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Potential of Young Entrepreneurs: Is There any Possibility of Their Development Through Education?

Abstract

The practical aim of this research is to propose measures in educational processes that contribute to the development of entrepreneurial potentials. Personal entrepreneurial potentials are researched through the following dimensions: attitudes towards change, autonomy, self-confidence. The results showed that students' attitudes towards changes are positive verbally and desirable socially. Closer analysis showed that almost half of the respondents avoid uncertain situations. Autonomy, as the second measured dimension, seems to be an unimportant feature of the surveyed students. It is the way of generating income for men, and possibility of showing their potentials for women. The results clearly indicate the need for the development of all the measured dimensions.

Keywords: *education, potentials, students, entrepreneurs, development*

1. Introduction

Conditions in modern business operations, particularly in transition and developing economies have imposed a number of new requirements on both the employed and unemployed population related to their independent engagement in the creation of new businesses and new jobs. Given that an entrepreneur is a person who creates the organization (Gartner, 1989), or a person who sets up and runs new business towards growth and profit (Carland, 1984), what is required for establishing a critical number of people who would contribute to the development of larger systems or regions?

According to a series of research, entrepreneurship is defined as a key generator of innovation, employment and economic growth (Acs et al., 2004; Audretsch & Keilbach, 2004; Kelley et al., 2011; Van Stel et al., 2005). Furthermore, entrepreneurship is a process of transformation of knowledge into practical results (Shane & Venkataraman, 2000), establishing the basis for the development of intellectual capital (Zahra & Dess, 2001).

Due to the long lasting transition period in Serbia, there is a lack of a favourable environment for increasing the number of entrepreneurs. Thus, in the education system, particularly at its lower levels, there is a lack of subjects and modules which would contribute to the development of the young people's entrepreneurial potentials and attitudes towards the benefits of entrepreneurial business. Therefore, a concept is designed for researching students' attitudes at the Faculty of Technical Sciences. The basic research questions in the study are the following:

- Do students have any entrepreneurial potential?
- Is entrepreneurial potential associated with the gender characteristics?
- Is entrepreneurial potential considered through the attitude towards changes, the individual's autonomy, self-confidence and what is the extent to which this potential is dominant?

2. Towards the research problem

A number of authors exploring the issue of entrepreneurs and entrepreneurship, (Reynolds, 1994; Store, 1994; Robinson, 1991) believe that it is impossible to understand entrepreneurs without taking into account the anthropological and sociological influences on the success of entrepreneurial ventures. Anthropological and sociological entrepreneurship consider social networks, social and ethnic identity as well as socio-demographic characteristics (e.g. age, gender, origin, religion, education, etc.) as the primary drivers of the entrepreneurs' success.

Entrepreneurial characteristics have been researched for many years (McClelland, 1961) by studying personality traits that might be associated with entrepreneurial activities. Researchers mainly agree that entrepreneurs should have the following personality traits: a remarkable acumen for new market opportunities and consumer needs; skills to convert elusive dreams into a feasible goal; a clear mental model of future business; a sufficient level of creativity and business ingenuity in the communication with potential investors / funders, partners, employees; analytical skills, enthusiasm (Dollinger, 2005).

Numerous studies have dealt with the relationship between personality traits and inclination towards entrepreneurship (Brandstätter, 1997; Zhao & Seibert, 2006, Rauch & Fresu, 2007; Caliendo, Fossen & Kritikos, 2011).

If entrepreneurship is a dynamic system, instead of being static (Bygrave, 1989), to what extent is the attitude towards changes a measure by which entrepreneurs are defined? Bagby (1988) believes that entrepreneurs should deal with changes, and also, create them.

As indicated by a series of studies, the attitude of seeing changes as opportunities (Chellam et al., 1991) suggests that there is a correlation between attitudes towards changes, particularly towards risks, on the one hand, and the entrepreneurial behaviour, i.e. the decision to follow entrepreneurial venture, on the other.

The relationship between risk tolerance and deciding to engage in entrepreneurship has been researched as well (Cramer, Hartog, Jonker & Van Praag, 2002; Caliendo, Fossen & Kritikos, 2009). However, according to empirical studies, there are no clear results indicating that there is a correlation between high levels of risk tolerance and success in entrepreneurial activities. Instead, results have indicated that there is a high correlation between intermediate levels of risk tolerance and success (Caliendo, Fossen & Kritikos, 2010; according to Chellah, Harworth & Brearley, 1991.).

