

ENTREPRENEURSHIP IN THE FIELD OF LIFE SCIENCES: THE PERSONAL SKILLS NEEDED TO START AN INNOVATIVE SME

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Abstract

The way in which an entrepreneur thinks and acts is a defining factor for the viability of a business in the field of life sciences. The skills of the successful entrepreneur, innate and acquired, are an important argument in this process. To evaluate the viability of these concepts in Romania, during 2014-2016, we conducted a survey based on questionnaires, involving 104 people from universities, research institutes and hospitals. They had to answer questions such as how they react when they have difficult tasks to accomplish, in which way the opinions of others are reflected about the decisions they make, if they can have in the same time, two responsibilities, as the Company Manager and as the Project Team Leader, and if they are able to coordinate a project with multi-disciplinary teams. Results obtained showed that 56% of the respondents when faced with difficult tasks are absolutely certain to be able to achieve them, and only 44% of them answered that they can generally solve them. Regarding how other people's views on their own decisions are reflected, 38% of the respondents strongly agreed that the opinions of others persons do not matter when they make a decision. Other 48% answered that are agreed that they take decisions are made without taking account the opinions of others. Only 13% of respondents answered that the own decisions are based on the opinions of those around them. Regarding the ability to do two things at the same time , 74% of the respondents agreed that they could do this and only 18% said that they do not able to make this. Regarding the ability to coordinate the work of multidisciplinary teams, 78% of answers were positively. Here, only 13% of answers were negative. The analysis indicates that the personal skills are important for entrepreneurship. Persons who are passionate about what they are doing, and who have a deeply knowledge in different areas of the life sciences, and which are able to coordinate multidisciplinary teams have greater chances to succeed as entrepreneurs for innovative SME.

Key words: entrepreneurship skills, innovative SME

INTRODUCTION

There are many studies that try to explain the entrepreneurial success on the basis of individual qualities. In most of these studies, personal qualities such as autonomy, interpersonal relations, capability to manage

the environment, personal development, and last but not least the goal in life and self-acceptance [3, 4, 5] seem to be personal qualities. Other concepts explain entrepreneurial intent and success on the basis of volunteer abilities; and the conclusion of these approaches is that in the entrepreneurial

process, the will has a greater influence over the process than the environmental constraints [3]. Statistics have shown that in general the percentages of female entrepreneurs fit with those of male entrepreneurs. At a closer analysis, female entrepreneurs have specific abilities such as: perseverance, sensitivity, empathy. In the case of female entrepreneurs, an important role seems to play the skills of how to deal with people and how to communicate [5].

Other papers say that there is a link between entrepreneurial selectivity and entrepreneurial intent. Thus, the entrepreneur is perceived as a person self-conscious and self-sufficient who wants to do entrepreneurship and their own person 1) is aware that he can do this 2) he knows if he is fitting with what he / she wants to do [4].

MATERIALS AND METHODS

To evaluate the viability of these concepts in Romania, during 2014-2016, we conducted a survey in based on questionnaires, in which were involving 104 people from universities, institutes and hospitals. They had to answer questions such as: how they react when they have difficult tasks to accomplish; in which way the opinions of others are reflected about the decisions they make; if they can have in the same time, two responsibilities, like Company Manager and Project Team Leader, and if they are able to coordinate a project with multi-disciplinary teams. In this part of the questionnaire for their answers, the respondents has use the scale presented in the Table 1 [8, 9, 10, 11].

Table 1. Scale used to quantify the respondents answers

Respondent opinion	Score
strongly agree	1
agree	2
disagree	3
strongly disagree	4
refusal/no answer	5

Source: [8, 9, 10, 11]

RESULTS AND DISCUSSIONS

When the respondents has select a response to the statement, "Generally, when I face difficult tasks, I am sure I will accomplish them" the end results sown that 56% of the respondents said they were totally in agreement, and 44% are agree (Figure 1). Overall, all respondents agreed with this statement, demonstrating that the selected persons are self-determined and autonomous [12]. Regarding the affirmation "My life is determined by my own action, not by other or by chance", the results shown the following: 36% of respondents were strongly agreed; 55% were agreed and 9% disagree (Figure 2).

