the investigation are common to all other categories: (i) the definition of the problem; (ii) the construction of hypotheses or research questions; (iii) the collection, organization, verification, validation, analysis, and selection of data; (iv) the hypothesis test or the answer to the questions; and (v) the drafting of an investigation report.

This research required the development of an appropriate instrument to obtain the desired information, based on instruments already used. Thus, the methodology used to contrast the hypotheses and variables of our research is defined as (a) descriptive, since it analyses the influence of certain resources by describing a reality without interfering with it (Appolinário, 2006). Theories suggest the application of questionnaires and observation; (b) It is cross-sectional since the researcher studied the behaviour of the variables in different groups of subjects in the same space of time (Appolinário, 2006). As Kerlinger (2002) suggests, our study included all students in each course, to establish relationships and correlations between variables and compare the various grades and their actions; (c) and it is correlational, because it tried to verify if there is a relationship between the several quantifiable variables, although, according to Carmo and Ferreira (1998), this type of research only determines that there is a relationship between two variables but does not constitute a cause-effect relationship and there can be a strong degree of correlation between two variables without one of the variables being the cause of the other and a third variable being the cause.

Our research has been supported in a non-experimental model once no new situations were constructed. The variables have not been manipulated on purpose, distributed randomly in the subjects, or deliberately modified, being that the researcher is limited to observing the facts in their natural context and then analysing them (Kerlinger, 2002; Sampieri, 2006; Creswell, 2009). The choice of this non-experimental and transversal research model was not alien to the objective of the work and the underlying theoretical model and was based on an exhaustive bibliographic review that revealed the variables that are recently used in the understanding of entrepreneurship in the higher education of tourism.

It was interesting to find a teaching model in a country with a strong entrepreneurial culture to proceed to a comparative study, but there is no country with a complete entrepreneurial model. The United States would be the best example but very difficult to measure. In the impossibility of advancing for a comparative study, we opted for a case study, correlational research, on the model of higher education in Portugal in the area of tourism and its practices, trying to verify if there is a relationship between the different variables quantified. After collecting data through questionnaires and observation, the tourism course with the best results in terms of entrepreneurial practice has been studied.

Thus, we decided to carry out a real case study, which was related to the undergraduate courses in tourism, to identify and understand how these courses are preparing their students regarding entrepreneurship and, consequently, define the improvements to be implemented in the higher education of tourism. We defined as a dependent variable of this study the entrepreneurial vocation of the students and as independent variables the entrepreneurial culture/climate in tourism courses and higher education institutions, as well as the personal characteristics of the students surveyed. For data collection, the questionnaire and the observation of the variables of interest were privileged to evaluate the quality of the proposed model. This model has been based on an exhaustive bibliographic review from which emerged the variables that we use in the understanding of entrepreneurship in higher education of tourism. All necessary procedures were guaranteed to ensure that respondents understood exactly what they were being asked and felt comfortable and confident to say their opinions accurately. Next, we select the instruments with the concern of validating them for the Portuguese population, considering their specificities in their academic field. We search for material intending to find the appropriate scales, of recent application. Not finding them with the specificities of our sample, in an exploratory phase, we had to elaborate our own questionnaires and adapt the most relevant questionnaires. The information from the questionnaires applied was duly validated and exported to the statistical software PASW SPSS. This procedure eliminated manual transcription of data, one of this study's biggest sources of error.

This study population was all coordinators and students of 1st and 3rd years of the degrees in tourism in Portugal. At the time of this study, Portugal offered 32 courses in public higher education and 17 in private higher education in the tourism area. Thus, this study was based on the 237 students who answered the first questionnaire

(questionnaire A) and the 15 coordinators (43%), representing more than 1200 students, who accepted to be surveyed (questionnaire B). Questionnaire A was sent to a universe of 1200 students (the student population of the institutions that joined this work). Under a margin of error of 3.5%, the ideal number of participants would be 292. Once the number of responses obtained was 237, it amounted to a percentage of 81.2%. The margin of error assumed by the 237 participants was 4.8%.

4 Results and discussion

The main purpose of this research is to propose a model of an instrument for evaluating the entrepreneurial capacity of students in the higher education area of tourism in Portugal. This instrument proposal is validated by a deep exploratory study that was carried out through PhD research during the past decade.

Explanation of the structure of the model of an instrument for evaluating the entrepreneurial capacity of students

1. The first tool used is a questionnaire of business perspective, created and validated by the Small Business Association (n. d.) (an organization of the American government responsible for small business policies) and which consists of the exposure to the minimum requirements to be a successful entrepreneur. This questionnaire structure results from more than one hundred interviews with the owners of large companies in California. This association developed this tool where there are no wrong answers, but each alternative is a segment of the reactions obtained by this study, and the importance given to each of them corresponds to the importance that this group of successful entrepreneurs gave them. The questionnaire

was sent to the coordinators of the courses that participated in this study, which they shared with their 1st and 3rd-year students. This questionnaire uses closed and validated *Likert* questions about the interpretation that students have about their degree course in tourism. Through the results of the measures of central tendency, dispersion, and distribution of each element separately, it seems that the asymmetry coefficients for items 2, 3, 6, 9, 10, 11, 13, 17, and 19 are negative, which means that they are not associated with a normal distribution; so these items do not have a good capacity to discriminate people. The content of other elements is relatively close to zero and therefore may be associated with a normal distribution, so they have a good ability to discriminate people on those issues. For the Kurtosis coefficient, a measure of dispersion that characterises the peak or “flattening” of the curve of the probability distribution function, it can be observed that items 6, 7, 8, 13, 14, 17, and 19 show positive values, which means that they have a leptocurtic distribution, that the standard deviation is low and people are remarkably clustered around the mean. In this context, this instrument has been applied to the population of students attending the first and last years of a degree in tourism in Portugal, to determine their propensity for entrepreneurship. This tool is divided into four parts, with open, closed, multiple choice questions in the closed range and the Likert scale, including the following data (Tables 1, 2, 3, 4, 5 and 6):

- i. Socio-labour and sociodemographic data, in which information is collected on the variables considered relevant to the entrepreneurship matters.
- ii. Entrepreneurial propensity data.
- iii. Entrepreneurial teaching methods data.
- iv. Entrepreneurial activities data.