Thus, studies have been carried out regarding the role of human motivation in entrepreneurship (Aldrich & Zimmer, 1986; Carroll & Mosakowski, 1987), which represents an important framework for the entrepreneurial behaviour. Thus, entrepreneurial activity can be defined as a compliance of abilities and motivation for its implementation. The decision to be engaged in entrepreneurial motivation also emerges as the individual's independent motivational choice (Kruger et al., 2000) regarding the individual's attitude towards the selected behaviour (Eisen, 1991).

Studies dealing with the relationship of the autonomy of personality traits driving the entrepreneurial activity and the attitude towards work (Carter et al., 2003; Feldman & Bolino, 2000) have revealed that jobs allowing independence actually are more motivating than jobs that lack independence (Corman et al., 1988).

Self-esteem as a personality trait was subjected to a number of studies. These have shown that success in entrepreneurial activities, both in starting and sustaining business, is largely based on the amount of entrepreneurs' self-esteem. While studying business in timber industry, Baum (1994) concluded that there was a significant relation between the entrepreneurs' self-esteem and corporate development.

3. Research Methodology

The characteristics of students of the Faculty of Technical Sciences (Departments of Electrical engineering, Mechanical engineering, Mechatronics, Transportation, Industrial engineering and Management) regarding their entrepreneurial potential were examined in the period from November 2011 to January 2012, on a half-structured sample consisting of an equal number of students in every study year and from every chosen study program. The research methodology was chosen in accordance with the defined purpose of the research and was based on a combination of qualitative and quantitative methods, as well as on comparison with the relevant literature and scientific insights. Data were collected through surveying, using a pre-designed questionnaire which was completed by 1020 students. The questionnaire was designed to obtain information on the studied variables: attitudes towards changes, autonomy and self-confidence as a foundation for entrepreneurship.

The goal of the study is to identify the existence of entrepreneurial potential through the following variables: attitudes towards changes, independence, confidence and attitudes towards entrepreneurship. Based on the research subject and goals, the following hypotheses were defined:

1. H1: There is a remarkable independence as a personality trait of students
2. H2: The surveyed students are highly self-confident
3. H3: The attitude of surveyed students towards changes is positive

4. Research results

As shown by the results, autonomy is not distinguished as an important feature of our respondents. In 90.4% of the cases, the surveyed students supported someone else's ideas provided that they believed they were good and completely new, while only 8% of the students did the same when they lacked their own ideas.

As to the distribution of responses on the question whether they rely on others when performing a task, based on a chi-square test of independence there is a statistical significance regarding the respondents' gender (Pearson Chi-Square = 11.194; Asymp. Sig. = 0.004). The female respondents are more confident, or they accept assistance from others only in cases when they lack time to perform the task, while the male respondents are more likely to rely on others in their work (Table 1).

Table 1. Cross tabulation: The respondents' gender – I rely on others when performing a task

| | | I rely on others when performing a task | | | Total |
|---------|--------|---|--|-------------------------|--------|
| | | Yes, frequently | Only in cases when I lack time to perform the task | No, I trust only myself | |
| Gender: | female | 11.4% | 74.3% | 14.3% | 100.0% |
| | male | 20.0% | 67.5% | 12.5% | 100.0% |
| Total | | 17.4% | 69.6% | 13.0% | 100.0% |

The respondents' gender affects the distribution of responses to the question: how would students invest a large amount of money? (Pearson Chi-Square = 12 199; Asymp. Sig. = 0.002). Table 2 shows that the male respondents prefer to start their own business, while the population of female respondents would rather invest money in real estate or shares. A small percentage of the respondents would save money for the “rainy day”.

