ACTA UNIVERSITATIS AGRICULTURAE ET SILVICULTURAE MENDELIANAE BRUNENSIS

Volume 65 198 Number 6, 2017
https://doi.org/10.11118/actaun201765061935

UNDERSTANDING STUDENT ENTREPRENEURS: DOERS, PROCRASTINATORS, DREAMERS, AND ABSTAINERS

Marian Holienka[1], Peter Gál[1], Zuzana Kovačičová[2]

[1]Department of Strategy and Entrepreneurship, Faculty of Management, Comenius University in Bratislava, Odbojárov 10, 820 05 Bratislava, Slovakia
[2]Department of Information Systems, Faculty of Management, Comenius University in Bratislava, Odbojárov 10, 820 05 Bratislava, Slovakia

Abstract

HOLIENKA MARIAN, GÁL PETER, KOVAČIČOVÁ ZUZANA. 2017. Understanding Student Entrepreneurs: Doers, Procrastinators, Dreamers and Abstainers. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis,* 65(6): 1935–1944.

Entrepreneurship as one of the potential career paths is an actual phenomenon among university students all around the world. However, as shown by recent GUESSS (Global University Entrepreneurial Spirit Students' Survey) findings, the action-intention patterns are rather varied. While a bunch of students already start their businesses (= "doers"), few of them declare their intention to start-up after completing their studies (= "procrastinators"), and even greater share of student population indicate a postponed intention to start a business in the mid-range future (= "dreamers"). Of course, a considerable proportion of students exhibit no inclination towards entrepreneurial career path (= "abstainers"). The aim of this exploratory study is to analyse differences between actual, would-be and „perhaps sometimes later" entrepreneurs, and entrepreneurial abstainers, among European university students. To do so, we utilize the 2016 GUESSS project individual-level data from 25 European countries (n = 68,828), search for similarities and differences between the above-mentioned groups of university students, and analyse robustness of our findings by investigating for drivers of individual involvement in entrepreneurial activity. Our study contributes to the body of knowledge on this under-researched perspective on youth and student entrepreneurship.

Keywords: entrepreneurship, students, activity, intention, postponement, realization

INTRODUCTION

Student entrepreneurship is an important phenomenon within the overall entrepreneurial dynamics. In environment of universities, students have access to broad knowledge and networks, and their student status gives them, in general, certainly more freedom and space for experimenting than after entering the "real" life with all its duties and responsibilities. However, as in the general population, while some students get engaged in the enterprising efforts or report interest to start their businesses in closer or less proximate future, the others remain distant. If we agree that having entrepreneurs and having enterprising and entrepreneurial people is beneficial for population in general, having student entrepreneurs is even more important. With entrepreneurial endeavors established already during the studies, the transition from student life to economic activity is smoother. Also, if an individual enters the entrepreneurial path in the beginning of the economically active life, it is more likely that he/she will tend remain on this path in the future career life. And even in case of exiting this path, entrepreneurial track record increases individual qualification and provides valuable experience that can be capitalized in the future professional career. These arguments are even more relevant in the context of current socio-economic challenges and changing nature of work and economy as such, especially for youth generation (Dvouletý and Lukeš, 2016).

There are several good preconditions to support student entrepreneurship, including (potential) exposure to educational and training programs, easy targeting of support services and schemes, unprecedented access to networks and knowledge, synergies from interactions and interdisciplinarity etc. However, efficient entrepreneurship support requires good understanding on why some individuals abstain from entrepreneurship, how entrepreneurial intentions are formulated and whether and how they convert into real activities. Thus, the aim of our study is to provide an initial exploration under an innovative perspective dividing student population into entrepreneurship doers, procrastinators, dreamers and abstainers. Moreover, we consult the robustness of this perspective with findings on drivers leading student individuals towards inclination to entrepreneurship. The main research question of our study is: what are the differences between student entrepreneurial doers, procrastinators, dreamers and abstainers?

Student Entrepreneurs, Intention and Action

Universities, Students and Entrepreneurship

Entrepreneurship has been taught at universities already for decades. According to Katz (2003), the first entrepreneurship course was offered at Harvard's Business School in United States in the February 1947. Gradually, other universities started adopting entrepreneurship into their curricula. Currently, majors in entrepreneurship or small business can be found on hundreds of higher education institutions worldwide. Moreover, universities have moved far behind providing only courses on entrepreneurship. Instead, entrepreneurship has become, besides educating students and conducting research, something like their third mandate (Jansen *et al.*, 2015). Universities produce new knowledge and innovation, and their scientific and pedagogical staff hand them on to young people who are supposed to apply the obtained know-how in practice. Part of students do not wait until the completion of their studies, but start to realize their talents not only through first employment experiences, but even through own entrepreneurial activities. Therefore, a category of student entrepreneurs arises.

