EXPLORING ENTREPRENEURIAL POTENTIAL AMONG STUDENTS

Elena-Aurelia Botezat Adriana-Florina Borza

University of Oradea, Faculty of Economics, Department of Management-Marketing ebotezat@uoradea.ro
University of Oradea, aborza@uoradea.ro

Abstract

According to last research in domain, youth unemployment rate has considerably increased interest in promoting entrepreneurship. Romania occupy a better position to the unemployment chapter (6.8%) than other states like France (with an unemployment rate of 10.3%), Poland (9%) or the Netherlands (7.4%), when it comes to youth situation becomes critical, one in four young people under 25 are unemployed. In 2015, youth unemployment rate in Romania was 24%, above the average of European Union countries, which was 22.2% (Eurostat, INS, 2015). In this context, students should be prepared to rediscover their potential to create their own job and to accept self-employment as a viable life program (Gibb, 1987, 1993, 2002; Hitty & O'Gorman, 2004). As studies shows, they tend to choose activities they enjoy and leave in the background, or the last moment those activities they are required to do..

The study aims to investigate the relationship between entrepreneurial potential of students with various majors and entrepreneurial personality. A paper-pencil survey was carried out for 3 different facilities. Faculty of Economics student's (N=81 students on 2nd and 3 year of study), technical sciences student's and human science student's received a paper-pencil questionnaire which they had to fill-out immediately after they were involved in a workshop in which they had to use their entrepreneurial creativity potential.

It aimed equally by the impact of training on subjects which were put in a position to assess patterns of entrepreneurial action. To develop different aspects of entrepreneurial self-efficacy among students is important their exposure to various learning situations. In the current stage of research, it confirms that there are significant differences in terms of motivation, risk propensity or entrepreneurial skills to students following technical and economic studies.

The research is in its first phase and the conclusions to be developed on the basis of the process of specialized training in the next stage.

Key words: entrepreneurship, unemployment rate, training, students

JEL classification: M10

1. Introduction

The alarming increase in the rate of youth unemployment has considerably increased interest in promoting entrepreneurship. Although generally Romania

occupy a better position to the unemployment chapter (6.8%) than other states like France (with an unemployment rate of 10.3%), Poland (9%) or the Netherlands (7.4%), when it comes to youth situation becomes critical, one in four young people under 25 are unemployed. In 2015, the youth unemployment rate in Romania was 24%, above the average of European Union countries, which was 22.2% (Eurostat, INS, 2015).

Under these conditions, students should be prepared to rediscover their potential to create their own job and to accept self-employment as a viable life program (Gibb, 1987, 1993, 2002; Hitty & O'Gorman, 2004). Current students are more interested in different opportunities and challenges than a solid career. They tend to choose activities they enjoy and leave in the background, or the last moment those activities they are required to do. They had many extracurricular activities, they have craving for "attractive offers". Generation Y, which belongs to current students, born between the years 1990 - 2000 uses the Internet as the main method of communication and is characterized by delayed maturity. It is, however, a generation with attitude, protesting against the political class, rejects hierarchies and models and more importantly, is characterized by auto-didacticism (The Economist, 2013).

In these circumstances, there is a need to gear education to skills that have long-term effects on human behaviors and actions. Related to this subject, there are many studies, among which, for purposes of this article, we mention the research aimed to identify the characteristics that determine the student's attractiveness towards entrepreneurship (Wilson & all. 2007). Our study aims to identify the entrepreneurial potential of University of Oradea's students and contribute to a better orientation of their training.

2. Theoretical background

Research into the factors which determine students' attractiveness toward entrepreneurial activity was the subject of several studies. These are based on known three theories and accepted in the research literature. It's about Self-Regulatory theory (Higgins, 1998), Theory of Planned Behaviour (Ajzen, 1991) and Social Cognitive Theory (Bandura, 1997).

The theory of self-regulation explain human action as a social and cognitive process through individuals set personal goals and regulate their behaviors to achieve their goals (Higgins 1998). As Hoggins states, people must learn to know each other in order to get to control themselves and be able to adequately manage the relationship with the environment. "What we are" (Self) has three functions. The first function is instrumental. It provides information about various behaviors or in other words about "how to respond to the world." The second function is the function of expectation. This function serves to provide information about what someone should expect when engaging in a particular behavior, "how the world responds to me." The third function is the function monitoring. It provides information about the condition of a particular moment of a person in relation to the final state, about "what I do on the wishes and requirements come to me." Higgins proposes two concepts that underpin self-regulation: promotion and prevention.

