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Entrepreneurship Skills Development in Higher Education Courses for Teams Leaders

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Abstract: This article analyses the concept of skills and identifies the skills needed by entrepreneurs to lead their teams. To accomplish these goals, the primary step was to determine the leadership skills developed by the universities in the entrepreneurship and innovation courses and to compare it with the needed skills perceived by entrepreneurs. This research approach is framed in the Management Sciences, and the research problem is anchored to the following research questions: What leadership skills are required by students for them to be effective in entrepreneurial endeavors upon graduation? Are the skills identified by the entrepreneurs sufficiently learned in Universities in Portugal? Does the student work experience, gender or age contribute to a level of leadership skills attainment? The leadership skills identified by the entrepreneurs were pointed out by two focus groups with 15 entrepreneurs and by conceptual content analysis, establishing the existence and frequency of concepts represented by the words or phrases in the entrepreneur's discourse. To verify if those skills are being developed in the entrepreneurship and innovation of higher education courses, an online survey was conducted with the students from the 3rd year of 2016/2017 academic year of several universities. The primary outcome of the research will be a proposal for a model of leadership skills development for students to potentiate their leadership capacity as entrepreneurs.

Keywords: skills; higher education; entrepreneurship; leadership; teams

1. Introduction

Entrepreneurship and entrepreneurs have become increasingly important worldwide, considering the positive impact on employment, productivity, innovation and economic growth, by analysts, economic theoreticians and researchers (Global Entrepreneurship Monitor GEM; Ahmad and Hoffmann 2008).

To become a successful entrepreneur requires a set of technical skills (Gonçalves et al. 2017), but also the combination of opportunity, capabilities, and resources. However, the entrepreneur needs to be a leader to conduct the business and the teams efficiently and achieve the goals to be successful. This research will bring some light to the above-mentioned skills.

This paper will be focus on the gap identified by the research that has been developed over the last few years, focusing on the entrepreneur's management skills and characteristics as well as the contexts, but not on the leadership skills needed to be developed/learned in higher education courses (Henry et al. 2005; Roy and Das 2016).

According to this idea, the primary objective of this research is to identify leadership skills that entrepreneurs need to develop and make recommendations for the higher education entrepreneurship and innovation courses. Firstly, this article briefly explores the concept of skills, followed by the presentation of the methodology that is used as the basis for skills identification in the industry. After that, reports on a sample of students consulted through the application of a survey asking them about their perception of the level of development of these skills in those courses will be reported. This will

highlight the need for such skills to be considered into the entrepreneurship and innovation courses in the higher education context.

2. Literature Overview

2.1. Entrepreneurship Conceptualization

Entrepreneurship can be understood as an individual or collective system that are internal or external to the organizational structure, developing something new from the conception of ideas to the creation of a business. The concept of applied entrepreneurship (Miller 1983) proposes that an entrepreneurial firm, which focuses on innovation, is open to risk and proactively concerns its competitors. According to (Drucker 1985), innovation is a specific function of entrepreneurship, whether in an existing business, a public service institution, or a new venture, started by an entrepreneur which creates either new wealth-producing resources or endows existing resources with enhanced potential for creating wealth.

The entrepreneurship concept assumes different definitions regarding its evolution. It is defined as a systematic innovation (Drucker 1985), which consists of a purposeful and organized search for changes, and it is the systematic analysis of the opportunities, in which such changes might offer economic and social innovation. It is the mindset and process to create and develop economic activity by blending risk-taking, creativity, and innovation with sound management within a new or an existing organization.

According to Reynolds (2005), entrepreneurship can be conceptualized as the identification of opportunities and the creation of new businesses or organizations. It is a dominant driver of economic growth and job creation: it creates new companies and jobs, opens up new markets, and nurture new skills and capabilities. Entrepreneurship has grown as a concept and in the level of importance, placed on the development and sustainability of the economy.

Entrepreneurs are individuals who take significant risks regarding capital, time and the commitment of his/her career providing value through the products or services that may be new or exclusive, but the value somehow must be infused by the employer to locate and obtain the skills and resources (Ronstadt 1984). From this point of view, the entrepreneur not only risks his money but also his prestige. Entrepreneurial action is conceived as a human attribute, including the willingness to face uncertainty (Kihlstrom and Laffont 1979).

Drucker (1985) describes the entrepreneur as an individual exploiting opportunities that are created by the changes in the environment.

Being entrepreneurial and the creation of an entrepreneurial culture goes beyond the fear of risk (McMullen and Shepherd 2006) and the stigma of failure that influences the entrepreneurship context decisively.