According to Marchand and Hermens (2015), student entrepreneurs can be defined as individuals attending award classes at university and conducting innovative and revenue generating entrepreneurial activities. However, if we adopt broader definition of entrepreneurship (e.g. FFE-YE, 2012), we can consider all students involved in actively running any enterprising activities, i.e. acting upon identified opportunities and developed ideas, and transforming them into value for others, may this value be financial, cultural or social. While doing so, student entrepreneurs can take many advantages of university resources such as specialized professors, support services or spaces such as incubators, patent and copyright protections provided by the university and sometimes also their classroom learning (Mars *et al.*, 2008). Further, they might use universities and their faculty members or students to market products, services and processes. In such conditions, providing only entrepreneurship education alone is not enough. The role of universities in stimulating entrepreneurship has to be understood in a broader context. An integrated ecosystem should be created, with close linkages between science, engineering, business, law and other groups (Jansen *et al.*, 2015). As Jansen *et al.* (2015) state in their Student Entrepreneurship Encouragement Model (SEEM), universities should encourage students through three groups of activities, namely stimulating (creating awareness of the entrepreneurial opportunities, presenting role models and success stories, etc.), educating (teaching the necessary skills, business plan creation, etc.), and incubating (various forms of support to start-up teams).

Entrepreneurial Intention, Action and Their Drivers

According to the results of the systematic literature review on entrepreneurial intentions (Liñán & Fayolle, 2015), the decision to become an entrepreneur is influenced by a combination, respectively the interaction of several factors, including: core entrepreneurial intention model, personal level variables, entrepreneurship education, context and institutions and the entrepreneurial process.

The standard theoretical models to explain students' entrepreneurial intentions and ultimately entrepreneurial intentions are Shapero's model of the entrepreneurial event (Shapero, 1982) and Ajzen's (Ajzen, 1991) theory of planned behavior (TPB). In these intention-based models, entrepreneurship is seen as an intentional process. In the psychological literature, intentions have proven to be the best predictor of planned behavior. Entrepreneurial intentions are seen as the product of an individual's self-efficacy, attitude and the subjective norms toward entrepreneurial behavior (Krueger, Reilly, & Carsrud, 2000). According to these theories, entrepreneurial intentions are seen as one of the strongest predictors of entrepreneurial behavior.

Determinants of individual entrepreneurial intention and/or consequent involvement in entrepreneurship have been subject to theory development and empirical research for decades. Especially regarding students (or "youth" category, where students usually fall into), these drivers can be found among demographic attributes, individual personality, human capital and social capital characteristics, and environmental enablers and characteristics. Demographic characteristics include mainly gender and age, with being female inhibiting entrepreneurial activity (e.g. Zamfir *et al.*, 2013; Holienka *et al.*, 2016) and increasing age

being its driver (e.g. Minola *et al.*, 2014; Zamfir *et al.*, 2013; Simoes *et al.*, 2016). Also, in some countries, migrants have been identified to be more enterprising comparing to local populations (e.g. Kloosterman, 2010). Individual attributes studied for their effect on entrepreneurship include personality traits, such as risk-taking, need for achievement or autonomy, creativity, innovativeness or locus of control (Rauch and Frese, 2012), then entrepreneurship competencies (Unger *et al.*, 2011) and education. There are ambiguous evidences on effect of education in general (Davidsson and Gordon, 2012; Minola *et al.*, 2014), so its exploration is directed to more specific perspectives, such as exposure to special entrepreneurship education or entrepreneurship-related field of study (Holienka *et al.*, 2016). As for contextual factors, frequently established drivers of individual involvement are namely entrepreneurship-favoring climate and support from close social groups (e.g. Wyrwich *et al.*, 2016) and parent entrepreneurs (e.g. Lindquist *et al.*, 2015; Chlosta *et al.*, 2012; Laspita *et al.*, 2012).