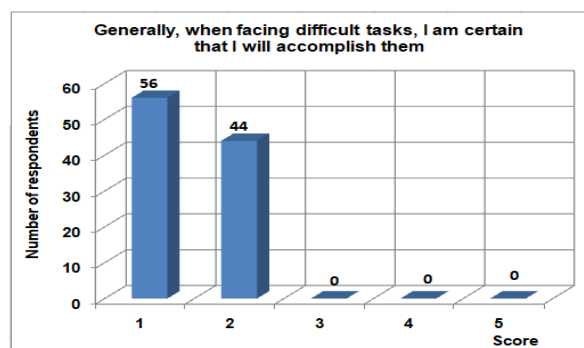


Fig. 1. The respondents' opinion at the statement: "Generally, when I face difficult tasks, I am sure I will accomplish them"

Source: Own calculation.

With a 91% of positive responses, we can see that the selected persons are able to resist social pressure to think and act in some ways. These values prove that the majority of participating at this survey has autonomy. [12].

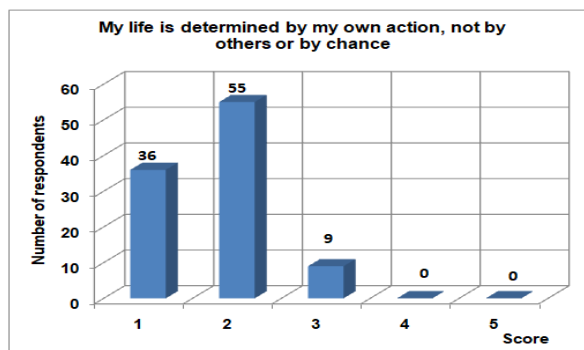


Fig. 2. The respondents' opinion at the statement: "My life is determined by my own action, not by other or by chance"

Source: Own calculation

Regarding "The possibility of being rejected by others for standing up for my decisions

would not stop me" is affirmation, 48% agree, 13% disagree and 1% of respondents has no answer (Figure 3). The total value of 86% of positive answers demonstrates that selected individuals have the skills to manage the external environment, are able to choose and create contexts appropriate to personal needs and needs. The high percentage of responses shows that 86% of respondents to the questionnaire are able to effectively use the opportunities that occur in the environment at one time, being able to create the contexts appropriate to personal needs and values. In fact, these people have the qualities of "Environmental Mastery" [12].

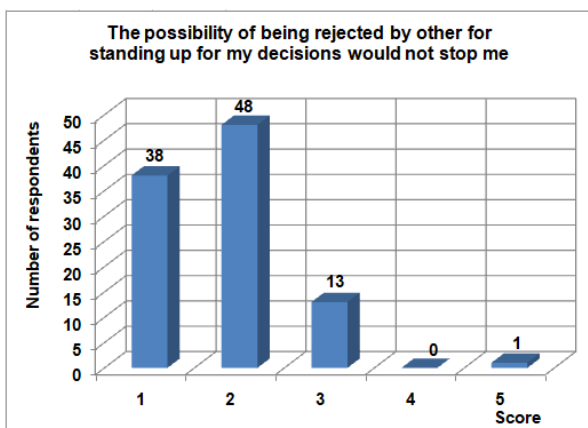


Fig. 3. The respondents' opinion at the statement: "The possibility of being rejected by others for standing up for my decisions would not stop me"
 Source: Own calculation.

The answers received at the phrase "I am an inventive person who has ideas" indicate that 43% of respondents strongly agree with this affirmation, 48% agree, 5% disagree and 4% has no answer (Figure 4). Overall, 91% of the respondents agree with this affirmation, demonstrating that the selected persons have creativity and their personality is in continuous development.

The high percentage of affirmative answers shows that 91% of respondents to the questionnaire have specific qualities which indicate the Personal growth and Autonomy [12]. The responses to the affirmation "I am optimistic about my future" show that 43% of respondents are strongly agreed and 48% agree. Only 5% for respondents are not agreeing with this affirmation (Figure 5).

The structure of these answers reveals that 91% for respondents manifest Autonomy, has positive relationships with other and can have the qualities of Environmental Mastery.