Implementing ideas is not a natural process even though it's possible to say that entrepreneur's profile is crucial to defining a business idea and applying it successfully, but it is also important to note that there is the possibility of developing entrepreneurial characteristics (Zeng and Honig 2016) with the help of educational institutions that should play a key role (Henry et al. 2005; O'Connor 2013; Paço et al. 2016), since the early stages of development (Maritz and Brown 2013; Maritz 2017).

Innovation, for example, is a discipline that can be taught from the earliest years of school to the university level (Kuratko 2005; Hindle 2007) because it is a specific tool used by the entrepreneurs to explore new opportunities for business or different product or service (Arasti et al. 2012).

It's important to know how to reduce the risk, seek for new sources of innovation, use creativity tools, and to learn from the market; these are the skills that every entrepreneur or potential entrepreneurs need to have (Lumpkin and Dess 2001; Wiklund and Shepherd 2005).

It is also significant to mention the concept of entrepreneurial orientation, which is the practice of entrepreneurship within organizations. Its origins are in strategic planning since it refers to the actions

taken by individuals (Miller and Friesen 1978). In this perspective, the company adopts this situation as a practice of entrepreneurial management.

As Miller (1983) referred entrepreneurial management characterizes an entrepreneurial organization capable of innovating in products and markets, with some degree of risk in business, and acting proactively as to their competitors.

Every day, the world witnessed the birth and death of companies, products, processes, and services, and the goal of entrepreneurship learning is to seek and to systematically explore new business/new practices that add value to the market and streamline the economy (Larso and Saphiranti 2016).

In this sense, entrepreneurship is built based on the different types of skills that are widely studied in the literature and referred as soft and hard skills. The soft skills can be defined as the behavioral skills required for the application of hard skills and knowledge in organizations (Rainsbury et al. 2002). James and James (2004) also suggest that soft skills are a set of skills and talents of an individual.

Other authors categorize the soft skills as (1) interpersonal skills; (2) personal and social skills; and (3) cognitive skills (Muzio et al. 2007).

Concerning the soft skills that are inherent to managing entrepreneurial projects, Davis (1993) suggested that there are skills and practices of successful managers. He stated that "the emphasis of the future has to be in leadership skills and interpersonal management practices that ensure project success".

2.2. Skills Concept

In the 80s, the concept of skills started to have significant importance due to technological, organizational, and economic factors. Considered as a resource—of individual and organizational nature—which would allow competitiveness and productivity advantages to companies (Vasconcelos et al. 2016).

Historically, the word skills have been used to refer to individual characteristics. However, in the concept of Prochno (2001), although the skills always apply to the individual, all of them have two dimensions, the individual and the collective (organizational).

In this way, the concept of skills assumes a rather broad scope which makes it complicated and makes its comprehension/understanding and concept delimitation difficult.

The concept has been studied by several authors (Mulder 2000, 2001; Kuhn and Weinberger 2005; Heckman et al. 2006; Heckman and Kautz 2012; Weinberger 2014) and previously by Norris (1991) and Ellström (1997). Skills development prevails as a research issue in higher education dominion; it is the primary goal to be achieved by the students (Lackéus 2015; Roy and Das 2016; Zeng and Honig 2016). Skills development is perceived as a strategic management tool to cope with the current business environment (Nyhan 1998), mainly because of the market that has changed from one of mass production to one of customization, whereby quality, price, and speed of delivery are stressed. This change has brought about new circumstances in which many organizations struggle to cope with new and emerging customer segments, cultural diversity in a global marketplace, market volatility, raised customer expectations about the quality of products and services, and the impact of the internet on an organization's core business. In the job market, there has been a growth in the higher-level jobs such as managerial and professional positions that require flexibility and problem-solving skills.

Regarding entrepreneurship, the literature shows the importance of the soft skills related to leadership, moral values and ethics, communication and also the ability to adapt to new work contexts (Bell 2009; Beckton 2009; McIntosh 2008; Eisen et al. 2005; Leroux and Lafleur 2006).

According to Zepke and Leach (2010) and Syakir (2009), entrepreneurial skills can enhance the ability of entrepreneurs by encouraging them to take risks, identify the practical methods of business and prepare them to make all the opportunities available.

Regarding the literature, most of the entrepreneur's apparent weaknesses in leadership and communication skills and the application of soft skills in the entrepreneurship curriculum are

essential for the development of the entrepreneurs and to create potential opportunities for the future entrepreneurs.