MATERIALS AND METHODS

Our analysis is based on data from Global University Entrepreneurial Spirit Students' Survey, a worldwide academic study on entrepreneurial activities and related attributes among university students (Sieger *et al.*, 2016). The project collects data using an online survey instrument from population of higher education students using the convenience sampling. We utilize data from 2016 wave with coverage on 50 countries and total sample of 122,509 respondents. We focused our analysis on European countries only, with condition of minimum sample size of 100 respondents. This resulted into the sample of 68,828 individuals from 25 different European countries.

To classify the respondents according to their inclination to entrepreneurship, we computed a dummy variable labeled "action_intention" with four values (being an active or nascent entrepreneur, i.e. doer = 3; not being and entrepreneur yet, but indicating the planned career as entrepreneur after completing the studies, i.e. procrastinator = 2; indicating the plan to become entrepreneur five years after study, i.e. dreamer = 1; no entrepreneurial activity or plans to become an entrepreneur, i.e. abstainer = 0).

Our investigation on differences among entrepreneurship inclinators with comparison to abstainers, and on drivers of student individual entrepreneurial propensity, covered selected demographic characteristics, individual entrepreneurship-related attributes and contextual attributes related to university and personal background. Variables utilized in the analysis are described below.

The demographic characteristics included the following variables: gender (female = 0, male = 1), age category (18 – 19 = 1, 20 – 24 = 2, 25 – 29 = 3, 30 and more = 4), field of study (original category "law and economics incl. business sciences" considered as business = 1; other categories aggregated as non-business = 2), number of years to finish university studies (current year (t) = 0, t + 1 = 1, t + 2 = 2, and t + 3 and more = 3), and being a migrant (lives up to 5 years in the current country of residence = 1, no = 0).

The examined individual attributes included locus of control (Likert-type scale 1–7 comprising of 3 items), attitude to entrepreneurship (Likert-type scale 1–7 comprising of 4 items: attractiveness of the entrepreneurial career, would become entrepreneur if had opportunities and resources, satisfaction if became entrepreneur, preferring entrepreneurship to other options) – both scales were tested for reliability and values of Cronbach's alpha were acceptable (locus of control: 0.726, attitude towards entrepreneurship: 0.953). Also, self-assessment of selected entrepreneurial competences was included in the individual attributes, namely: identifying opportunities and creating products, managing innovations and commercializing new ideas, leadership and networking, and managerial competencies. In regression analysis, we employed the variable representing total self-assessment score for all beforementioned selected competencies.

The contextual attributes covered the university context as well as family and personal background characteristics. The first included perception of university entrepreneurial atmosphere (Likert-type scale 1–7 comprising of 3 items: assessing atmosphere inspiring to develop new business ideas, favorable climate for becoming an entrepreneur and encouragement for students to start entrepreneurial activities; Cronbach's alpha = 0.901) and intensity of entrepreneurship education (no entrepreneurship course = 1, elective course = 2, compulsory course = 3, entire entrepreneurship study program = 4). The latter included three variables indicating perceived support to become entrepreneur from close family, friends and fellow students (each one on Likert-type scale 1–7, very negatively – very positively), as well as a dummy variable indicating whether an individual has parent entrepreneurs (none, mother only, father only, both parents entrepreneurs). In regression analysis, we employed the variable indicating whether an individual has none, one or both parents entrepreneurs (none = 0, one of them = 1, both parents = 2).

Our analysis of students' entrepreneurship doers, procrastinators, dreamers and abstainers comprises of three main steps. In the first step, we look at distribution of our sample into entrepreneurship inclination categories in total, as well as in different countries. This provides a basic insight into proportions and their patterns with general as well as country-specific perspective. The second step of our analysis is aimed at exploration of differences between doers, procrastinators, dreamers and

abstainers in terms of the examined demographic characteristics, individual entrepreneurship-related attributes and contextual attributes related to university and personal background. For each of the variables in our analysis, we either provide variable frequencies for the examined categories of entrepreneurship inclinators (doers, procrastinators, dreamers) and abstainers, or mean value of the variable for the examined categories. As we use scales with different number of items, mean values are normalized to interval 0–1. Results of our analysis are presented in structured tables that are further described and discussed. Finally, the third step of our analysis, that serves as a robustness check and further expands our inquiry into understanding the nature of student entrepreneurship inclination, comprises of an ordinal logistic regression analysis. This type of analysis is used to predict an ordinal dependent variable (in our case, this is an intensity of entrepreneurial inclination represented by "action_intention" variable) and determine which of the examined independent variables (demographic characteristics, individual and contextual attributes) have a statistically significant effect on this dependent variable – odds that one group had a higher/lower value of the inclination towards entrepreneurship (in case of categorical independent variables) or effect of a single unit increase/decrease on odds of inclination towards entrepreneurship having a higher/lower value (in case of continuous independent variables). To estimate the parameters of the models we used IBM SPSS Statistics 24 software. The significance of parameters was tested using Wald z-statistics. Maximum likelihood estimations were used to calculate the logit coefficients denoting changes in the log odds of the dependent variable.