Table 1: Questionnaire A, Section 1

A. TO BE COMPLETED BY THE STUDENT											
Section I – Personal Information											
IQ1. Higher Teaching Institution:			IQ2. Course Name:								
IQ3. Year of course:		3 rd year	IQ4. Status:			Student	IQ5. Gender:			Male	
		1 st year				Student-worker				Female	
										I'd rather not say	
IQ6. Age:		17-23 years	24-30 years	31-37 years	38-45 years	46-54 years	> 55 years				
IQ7. Professional experience:		No experience	< 1 year	1-3 years	4-6 years	7-9 years	> 9 years				

Table 2: Questionnaire A, Section 2 [IIQ1-IIQ9]

A. TO BE COMPLETED BY THE STUDENT					
Section II – Entrepreneurship Personal Level (based on Small Business Administration - SBA, 2007)					
IIQ1. What is the key to success in business?		IIQ2. If a relative asked you for advice on starting a business, what would you say?		IIQ3. What is the potentially most dangerous situation?	
	1. Business knowledge		1. Study the market		1. Growing too fast
	2. Hard work		2. Work first for someone in the same industry		2. Growing irregularly
	3. Promotion/Advertising		3. Write a business plan		3. Growing too little
	4. Manage the business personally		4. Report on costs/budgets		4. Grow very slowly
	5. Sufficient capital		5. Give up the idea		5. Growing too much
IIQ4. Who to trust in business?		IIQ5. When do you feel unhappy with your employees?		IIQ6. If I were an entrepreneur, what would I tell my employees about my customers?	
	1. In me		1. When they are not satisfied		1. They deserve attention
	2. In some key employees		2. When customers are poorly served		2. They are demanding
	3. In my clients		3. When they dedicate less than I do		3. They are always right
	4. In my partner		4. When they ask for resignation		4. They are fools
	5. In no one		5. When they are late		5. They are too complicated
IIQ7. Of the following factors, which are the most important to the success of a small business?		IIQ8. When it comes to money, how do you feel?		IIQ9. Financially, what should you worry about in your company?	
	1. Word of mouth		1. Careful		1. What is fully funded by income - no debt
	2. Marketing		2. Rigid		2. Keep your financial situation rigorously up to date
	3. Participation in community events		3. Intelligent		3. May have more benefits this year than in the past
	4. Commercial point		4. Sentimental		4. Don't have problems with cash flow
	5. Brand		5. Very carefree		5. Who has a good line of credit

Table 3: Questionnaire A, Section 2 [IIQ10-IIQ18]

A. TO BE COMPLETED BY THE STUDENT					
IIQ10. What do you do when you hire people?		IIQ11. What do you do with your employees?		IIQ12. What is the real key to success in business?	
	1. I consider behavior more important than experience		1. I work alongside them whenever possible		1. Quality products and services
	2. I look for the best person and paid him well		2. Whenever possible, I attribute functions according to personalities.		2. Knowledge of the industry in which you operate
	3. I'm looking for a lot		3. I treat everyone the same way		3. Hard work and perseverance
	4. I only hire students to do internships		4. I encourage you to talk to me about business		4. Employees
	5. I try to pay as little as possible		5. I try to talk to everyone particularly once a week		5. Marketing
IIQ13. What do you think of the competition?		IIQ14. What is the best competitive advantage in business?		IIQ15. What makes it most important?	
	1. They are a constant threat		1. Know the needs of the market		1. Stay in touch with my customers
	2. They are observers		2. Credibility		2. Use new techniques
	3. They are everywhere		3. Make detailed planning		3. Stay in touch with my employees
	4. They're smart		4. The experience		4. Maintain accurate financial records
	5. They're dumb		5. Conduct business ethically		5. Getting reformed-me
IIQ16. What is your dream in business?		IIQ17. What do you think of business plans?		IIQ18. What makes an 'extraordinary' entrepreneur?	
	1. Make the company grow more than the others		1. Essential - I don't start my activity without them		1. Creativity
	2. Stop the hassle and have more fun at work		2. Informative and useful		2. Be customer-centric
	3. Dealing with other businesses		3. Something my accountant can do		3. Flexibility
	4. Take a vacation		4. Good but not necessary		4. Discipline
	5. Working until exhaustion		5. Waste of time		5. Technical capacity

Table 4: Questionnaire A, Section 2 [IIQ19-IIQ20]

A. TO BE COMPLETED BY THE STUDENT					
IIQ19. What is the biggest need for a business?			IIQ20. What is essential to sell?		
	1. A coherent business plan		1. Market research		
	2. Money		2. Convince the customer		
	3. Market research		3. Test the product		
	4. Time		4. Experience		
	5. Support		5. Having a 'sixth sense'		

Table 5: Questionnaire A, Section 3 [IIIQ1]

A. TO BE COMPLETED BY THE STUDENT					
Section III – Entrepreneurship Course Level (based on Filion, 1991; Gibb, 1991; Vesper, 1992; Bradford et al, 1994; Dolabela, 1999a; Filion, 2000; Amaral, 2000; Trigo, 2005a; Abranja, 2020)					
IIIQ1. How do you interpret the training of your Bachelor in Tourism?					
	I totally disagree	I disagree	I don't agree or disagree	Agree	I totally agree
1. Most of my teachers use teaching methods and techniques, which provoke conditions of inquisition, reflection and research.					
2. The training of my course is strongly based on "learning by doing", with strong recourse to practice and research					
3. The training of my course is strongly based on elements of concept and abstraction (theory) and little in the concrete					
4. In my classes in general, teachers often present problems and encourage me to solve them					
5. In my course there are several curricular units that are cross-instructed, including the evaluation					
6. Most of my teachers use teaching methods and techniques that already provide me with answers without having to look for them.					
7. My professors in general, usually talk about entrepreneurship and encourage this practice					
8. The training of my course is strongly based on concrete and objective elements (practice) and very little abstract					
9. The training of my course is strongly based on study visits, lectures/seminars, compulsory internships and project support.					
10. The training of my course is strongly based on experiences, group dynamics, case studies, brainstormings/debates, reflections, individual elaboration of articles, interview reports and presentations					

2. Secondly, an interview was conducted with the coordinators of the degree courses in tourism, to identify what entrepreneurship measures have been taken in their courses. The objective was also to identify the propensity of these professionals for entrepreneurship because as we saw in the bibliographic review, it can influence the implementation of teaching methodologies in their course and, consequently, in the entrepreneurial attitude of students. In this case, there was no need to validate the instrument since the universe of respondents is very small. We conducted fifteen interviews, lasting approximately 60 minutes each, where we began to explain the reasons and objectives of this study and then the application of the

research questions. We opted for the direct approach with the coordinators to try to collect the answers of 100% of all the individuals who coordinate the degree courses in tourism in Portugal, but, unfortunately, some coordinators have not shown availability in time to conclude this study. This tool is divided into four questions groups: open, closed, multiple choice in the closed range, and the Likert scale, including the following data (Tables 7, 8, 9, 10 and 11):

- i. Socio-labour data, in which information is collected on the variables considered relevant to the entrepreneurship matters.
- ii. Entrepreneurial propensity data.