Table 2. Cross tabulation: The respondents' gender – What would I do if I had a larger amount of money

| | | What would I do if I had a larger amount of money: | | | Total |
|----------|--------|--|---|--|--------|
| | | I would start my own business – enterprise | I would invest my money (real estate, stocks, etc.) | I would save money for the “rainy day” | |
| Gen-der: | female | 38.4% | 54.6% | 7.0% | 100.0% |
| | male | 50.2% | 44.0% | 5.8% | 100.0% |
| Total | | 46.6% | 47.3% | 6.2% | 100.0% |

Also, most respondents (71.5%) think twice before making a decision; 24.11% of the respondents make decisions quickly and intuitively, while only 4.4% of the respondents generally avoid making decisions, i.e. decide only when it cannot be avoided.

Regarding our independent variables, there is no statistical significance when it comes to the respondents' attitude towards the details of an activity. The percentage of the respondents liking to deal with details and those reluctant to do so because of their time consuming nature is similar – 43.2% and 44.8%, respectively. 12% of the respondents stated that they were bored with details and they could not take care of them.

When looking at the distribution of the responses by the respondents' gender to the question of whether the students have done some work independently (Pearson Chi-Square = 37 895; Asymp. Sig. = 0.000), the male respondents did so more frequently than the female ones, while the female students more frequently answered that they had never done it before. Regarding the type of school attended by the respondents, an independent job was performed more frequently by the students coming from technical schools than by those who had attended high schools (Pearson Chi-Square = 15 844; Asymp. Sig. = 0.000). The distribution of responses also depended on whether the students came from families that run or do not run their own business – the students from families that run a business had done some independent work more frequently than the other group of respondents (Pearson Chi-Square = 20 581; Asymp. Sig. = 0.000),

The distribution of the responses to the question “Do students prefer to solve problems” is affected by the type of school the respondents had attended (Pearson Chi-Square = 33 062; Asymp. Sig. = 0.000), as well as the faculty they had enrolled on (Pearson Chi-Square = 41 652; Asymp. Sig. = 0.000). As suggested by the cross tabulation of school attended by the respondents and their attitude towards the problem (Table 3), the students who had attended technical schools in most cases approach to problems in a familiar way (as everyone does), while the students who had attended high schools like to solve problems in a way different from the others (as no one else does).

Table 3. Cross tabulation: School attended – I like to solve problems

| | | I like to solve problems: | | | Total |
|--------------------|------------------|--|--------------------------------------|--|--------|
| | | In a way different from the others (as no one else does) | In a familiar way (as everyone does) | With the assistance of others (suggestions or actual help) | |
| School attend- ed: | High school | 50.8% | 28.3% | 20.8% | 100.0% |
| | Technical school | 36.4% | 31.0% | 32.7% | 100.0% |
| | Other | 49.6% | 16.0% | 34.4% | 100.0% |
| Total | | 44.1% | 27.9% | 27.9% | 100.0% |

Attitudes toward problem solving also depend on the faculty enrolled on by the respondents. The highest number of the students of Mechatronics prefers solving problems in a way different from others, the students of Electrical Engineering approach problems in familiar ways, while the students of Mechanical Engineering solve problems using the assistance of others.

Similar results were obtained for forcefulness. Almost half of the respondents (49.6%) believe that strength is a feature they have, while 46.5% of the respondents believe that they are strong only in specific situations. This is a feature that all our participants have, regardless of gender, education or background.

Although 64.3% of the respondents accept learning as a common task; 28.2% of them see it as a challenge, while only 7.5% of the students perceive it as a problem. The students' attitudes towards this issue vary according the Department, as indicated by the chi-square test of independence (Pearson Chi-Square = 30 743; Asymp. Sig. = 0.001).

Generally, our respondents are resolute in performing their activities; 59% of them said that others cannot easily wobble them in what they do, while 34.7% think that they can be wobbled only occasionally. However, the students' responses are gender-dependent (Pearson Chi-Square = 13 342; Asymp. Sig. = 0.001).

Regarding the question "Are you ambitious?" 63% of the students think that they are; 33.4% believe that they are ambitious only in specific situations, while very few of them (3.5%) responded they are not. The presence of these qualities was influenced mostly (Pearson Chi-Square = 19 074; Asymp. Sig. = 0.001) by the success in high school and the desire to enrol on the faculty and continue further education.

90.5% of the respondents recognize the mistakes they have made looking at them as new opportunities, as well as a chance to learn something. Only 6.3% fail to recognize the mistake they have made, while 3.2% believe that it is better to do nothing because then they cannot make mistakes.