RESULTS AND DISCUSSION

In the first part of this section we present the basic characteristic of our sample in terms of inclination to entrepreneurship in general, as well as in different countries. As can be seen in Tab. I, almost two thirds of European university students completely abstain from entrepreneurship. On contrary, more than each sixth university student in Europe is currently running or actively attempting to start his/her own business activity (i.e. "doer"). Also, there are students who indicate their wish to enter the entrepreneurial path, but postpone this step to the future. While a smart part (1.4% of university student population) procrastinates starting a business to the end of their studies, almost 19% of students dreams about starting a business in a more distant future – in five years after completion of the university studies.

As can be seen from Tab. II, differences in students' entrepreneurial inclination across European countries are considerable. Most abstainers can be found in Germany, Switzerland and Austria, while the lowest percentage of students declaring no interest in entrepreneurship can be found in Belarus, Russia and FYR Macedonia. Interestingly, while the inclination is higher in the latter countries in all its categories, the highest relative difference is observed in the share of "procrastinators". Therefore, the results suggest a pattern related to characteristics of country or group of countries. This would correspond with the pattern observed by other studies on general population linking country-level factors such as competitiveness level (e.g. Kelley *et al.*, 2016), national culture (e.g. Pinillos and Reyes, 2011) or overall institutional arrangements (e.g. Stenholm *et al.*, 2013) to entrepreneurial activity. However, closer inspection of this direction is behind the scope of this paper, and is encouraged for further research.

I: *Inclination to entrepreneurship among university students, entire sample*

	%	Sample size
Doers	16.2%	11,160
Procrastinators	1.4%	990
Dreamers	18.8%	12,914
Abstainers	63.5%	43,740

Source: GUESSS 2016 international data, own calculations

II: *Doers, procrastinators and dreamers in selected European countries*

Rank[1]	Country	Doers	Procrastinators	Dreamers	Abstainers
25	Germany	9.2%	0.4%	11.8%	78.6%
24	Switzerland	9.1%	0.8%	15.6%	74.5%
23	Austria	11.2%	0.9%	15.0%	72.9%
…					
3	FYR Macedonia	31.5%	3.2%	21.8%	43.5%
2	Russia	28.1%	4.2%	28.2%	39.4%
1	Belarus	24.3%	3.5%	35.1%	37.2%

[1] countries ranked according to abstainers, ascending order
Source: GUESSS 2016 international data, own calculations

The following part of the results section represents the second step of our analysis. We explored the differences among different categories of inclination to entrepreneurship as well as in comparison to entrepreneurship abstainers in selected demographic characteristics (Tab. III) and individual and contextual attributes (Tab. IV).

As can be seen from our results in Tab. III, there are considerable differences between the examined categories in certain demographic attributes. First, as for gender, male students exhibit almost twice as high involvement in "doing" entrepreneurship than their female counterparts. On contrary, shares of procrastinators and especially dreamers among genders are very similar, while the rest of the difference between the two is mirrored in share of abstainers. Thus, it seems that while entrepreneurial activity is domain of men, being a dreamer or procrastinator seems to be gender-indifferent.

Second, as for age, our findings show that the share of doers increases by age category, while the share of dreamers decreases. The share of procrastinators among student population shows a U-shaped curve pattern, and is the highest within the youngest age category. The share of abstainers shows a reverse U-shaped pattern peaking in 25–29 category. These findings suggest that dreaming about future entrepreneurship career is more likely for younger students. With the increasing age, students tend to be more "real" about entrepreneurship (share of dreamers in 30+ category is almost three times lower compared to 18–19 category). The highest activity and drop in abstainers in the 30+ category could be explained by its specific nature, as it frequently comprises of more senior active professionals acquiring further qualification and degrees (e.g. PhD., MBA).

Third, our results indicate a clear linear pattern in relationship between number of years to complete university studies and inclination to entrepreneurship. The closer are students to finish their studies, the more doers, the less procrastinators or dreamers, but also the more abstainers are found within their population. Thus, like in case of age, it seems that as students are getting closer to the edge of the "real life", the more realistic they are about their future career, and those who have not yet started a business are beginning to give up entrepreneurial dreams.