Promotion has to do with sensitivity to positive outcomes and prevent sensitivity to negative results. Such adaptation occurs and improves matching between the individual and the environment. Recent research highlights the role of self-regulation to improve entrepreneurship student's education (Bryant 2006).

The theory of planed behavior explain human volitional behavior as a result of interactions between three main motivational and enabling factors including control over behavior, attitude towards behavior and subjective and social norms (Ajzen,1991). After Ajzen, the best predictor of an individual's behavior is the intention to achieve that specific behavior. It is preferred that the intention should be measured as close as possible to the expression of that behavior. From the point of view of theory of planned behavior, intention to perform a certain behavior is determined by three factors. The first factor is the attitude toward behavior, attitude that is influenced by the person's beliefs, expectations and feelings with regard to possible outcomes of engaging in a specific behavior. The second factor is constituted by subjective norms, i.e. the individual opinions about others' expectations and motivation to comply with those expectations.

The third factor is the perceived control or evaluation on the variables that could facilitate or conversely, obstructs the performance of a specific behavior. Synthetically, the theory of planned behavior is perceived as ease or difficulty to perform a specific behavior. Recently were published several studies that have shown that the theory can successfully be applied to stimulate the propensity to entrepreneurship (Krueger et al., 2000, Segal et al, 2005, Souitaris & all. 2007). Social cognitive theory defines human action as a function of the interplay between personal, behavioral and environmental factors (Bandura, 1997). After Bandura, in the face of situation which determine a new behavior, individuals resort to their social experience, observation being used as a tool for acquiring, in short time, knowledge and skills meant to guide action. Observing the behavior of others, people make a conscious decision whether or not to behave in the same way.

In other words we learn by watching others through a process which involves self-efficacy (self-efficacy), considering that we are influenced by preserving the sense of physical and psychological comfort (well-being). Self-efficacy is the perception of its capacity to produce and adjust life events. To develop different aspects of entrepreneurial self-efficacy among students is important their exposure to various learning situations. Once engaged, their perception about their entrepreneurial skills changes for the better and make a step further in terms of motivation to adopt entrepreneurial behavior (Wilson & all 2007; Fayolle & all 2006).

3. Method

A paper-pencil survey was carried out for 3 different facilities. Faculty of Economics student's (N=81 students on 2nd and 3 year of study), technical sciences student's and human science student's received a paper-pencil questionnaire which they had to fill-out immediately after they were involved in a workshop in which they had to use there entrepreneurial creativity potential. The participants are 33% male and 67% female; minimum age 20, maximum age 30 (an average of 21,8).

Entrepreneurial skills were measured with Entrepreneurial Personality Inventory - EPI. The EPI consists in 7 scales, constructed to describe the main personality traits considered as entrepreneurial in the field literature: Risk propensity (21 items) (α =.85); Social skills (14 items) (α =.77); Entrepreneurial skills (17 items) (α =.87), Creativity (17 items) (α =.87); Independence (17 items) (α =.72); Achievement motivation (17 items) (α =.83); Resource organization (10 items) (α =.78).

4. Findings and discussions

Achievement motivation is positively correlated (strongly significant) (r = 519 at p = 0.01, table 1) with the propensity for risk of subjects. Specialty literature places the tendency to take risks between entrepreneurial personality characteristics (Koh, 1996; Caird, 1991 Mitchell & Larsson, 1987). "Taking risks has always been associated with entrepreneurial behavior.

Table 1: Correlation Coefficient between variables: achievement motivation and risk propensity

nex propertiesty		
		Risk propensity
Achievement motivation	Pearson Correlation	,519**
	Sig. (2-tailed)	,000,
	N	81

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Source: author's own analysis

Risk associated with entrepreneurial decision may be due to the unpredictable nature of consumers and competitors, uncertainty about a new product or entering a new market" 10 . Increased tolerance for risk is specific to subjects with entrepreneurial intentions. The results confirm the trends observed in the literature (Borza, 2015). This is significantly higher compared with subjects who do not conduct entrepreneurial (non-entrepreneurs) and positively correlated with entrepreneurial success.

Table 2: Correlation Coefficient between variables Risk propensity and Independence

	-	Independence	_
Risk propensity	Pearson Correlation		,500**

_

¹⁰ Sebastian Pintea & all, *Rolul iluziei controlului și al credințelor iraționale în deciziile antreprenoriale*, în Journal of Applied Psichology, 2009, Vol. 11, nr. 2 103-108.

Sig. (2-tailed)	,000
N	81

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Source: author's own analysis

Risk propensity is positively correlated (strongly significant) (r = 500 to a p = 0.01) independence (table 2). Internalization (locus of control) (Croma, 1992; Caird, 1991) is considered by all the research a defining dimension of the entrepreneurial personality. Internal locus of control positively correlated with the need for achievement, but considering that entrepreneurial personality considers that holds control of its own destiny most of the time, it is marked by a strong sense of self-confidence (in his own ability solutions).

