

ENTREPRENEURIAL MOTIVATION POTENTIAL OF ECONOMICS STUDENTS IN SLOVAKIA: WHICH ARE THE HRM IMPLICATIONS FOR ENTREPRENEURIAL POLITICS AND PRACTICE?

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Abstract

On the sample of N=304 economics students from Slovakia are examined the following entrepreneurship motivation variables: a) professional attraction of entrepreneurship; b) social valuation of entrepreneurship; c) perceived entrepreneurial capacity; d) entrepreneurial intention; e) key entrepreneurial motivators (extrinsic and intrinsic); f) perceived entrepreneurial support; g) perceived entrepreneurial barriers. Obtained results suggest relatively low attractiveness of entrepreneurship profession in relation to the other professional options; average social support in realization of entrepreneurial idea; relatively low perception of entrepreneurial knowledge importance; relatively low entrepreneurial intention; intrinsic motivation factors showed as more important than extrinsic; not perceived any important supportive/logistic to entrepreneurs; predominantly are perceived entrepreneurial barriers. Calculated entrepreneurial potential showed as rather low, what gives HRM implications for entrepreneurial politics and practice.

Key words

motivation variables of entrepreneurship, entrepreneurial motivational potential, entrepreneurial politics, entrepreneurial development, management with motivation factors of entrepreneurship, HRM.

JEL Classification: M5, M51, M52

Introduction

Entrepreneurship is a multifaceted phenomenon that cuts across many disciplinary boundaries (Low & MacMillan, 1988). In broader sense entrepreneurship is the result of combination of psychological, social, cultural, ideological, religion, ethnic and institutional relationship which sources we can find in personality theories of entrepreneurship such as socio-cultural theories of entrepreneurship (Bogdanović, Svrznjak & Kamenjak, 2008). Entrepreneurship is also seen as a process through which new knowledge is transformed into products and services, which can be sold. Entrepreneurship as creator of jobs is considered as significant factor in the development of human capital (Zahra & Dess, 2001). An entrepreneur is a person who undertakes and operates a new enterprise or venture, and assumes some accountability for the inherent risks (Uddin & Bose, 2012). For socio-economic and organization development (i.e. creation of new products) it is crucial to understand the entrepreneurial motivation (drive), because entrepreneurial motivation is causal factor of entrepreneurial engagement and is important part of entrepreneurial success. Some aspects of motivation for entrepreneurship include *profession attraction of entrepreneurship, social valuation of starting new business, perceived entrepreneurship capacity, entrepreneurship intention, external and internal*

motivational factors, entrepreneurship support, entrepreneurship barriers and general entrepreneurship motivation (Liñán, 2005; Liñán & Yi-Wen Chen, 2009; Malebana, 2014). *Professional attraction* captures the respondent's career plans, the type of profession they would choose based on external environment from medium to long term perspective and whether becoming an entrepreneur attracts them or not (Azhar, Javaid, Rehman & Hyder, 2010). *Social valuation* of starting new business estimate how acceptable it is by the society to become an entrepreneur. *Perceived entrepreneurship capacity* measure ability to manage and monitor the entrepreneurship project. *Entrepreneurship intention* is measure of interest to be entrepreneur. Measure of *external and internal motivational factors* (Liao, Welsh & Pistrui, 2014) suggest that entrepreneurship is affected by the need for achievement from within (McClelland, 1961), internal locus of control; the belief that the outcome of events will be influenced by the individual efforts (Brockhaus, 1982); the practical purposiveness of the individual's actions (Bird, 1988); risk-taking propensities (Slevin & Covin, 1992); and the belief in the individual's capacity to perform a task (Boyd & Vozikis, 1994). *Entrepreneurship support* measure the views/perception on personal and institutional support, and *entrepreneurship barriers* measure the

views/perception on personal and institutional barriers that may prevent entrepreneurship.

For entrepreneurial activity very important are motivational factors which support entrance, keeping and maintaining high interest of entrepreneurs on new entrepreneurial projects/ventures (Bogdanović, 2015). For entering into the world of entrepreneurship (motivation to enter) key are psychological characteristics of entrepreneurs, and for keeping in the entrepreneurship (motivation of stay) important is entrepreneurial success itself. Entrepreneurship personality research specify that entrepreneurial personality exist (Markman & Baron, 2003; Holland, 1997), and this personality characteristics (as motivation factors) are also important for entrance into the entrepreneurship world.

The European Commission's (2016) call to foster entrepreneurial skills (and so indirectly entrepreneurial motivation) through entrepreneurial education was the first attempt to propose entrepreneurial education as a possible solution to the youth unemployment problem. It is now a priority in the EU to address the issue of entrepreneurial education. It is thought that entrepreneurial graduates will become self-employed and perhaps even contract others.