2.3. Leadership Framework

In reviewing the literature, general management literature considers leadership as a success factor in organizations and that specific leadership style can lead to better performance. Leadership is an effectively and widely studied phenomenon, as suggested by (Bass and Stogdill 1990), in which the authors refer to about 7500 studies on this subject.

It is possible to acknowledge the existence of three dominant theoretical paradigms on leadership: The first one focuses on the profile and leading conditions; the second one is concerned with an indication of leadership behaviors which are more effective, and the third one, which is more of an aggregator, explores the contingent variables that determine the success of leadership, either as background or even as consequential.

In the context of this paper, the current review is focused on two main theories: the transactional and transformational leadership styles (Bass 1990), and the entrepreneurial leadership (Reich 1987). Kuratko (2007).

Since the late 1990s, there has been an emphasis on studying the complexity of the contexts where the leaders emerge, and researchers have acknowledged that transactional leaders arise in situations of low complexity and transformational leaders in situations of high complexity.

Transactional leadership refers to the leader rewarding his/her followers for meeting performance targets. This kind of leader focuses on the role of supervision, organization, and group performance.

Transformational leadership refers to the leader who exhibits charisma, develops a vision, respect, and trust. This type of leader also considers his/her employees, paying personal attention to followers and provides intellectual stimulation, challenging followers with new ideas and approaches.

Burns (1978), based on a study of political leaders, proposed that the leader types should be presented in a continuum of behaviors ranging from transactional to transformational, arguing that transformational leadership is revealed when the leader can stimulate the followers to develop certain types of actions, which is done beyond their interests and motivations, focused only in the best interests of those they serve—the group and the organization. The model estimates that this type of leadership develops and stimulates higher behaviors, even in the ethical dimension, as of the leader or the followers. This line of thought was taken up by Bass (1985) which questions after noting that the difference would be only conceptual, as some leaders had a mix of the two roles, even if there is a clear distinction between transactional and transformational leadership.

However, in contemporary dynamic markets, a new definition leadership—entrepreneurial leadership (Dess et al. 2003; Fernald et al. 2005; Ireland et al. 2002, 2003; Kuratko 2007; Gupta et al. 2004) has emerged. An entrepreneurial leader is a transformational leader who deals with a very dynamic market offering opportunities and challenges and is characterized by skills as clarity, communication, consistency, caring, creating opportunities, self-confidence, power need and its use, and vision (Solomon et al. 2002; Tarabishy et al. 2005).

Entrepreneurial leadership shares many qualities with transformational leadership, emphasizing the development of a shared vision, promoting the empowerment and autonomy of followers, tolerance of ambiguity, and flattening the organization to allow leadership to permeate the organization at all levels. However, whereas transformational leadership focuses on competitive advantage, entrepreneurial leadership focuses on innovation and creating value.

In this research and under this theoretical framework, it was identified that the leadership skills needed by the entrepreneurs during the focus groups and to evaluate if those skills are being developed in higher education courses, the primary goal is to propose a model of skills development to prepare the students to create an entrepreneurial spirit.

3. Research Questions

To identify the leadership skills and the level of those skills developed by universities, several research questions emerged from the literature review and the focus group as a guide for the whole research. In this context, the following research questions have guided the present study:

RQ 1: What leadership skills are required by students for them to be effective in entrepreneurial endeavors upon graduation?

RQ 2: Are the skills identified by the entrepreneurs sufficiently learned in Universities in Portugal?

RQ 3: Does student work experience, gender or age contribute to a level of leadership skill attainment?

4. Methodology

In this study, the research methodology was a mixed-method on two sources for collecting data: (1) one conceptual focus group, and (2) online survey.

The primary technique employed was the focus group about entrepreneur's leadership skills that are needed, identified by 15 Portuguese entrepreneurs who participated in this research. The group only met once, and the majority were male entrepreneurs with very different experiences; some of the participants already had other businesses and, for others, this was the first experience as an entrepreneur. The focus group discussion employed a qualitative approach, which was more adequate to promote a group discussion among the participants, gain an in-depth understanding of their point of view, and to obtain data from a purposely selected group of entrepreneurs. However, the focus group discussion requires a team consisting of a skilled facilitator (Burrows and Kendall 1997; Krueger and Casey 2000). The facilitator is central to the debate not only by managing the existing relationships but also to create a relaxed and comfortable environment for the discussion. In this case, the facilitator had a strong background on the theme and even on facilitating focus groups, and in this context, this technique of data collection was most adequately used.