Fourth, as for the field of study, different pattern in inclination to entrepreneurship is indicated comparing business to non-business students. While business students show higher entrepreneurial action or intention in all its stages, there are more abstainers among non-business students. This is obvious to the extent that business students are, by definition, being prepared to manage and run businesses (including their own ventures). However, it is usually the non-business students who hold certain domain of expertise in their field of study that could be capitalized upon via starting their business.

Finally, there are significantly more doers among migrant students. As the share of procrastinators and dreamers is very similar as among non-migrants, the most of the difference lies in share of doers and abstainers. Such pattern corresponds well with the observed situation in general populations in developed economies (where most European countries fall into) with higher early-stage entrepreneurial activity of migrants compared to non-migrants (Xavier *et al.*, 2013). As students are the future economically active individuals, they will most likely contribute to preserve this disparity also in the future.

As can be seen from Tab. IV, there is no general pattern for all examined individual and contextual attributes, but each of the attributes provides a specific insight to the nature of the examined categories of entrepreneurial inclinators and abstainers.

III: *Demographic characteristics vs. entrepreneurial action and intention*

Attribute		Doers	Procrastinators	Dreamers	Abstainers
Gender	Female	12.3%	1.3%	19.1%	67.3%
	Male	22.4%	1.6%	18.2%	57.8%
Age categories	18–19	13.5%	3.0%	27.4%	56.1%
	20–24	14.7%	1.5%	20.4%	63.5%
	25–29	16.0%	0.8%	15.7%	67.4%
	30+	26.2%	1.7%	11.7%	60.4%
Years to finish	t + 0	16.9%	0.8%	16.2%	66.1%
	t + 1	16.6%	1.1%	17.1%	65.2%
	t + 2	15.7%	1.6%	19.7%	63.0%
	t + 3 +	15.4%	2.3%	22.8%	59.5%
Field of study	Business	19.4%	1.8%	21.9%	56.9%
	Non-business	14.8%	1.3%	17.4%	66.6%
Migrant	Yes	24.9%	1.3%	21.1%	52.8%
	No	15.9%	1.5%	18.9%	63.8%

Source: GUESSS 2016 international data, own calculations

First, in case of having an internal locus of control, our results indicate moderate gradual increase of this attribute with entrepreneurial intention and its increasing seriousness. The strongest internal locus of control is exhibited by doers, while the lowest mean value is shown within abstainer population. Despite indication of a particular pattern, the differences between categories are relatively moderate.

Second, in case of attitude to entrepreneurship, there is no particular pattern of difference within entrepreneurship inclinators category. Thus, we can expect that positive attitude itself would not lead individuals to stop dreaming about own business or procrastinating its start, and make them actually start it up. On contrary, significantly lower attitude is exhibited by abstainers, which is perfectly understandable, as the scale measures attitude to become an entrepreneur.

Third, also in the case of entrepreneurial competences, there is no considerable difference nor any gradual pattern among inclinators. The differences are rather low, but in all cases, procrastinators outperform doers and dreamers. However, significant differences are observed in case of abstainers, who indicate lower self-assessment in each of the considered competences. Therefore, our findings suggest there is a relationship between perceived level of entrepreneurship competencies and interest in entrepreneurial career. This pattern could originate in effort of inclinators to develop their qualities, and lack of interest among abstainers. Looking at particular competencies, the biggest difference between inclinators and abstainers is seen in ability to identify opportunities and create new products, qualities that are relevant for starting a new business. Thus, entrepreneurship training for future potential entrepreneurs should especially consider these skills.

Fourth, our results indicate rather small differences between doers, procrastinators and dreamers in perceiving university entrepreneurial atmosphere. Interestingly, most positive perception is observed among dreamers. As for abstainers, they indicate slightly less positive atmosphere in favor of entrepreneurship at their universities.

Fifth, our entrepreneurship inclination distribution analysis within categories of entrepreneurship education intensity shows several interesting findings. For example, there is almost the same share of dreamers within students who experienced any training, irrespective its intensity. Also, among students without any training, there are only 11.1% doers and as many as 70.5% abstainers. On contrary, among students enrolled in special programs one can find more than one third active entrepreneurs. Interestingly, 4 in 10 such students don't consider entrepreneurial career.