Table 6: Questionnaire A, Section 3 [IIIQ2-IIIQ5]

A. TO BE COMPLETED BY THE STUDENT					
IIIQ2. What learning elements are most commonly used in your classrooms by teachers?					
1. Experiences		2. Reading		3. Lectures (by the professor)	
4. Group dynamics		5. Study and preparation of the various articles and texts		6. None of the above	
7. Case studies of individuals and/or groups		8. Testimonials from local entrepreneurs		9. Self-knowledge instruments/tests	
10. Preparation of interview reports with successful entrepreneurs		11. Dialogue presentation (discussion of ideas and stimulating and reflection)		12. Presentation sessions	
IIIQ3. How many study visits have already been made in your course?					
1. 0		2. 1-2		3. 3-4	
4. 5-6		5. 7-8		6. >8	
IIIQ4. How many seminars/conferences/congresses do you know that have been organized by the director or a teacher of your course?					
1. 0		2. 1-2		3. 3-4	
4. 5-6		5. 7-8		6. >8	
IIIQ5. How many internships or job context trainings have been or will be promoted/offered to you by the course coordination?					
1. 0		2. 1-2		3. 3-4	
4. 5-6		5. 7-8		6. >8	
THANK YOU VERY MUCH FOR YOUR COOPERATION					

Table 7: Questionnaire B, Section 1 [BIQ1-BIQ4]

B. TO BE COMPLETED BY THE COURSE COORDINATOR/DIRECTOR														
Section I – Personal Information														
BIQ1. Higher Teaching Institution:			BIQ2. Course Name:											
BIQ3. Years of teaching:			1-3 years		3-6 years		6-9 years		9-12 years		12-15 years		> 15 years	
BIQ4. Professional experience:			No experience		< 1 year		1-3 years		4-6 years		7-9 years		> 9 years	

- iii. Entrepreneurial teaching methods data.
- iv. Entrepreneurial activities data.

The model of an instrument for evaluating the entrepreneurial capacity of students

This instrument has already been pre-tested and applied to a sample of 237 students (margin of error was 4.8%. The ideal number of participants was 292) and 15 tourism degree coordinators that represent more than 1200 students (margin of error of 3.5%).

Methods of data analysis

The first elaboration of the data should be made in tables of frequencies [absolute (N) and relative (%)], followed by the respective graphs, for better visualization of the percentage variation of the data of the students and coordinators of the courses of degree in tourism in Portugal. In Section II (Entrepreneurship Personal Level), on the questionnaire based on Small Business

Association (n. d.) (Tables 12, 13 and 14) we used a scale to measure the entrepreneurial propensity of the students, where there are no “incorrect” answers. Each alternative represents a segment of reactions obtained by the Small Business Association study (n. d.), and the weight given to each corresponds to the importance that this group of successful entrepreneurs has given them. The construction and the origin of this questionnaire were fully respected. Authorization was requested from the SBA for its application in this particular work, which has been given electronically without any restriction.

It is important in this study to also consider the application of Coefficient no Parametric of *Correlation of Spearman*, to respond to the objectives considered. It opts for this coefficient by not meeting the estimate of the normal distribution, for some of the variables that had been crossed.

Table 8: Questionnaire B, Section II [BIIQ1-BIIQ2]

B. TO BE COMPLETED BY THE COURSE COORDINATOR/DIRECTOR					
Section II – Knowledge about Entrepreneurship					
BIIQ1. How do you interpret entrepreneurship?					
	I totally disagree	I disagree	I don't agree or disagree	Agree	I totally agree
1. I believe in entrepreneurship					
2. It consists of the binomial teaching and innovation					
3. I am aware of the advantages and disadvantages of entrepreneurship					
4. I know the characteristics of an entrepreneur					
5. I know how to document my about entrepreneurship					
6. I encourage the teachers of my course to entrepreneurship and be more entrepreneurs					
7. I encourage the students of my course to entrepreneurship and be more entrepreneurs					
8. I believe in entrepreneurship in higher education					
BIIQ2. How do you interpret entrepreneurship in higher education?					
	I totally disagree	I disagree	I don't agree or disagree	Agree	I totally agree
1. Entrepreneurship is a new trend in education					
2. Entrepreneurship should be promoted and supported by the Government in higher education					
3. In higher education, entrepreneurship should be promoted only in universities					
4. Entrepreneurship must be supported in the courses by the institution's direction					
5. In higher education, entrepreneurship should be promoted only in polytechnic institutes					
6. Entrepreneurship must be supported in the courses by the course direction and teachers					
7. In higher education, entrepreneurship should be promoted only in public institutions					
8. I give great importance to entrepreneurship in the course I coordinate/direct					
9. I plan to encourage more and better teachers and students to entrepreneurship					
10. In higher education, entrepreneurship should be promoted only in private institutions					

Table 9: Questionnaire B, Section II [BIIQ3]

B. TO BE COMPLETED BY THE COURSE COORDINATOR/DIRECTOR					
BIIQ3. How do you interpret the teaching methods in your course (bachelor)?					
	I totally disagree	I disagree	I don't agree or disagree	Agree	I totally agree
1. Most of the teachers use teaching methods and techniques, which provoke conditions of inquisition, reflection, and research in the student.					
2. The training of my course is strongly based on "learning by doing", with strong recourse to practice and research					
3. The formation of my course is strongly based on elements of concept and abstraction (theory) and little in the concrete					
4. Teachers often present problems and encourage students to solve them					
5. In my course there are several curricular units that are cross-instructed, including the evaluation					
6. Most teachers use teaching methods and techniques that already provide answers to students without having to look for them.					
7. Teachers in general usually talk about entrepreneurship and encourage this practice					
8. The training of my course is strongly based on concrete and objective elements (practice) and very little abstract					
9. The training of my course is strongly based on study visits, lectures/seminars, compulsory internships, and project support.					
10. The training of my course is strongly based on experiences, group dynamics, case studies, brainstormings/debates, reflections, individual elaboration of articles, interview reports and presentations					
11. The expository method is the most effective and most applied in my course					

The normality assumption must be met, resorting to the Central Limit Theorem for samples of more than 30 elements. This theorem states that when the sample size increases, the sample distribution of its mean comes

closer and closer to a normal distribution. To find the distribution of the mean, the population's mean and standard deviation must be identified.