According to that the purpose of this research was to measure the concept of motivation for entrepreneurship by means of economics students respondents in Slovakia in order to better know this part of entrepreneurship phenomenon, to conceptualize the calculation of entrepreneurial motivation potential as general measure and at the same time to estimate the entrepreneurship motivation potential, on Slovak sample. The research problems are defined as follows:

- 1) To identify the level of professional entrepreneurship profession attraction in two stages (as summary grade and in analytical way).
- 2) To identify the level of social valuation of starting new business also in two stages i.e. as social valuation from important social groups (friends, imediate family, colleagues) and general cultural valuation of entrepreneurship.
- 3) To identify the level of perceived entrereneurial capacity (entrepreneurial ability).
- 4) To identify the level of entrepreneurial intention.
- 5) To identify the level of important motivational factors. To calculate the level of extrinsic and intrinsic motivation indicators and caluculate the final indicator of intrinsic and extrinsic motivation.
- 6) To identify the level of entrepreneurial support/logistics.

- 7) To identify the level of entrepreneurial barriers/obstacles.
- 8) To identify the general entrepreneurial motivation (EM) and calculate the entrepreneurial motivation (EM) by means of mentioned seven indicators, on Slovak sample.

1 Goal and Methodology

Motivation for entrepreneurship/entrepreneurial motivation is for entrepreneurship an important scientific and professional question because entrepreneurship by the nature (creating/starting new business) is *mental*, i.e. *human resources phenomenon* and is initiated by the human entrepreneurs.

The first aim of this paper was to identify the level of this entrepreneurial motivation (analitically and holistic) by the Slovak economics students population. This is made by the measuring for important entrepreneurial motivation indicators:

- a) Professional attractiveness of the entrepreneurship as professional option (as unique measure and in comparison with concurent salaried and liberal professional options);
- b) Social valuation of starting new business (by important social groups of potential entrepreneur (friends, imediate family, colleagues) and general (cultural) social valuation of entrepreneurial activity;
- c) Perceived entrepreneurship capacity (perceived ability to be an entrepreneur i.e. perceived ability to create new business);
- d) Entrepreneurial intention (intention to be an entrepreneur i.e. perceived seriousness to be an entrepreneur);
- e) Key entrepreneurial motivators (intrinsic and extrinsic). This indicators show as the concrete motivational sources for entrepreneurship, which are devided in intrinsic and extrinsic and so measured);
- f) Perceived entrepreneurial logistics/support. This indicator show how are perceived the main general supports in the context of perceived easyness of creating new business and so create an entrepreneurial profession;
- g) Perceived entrepreneurial barriers/obstacles. This is an indicator of perceived difficulties/ obstacles in entrepreneurship and shows perceived personal opinion (perceived lack of specific

entrepreneurial competences but also social and other barriers as potential complications in starting new business). Perceived personal obstacles can be indicators of suboptimal entrepreneurial education, and perceived social and other obstacles as the indicator of perceived economic (non)freedom perception.

Because there is little evidence about the entrepreneurial motivation research in Slovakia and other transition economies on young student population which should be especially entrepreneurship prone (i.e. entrepreneurship is the power of the „youth“) it is considered that the topic (although interesting and for business very relevant) is a new line of motivational research of entrepreneurship in the frame of psychological i.e. motivational theories of entrepreneurship.

This work has its foundation in a sample of economic students from the Faculty of Economics at the University Matej Bel in Banska Bystrica, Slovakia - hereafter referred to as entrepreneurial Slovakia sample.

The second goal was to research the level of key entrepreneurial indicators (variables: professional attraction of entrepreneurship; social valuation of entrepreneurship; perceived entrepreneurship capacity; entrepreneurial intention; key internal and external entrepreneurial motivators; perceived entrepreneurial logistics/support; perceived entrepreneurial barriers/obstacles), research the connections of this variables with different socioeconomic variables: gender, study level, area of economic study, working/organizational experience, entrepreneurial experience) which are important for entrepreneurial activity and future entrepreneurship of economic student population.

The third goal was to find general formula to calculate entrepreneurial potential and to calculate it on the level of Slovak sample.

This type of research can forecast the future economic efficiency in entrepreneurial activity of such human resources (i.e. economics students), and improve entrepreneurial starts in different types of business starts.

1.1 Measurements instruments

In order to measure different indicators of entrepreneurial motivation we used the combination of two questionnaires i.e. from the research of Malebana, 2014. and Liñán & Yi-Wen Chen, 2009.

which measures different indicators of entrepreneurial motivation i.e.:

- 1) Professional attraction of entrepreneurship itself and in comparison with other professional possibilities
- 2) Social valuation of starting new business and general social valuation of entrepreneurial activity
- 3) Perceived entrepreneurship capacity
- 4) Entrepreneurial intention
- 5) Key entrepreneurial motivators (eksternal and internal)
- 6) Perceived entrepreneurial logistics/support
- 7) Perceived entrepreneurial barriers/obstacles

So prepared and used measurement instruments consist of mentioned seven scales. The measurement instrument is made on english language. Originaly it is translated on slovak language so students can understand and give answers on their native language.

1.2 Colected data and sample characteristics

The measurement was conducted in May 2016. on the sample of N=304 economic students on the Faculty of Economics University Matej Bel in Banska Bystrica, Slovakia.¹

In the sample were N=235 (77,6%) female and N=63 (20,7%) male respondents and N=5 (1,6%) of respondents did not answered on this question. The respondents were in average M=22,15 year old with standard deviation s=1,63 years. Also there were N=153 (50,3%) students of bachellor degree and N=151 (49,7%) of master degree. By nationality in sample were N=287 Slovaks (94,4%), N=2 Ukrains (0,7%) and N=15 (4,9%) of respondents did not answered on this question, so the sample is treated dominantly as Slovak sample obtained on Faculty of Economics University Matej Bel in Banska Bystrica.