Sixth, our findings indicate that perceived support from family, friends and peers (each assessed separately) if one would become an entrepreneur is very similar among doers, procrastinators and dreamers. On contrary, abstainers indicate lower support from each of the above mentioned social groups. However, this difference is quite moderate, so we are not able to determine the clear pattern from our data.

Finally, we looked at distribution of activity and intention within categories determined by parent entrepreneurship. Interestingly, there is similar share of both procrastinators or dreamers, irrespective if an individual has entrepreneur

IV: *Individual and contextual attributes vs. entrepreneurial action and intention*

Attribute		Doers	Procrastinators	Dreamers	Abstainers
Loc. of control		0.749	0.716	0.706	0.681
Attitudes		0.822	0.805	0.765	0.429
Entre. comp.	Opp. & creat.	0.708	0.713	0.633	0.479
	Soft skills	0.754	0.760	0.704	0.583
	Innovation	0.728	0.734	0.666	0.518
	Management	0.757	0.773	0.703	0.527
Uni. atmosph.		0.868	0.858	0,892	0.762
Educ. intens.	No course	11.1%	1.4%	17.1%	70.5%
	Elective	22.6%	1.5%	21.2%	54.7%
	Compulsory	20.4%	1.4%	21.6%	56.6%
	Program	36.4%	1.8%	21.3%	40.5%
Support from	Family	0.822	0.823	0.818	0.707
	Friends	0.832	0.827	0.830	0.733
	Peers	0.760	0.773	0.768	0.692
Parents entre.	None	14.2%	1.4%	18.0%	66.4%
	Father only	18.9%	1.6%	21.1%	58.5%
	Mother only	19.4%	1.6%	20.1%	58.9%
	Both	24.0%	1.7%	18.8%	54.8%

Source: GUESSS 2016 international data, own calculations

parent(s) or not. However, we can observe a clear difference between share of doers and abstainers. There are 10% more doers and almost 12% less abstainers among students whose both parents are entrepreneurs, compared to students with non-entrepreneur parents. Students with one parent entrepreneur are somewhere in the middle between the two, while it makes no difference whether it is a mother or a father who runs a business.

The final part of the results section presents the findings of ordinal logistic regression conducted to identify factors influencing the level of students' entrepreneurial propensity (Tab. V). This perspective serves as a robustness check to findings obtained from explorations in the previous step of our analysis, and further expands our understanding of the investigated phenomenon.

As can be seen from Tab. V, statistically significant effect on odds of intensity of entrepreneurship inclination has been indicated in case of twelve of our explanatory variables.

In case of demographic characteristics, gender proved its significant influence on entrepreneurial propensity, as odds of female students showing higher inclination towards entrepreneurship was .858 times that of male students. This finding corresponds with the pattern indicated in Tab. III. above, showing considerable difference in doers and abstainers, but quite similar share of procrastinators and dreamers among genders. Secondly, our results prove significant influence of decreasing number of years to accomplish university studies, with odds of inclination towards entrepreneurship decreasing with approaching end of studies (e.g. odds of students in their last year of study showing higher inclination towards entrepreneurship was .746 times that of students with 3 or more years to finish). This finding also corresponds with pattern discovered in Tab. III. above, as with approaching end of studies, there are slightly more doers, but also more abstainers and less procrastinators and dreamers, which means becoming more real about entrepreneurship and staring doing it (in fewer cases) or leaving dreams and aspirations behind (a case of most former dreamers and procrastinators). Finally, migrant status proved its significance, with odds of non-migrant students' increased entrepreneurship inclination being .749 times of that of migrant students. Again, this fits to the pattern of considerably higher proportion of doers and lower share of abstainers among students with migrant background, compared to their non-migrant counterparts.

As for individual attributes, our results suggest significant effect of all three examined attributes on students' inclination towards

V: *Modelling students' entrepreneurship inclination (ordinal logistic regression results)*