Table 10: Questionnaire B, Section II [BIIQ4-BIIQ7]

B. TO BE COMPLETED BY THE COURSE COORDINATOR/DIRECTOR					
BIIQ4. How do you interpret entrepreneurship in your course (bachelor) and/or in your institution?					
	I totally disagree	I disagree	I don't agree or disagree	Agree	I totally agree
1. There was a recent inclusion of units of an entrepreneurial nature in my course					
2. My university/polytechnic has an entrepreneurship support department/idea incubator					
3. My university/polytechnic regularly promotes ideas/project competitions					
4. My university/polytechnic regularly promotes entrepreneurial training					
5. My university/polytechnic has a high number of business agreements					
6. My university/polytechnic accompanies its students, in the context of internships or work, during and after the course					
7. My university/polytechnic gets as close as possible to companies to strengthen their training and methods					
8. My university/polytechnic is as close as possible to other higher education institutions to exchange knowledge					
9. My university/polytechnic involves students of a bachelor's degree in tourism in institutional research work					
BIIQ5. How many study visits did you make with your students during the 3 years of the course?					
1. 0		2. 1-2		3. 3-4	
4. 5-6		5. 7-8		6. >8	
BIIQ6. How many seminars/conferences/congresses are promoted/offered by the course coordination or teachers during the 3 years of the course?					
1. 0		2. 1-2		3. 3-4	
4. 5-6		5. 7-8		6. >8	
BIIQ7. How many internships or job context trainings are promoted/offered by the course coordination during the 3 years of the course?					
1. 0		2. 1-2		3. 3-4	
4. 5-6		5. 7-8		6. >8	

Table 11: Questionnaire B, Section II [BIIQ8-BIIQ12]

B. TO BE COMPLETED BY THE COURSE COORDINATOR/DIRECTOR	
BIIQ8. What curricular units do you consider fundamental(s) to increase entrepreneurial competence in the course curriculum?	
BIIQ9. What 'parallel' bodies or activities do you consider necessary to have in a higher education institution to increase entrepreneurship?	
BIIQ10. What advice would you give to undergraduate students to obtain a greater entrepreneurial culture or to create their own company or project?	
BIIQ11. What advice would you give to a teacher to obtain a greater entrepreneurial culture and have more entrepreneurial teaching methods?	
BIIQ12. What needs to be done to make entrepreneurship an option more chosen by undergraduate students?	
THANK YOU VERY MUCH FOR YOUR COOPERATION	

Table 13: Student Questionnaire [Entrepreneurship level] [IIQ10-IIQ15]

Student Questionnaire [Entrepreneurship level] (Source: based on SMA, 2007)		
Section 1		
IIQ1. What is the key to success in business?	IIQ2. If a relative asked you for advice on starting a business, what would you say?	IIQ3. What is the potentially most dangerous situation?
Business knowledge [5 PTS]	Study the market [5 PTS]	Growing too fast [4 PTS]
Hard work [4 PTS]	Work first for someone in the same industry [3 PTS]	Growing irregularly [3 PTS]
Promotion/Advertising [3 PTS]	Write a business plan [2 PTS]	Growing too little [5 PTS]
Manage the business personally [2 PTS]	Report on costs/budgets [1 PTS]	Grow very slowly [2 PTS]
Sufficient capital [1 PTS]	Give up the idea [4 PTS]	Growing too much [1 PTS]
IIQ4. Who to trust in business?	IIQ5. When do you feel unhappy with your employees?	IIQ6. If I were an entrepreneur, what would I tell my employees about my customers?
In me [1 PTS]	When they are not satisfied [2 PTS]	They deserve attention [3 PTS]
In some key employees [5 PTS]	When customers are poorly served [5 PTS]	They are demanding [2 PTS]
In my clients [2 PTS]	When they dedicate less than I do [3 PTS]	They are always right [4 PTS]
In my partner [3 PTS]	When they ask for resignation [4 PTS]	They are fools [5 PTS]
In no one [4 PTS]	When they are late [1 PTS]	They are too complicated [1 PTS]
IIQ7. Of the following factors, which are the most important to the success of a small business?	IIQ8. When it comes to money, how do you feel?	IIQ9. Financially, what should you worry about in your company?
Word of mouth [5 PTS]	Careful [5 PTS]	What is fully funded by income - no debt [2 PTS]
Marketing [2 PTS]	Rigid [2 PTS]	Keep your financial situation rigorously up to date [3 PTS]
Participation in community events [3 PTS]	Intelligent [1 PTS]	May have more benefits this year than in the past [1 PTS]
Commercial point [4 PTS]	Sentimental [4 PTS]	Don't have problems with cash flow [4 PTS]
Brand [1 PTS]	Very carefree [3 PTS]	Who has a good line of credit [5 PTS]

The t-student parametric test must also be applied to verify the existence of significant differences between the courses of polytechnic institutes and those of universities at the level of entrepreneurship. The null hypothesis in these statistical tests is that there are no significant differences in the courses under study. If the test value is less

than or equal to 0.05, this hypothesis is rejected, and it can be stated that the mean is significantly different in the study groups. If the test value is greater than 0.05 the null hypothesis is not rejected, there is not enough evidence to affirm that the means differ significantly between the groups under study.