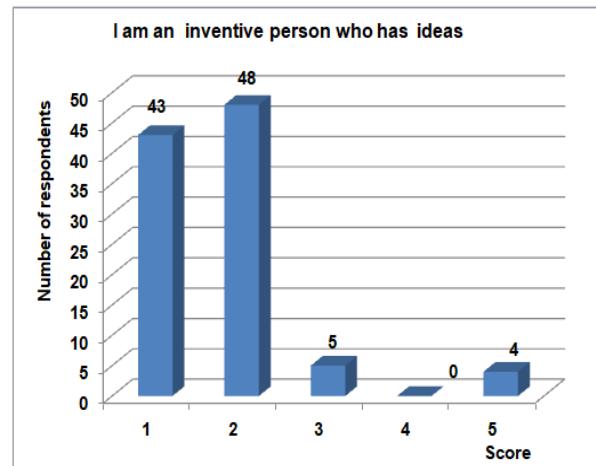


Fig. 4. The respondents' opinion at the statement: "I am an inventive person who has ideas"
 Source: Own calculation.

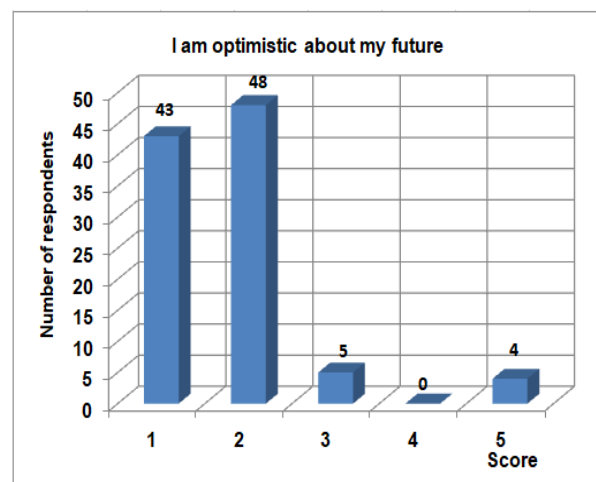


Fig. 5. The respondents' opinion at the statement: "I am optimistic about my future"
 Source: Own calculation.

Regarding the affirmation "I'm often appreciated and encouraged by others due to my daring and well-organized ideas and plans", the answers received showed that 21% of respondents strongly agree and 61% agree. Only 8% of respondents are not agreed and 10% has no answer (Figure 6). The total of 82% positive answers indicates that these persons have personal qualities like creativity and passion.

This is confirmed too by the results of a study aimed at explaining entrepreneurial training

and development based on creativity, passion and, ultimately, the personal effectiveness of entrepreneur [2].

The study has shown that entrepreneurial experience increases entrepreneurial efficiency and sustains passion over time. In addition, entrepreneurial training influences the development of business as a result of passion, and for entrepreneurs who are organized, and creative, can acquire Mastery in entrepreneurial activity [2, 6]. The data obtained are in agreement with the results of model tested in Sweden, where in the entrepreneurship process, psychological autonomy mediates the relationship between active engagement and well-being, with positive effects on competences and relationships. This is because when an entrepreneur has qualities such as self-organization and autonomy, then he / she will work better (Personal growth) and will be able to cultivate more meaningful relations with others [13].

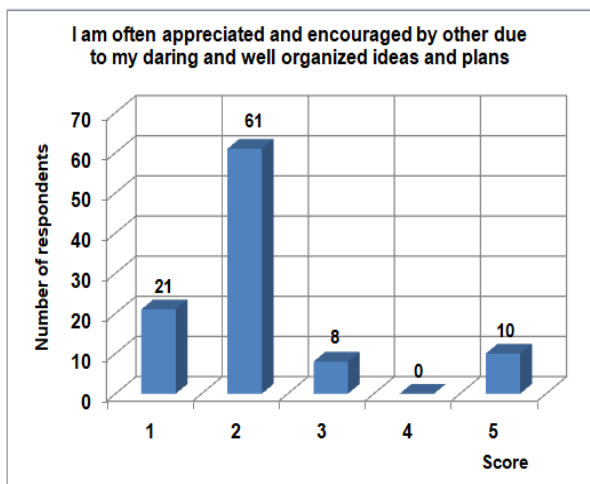


Fig. 6. The respondents' opinion at the statement: "I'm often appreciated and encouraged by others due to my daring and well-organized ideas and plans"
 Source: Own calculation.