Detailed characteristics of the sample are presented in the next three tables according study type, working experience in organization and entrepreneurial working experience.

¹ In the data collection helped the staff of Faculty of Economics University Matej Bel in Banska Bystrica, Department of Corporate Economics and Management, Slovakia., where first author was on teaching-researching study stay in 2016.

Table 1: Sample of respondents according economic study type

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	59	19,4	19,4	19,4
B	107	35,2	35,2	54,6
C	2	,7	,7	55,3
E	6	2,0	2,0	57,2
F	12	3,9	3,9	61,2
G	5	1,6	1,6	62,8
H	104	34,2	34,2	97,0
I	9	3,0	3,0	100,0
Total	304	100,0	100,0	

Legend: A-Tourism; B-Business Economics and Management; C- Business Economics and Management in English Language; E- Territorial Management; F-Public Economics and Management; G-Business Economics and Management of Tourism; H- Business Economics and Management of Small and Medium-Sized Enterprises; I- Marketing Management of Business.

Table 2: Sample of respondents according working experience in organization

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	,7	,7	,7
A	56	18,4	18,4	19,1
B	65	21,4	21,4	40,5
C	34	11,2	11,2	51,6
D	56	18,4	18,4	70,1
E	91	29,9	29,9	100,0
Total	304	100,0	100,0	

Legend: A-no experience; B-0-3 month; C-3-6 month; D-6-12 month; more than 12 month

Table 3: Sample of respondents according entrepreneurial working experience

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	1,6	1,6	1,6
A	280	92,1	92,1	93,8
B	8	2,6	2,6	96,4
C	4	1,3	1,3	97,7
D	4	1,3	1,3	99,0
E	3	1,0	1,0	100,0
Total	304	100,0	100,0	

Legend: Entrepreneurial working experience: A-no; B-0-3 month; C-3-6 month; D-6-12 month; E-more than 12 month.

1.3 Procedure

It was applied prepared questionnaire on the selected economics student population. Before questionnaire application the Dean and Vice Dean of Pedagogy of the Faculty of Economics were kindly asked for approval of the research. Before the questionnaire fulfilling to the students were explained the goals of the research, and they were kindly asked for their approval to be included in this research. Only students who gave their approval for research, participated in the survey. The questionnaire fulfilling was anonymous and took approximately 20 minutes. The data processing was conducted in the SPSS statistical package.

2 Results and discussion

To deal with problems of entrepreneurial motivation which can be calculated by the means of all the entrepreneurial indicators, we identified all the key descriptive statistic values of targeted items and variables in the researched sample (arithmetic mean, standard deviation, skewness and standard error of the variable). The results are presented in different tables

according defined problems because of good review of results. The discussion of the results is prepared according defined criterion. To define such a criterion what is in fact the higher value for scale of 7 degrees it is used the criterion that for entrepreneurship is higher value 4,90 (70% of values, the same as the degree 3,50 on the scale of 5 degree – the typical scale of school degree in Croatia). So where the value was less than 4,90 from maximum 7,00 it is treated as low and under desired indicator level. The values which are equal of higher than 4,90 are bolded.

3.1. First research problem

In the table 4. are presented the indicators of professional attraction of dominant professional types (salaried, liberal, entrepreneurial) in two parts. At first are presented the results of general grade (summary evaluation) of different professional options, and after that is presented the analytical evaluation for entrepreneurial professional attractiveness by items and then is calculated linear combination of 5 items (composite variable titled professional attraction of entrepreneurship composite).

Table 4: Attraction of different professions (salaried, liberal, entrepreneurial) as general grade and entrepreneurship professional attraction as analytical evaluation

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
OT 9 Attractiveness of salaried work	302	4,68	1,433	-,248	,140
OT 10 Attractiveness of liberal profession	296	4,24	1,579	-,240	,142
OT 11 Attractiveness of entrepreneur profession (evaluation by general/summary evaluation method)	298	4,87	1,505	-,444	,141
OT 13 Entrepreneurship has more advantage than disadvantage	301	4,44	1,497	-,070	,140
OT 14 Entrepreneur career is totally attractive to me	300	4,70	1,631	-,272	,141
OT15 If I had resources and opportunity I'd like to start a business	300	5,25	1,681	-,873	,141

OT16 Among various options, I would rather be an entrepreneur	300	4,46	1,554	-,226	,141
OT17 Being an entrepreneur would entail great satisfaction for me	300	4,49	1,600	-,152	,141
PROFESSIONAL ATTRACTIVENESS OF ENTREPRENEURSHIP COMPOSITE (Composite OT13 to OT17)- evaluation by analytical evaluation method	300	4,67	1,38		

Legend: negative values of skewness indicates the values above average (M=3,5). Standard error measure depicts how reliable was the measurement. Bolded are te values above 4,90 and higher as desirable values who support entrepreneurship

According to such criterion from the presented table above we can see that:

PROFESSIONAL ATTRACTIVENESS OF ENTREPRENEURSHIP. Near that desirable value was entrepreneurial attractiveness of entrepreneurial profession (M=4,87) achieved by summary evaluation method but still under desirable level (M=4,90 and higher). More precisely analytical evaluation (Noe at all, 2006) of attractiveness of entrepreneurial activity composite shows somewhat lower (M=4,67) what is also somewhat under desirable level. For demotivational factors which produced such relatively low entrepreneurial attractiveness can be seen a lack of opportunities and resources because in the case of such resources the examinee would like to start a business (M=5,25).