Table 12: Student Questionnaire [Entrepreneurship level] [IIQ1-IIQ9]

IIQ10. What do you do when you hire people?		IIQ11. What do you do with your employees?		IIQ12. What is the real key to success in business?	
	I consider behavior more important than experience [4 PTS]		I work alongside them whenever possible [1 PTS]		Quality products and services [3 PTS]
	I look for the best person and paid him well [2 PTS]		Whenever possible, I attribute functions according to personalities. [2 PTS]		Knowledge of the industry in which you operate [2 PTS]
	I'm looking for a lot [3 PTS]		I treat everyone the same way [5 PTS]		Hard work and perseverance [1 PTS]
	I only hire students to do internships [5 PTS]		I encourage you to talk to me about business [4 PTS]		Employees [4 PTS]
	I try to pay as little as possible [1 PTS]		I try to talk to everyone particularly once a week [3 PTS]		Marketing [5 PTS]
IIQ13. What do you think of the competition?		IIQ14. What is the best competitive advantage in business?		IIQ15. What makes it most important?	
	They are a constant threat [1 PTS]		Know the needs of the market [5 PTS]		Stay in touch with my customers [4 PTS]
	They are observers [2 PTS]		Credibility [4 PTS]		Use new techniques [5 PTS]
	They are everywhere [3 PTS]		Make detailed planning [3 PTS]		Stay in touch with my employees [3 PTS]
	They're smart [4 PTS]		The experience [1 PTS]		Maintain accurate financial records [2 PTS]
	They're dumb [5 PTS]		Conduct business ethically [2 PTS]		Getting reformed-me [1 PTS]

To better elucidate this analysis, it is important to consider the diagrams of extremes and quartiles (Boxplot) since it is the graphical representation with the best cost/benefit ratio), as they are also very useful for graphically comparing various datasets and samples under study. In this way, a very clarifying representation is obtained in the form of the distribution of the data, mainly in terms of the greater or lesser concentration, symmetry, and the existence of “abnormal” values.

The parametric procedure One-way ANOVA should also be used to find out the existence of differences between the various undergraduate courses in tourism, in terms of entrepreneurship activities. Also in this statistical procedure, the null hypothesis should be rejected if the test value is less than 0.05.

Another statistical technique that should be used is the simple linear regression model, according to the nature of the variables under study, which has already been mentioned are continuous. This technique is intended to estimate a regression model as a way of predicting the entrepreneurship activities that most contribute to explaining

the choice of undergraduate courses in tourism. Thus, the dependent variable or endogenous variable will be the degree course in tourism, and the independent variable will be the teaching method and increased activities. In this regression model, the correlation between the variables must also be analysed, through the Pearson correlation coefficient (r), which must have a value close to -1 or 1, indicating in the first case that there is a strong negative correlation (the variables evolve in opposite directions), and in the second case there is also a strong but positive correlation (in which the variables evolve in the same direction). Already the value of the coefficient of determination (R^2), should present a value close to 1, indicating that we are facing a regression model with enough quality, variability, and credibility to estimate the degree course according to the various teaching methods and activities.

Another statistical test to use is Pearson's Qui-Square Independence test to investigate the existence of the relationship between students' propensity for entrepreneurship and their course's commitment to entrepreneurial content and activities.

Table 14: Student Questionnaire [Entrepreneurship level] [IIQ16-IIQ20]

IIQ16. What is your dream in business?	IIQ17. What do you think of business plans?	IIQ18. What makes an 'extraordinary' entrepreneur?
Make the company grow more than the others [4 PTS]	Essential - I don't start my activity without them [1 PTS]	Creativity [4 PTS]
Stop the hassle and have more fun at work [3 PTS]	Informative and useful [2 PTS]	Be customer-centric [3 PTS]
Dealing with other businesses [2 PTS]	Something my accountant can do [3 PTS]	Flexibility [5 PTS]
Take a vacation [1 PTS]	Good but not necessary [4 PTS]	Discipline [1 PTS]
Working until exhaustion [5 PTS]	Waste of time [5 PTS]	Technical capacity [2 PTS]
IIQ19. What is the biggest need for a business?	IIQ20. What is essential to sell?	
A coherent business plan [3 PTS]	Market research [1 PTS]	
Money [5 PTS]	Convince the customer [4 PTS]	
Market research [1 PTS]	Test the product [5 PTS]	
Time [2 PTS]	Experience [2 PTS]	
Support [4 PTS]	Having a 'sixth sense' [PTS]	

Finally, an analysis of the content of the interview's open questions was carried out. According to Bardin (1977), this is a set of communication analysis techniques that uses systematic and objective procedures to describe the content of messages. The intention is to infer, through quantitative or non-quantitative indicators, knowledge of the conditions of production.

5 Conclusions

Entrepreneurship indicators are very important instruments to evaluate and compare the knowledge, skills, and entrepreneurial dynamics of a given object of study. The measurement of entrepreneurship is not something consensual, since in addition to the definition of the term not being unanimously assumed by everyone due to its multiplicity, the same applies to a reliable and technical-practical set of indicators capable of faithfully measuring its results and comparing them with the tools of those who practice it. The measurement of entrepreneurship has focused more predominantly on the creation of companies and jobs, as well as on the factors of innovation and initiative that apply to the business fabric or a geographical space. However, the measurement of entrepreneurship must go further and, for that very reason, we believe that its measurement must extend to higher education and training.

The reflection developed in this research allowed us to categorise indicators of entrepreneurship and propose

a scoreboard grouped in a set of three categories that we explain below, which, as a whole, can enable the measurement of entrepreneurship in a more global and integrated way in higher education institutions, in undergraduate courses in tourism, in the coordination/direction of the courses, and in the teachers and the students themselves. In each of the defined categories, there are different indicators, depending on the characteristics of each category and the number of variables that allow its measurement.

We begin by characterising the results of the Dimension "The entrepreneurial propensity" and for this purpose, we applied the questions from 1 to 20 of Section 1 in questionnaire A (students) and the questions BIIQ1 and BIIQ2 and from BIIQ8 to BIIQ12 in the inquiry by interview (B). The possibility was considered that, as far as coordinators are concerned, this propensity influences the entrepreneurial load in the courses, and in turn contributes to the entrepreneurial propensity in the students. The entrepreneurial propensity of students was measured through a scale created by the Small Business Administration (see Table 1).

In the dimension "Entrepreneurial teaching methods" we can understand if the methods and techniques of teaching used by teachers in their classrooms provoke in the student conditions of inquisition, reflection, and research, such as experiences, group dynamics, case studies, brainstorming/debates, reflections, individual elaboration of articles, reports of interviews and presentations, to the extent that, according to Fillion (1991) provide the student with the construction of a cri-

tical, reflective and decisive spirit. With this category, it is also possible to verify that there are cross-curricular units, including evaluation, a method that proves effective in promoting entrepreneurial education (Fillion, 2000). Here, it also allows us to register teachers encouraging students to solve problems since this “forces” them to do autonomous research and to think for themselves in appropriate solutions (Gibb, 1987). This category allows us to consider students, teachers, and course coordinators/directors.

