Proceedings of the International Congress on Interdisciplinarity in Social and Human Sciences

5th - 6th May 2016

Research Centre for Spatial and Organizational Dynamics
University of Algarve
Faro, Portugal
Entrepreneurship is having the courage to transform an idea into reality and achieve personal, financial, and recognition satisfaction. The psychological ability to handle failure has proven essential in success.

We analysed the importance of idiosyncratic psychological aspects in the success of entrepreneurs through an observational study accompanying 20 entrepreneurs from the idea presentation phase to company incorporation.

During the observation period 4 distinct psychological phases of the entrepreneurs were observed, being it possible to describe them as follows: absorption of information and knowledge; application of the gathered knowledge to their specific cases; frustration generated by criticism, namely from investors who didn't recognise the value of their projects; realism and implementation of the project.

Having passed more than 6 months after the analysis period, one can verify that the entrepreneurs who have travelled the 4 phases are today developing their projects being that the remaining ones are in a similar situation as at the end of the initial two months.

Conclusion: The ability to cope with frustration and rejection is a determinant factor in the success of the entrepreneur. The ability to learn from rejection, more than resilience help the entrepreneur to proceed.

Keywords: Entrepreneurship, Idiosyncrasy, Coping.

JEL Classification: L26, L31, M13.

1. INTRODUCTION

Entrepreneurship has become a common word in many European countries in part due to a low economic growth and high and continuous levels of unemployment. This environment increases an effort to stimulate entrepreneurship as a road to economic growth and job, many times self-employment, creation (Acs, 1992; Carree and Thurik, 2003, 2006; Beck et al., 2005). This has driven, amongst others, the several economic policy makers across Europe, including the European Commission, to actively promote entrepreneurship (OECD, 1998; European Commission, 1999, 2004).

But what differentiates entrepreneurs from the rest of us? The word entrepreneur implies certain psychological traits and attitudes but also values of an individual motivated to initiate a business project with all associated difficulties and risks. Although there are arguments to defend that using traits to characterise entrepreneurs is not appropriate (Gartner, 1988), there exists a fair consistency in the literature investigating the entrepreneurial in the definition of characteristics that distinguish entrepreneurs from non-entrepreneurs. Hisrich (1988; 1990) in his research on entrepreneurial behaviour notes that the entrepreneur is characterised, as someone who shows initiative and creative thinking, is able to organise social and economic mechanisms to turn resources and situations to his or her practical account, and accepts risk and failure as part of being an entrepreneur.

The most important contributions for entrepreneurship research came from economics, psychology, and sociology. Schumpeter and later McClelland, normally named as the fathers of the field of entrepreneurship research, took a psychological perspective, with individuals being the major objects of entrepreneurship research. However, during the
period 1980-2005 this changed in mainstream entrepreneurship research. During this time period the objective was to explain entrepreneurship by using economic and strategy theories (Kirchhoff 1991). More recently, the importance of a psychological perspective, as “entrepreneurship is fundamentally personal” has gained importance in research again (Baum et al. 2007).

However, the lack of a solid theoretical foundation has been responsible for the fragmentation of research on entrepreneurship, often resulting in studies that examine the same or similar issues very much limited to a certain disciplinary perspective ignoring other perspectives. It is only recently that scholars have begun to address the need for integrative typologies and paradigms that can provide a coherent platform for diverse research efforts (Hisrich, 1990; Lumpkin and Dess, 1996; Wortman, 1987). More recent theoretical work in entrepreneurship shows the awareness that there is a need for frameworks that will facilitate the synthesis of existing research and the generation of new studies that address the gaps (Lumpkin and Dess, 1996; Van de Ven, 1992; West, 1997).

On the other hand some may argue that setting up a business is a process as recognized by some authors (Low and MacMillan, 1988; Bull and Willard, 1993) and a distinction between stages such as conception, gestation, infancy, adolescence, maturity, and decline has been established (Reynolds, 1997; Reynolds and White, 1997). Often these stages of conception, gestation, and infancy are mentioned as the dynamics of entrepreneurship while the stages of adolescence, maturity, and decline are mentioned as the level of entrepreneurship (Sternberg and Wennekers, 2005). The expression nascent entrepreneurship applies to the combination of gestation and infancy (Reynolds et al., 2005). Other research makes a distinction between opportunity recognition and opportunity exploitation stages (Sarasvathy et al., 2003). Distinguishing between the stages continues even after a business is established (Gartner and Carter, 2003). Finally, in this line of rationale, determinants are not necessarily the same across the stages of the entrepreneurial process (Davidsson, 2006; Reynolds, 2007).