The calculation of statistical differences between the professional attractiveness of different profession showed:²

- There is no found statistical difference in attractiveness of salaried and entrepreneur profession (t=1,58; df=598; p=0,11 i.e. p>0,05).
- There is found statistical difference in attractiveness of salaried and liberal profession

(t=3,57;df=596; p=0,00004 i.e. p<0,01) in dirrection of more appreciated salaried profession (M=4,68 vs.M=4,24).

- There is found statistical difference in attractiveness of liberal and entrepreneurial profession (t=4,98; df=592; p=0,0001 i.e. p<0,01) in direction of more appreciated entrepreneurial profession (M=4,67 vs. M=4,24).

From this results can be concluded that salaried job is still highly appreciated and in comparison with entrepreneurial profession there is no found statistically significant difference. This results shows us on relatively low entrepreneurial attraction because examine still perceive that salaried job is as good professional option as entrepreneurial one. This is probably because of security of perceived salaried job. The free (liberal) profession showed the lowest attraction (statistically significant differences with entrepreneurial and salaried job profession) what is to explain with insecurity and relatively low perceived profit from such profession in comparison with entrepreneurial one. So, as salaried job is still very attractive professional option if we want more entrepreneurs it should work to improve attractiveness of entrepreneurial professions, by improving variables who creates the dependent variable of entrepreneurial motivation (EM). Professional attractiveness of entrepreneurship composite (measured analitically) showed somewhat lower attraction (M=4,67) than

² Quick calculation of statistical differences can be made by means of the Internet portal www.graphpad.com/quickcalcs/ttest2/ (retrived on 10. 07. 2016.)

measured as general grade attraction (M=4,87). As it is known that analytical approach gives more precise information can be concluded that attraction of entrepreneurship is much nearer to the attraction of salaried work (M=4,67 vs. M=4,68). Therefore when examinees analitically think about entrepreneurship (with more consciousness) they perceive the entrepreneurial profession less attractive, especially low is evaluation the cost and benefit of entrepreneurship (M=4,44) – what is an very important economic indicator and evaluation of entrepreneurship in the comparison with possibility of other options (M=4,46), so examinees are not quite sure if entrepreneurship is really the best professional option. So according to this results if it is the goal to

have more entrepreneurs (more business with more employment) education institutions/society should work on improving the perception of by means of impression management and improvement of objective characteristics of this professional option. If the society has developed entrepreneurship it creates so much new business that there is lack of working force (human resources). Such situation nowadays e.g. we have in Germany and Scandianavian countries.

3.2 Answer on the second research problem

The basic results as answers on the second research problem are presented in the table 5.

Table 5: Social approval of important social environment (friends, immediate family, colleagues) for creating new business and cultural approval (analitically measured) and general evaluation of entrepreneurship activity composite

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
OT 18 Social approval for creating a business by friends	301	5,13	1,389	-,706	,140
OT 19 Social approval for creating a business by immediate family	301	4,97	1,531	-,545	,140
OT 20 Social approval for creating a business by your colleagues	298	4,69	1,294	-,149	,141
SOCIAL APPROVAL FOR BUSINESS CREATING (Composite OT18 to OT 20)	298	4,94	1,203		
OT33 General social valuation of entrepreneurial activity by the family	304	3,92	1,423	,120	,140
OT34 General social valuation of entrepreneurial activity above other activities and careers	299	4,31	1,296	-,247	,141

OT35 National social valuation of entrepreneurial activity considered as worthwhile despite the risks	297	4,01	1,318	,005	,141
OT36 Perception of national culture as favorable towards entrepreneurial activity	296	3,53	1,340	,180	,142
GENERAL VALUATION OF ENTREPRENEURSHIP ACTIVITY COMPOSITE (Composite of OT33 to OT 36)	294	3,94	1,024		

Legend: negative values of skewness indicates the values above average (M=3,5), Standard error measure depicts how reliable was the measurement. Bolded are the values above 4,90 and higher as desirable values who support entrepreneurship

SOCIAL VALUATION OF ENTREPRENEURSHIP.

Friends (colleagues) are really social support (M=5,13), so this indicate that the culture of younger student Slovak people support the idea of entrepreneurship. Also the immediate family supports idea of entrepreneurship (M=4,97) so there is possible cultural shift to entrepreneurial desirableness. Interesting result is that social evaluation of important persons (friends, family, colleagues) for creating the business is much higher (M=4,94) than the cultural general approval (source of national culture) for entrepreneurial activity (M=3,94). This result is sign that younger people have different perception about near social support (more positive) about

entrepreneurship than is this support from the whole population (national culture) which perhaps has its source in the former perception which stems from former socio-economic perception (real socialism) who is changing but according such general valuation is still present in some amount. So the arithmetic mean of this two sources of social valuation is somewhat lower than desirable, i.e. $(4,94+3,94)/2=4,44$.