In the dimension “Entrepreneurial activities” it is possible to analyse the number and typology of entrepreneurial actions carried out during the course, such as study visits, seminars, conferences, internships, or job context training. This category also allows us to analyse the inclusion of curricular units, parallel training actions of an entrepreneurial nature, activities to promote entrepreneurship (contests of ideas, joint projects, mobility, etc.), or organizations created to support entrepreneurship (department of support for business initiative or an incubator of ideas) in the course or the institution. At the same time, it is also possible to evaluate the relationship between the course and the educational institution with the companies and the market to improve their training and provide supported practices or post-course cooperation regarding former students’ employment.

This study reveals the entrepreneurial methods used and applied in the classroom and in a work context, with entrepreneurial professionals. It is common to multiple authors (Filion, 1991; Gibb, 1987; Vesper, 1992; Garavan & O’Cinneide, 1994; Dolabela, 1999a; Filion, 2000) that entrepreneurial learning must be strongly based on learning by doing, in a perfect symbiosis between theory and practice.

This tool also allows us to analyse the relationship between the course and the institution with entrepreneurial activities (seminars/lectures/conferences, curricular practices and study visits), since several authors defend these activities as actions to promote entrepreneurship (Filion, 1991; Gibb, 1987; Vesper, 1992; Garavan & O’Cinneide, 1994; Echtner, 1995; Dolabela, 1999a; Amaral, 2000; Filion, 2000; Klofsten, 2000; Re, 2002; Malheiros, 2004; Girão, 2007; Scabeni & Crisóstimo, 2008; Abranja, 2020).

Future prospects

Many of the indicators to measure entrepreneurship used in different current studies are the result of questionnaires and interviews applied to companies or entrepreneurs. Some of the indicators presented here do not yet exist and it is necessary to apply them so that their performance can be evaluated and compared with other

realities in a global and integrated way. However, it is recognised that our proposal does not meet with a consensus on the ideal indicator model capable of effectively measuring entrepreneurship in tourism higher education. In this sense, we continue to investigate publications, projects, and studies of other authors in this direction, which allows us to find the ideal measuring instrument.

For the future, we recommend that the degree courses in tourism in Portugal and its institutions consider some reflections that in the short and medium term become the following actions:

- Introduce entrepreneurial education in its educational system to create more entrepreneurial initiatives and entrepreneurship in students and teachers, reducing the gap between the academic world and the reality of the labour market. According to Melé (1999), the entrepreneurial culture looks at the actions that arouse business awareness and entrepreneurship, particularly in the educational system, but this spirit that we refer to is not a subject instituted in our schools.
- Narrow the higher education of the business reality, creating a more practical training and transmitter of skills. Toril and Valenciano (2011, p.54) state that “know-how is necessary to stimulate students’ innovation potential and influences the processes of socialization and adaptation to student changes”. The authors also state that, in fact, personal qualities relevant to entrepreneurship, such as creativity, innovation, initiative, and common sense, can be useful both in work practice and in everyday life.
- Create more and better teaching methods and entrepreneurial activities, namely: group dynamics, case studies, diagnostic tests, debates, readings, writing articles, interviews and reports, presentations (Garavan & O’Cinneide, 1994), internships, educational visits, conferences/seminars (Filion, 1991; Gibb, 1987; Vesper, 1992; Garavan & O’Cinneide, 1994; Dolabela, 1999b; Filion, 2000), in order to develop fundamental skills for the entrepreneur: analytical skills (Kuenzer, 1999); creativity and imagination (Filion, 1999; Kuenzer, 1999); know-how (Bucha, 2009); problem solving (Trigo 2005); communication and language (Kuenzer, 1999); attitude (Bucha, 2009; Trigo, 2005); pro-activity (Filion, 1999; Bucha, 2009); teamwork (Kuenzer, 1999); innovation (Filion, 1999; Bucha, 2009); speed of response (Kuenzer, 1999); leadership (Bucha, 2009); taking risks (World Tourism Organisation, 1998); transforming the obsolete into the current (Schumpeter, 1984, as cited in Tjønndal,

2021); negotiation capacity (Bucha, 2009); identifying opportunities (World Tourism Organisation, 1998); intuition (Filion, 1991); and perseverance (Bucha, 2009).

- Develop incubators of ideas or departments to support the promotion of entrepreneurship in higher education institutions, because as Toril and Valenciano (2011) defend, incubators provide three determinants for the development of successful businesses: (a) an entrepreneur and learning environment; (b) easy access to tutors and investors; and (c) notoriety and market positioning.

Bionote:

Nuno Abranja has a PhD in Work Sciences - Tourism Entrepreneurship, University of Cádiz. Master's degree and Postgraduate in Management and Development in Tourism, University of Aveiro. Degree in Tourism Development Planning, ULHT and a Bachelor's in Tourism, Hospitality and Thermalism, ISCE. Director and professor of ISCE Tourism Department. International Office and Entrepreneurship Office Coordinator of ISCE. Former Lecturer at ISG, ESTM, ULHT, IPLuso, Europeia University, Lusíada University, ETIC, IPTrans and EPAC. Founding editor-in-chief of Tourism and Hospitality International Journal. Author and Co-author of 9 books. Scientific board member of 36 scientific conferences and journals. Co-author of Encyclopaedia of Tourism. Member of CiTUR and ISCE-CI. CEO of OMelhorDoTurismo consulting. International consultant and business coach. Tourism, hotel management, entrepreneurship and marketing are his research areas. ORCID ID: 0000-0002-4312-5001