Variable	Coefficient	Std. err.	Wald	P value	Odds ratio
Gender (female = 0)	-.154	.021	52.517	.000	.858
Age category 18-19	.122	.055	4.890	.027	1.130
Age category 20-24	.029	.037	.641	.423	1.030
Age category 25-29	-.101	.041	6.228	.013	.904
Age category 30+	.000				
Field of study (bus. = 1)	-.044	.023	3.752	.053	.957
Years to finish: 0	-.293	.033	76.415	.000	.746
Years to finish: 1	-.247	.030	66.534	.000	.781
Years to finish: 2	-.137	.031	20.046	.000	.872
Years to finish: 3 +	.000				
Migrant (no = 0)	-.289	.043	44.569	.000	.749
Locus of control	-.039	.004	103.435	.000	.962
Attitude to e-ship	.225	.002	8885.378	.000	1.253
Entre. competences	.024	.002	220.188	.000	1.024
University atmosphere	-.014	.002	35.597	.000	.986
Education intensity	.227	.011	456.336	.000	1.255
Support from family	.030	.010	9.400	.002	1.030
Support from friends	-.013	.013	.947	.330	.987
Support from fellow stud.	-.060	.010	36.837	.000	.941
Parents entre. (none = 0)	-.116	.034	11.614	.001	.891
Parents entre. (one = 1)	-.055	.038	2.114	.146	.946
Parents entre. (both = 2)	.000				
-2 Log Likelihood	75452.989				
Nagelkerke pseudo R2	.399				

Source: GUESSS 2016 international data, own calculations

entrepreneurship. First, higher self-assessment of entrepreneurial competences is positively related to increased intensity of student inclination towards entrepreneurship. This finding cannot be contrasted to analysis displayed in Tab. IV., as it considered four partial subsets of competences and showed ambiguous results. However, perhaps overall self-assessment plays more consistent role in general inclination towards entrepreneurship than partial self-perceptions of specific types of competences. Second, interestingly, individuals with stronger locus of control exhibit slightly lower odds of increased entrepreneurial propensity. This result challenges the moderate pattern observed in Tab. IV. above and suggests that influence of this attribute on intensity of involvement in entrepreneurship is questionable. Third, our results also indicate positive effect of attitude towards entrepreneurship, which is a rather self-explanatory finding in line with results of exploration presented in Tab. IV. above.

Finally, as far as contextual attributes are concerned, several factors proved significance in relation to entrepreneurial inclination levels among university students' population. First, perceiving university entrepreneurial atmosphere seems to decrease odds of showing higher inclination towards entrepreneurial action. This is in line with above mentioned findings (Tab. IV.) that show the highest evaluation of atmosphere among dreamers and its drop among procrastinators and doers. Second, we found significant positive relationship between intensity of entrepreneurship education and odds of inclination towards entrepreneurship having a higher value. This is well in line with our previous findings displayed in Tab. IV above, where the highest share of doers and lowest share of abstainers can be found among students enrolled in special business-related programs. Third, while increase of perceived support from family positively influences odds of increased inclination towards entrepreneurship, the effect of increase of perceived support from fellow students is, surprisingly, opposite. This clarifies the pattern observed in results above (Tab. IV.), where perceived support from schooling peers was lower for doers than for procrastinators and dreamers. Again, this factor seems to encourage rather dreaming or aspirations than actual action. Also, possibly, those who already started businesses might be less supported and rather excluded from mainstream masses. This is, according to our opinion, an interesting finding that provides direction for future examinations. Fourth, the important role of family influence is further underlined by significant influence of parent entrepreneurship, as odds of students with non-entrepreneur parents showing higher inclination towards entrepreneurship was .891 times that of students coming from fully entrepreneurial families, i.e. with both parents being entrepreneurs (reference category). This finding corresponds well with our results presented above in Tab. IV.

Summing up, there is a difference in individual entrepreneurship-related and contextual attributes between abstainers and inclinators (either in terms of action or close/future intention). However, the pattern observed after decomposing inclinators into doers, procrastinators and dreamers is not always clear. Some robustness check has been provided by ordinal logistic regression analysis, which also further clarified certain identified relationships between explanatory factors and students' propensity towards entrepreneurship. In general, there seems to be a relationship between individual maturity and "seriousness" of entrepreneurial propensity. As students come closer to "real" life, they are also becoming more "real" about entrepreneurship. There are almost twice as many doers and nearly two thirds less dreamers between 18–19 and 30+ age groups. Also, the same pattern can be observed in case of years to completion of studies. Thus, it seems that even though some part of student population can be attracted by developing their entrepreneurship-relevant attributes and influence from supportive environment and background, the actual decision to become entrepreneurs comes with the finishing studies and approaching to real life outside universities with all its duties and responsibilities.

Also, university atmosphere itself and supportive behavior of schoolmates seem not to be encouraging enough entrepreneurial efforts among students. On contrary, while they seem to enhance dreaming about entrepreneurship or procrastinating business aspirations, they are not sufficient drivers for actual action.