Regarding the respondents choice concerning the statement "I am able to manage well enough a new project and developing a company", the results obtained showed that 21% of these are strongly agree with this fact, 61% agree, 8% are not agree and 10% has no answer (Figure 7).

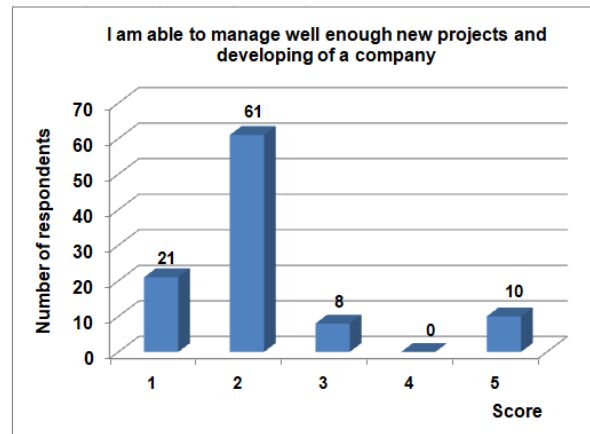


Fig. 7. The respondents' opinion at the statement: "I am able to manage well enough a new project and developing a company"
 Source: Own calculation

The total value of 82% for positive answers supports the previous study [2], according to which, in the long run, the passion intensifies, the efficiency grows, and the entrepreneurs acquire mastery in the field of entrepreneurship. With regard to the answers received to affirmation "I am able to lead people with diverse backgrounds, professions or personalities", the results show that 25% of respondents strongly agree, 53% agree, 13% are not agree and 9% of respondents have no answer (Figure 8).

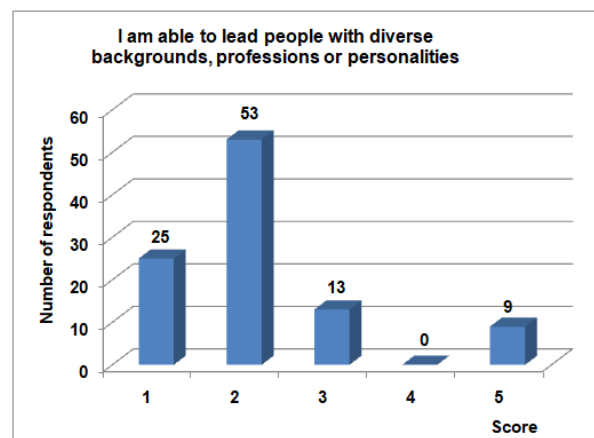


Fig. 8. The respondents' opinion at the statement: "I am able to lead people with diverse backgrounds, professions or personalities",
 Source: Own calculation

With a total value of 78%, respondents have proven they can have control over the outside world (environmental mastery) and can bind warm relationships with others (can have a positive relationships with others).

In addition, they are aware that the experience they will gain by working with people with different knowledge, professions, and personalities, can have as the effect the improvement of personal growth [2, 6, 12, 14].

CONCLUSIONS

The results obtained from survey analysis showed that 100% of respondents are self-determined and more than 91% has autonomy. About 90% of respondents said they were inventive persons and 82% of them declare that are creative and passionate; this indicates that at least 82% of respondents are able to create and lead innovative companies.

Between (78-91)% of survey respondents has the qualities of Environmental Mastery, and 82% from these can acquire Mastery in entrepreneurial activity. It is important to notice that 91% of respondents are able to resist to social pressure, and they can think and act in entrepreneurship process in personal ways, according to own values and interest.

Only 78% of respondents declare that they can lead people with different backgrounds, professions or personalities, and this fact can improve the own personality of entrepreneur.

These results confirm that the skills of the entrepreneur, innate and acquired, are the important factors for business success.

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