References

- [1] Abranja, N. (2008). O empreendedorismo no ensino superior de turismo [Entrepreneurship in higher education in tourism]. *GOGITUR: Journal of Tourism Studies*, 1(1), 5-20.
- [2] Abranja, N. (2017). O empreendedorismo como base do turismo sustentável: Proposta de modelo conceptual [Entrepreneurship as the basis of sustainable tourism: Conceptual model proposal]. *Revista Académica Observatório de Inovação do Turismo*, 11(2), 1-19.
- [3] Abranja, N. (2020). The learning process of entrepreneurship in tourism higher education in Portugal: A case study. In L. C. Carvalho, M. de L. Calisto, & N. Gustavo (Eds.), *Strategic business models to support demand, supply, and destination management in the tourism and hospitality industry* (pp. 241-254). IGI Global.
- [4] Abranja, N., Rodrigues, B., & Pedrosa Lima, A. (2022). Entrepreneurship in hospitality and the hotels in the social lifestyle of residents. *Media Wisata*, 20(2), 148-161.
- [5] Amaral, D. C. G. (2000). *Educação e formação de empreendedores pelas universidades* [Education and training of entrepreneurs by universities]. [Doctoral dissertation, Universidade Lusíada]. Repositório da Universidade Lusíada.
- [6] Appolinário, F. (2006). *Metodologia da ciência: Filosofia e prática da pesquisa* [Methodology of science: Philosophy and practice of research]. Thompson.
- [7] Associação Juvenil de Empreendedorismo. (2010). *Programa de apoio à inclusão econômica de jovens empreendedores* [Programme to support the economic inclusion of young entrepreneurs]. <http://www.enteraje.org.br/uploads/documentos/livroajecaldas20novas-participante.pdf>
- [8] Bahl, M. (2003). *Turismo: Enfoques teóricos e práticos* [Tourism: Theoretical and practical approaches]. Roca.
- [9] Barata, L. (2007, May 29-30). *Novas oportunidades: empreendedorismo em Portugal* [New opportunities: Entrepreneurship in Portugal] [Conference Paper]. II Seminário SEDES Novas Oportunidades: Empreendedorismo em Portugal, Lisboa, Portugal.
- [10] Bardin, L. (1977). *Análise de conteúdo* [Content analysis]. Edições 70.
- [11] Behrens, M. A. (2006). *Paradigmas da complexidade: Metodologia de projetos, contratos didáticos e portfólios* [Paradigms of complexity: Project methodology, teaching contracts and portfolios]. Vozes.
- [12] Beni, M. C. (2003). Como certificar o turismo sustentável? [How to certify sustainable tourism?]. *Revista Turismo em Análise*, 14(2), 5-16. <https://doi.org/10.11606/issn.1984-4867.v14i2p5-16>
- [13] Brush, C. G., Duhaime, I. M., Gartne, W. B., Stewart, R. A., Katz, J. A., Hitt, M. A., Alvarez, S. A., Meyer, G. D., & Venkataraman, S. (2003). Doctoral education in the field of entrepreneurship. *Journal of Management*, 29(3), 309-331. https://doi.org/10.1016/S0149-2063_03_00014-X

- [14] Bucha, A. I. (2009). *Empreendedorismo: Aprender a saber ser empreendedor* [Entrepreneurship: Learning to be an entrepreneur]. Editora RH.
- [15] Campenhoudt, L. V., Quivy, R., & Marquet, J. (2019). *Manual de investigação em ciências sociais* [Handbook of social science research]. Gradiva.
- [16] Carland, J. W., Carland, J. A. C., & Hoy, F. S. (1992). *An entrepreneurship index: An empirical validation* [Conference Paper]. 12th Annual Babson College Entrepreneurship Research Conference, France.
- [17] Carmo, H., & Ferreira, M. M. (1998). *Metodologia da investigação – guia para auto-aprendizagem* [Research methodology - a guide for self-learning]. Universidade Aberta.
- [18] Cohen, D. (2001). *E isso se ensina?* [And this is taught?]. Editora Abril.
- [19] COMPETE. (2023). *Incentivos às empresas* [Incentives for companies]. <http://www.pofc.qren.pt/areas-do-compet/incentivos-as-empresas>
- [20] Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publication, Ltd.
- [21] Cunha, M. P., Leiria, A. C., & Palma, P. J. T. M. (2006). O contrato psicológico em organizações empreendedoras: Perspectivas do empreendedor e da equipa [The psychological contract in entrepreneurial organisations: Perspectives of the entrepreneur and the team]. *Comportamento Organizacional e Gestão*, 12(1), 67-94.
- [22] DGAE. (2023). *Empreendedorismo* [Entrepreneurship]. <https://www.dgae.gov.pt/servicos/politica-empresarial/competitividade/empreendedorismo.aspx>
- [23] Di Bella, L., Katsinis, A., & Lagüera-González, J. (2023). *SME performance review 2022/2023*. PUBSY.
- [24] Dolabela, F. (1999a). *Oficina do empreendedor: A metodologia de ensino que ajuda a transformar conhecimento em riqueza* [Entrepreneur's workshop: The teaching methodology that helps turn knowledge into wealth]. Editora Cultura.
- [25] Dolabela, F. (1999b). *O ensino de empreendedorismo: Panorama brasileiro* [Entrepreneurship Education: The Brazilian perspective] [Conference Paper]. Conferência a Universidade Formando Empreendedores, Brasília, Brasil.
- [26] Echtner, C. M. (1995). Entrepreneurial training in developing countries. *Annals of Tourism Research*, 22(1), 119-134. [https://doi.org/10.1016/0160-7383\(94\)00065-Z](https://doi.org/10.1016/0160-7383(94)00065-Z)
- [27] EUR-Lex. (2016, February 24). A 'small business act' for European SMEs. <https://eur-lex.europa.eu/EN/legal-content/summary/a-small-business-act-for-european-smes.html>
- [28] Europe Startup Nations Alliance. (2022). *Start-up nations standard scoreboard 2022: Baseline version - executive summary of main conclusions*. <https://esnalliance.eu/wp-content/uploads/2023/01/ESNA-Baseline-Report-Executive-Summary.pdf>
- [29] European Commission. (2021). *The SME performance review monitors SME-related developments across the EU: Portugal 2021 SME country fact sheet*. <https://ec.europa.eu/docsroom/documents/50700>
- [30] Fillion, L. J. (1991). O planeamento do seu sistema de aprendizagem empresarial: Identifique uma visão e avalie o seu sistema de relações [Planning your corporate learning system: Identify a vision and evaluate your relationship system]. *Revista de Administração de Empresas*, 31(3), 63-71. <https://doi.org/10.1590/S0034-75901991000300006>
- [31] Fillion, L. J. (1999). Empreendedorismo: Empreendedores e proprietários-gerente de pequenos negócios [Entrepreneurship: Entrepreneurs and owner-managers of small businesses]. *Revista de Administração*, 34(2), 5-28.
- [32] Fillion, L. J. (2000, May 27). *O Empreendedorismo como tema de estudos superiores* [Entrepreneurship as a subject for higher education] [Conference Paper]. Seminário "A Universidade Formando Empreendedores". Brasília. <http://www.iel.org.br/programa/empreend/discurs4html>
- [33] Fowler, F. R. (2001). Uma visão da formação empreendedora para os novos desafios do mercado de trabalho [A vision of entrepreneurial training for the new challenges of the labour market]. In E. C. L. Souza (Ed.), *Empreendedorismo: Competência essencial para pequenas e médias empresas* (pp. 183-193). ANPROTEC.
- [34] Garavan, T. N., & O'Kinneide, B. (1994). Entrepreneurship education and training programmes: A review and evaluation - Part 2. *Journal of European Industrial Training*, 18(11), 13-21. <https://doi.org/10.1108/03090599410073505>
- [35] Gibb, A. (1987). Enterprise culture - its meaning and implications for education and training. *Journal of European in Industrial Training*, 11(2), 2-38.