Given the aforementioned overview of some of the most relevant literature in this field, over the last decades several studies were performed with the objective to identify the entrepreneur’s psychological profile and traits. However, many of these studies were either performed in a pre-entrepreneur phase, i.e. to identify potential entrepreneurs in, for instance, academic environment, or already in a “post-entrepreneur” phase, i.e. already after the entrepreneur having incorporated a start-up or many times having already reached a certain level of success.

As these two situations don’t explain certain traits and psychological aspects during one of the most critical stages of entrepreneurship, we have used a case study to start identifying patterns and similarities in behaviour and coping strategies of Portuguese entrepreneurs.

According to Baron (2007), entrepreneurship is a process with three phases: a) the prelaunch or opportunity identification phase in which the entrepreneur identifies viable and feasible business opportunities, (b) the launch or development and execution phase in which the entrepreneur assembles the necessary resources for starting a venture, and (c) the post-launch phase in which the entrepreneur manages the new venture in such a way that it grows and survives.

Our study focuses mainly on the first two of these phases and in this paper we focus ourselves mainly on the first phase.

2. METHOD

As already mentioned, over the last decades many studies on entrepreneurship and psychological traits have been performed in several countries and several sectors of activity. However, many of the existing scientific studies were carried out in the United States of America and other Anglo-Saxon countries, imposing immediately difficulties for carrying out similar studies in Portugal without the necessary adjustments, namely for the following reasons:

1. The recentness of studies in the field of entrepreneurship;
2. The lack of a start up tracking system;
3. The little information about start ups and their development;
4. Major differences in culture;
5. Major differences in financial support.

The abovementioned points can be divided in two types of difficulties. The first three items of the list are just a matter of timing. Portugal only recently started to look at entrepreneurship as something specific and therefore missing data can be overcome over time and is just a statistical handicap. However, the last two items of the list are not just a matter of timing but are much more decisive. As such, we analysed some features that make these last two items decisive for analysing behaviour and idiosyncrasy.

One of the major differences between the majority of the existing studies and this study in particular is that we
cannot say that an entrepreneur is the same thing in all parts of the world. As entrepreneurship is closely related to several culturally defined aspects, such as the propensity to risk, the meaning of failure or the comfort with exposition, an entrepreneur behaves automatically differently depending on his cultural heritage and on the place where he or she develops a project.

If we take the entrepreneurial Valhalla of Silicon Valley, a question many times asked to entrepreneurs is “How many times have you gone bankrupt before?” For most Continental Europeans this may sound like something very bad, but the truth is that in Silicon Valley terms, having gone bankrupt means that you are entrepreneurial and not afraid of taking risks, a trait highly appreciated over there.

Having said that, transposing the methodologies, described in the aforementioned studies, to Portugal is difficult as entrepreneurship as a field of study is still very recent making it therefore hard, not to say impossible, to find data and cases that cover the several stages of new enterprises. Given this limitation, we used a start-up and acceleration contest to start to gather information for our study. As such we focussed our research on the first phase of an entrepreneurial venture, i.e. the three stages of “from idea to business plan to venture”.

Our study, exploratory and observational, was carried out in a real situation where a group of approximately 20 entrepreneurs, representing 10 projects, had to develop a business plan from their idea and incorporate their start-ups in a three-month period. These 10 projects on their turn were selected out of a group of over 30 projects from an idea contest.

The aforementioned group of over 30 projects went to a series of crash courses in entrepreneurship that lasted approximately 4 weeks. These crash courses focussed on the following: Design Thinking, Business Model Generation, Business Model Environment and Value Proposition Design culminating in several presentations to a group of consultants and other jury members.

It was in this first phase that several idiosyncratic psychological aspects became clear in the larger group of entrepreneurs, the 30 plus projects, and also subgroups became defined according to how they coped with the pressure and stress of the several tests.

The first step was to select a small group of variables that could be observed. These first variables were: how did the entrepreneurs cope with criticism; how did they absorb information; what was the importance they gave to what they were learning; what was their capacity to transmit their ideas and finally; what was their capacity to change their project when needed. These variables were also observed in the subsequent phases.