"Research of positioning locus of control (internal or external) suggests that entrepreneurs (founders) differ from the general population in terms of locus of control"¹¹. The vast majority of studies found increased percentage of personality traits among entrepreneurs (chrome & Johns, 1983; Brockhaus & Horwitz, 1986; Caird 1991, Croma, 2000). It is natural that internal locus of control is not so common among non-entrepreneurs. Ability to transfer failure (and hence the success) from the executive area to the decision area is, in their case, much higher. Under these conditions it is possible that a number of contextual factors lead to an increased internal locus of control and not a specific personality profile.

Table 3: Correlation Coefficient between variables: Risk propensity and Resource organization

-	=	
		Resource organization
Risk propensity	Pearson Correlation	,266*
	Sig. (2-tailed)	,017
	N	81

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Source: author's own analysis

Risk propensity significantly correlated (r = 266 at p = 0.05, table 3) with the capacity of resources organization. On the willingness of the entrepreneurial personality to take risks, as was shown, there are several interpretative trends. A low aversion to risk combined with a good capacity of planning related to resources is regarded as entrepreneur's personality trait (Sexton & Bowman, 1985; Cunningham & Lischeron, 1991, Croma, 2000).

Either way, we must admit that at this point there is a strong consensus among researchers: "Taking risks has always been associated with entrepreneurial

¹¹ Shane, S., Locke, E. A., & Collins, C. J. (2012). *Entrepreneurial motivation* [Electronic version], accessed 25.06 2014 from Cornell University, ILR School website: http://digitalcommons.ilr.cornell.edu/articles/x

behavior. Risk associated with entrepreneurial decision may be due to the unpredictable nature of consumers and competitors, uncertainty about a new product or entering a new market" There are researchers who prefer to nuance strong position.

Table 4: Correlation Coefficient between variables Entrepreneurial skills and Risk propensity

1 1 7		
		Risk propensity
Entrepreneurial skills	Pearson Correlation	,803**
	Sig. (2-tailed)	,000
	N	81

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Source: author's own analysis

As can be observed in table 4, risk propensity significantly correlated (r =, 803 at p = 0.01) with the entrepreneurial skills which confirms the results of previous research in the field. As expected, subjects who have entrepreneurial skills will be able to take risks based on confidence in their own ability to manage a business. As known, self-confidence can result from previous entrepreneurial experiences or related to a specific structure of personality.

Entrepreneurial personality is the foundation that supports the subject's willingness to attempt starting up a business which involves a certain risk. Entrepreneurial optimism is centered on a person's subjective belief. Basis of entrepreneurial optimism is individual's strong confidence in its ability to predict - this ability may be real or presumptive.

5. Conclusions and limitations

There is a consistent set of objections that have been raised and identifying weaknesses of psychologist's approaches. "Psychological critical approach has as a starting point, the tendency to standardize entrepreneurial traits found in this school" ¹³.

It tells equally about the impossibility of accurately identification of the "entrepreneurial traits" (especially, to show what distinguishes an entrepreneur by any other person involved in economic decision).

Gartner (1985) considers that "the diversity of personality traits among entrepreneurs is far greater than the differences between entrepreneurs and non-entrepreneurs, making it impossible to determine a typical personality profile of an

¹² Sebastian Pintea & all, *Rolul iluziei controlului și al credințelor iraționale în deciziile antreprenoriale*, în Journal of Applied Psichology, 2009, Vol. 11, nr. 2, 103-108.

¹³ Bădulescu, A. & D. Bădulescu, *Antreprenoriatul. Cum? Cine? Când?*, Presa Universitară Clujeană, 2014, p. 19.

entrepreneur"¹⁴. But we can answer to this objection with the argument that this is not even necessary: there are people with qualities and entrepreneurial traits that will not get involved again in business, but we always assess (measure) the existence of personality traits related to others, calling a profile that outlines the basis of progressive action needed¹⁵. For supporting this idea, Østergaard (2014) states that"the entrepreneurial behaviour is not reserved to economical and vocational related behaviour. In contrary, entrepreneurial behaviour involves everything the entrepreneurs think, cope with and might achieve".

For subjects who answer the questionnaire, we can identify the expression of personality entrepreneurial traits, as defined in the literature. In the current stage of research confirms that there are significant differences in terms of motivation, risk propensity or entrepreneurial skills to students following technical and economic studies.