The second technique that was used to collect data was an online survey applied to 250 students from the 3rd year of 2016/2017 academic year, from several universities in Portugal, and obtained 117 valid questionnaires equivalent to 46.8% response rate. The statistical analyses of Cronbach's alpha Coefficient, Chi-square Tests, and Mann-Whitney Tests conclusions point to generally positive perceptions of students' development.

In total, the questionnaire consisted of 30 questions covering the following areas:

- Student background information (Questions 1–4);
- List of skills development in the higher education courses (Questions 5–30).

4.1. Focus Group Content Analysis

To make the conceptual analysis of the data collected from the focus groups, several steps were followed to code the text: (a) definition of the level of analysis: it was considered a set of related words; (b) definition of the number of concepts to code for: it was pre-defined on a set of concepts and categories; (c) code the existence of the concepts and the frequency: coding for existence, the concepts were counted for the number of times it appeared in the text, this was indicative of the concepts importance; (d) criteria for distinguishing among the concepts: decision on the level of generalization; (e) Code the texts: the text was coded using a computer assisted content analysis software; (f) analyzing the results: identification of the most important concepts for the research, namely, the skills identified by the entrepreneurs during the focus groups.

To answer the research question (RQ 1) What leadership skills are required by students for them to be effective in entrepreneurial endeavors upon graduation? A content analysis was applied to the focus group transcriptions on leadership skills. This methodology was used to analyze the presence of skills associated with the following dimensions: "management", "leadership" and "entrepreneurship". The list of skills emerged is organized in the following structure:

Entrepreneurship Skills:

- Capacity to be innovative and creative;
- Capacity to diversify the business area;
- Capability to identify and exploit new business opportunities;
- Project management skills to link project goals within the business context;
- Ability and willingness to undertake risk;
- Ability to organize the necessary resources to respond to the opportunity;
- Capability to create and develop national and international networks.

Leadership Skills:

- Skills related to the employee's performance development;
- Skills associated with the development of new opportunities for the employees through techniques as coaching and mentoring.
- Skills associated with motivation techniques to potentiate the employee's performance;
- Skills related to the method to improve employee's satisfaction;
- Communication skills to strengthen the commitment of the employees;
- Skills associated with the management of employee's expectations about their development in the organization;
- Skills related to the control of the cultural differences among employees.

Management Skills:

- Skills associated with new forms of work organization, in what regards the methods of teamwork, flexibility to adapt to changes in the working processes (as a response to a high rhythm of innovation);
- Skills associated with new knowledge of technologies;
- Skills regarding a more significant initiative, decision, and responsibility assuming;
- Skills related to the analysis of information related to productivity, what concerns workforce optimization of costs;
- Capacity to adapt to organizational change;
- Ability to manage strategic deals and alliances;
- The capability of developing social and relational knowledge which allows the coordination of working teams, taking advantage of all the potential elements.

4.2. Survey Analysis

Regarding the survey, there were 21 items representing entrepreneurship skills, leadership skills, and management skills, which emerged from the content analysis of the focus groups.

The dimensions of the questionnaire are as follows:

First dimension of the inquiry integrates the innovation skills needed by the entrepreneurs: Capacity for innovation and creativity, capacity to diversify the business area, capacity to identify and exploit new business opportunities, project management skills to link project goals within the business context, capacity and willingness to undertake risk, capacity to organize the necessary resources to respond to the opportunity, capacity to create and develop national and international networks.

The second dimension of the questionnaire integrates the leadership skills: Employees performance, development opportunities, the motivation of employees, the satisfaction of employee, communication, managing expectations, incorporating cultural differences.

Finally, the third dimension integrates the management skills on new forms and models of work organization, new technologies, organizational change, initiative, decision making, and responsibility, capacity to manage strategic deals and alliances, analysis of information, social and relational knowledge.

Respondents were asked to rate the skills on a 5-point Likert scale, ranging from 1 = no development; 2 = weak development; 3 = moderate development; 4 = considerable development; 5 = strong development.

5. Findings and Discussion

Respondents were primarily male (*n* = 64) and less were female (*n* = 53), please see Table 1.

Table 1. Background information on students that participated in the study—Gender.

	n	%
Male	64	54.7
Female	53	45.2
Total	117	100.0

Most respondents were employed (*n* = 97) and only a minor portion of the respondents were unemployed (*n* = 20), please see Table 2.

Table 2. Background information on students that participated in the study—Employee or Unemployed.

	n	%
Employee	97	82.9
Unemployed	20	17.1
Total	117	100.0

The types of respondent organizations were primarily education (*n* = 18), public sector (*n* = 18), health and social work (*n* = 13), commercial services (*n* = 12), manufacturing non-food (*n* = 16), Transportation, communication (*n* = 11), Financial services (*n* = 14) and other (*n* = 15), please see Table 3.