Autonomy as a personality trait is an acquired characteristic and that was not a part of the socio-cultural milieu in the past. Namely, socialism was dominated by collectivistic consciousness and given that cultural needs are changing very slowly, this type of consciousness has remained as a remnant of passive behaviour as a desirable pattern that has been learnt.

As indicated by the research results obtained for the *attitude towards changes*, obstacles are not perceived by the respondents as something discouraging. 82.5% of the respondents try to cope with them alone, 15.5% stated that they usually seek others' assistance to overcome the obstacles encountered, while only 2% of them give up in the face of obstacles.

However, when it comes to uncertain (risky) situations, 48.1% of the respondents try to avoid them, 33.5% do well in these situations, while 18.4% do not like taking risks.

59.1% of the respondents believe that they are curious people; 38.9% believe that they are curious only in specific situations, and only 2.1% believe that curiosity is not their characteristic feature.

When asked if they easily change their habits, 76% of the students declared that they always strive to be better, 16.6% feel that they prefer the status quo, while 7.4% believe they do not have any habits.

The statement “Persistence is a feature I recognize in my behaviour” is agreed on by 51% of the respondents, situation-dependent persistence is present in 46.7% of the students, while only 2.3% of them considered themselves as non-persistent.

The attitude towards changes can be considered as a remarkable feature, or merely as a rhetorical desirability. The existing huge problems in society at this time contribute to the increasing awareness of the need for changes.

The attitudes towards entrepreneurship are gender-dependent when it comes to the attitude towards their own enterprise (Table 4). The population of female students perceive their own enterprise as an opportunity to express creativity and imagination, while the male students perceive it as an opportunity of being the boss and exclusively as a good source of income. (Pearson Chi-Square = 16 907; Asymp. Sig. = 0.000)

Table 4. Cross tabulation: The respondents’ gender – I perceive my own enterprise

| | | I perceive my own enterprise | | | Total |
|---------|--------|-------------------------------------|--|--|--------|
| | | As an opportunity of being the boss | As an opportunity to express my creativity and imagination | exclusively as a good source of income | |
| Gender: | female | 30.6% | 51.6% | 17.7% | 100.0% |
| | male | 37.5% | 37.9% | 24.6% | 100.0% |
| Total | | 35.4% | 42.1% | 22.5% | 100.0% |

The surveyed students’ attitudes to entrepreneurship is ambivalent, partly positive, partly negative, while the conditions for entrepreneurship are inconvenient, which fails to contribute to the consideration of entrepreneurship as a desirable value.

5. Conclusion

As suggested by the research results, there is a varying degree of partial presence of entrepreneurial potential as measured by the attitude towards changes, autonomy, self-confidence. As indicated by the research conducted in Serbia (Markov & Stankovic, 2008), when measuring the entrepreneurial aspirations of the students of the University of Novi Sad, the students have negatively rated the

atmosphere of entrepreneurship; they believe that entrepreneurship education is insufficient for enabling the development of positive attitudes towards it, while only 44% have expressed the desire to set up their own businesses after graduation.

The non-existence of needed entrepreneurial potential that reflects through the relationship towards the self, the existence of independence in solving business and personal problems, as well as an attitude towards changes, has its foundation in authoritarian upbringing in which independence and activeness are not desirable traits.

Personality traits are also subject to development. Training for entrepreneurship involves developing personality traits, raising the awareness of self-development, as well as improving various skills and knowledge (European Commission, 2009).

With all the deficiencies related to the research instruments and research sample, we still believe that the results clearly indicate the need for a different education model that would assist young people in advancing entrepreneurial spirit and more positive attitudes towards entrepreneurship. The question that remains open is: what is the direction which educational and training processes should take in order to increase the entrepreneurial potential of students and create preconditions for the development of entrepreneurship in the country? Also, it is not certain whether our upbringing and education system provide sufficient conditions, knowledge and motivation for the development of entrepreneurial activity.

We believe that it is necessary to increase levels of knowledge and skills that would contribute to the development of entrepreneurship in different occupations and educational attainment, primarily because of the present conditions in Serbia and the crisis that largely affects human resources.

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