3.3 Answer on the third problem

The basic results as answers on the second research problem are presented in the table 6.

Table 6: Perceived entrepreneurial capacity for doing business

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
OT21 Easy start a business	301	3,46	1,422	,337	,140
OT22 Ability to control the new business process	300	4,12	1,402	,129	,141
OT23 Complete control of situation in case of starting to run new business	303	4,31	1,398	,040	,140
OT24 Knowledge of practical details needed to start a business	303	4,16	1,505	,062	,140

OT25 Perception of easily start and run a business	303	3,66	1,512	,406	,140
OT26 Perception of high chance of being successful in new business	301	4,02	1,263	,208	,140
ENTREPRENEURIAL CAPACITY COMPOSITE (Composite OT21 to OT 26)	298	3,96	1,090		

Legend: negative values of skewness indicates the values above average (M=3,5), Standard error measure depicts how reliable was the measurement. Bolded are the values above 4,90 and higher as desirable values who support entrepreneurship

PERCEIVED ENTREPRENEURIAL CAPACITY. Analytically measured is somewhat lower than desired (M=3,94) where especially was low the perception of easy start a business (M=3,46) and run a business (M=3,66). Such results follow us to conclusion that there are needed more qualitative entrepreneurial education in different important areas such as: economic competences, managerial competences, innovative competences, ethical/social responsibility competences (Bogdanović, 2015; Cingula&Veselica, 2010) to achieve better entrepreneurial competences for starting/run (discipline entrepreneurship) and maintain a started business (discipline management and organization). Therefore it is of interest of society that young people on economic faculties especially

are very good educated in every part of entrepreneurial competences so they will be therefore also more motivated.

Namely learning and knowledge has also important motivational function. If people permanent learn about something in the same time they will be more motivated. Also is true in the organizational settings, so if people in organization learn more they are also more motivated.

3.4 Answer on the forth problem

The basic results as answers on the second research problem are presented in the table 7.

Table 7. Entrepreneurial intention

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
OT27 Readyness to do anything to be an entrepreneur	301	3,85	1,701	,145	,140
OT28 Professional goal to be an entrepreneur	302	3,76	1,701	,171	,140
OT29 Readyness to make every effort to start and run own business	299	3,61	1,611	,163	,141
OT30 Determination to create a business venture in the future	301	3,81	1,702	,251	,140
OT31 Serious thought in starting a business	302	3,83	1,822	,145	,140

OT32 Firm intention to start a business someday	300	4,00	1,769	,047	,141
ENTREPRENEURIAL INTENTION COMPOSITE (Composite OT 27 to OT 32)	292	3,81	1,593		

Legend: negative values of skewness indicates the values above average (M=3,5), Standard error measure depicts how reliable was the measurement. Bolded are the values above 4,90 and higher as desirable values who support entrepreneurship

ENTREPRENEURIAL INTENTION. Analytically measured it was lower than desired (M=3,81). Especially low were the variables readiness to make every effort to be an entrepreneur (M=3,61) and professional goal to be an entrepreneur (M=3,76). This is a sign that entrepreneurship is still perceived as difficult and risky activity and many people perceive that it is not very wise to be entrepreneur if they have other attractive possibilities. So to strengthen the entrepreneurial intention can be advised, i.e. should be made the two types of future entrepreneurs empowerment:

- a) Individual empowerment in the sense of improvement of self-esteem, better entrepreneurship knowledge/competences
- b) Objective empowerment by the improvement of attractive contextual factors for entrepreneurship

3.5 The answer on the fifth problem

The basic results as answers on the second research problem are presented in the table 8.

Table 8: Perceived motivational factors of entrepreneurship

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
OT44 E. Motivation to be his own boss	296	5,62	1,581	-1,261	,142
OT45 E. Motivation to have interesting job	302	5,66	1,544	-1,259	,140
OT46 E. motivation in challenging her/himself	303	5,37	1,591	-,914	,140
OT47 E. motivation to take advantage from creative talents	302	5,41	1,482	-,977	,140
OT48 E. motivation in earning more money	304	5,37	1,488	-,911	,140
OT49 E. motivation in taking advantage of market opportunity	304	5,02	1,436	-,648	,140
OT50 E. motivation in maintaining the family tradition	301	2,96	1,826	,603	,140
OT51 E. motivation in increasing her/his status/prestige	304	4,57	1,638	-,584	,140

OT52 E. motivation to follow the example of person who I admire	303	3,65	1,858	,156	,140
OT53 E. motivation in the need for a job	302	4,73	1,499	-,577	,140
ENTREPRENEURIAL MOTIVATION COMPOSITE external+internal (Composite OT44 to OT53)	290	4,89	1,013		

Legend: negative values of skewness indicates the values above average (M=3,5), Standard error measure depicts how reliable was the measurement. Bolded are the values above 4,90 and higher as desirable values who support entrepreneurship