Table 3. Background information on students that participated in the study—Type of organization.

Type of Organisation (*n* = 117)	*n* = 117	
	n	%
Education	18	15.4
Public sector	18	15.4
Commercial services	12	10.3
Health and social work	13	11.1
Manufacturing non-food	16	13.7
Transportation, communication	11	9.4
Financial services	14	12.0
Other	15	12.8
Total	117	100.0

Respondents characterized their jobs as: Top management (*n* = 12), Middle management (*n* = 18), executive level (*n* = 20), Technical specialist (*n* = 21), and support staff (*n* = 13), please see Table 4.

Table 4. Background information on students that participated in the study—Job.

Job Characterization of Respondents (*n* = 117)	*n*	%
Top Management	12	10.3
Middle management/line manager	18	15.4
Executive level	30	25.6
Technical specialist/engineer/quality control	21	17.9
Staff/carry out the primary work process	12	10.3
Support staff	13	11.1
Other	11	9.4
Total	**117**	**100.0**

RQ 2: Are the skills identified by the entrepreneurs sufficiently learned in Universities in Portugal?

According to the perceived skills development, the resulting mean scores varied for entrepreneurship skills between 2.5 and 3.2, for leadership skills between 2.9 and 3.27, and management skills between 2.3 and 3.4, as outlined in Table 5. Therefore, all the skills identified in the focus group had a moderate development in the higher education courses.

Table 5. Perceived development of skills by the students (1 = no development; 2 = weak development; 3 = moderate development; 4 = considerable development; 5 = strong development)—(Cronbach's alpha (number of items) Mean (1–5) (S.D.)).

Rank	Skills	Cronbach Alpha	Mean	S.D.
Entrepreneurship Skills		*0.71 (n = 7)*		
1	Capacity to innovate and be creative		3.10	1.23
2	Capacity to diversify the business area		3.10	1.22
3	Capacity to identify and exploit new business opportunities		3.10	1.18
4	Project management skills to link project goals with business context		2.50	1.23
5	Capacity and willingness to undertake risk		3.20	1.18
6	capacity to organize the necessary resources to respond to the opportunity		3.20	1.16
7	Capacity to create and develop national and international networks		3.20	1.16
Leadership Skills		*0.78 (n = 10)*		
1	Employees performance		3.27	1.19
2	Development opportunities		3.22	1.25
3	Motivation of employees		3.15	1.23
4	Satisfaction of employee		3.12	1.26
5	Communication		3.12	1.25
6	Managing expectations		3.07	1.25
7	Integrating cultural differences		3.07	1.21
Management Skills		*0.80 (n = 7)*		
1	New forms and models of work organization		3.10	1.22
2	New technologies		3.40	1.24
3	The initiative, decision, and responsibility		3.25	1.25
4	Analysis of information		2.30	1.20
5	Organizational change		3.20	1.26
6	Capacity to manage strategic deals and alliances		3.19	1.23
7	Social and relational knowledge		3.19	1.22