- [36] Girão, J. A. (2007, May 29-30). *What sort of education for entrepreneurship* [Conference Paper]. II Seminário SEDES Novas Oportunidades: Empreendedorismo em Portugal, Lisboa, Portugal.
- [37] Global Entrepreneurship Monitor. (2023). *Global Entrepreneurship Monitor 2022/2023 global report: Adapting to a "new normal"*. <https://gemconsortium.org/report/20222023-global-entrepreneurship-monitor-global-report-adapting-to-a-new-normal-2>
- [38] International Data Corporation. (2021). *Startup & Entrepreneurial Ecosystem: Report 2021*. International Data Corporation Startup Portugal.
- [39] Kerlinger, F. (2002). *Investigación del comportamiento. Métodos de investigación en ciencias sociales* [Behavioural research. Social science research methods]. McGraw-Hill.
- [40] Klofsten, M. (2000). Academic entrepreneurship: Three levels. *Journal of European Industrial Training*, 24(6 & 7), 337-344.
- [41] Klofsten, M. (2007, May 29-30). *Training academic entrepreneurship: A Swedish good practice* [Conference Paper]. II Seminário SEDES Novas Oportunidades: Empreendedorismo em Portugal, Lisboa, Portugal.
- [42] Kuenzer, A. Z. (1999). As políticas de formação: A constituição da identidade do professor sobrance [The upbringing policies: The identity construction of the remaining teacher]. *Educação e Sociedade*, 20(68), 163-183. <https://doi.org/10.1590/S0101-73301999000300009>
- [43] Luís, N. (2004). *O impacto do perfil empreendedor na internacionalização* [The impact of the entrepreneurial profile on internationalisation][Master's thesis, Universidade de Coimbra]. Repositório Digital da Universidade de Coimbra.
- [44] Malheiros, R. C. C. (2004). Um mundo de idéias e oportunidades [A world of ideas and opportunities]. *Revista Empreendedor*, 10(110), 8-10.
- [45] MEC. (2001). *Manual de orientação para verificação no local das condições de reconhecimento* [Unpublished guidance manual for on-site verification of recognition conditions].
- [46] Melé, D. (1999). *Consideraciones éticas de la iniciativa emprendedora y la empresa familiar* [Ethical considerations of entrepreneurship and family business]. Editorial Eunsu.
- [47] Organisation for Economic Co-Operation and Development. (1998). *Fostering entrepreneurship*. https://www.oecd.org/en/publications/fostering-entrepreneurship_9789264163713-en.html
- [48] Paim, L. R. C. (2001). *Estratégias metodológicas na formação de empreendedores em cursos de graduação: Cultura empreendedora* [Methodological strategies for training entrepreneurs in undergraduate courses: Entrepreneurial culture] [Master's thesis, Universidade Federal de Santa Catarina]. Repositório Científico da CPLP. <http://repositorio.ufsc.br/xmlui/handle/123456789/79484>
- [49] Pessoa, E., & Gonçalves, S. (2006). *Ensino de empreendedorismo – uma abordagem tridimensional*. Universidade de Brasília.
- [50] Poliemprende. (2023). Quem somos [About us]. <https://www.poliemprende.com/quem-somos>
- [51] Programa Operacional Capital Humano. (2023). Quem somos [About us]. <https://www.poch.portugal2020.pt/pt-pt/Programa/Paginas/quem-somos.aspx>
- [52] Programa Operacional Potencial Humano. (2012). *Relatório de Execução do Programa Operacional Potencial Humano 2007*. Observatório do QREN. <https://www.cgtp.pt/images/images/2017/03/relatorio-final-POPH-parecer-CGTP-2017.pdf>
- [53] Re, C. B. Z. da (2002). Gestão de competências empreendedoras: Construção e desenvolvimento em cursos de turismo [Management of entrepreneurial competences: Construction and development in tourism courses]. *Turismo em análise*, 13(2), 7-16.
- [54] Sampieri, R. H., & Lucio, P. B. (2006). *Metodologia de pesquisa* [Research methodology]. Editora McGraw-Hill.
- [55] Scabeni, N., & Crisóstimo, A. (2008). A importância da educação empreendedora na formação inicial do administrador. *Revista Eletrônica Lato Sensu – UNICENTRO*, (6).
- [56] SEDES. (2007). *Guia do Empreendedorismo*. Associação para o Desenvolvimento Económico e Social. <https://eusouempreendedor.wordpress.com/wp-content/uploads/2008/12/guia-empreendedorismo.pdf>
- [57] SEDES. (2021). *Desenvolvimento económico* [Economic development]. https://www.sedes.pt/images/Documentos/GT_Economia.pdf
- [58] Siqueira, M. M. (2005). O ensino superior e a universidade [Higher learning and university]. *RAE eletrônica*, 4(1), 1-10. <https://doi.org/10.1590/S1676-56482005000100015>
- [59] Small Business Association. (n. d.). Quizz. http://www.sba.gov/smallbusinessplanner/manage/makedecisions/serv_manage_q1.html

- [60] Strom, R. J. (2007, May 29-30). *Entrepreneurship education & research in the U.S.* [Conference Paper]. II Seminário SEDES Novas Oportunidades: Empreendedorismo em Portugal, Lisbon, Portugal.
- [61] Tjørndal, A. (2021). *Social innovation in sport*. Springer Nature.
- [62] Toril, J. U., & Valenciano, J. P. (2011). Revisando el emprendedurismo [Revisiting entrepreneurship]. *Boletín Económico de Información Comercial Española*, 1(3021), 53-62. https://www.researchgate.net/publication/334987913_REVISANDO_EL_EMPRENDEDURISMO
- [63] Trigo, V. (2005). Doze meses de empreendedorismo [Twelve months of entrepreneurship: Trust is necessary]. *Dinheiro & Management*, 23(11), 1-18. <https://www.womenwinwin.com/documentos/image/informacao/doze-meses-de-empreendedorismo-endash-prof-virginia-trigo-iscte-endashiul.pdf>
- [64] Vesper, K. H. (1992). *New venture experience*. Vector Books.
- [65] World Tourism Organisation. (1995). *Educando educadores en turismo* [Educating the Educators in Tourism]. eLibrary.