MOTIVATIONAL FACTORS OF ENTREPRENEURSHIP (extrinsic and intrinsic). The main motivational factors (motivators) for entrepreneurship according to the evaluation equal or higher than M=4,90 were: To be my own boss (autonomy/freedom motivation) (M=5,62); To have interesting job (internal motivation who is sourced by personality) M=5,66; To challenge myself (internal motivation of challenging job) M=5,37; To take advantage of my creative talents (internal motivation of using abilities) M=5,41; To earn more money (external motivation) M=5,37; To take advantage of a market opportunity (external motivation) M=5,02. Global (extrinsic and intrinsic motivation) was at almost desirable level (M=4,89). Intrinsic motivators (i.e. OT 44-47) were on higher level (M=5,53) than the extrinsic motivators (i.e. OT 48-53) where M=4,38. Here were especially low the motivation of

family tradition maintenance (M=2,96) because of low entrepreneurial tradition in Slovakia (because of former socio-economic formation). The good sign is that young people (economics students) are intrinsic motivated for creating new business (higher values than the other entrepreneurial indicators, although they could be also better so there is also an important space for improvement), and somewhat lower extrinsic motivation which can be explained as due to the perception of low logistics/support and perceived barriers/obstacles in entrepreneurial activity in Slovak Republic.

3.6 The answer on the sixth problem

The basic results as answers on the second research problem are presented in the table 9.

Table 9: Perceived support for entrepreneurship

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
OT40 I know the different types of support offered to people who want to start new business	301	4,49	1,624	-,171	,140
OT41 Informations about government support is accessible	298	4,19	1,369	,072	,141
OT42 My level of knowledge about the types of support offered to people who want to start a business is high	300	3,85	1,511	,093	,141

OT43 The government provides adequate support to start a business	301	3,20	1,376	,278	,140
PERCEIVED ENTREPRENEURIAL SUPPORT COMPOSITE	296	3,93	1,411		

Legend: negative values of skewness indicates the values above average (M=3,5), Standard error measure depicts how reliable was the measurement. Bolded are the values above 4,90 and higher as desirable values who support entrepreneurship

PERCEIVED ENTREPRENEURIAL LOGISTICS/SUPPORT. There is no evident high perceived opportunity which supports entrepreneurship (all degrees of such variables were lower than 4,90). Also the mean value of perceived entrepreneurship support (composite variable calculated as linear combination of items) was lower than perceived entrepreneurship obstacles (M=3,93 vs. M=4,44).

So when support/logistics (opportunities) are perceived lower than barriers/obstacles (threats) we have the situation of declined potential of possible strategy (speaking in terms of SWOT analysis) and

the solution is to avoid such activity (i.e. entrepreneurial in this case) to minimize losses. So this perception should be better what can be achieved by objective better support of entrepreneurs in the reality.

3.7. The answer on the seventh problem

The basic results as answers on the second research problem are presented in the table 10.

Table 10: Perceived obstacles/barriers of entrepreneurial activity

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
OT54 Lack of HRM skills	303	3,98	1,385	-,023	,140
OT55 Lack of operations skills	300	3,89	1,424	,056	,141
OT56 Lack of business planning skills	302	3,89	1,438	,050	,140
OT57 Lack of general management skills	303	3,90	1,389	,037	,140
OT58 Lack of financial skills	301	4,09	1,553	-,086	,140
OT59 Lack of marketing skills	300	3,55	1,438	,443	,141
OT60 Lack of savings or asset	300	5,10	1,813	-,817	,141
OT61 Lack of suitable premises	301	4,41	1,684	-,301	,140
OT62 Difficult in convincing others to support your ideas	301	4,18	1,518	-,088	,140

OT63 Difficulty in finding suitable labour	300	4,10	1,423	,139	,141
OT64 High income tax	300	5,01	1,486	-,540	,141
OT65 High labour costs and fees	300	4,91	1,541	-,555	,141
OT66 Compliance with government regulations	300	5,04	1,583	-,540	,141
OT67 Fear of failure	293	4,71	1,746	-,347	,142
OT68 Difficulty in obtaining finance	299	5,12	1,540	-,648	,141
OT69 High risk in starting new business	299	5,15	1,522	-,797	,141
OT70 Uncertainty of the future of the business	296	4,79	1,475	-,560	,142
OT71 Bad economic indicators in general	300	4,30	1,430	-,104	,141
OT72 Lack of informations about business start-ups	300	4,04	1,510	-,115	,141
OT73 Lack of knowledge about where to obtain support	301	4,16	1,379	,079	,140
OT74 Problem of finding the right partner	299	4,35	1,493	-,184	,141
PERCEIVED ENTREPRENEURSHIP OBSTACLES/BARRIERS COMPOSITE	276	4,44	0,887		
Valid N (listwise)	272				

Legend: negative values of skewness indicates the values above average (M=3,5), Standard error measure depicts how reliable was the measurement. Bolded are values above 4,90 and higher as important perceived obstacles for entrepreneurship

PERCEIVED ENTREPRENEURIAL OBSTACLES/BARRIERS. As serious obstacles for entrepreneurship are seen: Lack of savings or asset (M=5,10); High income tax (M=5,01); High labour costs and fees (M=4,91); Compliance with government regulations (exaggerated administrative and bureaucratic load) (M=5,04); Difficulty in obtaining finance (lack of start-up financing and initial capital for young people) (M=5,12); High risk in starting a new business (M=5,51). Perceived personal limitations (lack of different skills for starting and maintaining the business) are seen lower (all lower than 4,90) than objective limitations. They

show us that students feel that they are not quite competent for entrepreneurial activity, so this can be attributed to not satisfactory entrepreneurial education/socialisation. So near the strengthening the subjective entrepreneurial capacities should also strengthen the objective situation in the environment which is not optimal, to achieve more entrepreneurial motivation. Such results in perception of objective variables which are seen as barriers indicates a lower level of economic freedom in this variables-which can be crucial for entrepreneurial motivation. Namely economic i.e. entrepreneurship activity is in direct function of economic freedom. If this freedom is low

(e.g. exaggerated regulations) the economic/entrepreneurship activity will be also low.