From analyzing the perceptions of the students regarding the skills development, it is possible to state that the skills identified first by the entrepreneurs have a moderate or low development in the current higher education innovation and entrepreneurship courses, as we can see in Figure 1. Notably, the entrepreneurship and the management skills had very low scores, whereas the leadership skills were among the higher level scores.
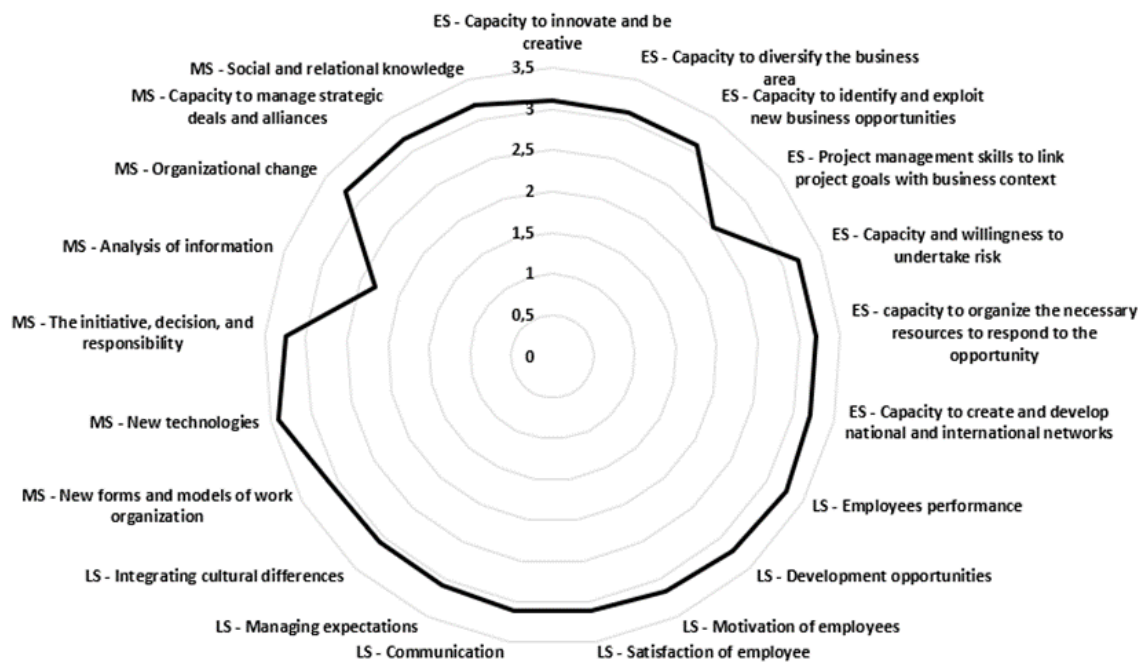
Figure 1. Perceived Skills Development for Teams Leading—Students. Legend: ES: Entrepreneurship Skills; MS: Management Skills; LS: Leadership Skills.

RQ 3: Does student work experience, gender or age contribute to a level of leadership skill attainment?

Cronbach's alpha (α) for all 117 respondents' entrepreneurship skills items obtained a value of 0.1, which allows for the creation of a new variable by combining the seven items. Similar calculations were made for the seven leadership skills items and the seven management skills items to achieve scores of 0.78 and 0.80, respectively.

The research question was then translated into the following hypothesis (Table 6):

Table 6. Hypothesis.

Gender	H0:	There is no relationship between perceived entrepreneurship skills development and gender.
	Ha:	There is a relationship between perceived entrepreneurship skills development and gender.
	H0:	There is no relationship between perceived management skills development and gender.
	Ha:	There is a relationship between perceived management skills development and gender.
	H0:	There is no relationship between perceived leadership skills development and gender.
	Ha:	There is a relationship between perceived leadership skills development and gender.
Job	H0:	There is no relationship between perceived entrepreneurship skills development and the job.
	Ha:	There is a relationship between perceived entrepreneurship skills development and the job.
	H0:	There is no relationship between perceived management skills development and the job.
	Ha:	There is a relationship between perceived management skills development and the job.
	H0:	There is no relationship between perceived leadership skills development and the job.
	Ha:	There is a relationship between perceived leadership skills development and the job.

Table 6. *Cont.*

Employment Situation	H0:	There is no relationship between perceived entrepreneurship skills development and the employment situation.
	Ha:	There is a relationship between perceived entrepreneurship skills development and the employment situation.
	H0:	There is no relationship between perceived management skills development and the employment situation.
	Ha:	There is a relationship between perceived management skills development and the employment situation.
	H0:	There is no relationship between perceived leadership skills development and the employment situation.
	Ha:	There is a relationship between perceived leadership skills development and the employment situation.
Type of organization	H0:	There is no relationship between perceived entrepreneurship skills development and the type of organization.
	Ha:	There is a relationship between perceived entrepreneurship skills development and the type of organization.
	H0:	There is no relationship between perceived management skills development and the type of organization.
	Ha:	There is a relationship between perceived management skills development and the type of organization.
	H0:	There is no relationship between perceived leadership skills development and the type of organization.
	Ha:	There is a relationship between perceived leadership skills development and the type of organization.

The differences between various factors of interest and these three new key variables were assessed using Mann- Whitney U Test (gender, employment situation, job and type of organization).

The results showed significant relationships between perceived entrepreneurship skills development and job ($X2 = 180.81$; df. $= 47$; p-value = 0.00); perceived leadership skills development ($X2 = 175.33$; df. $= 51$; p-value = 0.00); and perceived management skills development ($X2 = 170.25$; df. $= 40$; p-value = 0.00), meaning that Ha has been proved.

However, there were no significant differences between the three skills variables and the type of organization, gender, and employed/unemployed variables, meaning that Ha has been rejected.