Tabel 5.	Entrepreneurial skills
Mann-Whitney U	93,000
Wilcoxon W	198,000
Z	-,230
Asymp. Sig. (2-tailed)	,818,
Exact Sig. [2*(1-tailed Sig.)]	,839(a)

b. Grouping Variable: Specializare

The research aims to continue with a test that will be administered after a period in which subjects to take part in creative experiential workshop

_

¹⁴ Cf. Caliendo M., Fossen F. Kritikos A.,(2011) *Personality Characteristics and the Decision to Become and Stay Self-Employed*, German Socio-Economic Panel Study (SOEP), Berlin, p. 1 [available on-linehttp://www.diw.de/soeppapers]

¹⁵ A profile is dynamic assessed, taking into account the report perceived by each subject based on their own experiences and it is unlikely that people without a past and without entrepreneurial vocation will similarly perceive, for example, uncertainty and risk. Even if we can find in the average population reference's group dimensions as risk propensity, it is unlikely that this inclination to risk to correlate singnifically like in the case of the entrepreneurial profile with realism or emotional stability. Preference (and therefore some kind of response to a questionnaire item) derived in most cases from actual lived experiences and states of matter.

References:

- 1. Gibb, A. (1987) "Entreprise Culture Its Meaning & Implication for Education and Training", *Journal of European Industrial Traininig*, vol. 11, No.2, pp. 2-38.
- 2. Borza, A (2015) Antreprenoriatul în România: motivații, caracteristici și comportamente în mediul de afaceri românesc după 1990 (teza de doctorat), Universitatea din Oradea, Oradea.
- 3. Gibb, A. (1993)"The Entreprise Culture and Education", *International Small Business Journal*, vol. 11, No. 3, pp. 11-34.
- 4. Gibb, A. (2002) "In Pursuit of a New `Entreprise` and `Entrepreneurship` Paradigm for Learning: Creative Destruction, New Values, New Ways of Doing Things and New Combinations of Knowledge", *International Journal of Management Reviews*, Vol. 4, Issue 3, pp. 233-269.
- 5. Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. Academy of Management Review, 10(4)
- ***, Wining the Generation Game, The Economist, http://www.economist.com/news/business/21586831-businesses-areworrying-about-how-manage-different-age-groups-widely-different, September 2013.
- 7. Hitty, U. and O'Gorman, C. (2004) "What is Entreprise Education? An Analysis of the Objectives and Methods of Entreprise Education Programmes in Four European Countries", *Education and Trading*, Vol. 46, No. 1, pp. 11-23.
- 8. Wilson, F., Kickul, J. and Marlino, D. (2007) "Gender, entrepreneurial self-efficacity and entrepreneurial career-intention: implication for entrepreneurial education" *Entrepreneurship Theory and Practice*, Vol. 31, No. 3, pp. 387-401.
- 9. Higgins, E. T. (1998) "Promotion and Prevention: Regulatory Focus as a Motivational Principle", *Advanced in Experimental Social Psychology*, Vol. 30. pp. 1-46.
- 10. Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decisions Process*, Vol. 50, pp. 179-211.
- 11. Bandura, A. (1997) Self-efficacy: the exercise of control, New York: Freeman.
- 12. Bryant, P. (2006) "Improving entrepreneurial education through self-regulatory skills", *The NCIIA*, pp. 279-289.
- 13. Krueger Jr., N. F., Reilly, M., D., Carsrud, A., L. (2000) "Competing Models of Entrepreneurial Intention", *Journal of Business Venturing*, Vol. 15, No. 5/6, pp. 411-432.
- 14. Segal, G., Borgia, D., Schoenfeld, J. (2005) "The Motivation to Become an Entrepreneur", International Journal of Entrepreneurial Behavior and Research, Vol. 11, No. 1, pp. 42-57/
- Souitaris, V., Zerbinati, S., Al-Laham, A. (2007) "Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources", *Journal of Business Venturing*, Vol. 12, pp. 67-81.

- 16. Fayolle, A., Gailly, B., Lassas_Clerc, N. (2006) "Assesing the impact of entrepreneurhip education programmes: a new methodology", *Journal of European Industrial Traininig*, Vol. 30, No.9, pp. 701-730.
- 17. Schank, Roger C. (1995) What We Learn When We Learn by Doing, (Technical Report No. 60). Northwestern University, Institute for Learning Sciences, [on line]: http://cogprints.org/637/1/LearnbyDoing_Schank.html [14.04.2016]
- 18. Østergaard, A. (2014). The challenges of measuring the entrepreneurial personality? A methodological approach. DRUID Society Conference 2014, CBS, Copenhagen, June 16-18