3.8 The answer on the eight problem

To deal with problems of the whole entrepreneurial motivation (EM) which can be calculated by the means of all the entrepreneurial indicators, we identified all the key descriptive statistic values of target items and variables in the researched sample. In order to have clear and useful global measure of motivation for entrepreneurship, there is created the „face validity“ formula for measuring total entrepreneurial motivation (EM) which include all mentioned indicators. This formula consist of six indicators which are in the same direction (i.e. increases the value of entrepreneurial motivation) and one is in the opposite direction (i.e. decreases the value of entrepreneurial motivation):

$$EM = (a+b+c+d+e+f)-(g)$$

So by the principle of Occam's razor³ it is created this simple formula which can be useful for measuring and comparing the results of EM in different settings and examined populations. According this formula can be calculated the EM in different settings where we have the interval from the minimal to the maximal value of EM.

$$\text{Minimal entrepreneurial motivation (EM}_{\min}) = (1+1+1+1+1+1)-7 = -1$$

$$\text{Maximal entrepreneurial motivation (EM}_{\max}) = (7+7+7+7+7+7)-1 = +41$$

So, the EM can achieve the values in the closed interval (min,max) (-1; +41)

In creation of this formula of EM it is hypothesed that high professional attraction of entrepreneurship, high social valuation of entrepreneurship, high entrepreneurial capacity, high entrepreneurial intention, high intrinsic and extrinsic entrepreneurial motivators and high perceived entrepreneurial support increases entrepreneurial motivation (has positive impact on entrepreneurial motivation), and high perceived barriers have negative impact on entrepreneurial motivation. The purpose is to have

³ Occam's razor is the methodological principle in the cognition which tell us that the simplest explanation is usually the truth.

real insight (measure) of the complex dependent variable of EM in order to have good diagnostic tool. So can be made comparisons in EM in different settings and samples and of course to make improvement in entrepreneurial motivation after we know which indicators are good/appropriate and which less good/appropriate. Finally consequently this measure has the goal of improvement in creating and running new business in Slovakia from one potentially very propulsive population of economics and business students. Namely, hypothetically can be expected that young economics and business students should have higher entrepreneurial motivation because of chosen study and their youth/energy (i.e. entrepreneurship needs the energy of the youth) and knowledge they receive on their studies (entrepreneurship is economic field in economics which is studied mostly on Economics and business faculties), so it is important to know what is level of their entrepreneurial potential (diagnostic) and if it is suboptimal to make recommendatins how to improve them in order to have more entrepreneurs which are the currier of economic activity in market societies. After obtaining the descriptive results we calculate the dependant variable entrepreneurial motivational (EM) who can use as comparison and corrective actions in the improvement sense.

Calculated EM for Slovak sample = Professional attractiveness of entrepreneurship+social valuation of the entrepreneurship+perceived entrepreneurial capacity+entrepreneurial intention+actual motivation for entrepreneurship+perceived entrepreneurial logistics – perceived entrepreneurial barriers/obstacles = (4,67+4,44+3,96+3,81+4,89+3,93)-4,44=+21,26

$$EM (\text{Slovak sample}) = 21,26/42 = 50,61 = 51\%$$

The possible evaluation scale which should also pass through empirical testing can be created as follow:⁴

⁴ The proposed formula is maded by the idea that EM has „face validity“ indicators which are the sign of the higher or lower motivation potential. Although between the chosen indicators can be some empirical overlapping (some items measure the similar or the same thing) they are all directed in the same direction. Here is not made empirical validation of the used measruement instrument, to see this empirical overlapping because this is not the purpose of this paper. Also there is not made the empirical norming of values needed for each evaluation grade for the examined Slovak population. So this evaluation values and proposed evaluation skale is „face valued“ and arbitrary/hypothetical set of norms, which are usually used in schools when we evaluate the achievement of students or wokers. This scale so do not satisfy strong psychometric norms needed for estimation of achieved values (as are the norms in standardized IQ tests).

0-50 grade 1 - very low entrepreneurial motivational potential (EMP) in population
 51 - 60 grade 2 low EMP
 61 – 70 grade 3 middle EMP
 71 - 80 grade 4 high EMP
 81-100 grade 5 outstanding EMP (entrepreneurship as key and model social activity)

According to the obtained results and made evaluation scale can be hypothetically stated that the entrepreneurial motivation potential of Slovak economy and business students is low, and if we want to improve it we should make educational and cultural improvement in this sense.