6. Model Proposal for Entrepreneur Skills Development for Team Leading

The motivation for this research has its roots in the lack of a systematic development approach in universities and the development of soft skills for entrepreneurs, namely leadership skills. In this context, two approaches to skills development can undoubtedly be identified: the organizational development approach, which emerged from the focus groups to the entrepreneurs; and the universities development approach, which emerged from the online survey to the students—both of these two approaches can be complementary, creating a more sustainable link to the needs of the entrepreneurs and to the redefinition of the higher education curricula to respond to the market needs.

This research identified three types of skills through the data collection with the entrepreneurs—management, leadership, and entrepreneurship. Moreover, the analysis of the student's perceptions from the higher education courses about the level of development of those skills showed that it is crucial for universities to make some changes in their classes curricula because the current syllabi of the courses have some missing or underdeveloped skills, as observed in Figure 2.
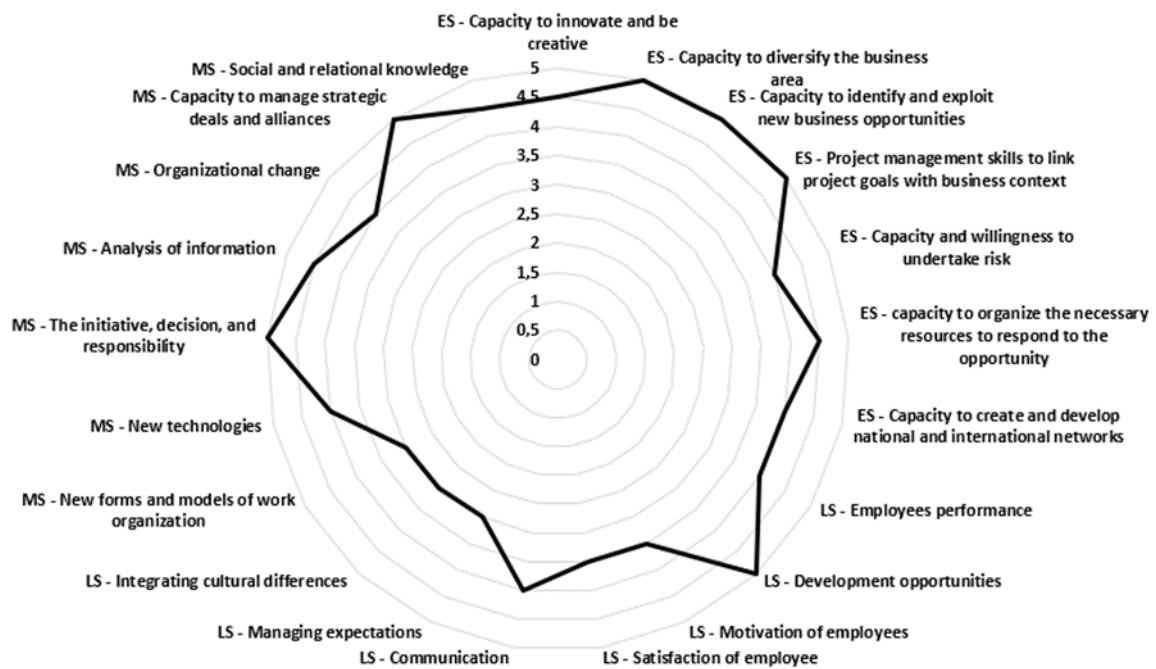
Figure 2. Model Proposal for Entrepreneur Skills Development.

Based on the research, on the expertise of the entrepreneurs and the researcher experience as entrepreneur and professor, a model was proposed as represented in Figure 2 with the recommendations for the skills development, increasing the level of development in all of the skills listed.