We gathered our information through observation and daily interaction with the focus group for a period of approximately 2 months of work (the total period was close to three months).

The project for start-ups, sponsored by one of the major entrepreneurial and business associations in Portugal, took place in the first half of 2015 and started with a list of 74 ideas. From these ideas 30 were selected through a desktop selection by a jury based on sent in information about each idea and also a presentation video of each set of entrepreneurs. The initial data set was composed by the answers and information delivered to the following list of questions on each project:

<table>
<thead>
<tr>
<th>Table 1 – Idea contest questionnaire and information request</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name of the Project</td>
</tr>
<tr>
<td>2. Explain in detail what are the objectives of the project.</td>
</tr>
<tr>
<td>3. What do you consider to be innovative, interesting or different</td>
</tr>
<tr>
<td>4. Contact name</td>
</tr>
<tr>
<td>5. Email address</td>
</tr>
<tr>
<td>6. Phone number</td>
</tr>
<tr>
<td>7. Skype address</td>
</tr>
<tr>
<td>8. Your function in the project</td>
</tr>
<tr>
<td>9. Present a one minute video presenting the team members</td>
</tr>
<tr>
<td>10. Detailed CV’s of each team member</td>
</tr>
<tr>
<td>11. How many promoters does the project have</td>
</tr>
<tr>
<td>12. How long have the promoters been working together as a team</td>
</tr>
<tr>
<td>13. Competences and experience of the promoters</td>
</tr>
<tr>
<td>14. How many researchers/engineers are on the team</td>
</tr>
</tbody>
</table>
15. Links to webpages demonstrating relevant actions developed by your team
16. Do all promoters have time to participate in the programme
17. In case you are selected do you commit yourselves to work full time on your project without any other external commitments
18. Present a one minute video on your product or prototype
19. What is the URL to your demo website
20. Who are your potential customers
21. How do you intend to reach those customers
22. Who are your competitors
23. How is your project different from what your competitors offer
24. What is your most recent product or main objective of your business
25. What is your project’s next goal and how long do you expect it will take to reach
26. Do you have any registered Intellectual Property
27. How much money have you invested in the project until now
28. In one sentence explain your projects
29. How much investment do you need to develop your project

Each project had on average between 2 to 3 entrepreneurs. A jury of 9, based on the answers and information on the abovementioned questionnaire, graded each project on 4 variables. The variables, graded from 0 to 5, where 0 meant, “non existing” and 5 “clearly existing”, were the following:

- Innovation and differentiation potential of the project/idea
- Promoters’ potential and commitment level
- Potential to attract investment
- Internationalisation potential

The selection was made based on a scale that added the points of each project in each of these 4 variables and averaged by the total number of jury members. As such, each project could have a maximum of 20 points (5 points maximum for each of the 4 variables). The average for the 74 projects was 8.5 points with a standard deviation of 3.99. The minimum points of any single project were 0 and the maximum attained was 16. Of the 30 selected projects, the lowest grading projects received an average of 9.67 points.

Table 2 – Average points per project obtained through desktop selection

<table>
<thead>
<tr>
<th>Project number</th>
<th>Average points</th>
<th>Project number</th>
<th>Average points</th>
<th>Project number</th>
<th>Average points</th>
<th>Average points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4,67</td>
<td>26</td>
<td>0,00</td>
<td>51</td>
<td>14,33</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9,00</td>
<td>27</td>
<td>6,67</td>
<td>52</td>
<td>7,00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>12,00</td>
<td>28</td>
<td>8,67</td>
<td>53</td>
<td>3,33</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0,00</td>
<td>29</td>
<td>7,33</td>
<td>54</td>
<td>8,33</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>9,00</td>
<td>30</td>
<td>12,00</td>
<td>55</td>
<td>6,00</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>10,00</td>
<td>31</td>
<td>5,33</td>
<td>56</td>
<td>7,00</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>11,67</td>
<td>32</td>
<td>8,67</td>
<td>57</td>
<td>8,00</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>13,33</td>
<td>33</td>
<td>2,00</td>
<td>58</td>
<td>4,00</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>10,67</td>
<td>34</td>
<td>6,67</td>
<td>59</td>
<td>3,00</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10,67</td>
<td>35</td>
<td>9,00</td>
<td>60</td>
<td>10,00</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>9,67</td>
<td>36</td>
<td>11,33</td>
<td>61</td>
<td>5,67</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>7,33</td>
<td>37</td>
<td>7,67</td>
<td>62</td>
<td>15,33</td>
<td></td>
</tr>
</tbody>
</table>
The 30 selected projects than went through three crash courses, of one week each. The three crash courses covered the following topics:

1. Design Thinking: The first step towards defining the idea in terms of business viability. Design thinking, unlike analytical thinking is a process, which includes the development of ideas, with very few or almost no limits through a “brainstorming” phase. The main objectives are to incentivise input and participation and to reduce the fear of failure or error.

2. Business Model Generation: Using the Business Model Canvas and Business Model Generation Tools (Osterwalder and Pigneur, 2010) a Business Model is designed using the input from the previous step.

3. Business Model Environment and Value Proposition Design: The continuation of the previous step, including now also exogenous factors that can influence a business model, using several tools and models (Osterwalder and Pigneur, 2010)

All these crash courses were accompanied and coordinated by a group of highly experienced consultants who spent full days with the entrepreneurs.

The majority of entrepreneurs were from areas not related to economics or business management and therefore not trained in finance.

This first phase was important to see how potential entrepreneurs react to defining their projects using several tools and techniques and also how they incorporate new techniques into building their projects.

All projects worked under the same rules and all knew what the objective was, i.e. working towards a pitch – a short presentation – to a jury responsible for choosing the 10 projects that would continue to the second stage of the programme. The prize for passing to the second phase was a monetary amount, sufficient to incorporate the new company but also several other benefits that would support the 10 finalists in the development of their project for a period of one year after inception.

What could be observed in this phase was rather surprising and went against initial expectations. What was observed was that specially the projects that seemed most solid in a first presentation and which had the most confident, at first sight, entrepreneurs were the projects that evolved less during the crash courses, mainly because of their lack of flexibility to hear third party comments and recommendations.

It was also at this stage that we could identify traits that made us conclude, although still in a very early phase, that some determinants of their success in walking the right path were how they coped with criticism, how they absorbed information, the importance they gave to what they were learning, their capacity to transmit their ideas and finally their capacity to change their project when evidences showed that they were not on the right path.

It was also at this stage that we could identify traits that made us conclude, although still in a very early phase, that some determinants of their success in walking the right path were how they coped with criticism, how they absorbed information, the importance they gave to what they were learning, their capacity to transmit their ideas and finally their capacity to change their project when evidences showed that they were not on the right path.

Also at this stage we started to observe behaviours in what concerns the capacity to handle frustration generated by criticism, namely from investors – specifically invited to give their opinion on the projects still in a very early stage – who didn't recognise in the entrepreneur’s opinion the value of their projects and finally to analyse their project with realism.
3. RESULTS

During the observation period, corresponding partly to the first phase of the project – when the 30 projects were still in the race – but mostly to the second phase of the project – 10 finalists only – 4 distinct psychological phases of the entrepreneurs were observed that can be described as follows:

Phase 1 – During this period most of the entrepreneurs acted like true “information and knowledge sponges”. They were eager to learn, most probably because of the excitement of having it made to the 10 finalists, and communication with them was extremely easy and productive. The comments from the entrepreneurs at this moment showed excitement, curiosity and this phase was very much characterised by wanting to be the best of the group. In table 3, one can observe that all entrepreneurs had high success factors and all clearly achieved the objectives.

Phase 2 – This was the period in which the entrepreneurs had to apply the gathered knowledge to their specific cases. This phase was the one where frustration first appeared, as it became clear to most entrepreneurs that within their teams they lacked several skills needed to develop their projects. This was particularly true for skills in the financial area. As this was for most of the entrepreneurs also the first moment that their projects suddenly turned into numbers, an additional stress and frustration factor was introduced as the numbers not always confirmed what they initially thought. This mainly because most entrepreneurs expected certain profits and in most cases over valuated revenues and under valuated costs. Nevertheless, all projects overcame this phase and with more or less detail were able to present a business plan including financial data. One other interesting observation was that during this phase suddenly collaboration between entrepreneurs started and a group spirit arose. As can be observed from table 3, in this phase already a clear distinction started to exist between entrepreneurs and their abilities to cope with frustration and only one of the groups of entrepreneurs that scored low in this phase was able to recover confidence in the next phases. In this particular case we have to add that one of the entrepreneurs of this group that recovered in subsequent phases was suffering from physical pain during this phase 2, which most probably explains in large extend the low scoring of that particular group.