4. Theoretical and practical value of the conducted research

This research provided us with the global formula for measuring entrepreneurship motivational potential, so we can on the systematic way compare the results from different countries and cultures. Because we also can measure the components of global entrepreneurship potential which has characteristics of entrepreneurship motivation predictors, we also have clear diagnostic tool for measuring the key indicators of the concept of entrepreneurial motivation potential.

In practical sense this means that on the ground of obtained data from this diagnostic tools we can propose different HRM practices in order to manage entrepreneurial potential. For example now we can practically propose the following HRM practices on the ground of obtained results from Slovak sample:

- a) To change the perception of low desirability of entrepreneurial profession there should change the impression of this profession. This could be made by the increasing the number of successful entrepreneurs, giving good opportunities to young and entrepreneurs which for the first time want to create its own jobs, to lower the perceived and real entrepreneurial barriers.
- b) Important suggestion is to stronger the entrepreneurial capacity by means of entrepreneurial education. Namely to stronger the motivation is important to internalize important knowledge i.e. knowledge about economic, managerial, innovational and ethical aspects of entrepreneurship, to have practice and to simulate entrepreneurial experience during study.

- c) To stronger the entrepreneurial motivation of young people in the context of personal variables it is important to „free the energy of the youth“ by internalizing more self-esteem and self-efficacy perception. Here is also important cultural change because „obedience and dependence culture“ is not connected with entrepreneurial culture, therefore should be created the culture which promotes economic freedom where is easy to start and conduct the business.
- d) The education system can also internalize important motivational factors such as: autonomy/freedom education, using abilities and challenge prone attitudes, promoting „earning money“ and „to take advantage of market opportunity“ attitude.

Entrepreneurship is primary mental and cultural phenomenon, therefore strongly depends on HRM practices in the whole society, especially in the educational institutions such as Economics & Business faculties.

5 Limitation of conducted research and proposal for further research

In high-quality psychometric research, there is a need to standardize questionnaires that are supposed to be valid in a specific cultural surrounding, therefore we used the questionnaires from different authors which has different cultural background (from the authors with European-Spanish, Chinese/USA, South-African), and supposed by “face validity” it will be also good measure for Slavic population i.e. Slovak Republic sample, but did not tested so created entrepreneurship questionnaire.

We assumed that combination of cross-cultural instrument from Liñán & Yi Wen Chen, 2009. and South-African (Malebana, 2014) measurement entrepreneurship intention and motivation measurement instrument will be the best solution for measurement of entrepreneurial motivation potential. For be sure such approach is the best one in strong psychometric sense there should be culturally testing the questionnaire in psychometric sense.

The other limitation of the conducted research is a limited sample which is conducted only in Slovakia sample on one Economics Faculty, so it would be better to have results from other “transition” countries, and have the possibility to compare the results from different contexts. We suggest that further research of

entrepreneurship motivation potential should be conducted in other transition economics of Europe, or even world, where different results can be expected-so such research would enable detailed testing the validity of measurement instrument. Another limitation in this concrete study is that it's focused on analyzing the groups perceptions without taking into account the gender. Also, the studied group could include postgraduate students of Economics, which could have more personal experience with entrepreneurship so obtain different results from this group. Results of this study can't also be generalized to students of other faculties (i.e. engineering students). Also limit of this concrete study is that the results are descriptive not conclusive. The research of the entrepreneurship motivation potential is in transition economies in a very early phase, and treatment by systematic HRM practices in order to manage it (improve it) also. Therefore there is a quite a large space for further research in the area of entrepreneurship motivational potential in transition countries but also all over the world.

Conclusion

This study conceptualised global measure for entrepreneurial management potential measurement. So it is found that global measure of motivation for entrepreneurship of Slovak economy and bussiness students were low. Their perceived entrepreneurial capacity were low, especially of easy start a business. They highly appreciated salaried job comparing to liberal and entrepreneurial jobs. Their entrepreneurship intentions were low especially measured effort and goal to be an entrepreneur. They consider that cultural general approval for entrepreneurial activity were lower than support of their friends and family. The main motivational

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factora for entrepreneurship were „to be own boss“ because authonomy and freedom and to have interesting job. They didn't perceived opportunity which supports entrepreneurship and perceive serious obstacles as lack of savings, high income tax, high labour costs and fees, compliance with government regulations, difficulty in obtaining finance and high risk in starting a new business.

It's expected that students of economy and bussiness have higher entrepreneurial motivation and according to this results there is opportunity to improve entrepreneurship motivation of students. According obtained results we can propose several HRM practices in order to manage (i.e. improve) entrepreneurial motivational potential such as:

- a) Organize education in important entrepreneurial knowledge (economic, managerial, innovative and ethical) in order to also improve entrepreneurial motivation.
- b) Organize educational practices which enable rising self-esteem and self-efficacy of young people so they internalize the attitude „Yes, I can start my own business and be successful entrepreneur“. This is connected with the cultural aspects of education, because some educational systems still prefer obedient and dependant pupils/ people what is not stimulative approach for more entrepreneurs and entrepreneurial activity .
- c) Lower the perception of entrepreneurial barierrrs i.e. deminish the real (objective) entrepreneurship barriers by making the real and psychological climate of „high economic freedom“ that highly encourage young people in doing his own business.

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