Next, Figure 3 shows a comparison between the student's perception of the development of the skills and the model proposal for the future reformulations of the courses of entrepreneurship and innovation.
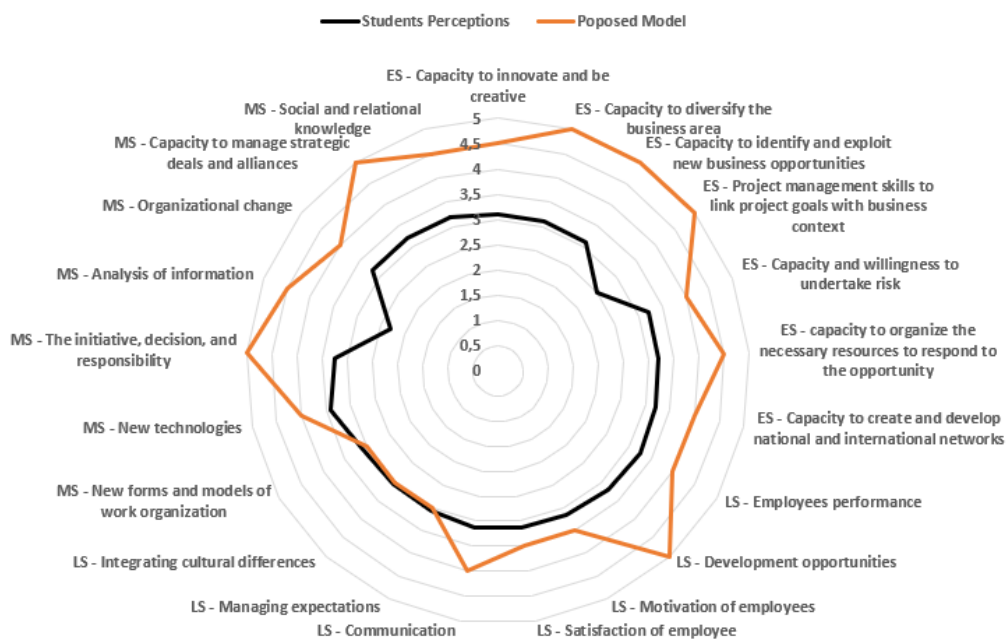
Figure 3. Comparison between Students Perceptions and Model Proposal for Entrepreneur Skills Development.

Most parts of this skills are hard to be taught because of their behaviorist nature and association to the transformational leadership style (Bass 1990) and to facilitate the learning process can be used as active learning methodologies (Friend and Militello 2014) as project-based learning and problem-based learning. This can justify why the students have identified a moderate development of this skills in the higher education entrepreneurship and innovation courses.

7. Conclusions

The leadership skills that could be developed to potentiate the entrepreneurial capacity of the students when leading their teams were identified by the entrepreneurs and categorized into 3 main categories: ES—Entrepreneurship Skills, MS—Management Skills, and LS—Leadership Skills.

Emerging from the results of the questionnaire, it´s possible to conclude that all those skills need a higher level of development in innovation and entrepreneurship in higher education courses, and there are significant relationships between perceived entrepreneur's leadership skills development and student's job, but no significant differences have been found between the three skills dimensions—management, leadership, and entrepreneurship—and the type of organization, gender, and employed/unemployed variables.

More specifically, for the skill development, a model was proposed which emerged from the focus group and the survey, both framed by the literature review with a particular focus on MS—Capacity to manage strategic deals and alliances, MS—Initiative, Decision and Responsibility, LS—Development opportunities, ES—Project management skills to link project goals with business context, ES—Capacity to Identify and Exploit new Business Opportunities, ES—Capacity to diversify the business area.

The model leads to rethinking the pedagogical model of the courses at the higher education level, because of the nature of the skills identified with a recommendation to use as learning resources and methodologies real-world cases, project-based learning, and problem-based learning.

Some recommendations about the pedagogical model which should be changed in Universities include a focus on real-life subjects and situations to let the students know the purpose behind the study and the projects, and the students as the center of the learning process should:

- Experience developing an entrepreneurship project or a business activity in an organized way with academic support.
- Strengthen their capacity for leadership and teamwork.
- Learn how to identify business opportunities.
- Define strategies: human resources management, production, purchasing, financing, marketing, organization, and implementation.
- Establish and evaluate managing and controlling mechanisms.
- Define risk plans and measure and calculate the risks impacts.
- Develop skills in negotiation and conflict management.

Those recommendations emerged from the model proposal and will help universities and entrepreneurs to be more integrated and to rethink their strategies according to skills development in responding to the challenges of the market.

8. Limitations and Future Research

Some limitations should be mentioned in relation to this study. First, there was only a small sample selected for this study. Future studies may look at a larger and more diversified sample so that the results can be generalized and extrapolated to other contexts.

A second limitation is that we have only collected the skills required by the entrepreneurs using content analysis of the focus group. It was not possible to conduct additional interviews to fully cross-validate the list of skills needed by the entrepreneurs.

Further empirical studies are required to check the impact and size of the gaps identified and future research should be conducted to identify and analyze the process of skills development used by

the companies of the entrepreneurs and create a practical model to develop these processes in higher education, thus transforming the courses more suitable for the market requirements. A parallel future research avenue could be the creation of a typology of skills that may help to build a framework of pedagogical contents for developing such skills.

Conflicts of Interest: The author declares that don't have any conflicts of interests.

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