Phase 3: This was the period of the highest frustration generated by criticism, namely from investors who didn’t recognise the value of the projects. Most entrepreneurs believed before entering this phase that having figured out their financial data and having written their business plans, i.e. applied what they had learned, that everybody, especially investors, would have the same view and would have the same faith in their projects. However, as is normal in these cases, each person looks differently at a particular project, and any type of criticism at this phase proved to be extremely hard to accept by the entrepreneurs. This was specially the case, as mentioned by several of them, as each comment was seen as a personal attack as their projects had now grown into their “child”. In this phase the aforementioned group spirit took new heights and in most cases all shared each other's pain, which proved to be extremely important for most entrepreneurs to overcome the frustration, as they would later confess. From table 3 we can observe that none of the projects that had a low scoring was able to recover in the next phase.

Phase 4: After receiving the criticism of the previous phase, most entrepreneurs ended up accepting the same and incorporating the suggested changes, or in some cases finding the answers for the raised questions, in their business plans. In a certain sense there was a return to phase 1 except for the overexcitement that was replaced by realism, analytical views and pragmatism. Simultaneously this also marked the return of optimism but in much more realistic parameters than in phase 1. On the other hand, the needed pragmatism made also all entrepreneurs focus very much on their own projects and the group spirit of phases 2 and specially 3, born out of collective frustration and fears, faded away in this phase. However, three out of the ten entrepreneurial teams were not able to overcome this phase with a good scoring which reflected, as can be see further on, on the projects viability.

After ending these stages of their initial entrepreneurial adventure, all 10 projects incorporated their respective start-ups, which also marked the end of the support, which they had had from full time consultants.

Over 6 months have passed and we still have regular contact with the entrepreneurs and we continue to follow the development of their ventures and personal development. From what we observe it becomes clear that entrepreneurs who have been able to go through and finish the 4 phases and above all have turned their dreams into realism and pragmatism, are today developing their projects. The ones that weren’t able to advance through all the phases and
specially the ones that were not able to complete phase 4 and in a certain sense got stuck in phase 3 continue in a similar situation as at the moment of incorporating their company.

At this moment, and although the sample is not yet representative nor is the timespan between project and present time to evaluate the project’s outcome as a business, a trend can be observed from the below data:

Table 3 – Performance in each phase and present situation of the projects

<table>
<thead>
<tr>
<th>Project nr.</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
<th>Present status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>Developing</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>On hold</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>Developing</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>Developing</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>Developing</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>On hold</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>Partly developing</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>Stagnated</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>Developing</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>Developing</td>
</tr>
</tbody>
</table>

Source: Project team – 2015 and 2016

In the above table the scale for each phase ranges between 1 and 5, where 1 means, “didn’t achieve any of the objectives and didn’t progress to the next phase” and 5 “achieved all objectives of the phase and successfully progressed to the next phase”. As can be seen from the above table there is in this sample group a clear correlation between the successes the entrepreneurs had in phases 3 and 4 and the present status (2016) of the project.

These projects, and several others from other initiatives will continue to be followed and we feel confident that similar results will support these initial findings.

4. CONCLUSIONS

Based on the observations, entrepreneurship has a lot to gain if besides technical assistance also coaching and psychological assistance is provided. This is of particular importance if we take the several entrepreneurial initiatives that exist on governmental and regional level which normally focus on technical support and should therefore take other kinds of support into consideration if positive results want to be potentiated. Also the several incubators and accelerators that exist in Portugal, focus normally on technical support as well as housing support but rarely on coaching or any type of psychological support. However, some initiatives, like for instance Mentor – Rede de Apoio (www.redementor.pt) has some initiatives that already go in that direction.

From our study, the most important conclusion is that the ability to cope with frustration and rejection appears to be a determinant factor in the success of the entrepreneur and will be further analysed with a broader base of analysis (more entrepreneurs and longer analysis period). The ability to learn from rejection, more than resilience helps the entrepreneur to proceed.

REFERENCES


Proceedings of the International Congress on Interdisciplinarity in Social and Human Sciences

University of Algarve
Faro, Portugal
2016