Thus, to promote entrepreneurship among students, it is necessary but not sufficient to create a favorable university climate and develop entrepreneurial competencies and qualities. It generates a mass of inclinators, but it is simply not enough. In addition, the inclination should be captured and nurtured until the very end of the study, to convert the most of it into real entrepreneurial activity. The enthusiasm about entrepreneurship among young students is gradually reducing as being confronted with obstacles and challenges related to entrepreneurship in "reality". Universities that aim to encourage entrepreneurship among their students should guide them throughout their entire studies and instruct how to overcome these barriers. To do so, universities need concrete actions in field of education, capacity building and providing support initiatives, facilities and services. Also, considerable role in determining whether students start businesses (e.g. become doers) is played by factors established as drivers on general population, such as gender and migrant status. Thus, we might conclude that these generally present patterns are being transferred to university environment which does not moderate them.

As for limitations of our study, despite extensive and quality dataset and robust analysis, we

understand that several limitations exist in our approach. First, while the scope of selected explanatory variables is rather broad, each of them offers further space for deeper inquiry. For example, it would be interesting to explore the character of education provided, its methods, classroom innovation, etc., or also the nature and reason of student migration, or social status of migrant students. Also, the nature of doers' activity can be varied. For example, some of nascent endeavors will never make it to real business that delivers and captures value, some of student businesses have nature of "quasi-businesses" or "part-time jobs", while some of them might be high-tech start-ups. Also, we do not know whether their activity is driven by opportunity or necessity. The above-mentioned limitations are related to our dataset, and they provide certain guidelines for further inquiry. Furthermore, in the examined phenomena, country and regional specific influences could play an important role, which is not reflected in our analysis, as it would be considerably out of the scope of this paper. Understanding the discussed limitations, this study brings to the table valuable and interesting results of an initial exploration effort, and it introduces a baseline perspective on relation between different intensity of students' inclination towards entrepreneurship and selected explanatory factors.

Further entrepreneurship research should inquire deeper into the evolution of entrepreneurial intention and action of students throughout their studies. Longitudinal approach could be useful with this respect, as well as deeper (even qualitative) inquiry into particular factors, together with approaches reflecting regional or country specifics. Our exploratory study has provided several potential directions with this respect. Role of maturing and approaching end of studies, adoption of competencies or exposure to different types of training are examples of such directions for individual-level studies, together with studying an effect of national culture, cultural and social norms on entrepreneurship, and national-level economic indicators.

CONCLUSION

The findings of our exploratory study on differences between doers, dreamers and procrastinators, in comparison with entrepreneurship abstainers lead us into following recommendations and implications.

Entrepreneurship education and support at universities should be customized according to the level of inclination to entrepreneurship. There are many doers that are interested in other things (helpful for their nascent or active activities) than the rest of inclinators. Also, dreamers should be guided to become doers instead of abstainers. And, equally important is the education among current abstainers, who should be linked to opportunities to discover their enterprising talents and utilize them according to their professional aspirations and personal preferences. Here, interdisciplinarity is the key. Students with lack of entrepreneurship education and/or coming from non-business fields of study are often equipped with specific proficiency suitable for commercialization. Thus, they should be linked to business students with higher entrepreneurial appetite. Finally, support at universities should be provided to students during their entire studies, building on initial enthusiasm and helping them to create sustainable entrepreneurial activities. The support of universities shall not be limited to general education and creation of favorable climate and supportive environment. In addition, concrete actions and instruments shall be developed and systematically provided to student populations. They should provide quality entrepreneurship education and training together with support services and facilities. Focus should be on increasing entrepreneurial competences and attitudes towards entrepreneurship, leveraging the effects of generally established factors and addressing their drawbacks.

Acknowledgements

This paper is based on data from Global University Entrepreneurial Spirit Students' Survey – GUESSS. Comenius University in Bratislava, Faculty of Management is the national GUESSS coordinator in Slovakia.

This work was supported by the Slovak Research and Development Agency under the contract No. APVV-14-0647.

REFERENCES

AJZEN, I. 1991. The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2): 179–211.

CHLOSTA, S. et al. 2012. Parental role models and the decision to become self-employed: The moderating effect of personality. *Small Business Economy*, 38(1): 121–138

DAVIDSSON, P. and GORDON, S. 2012. Panel Studies of New Venture Creation: A Methods Focused Review and Suggestions for Future Research. *Small Business Economics*, 39(4): 853–876.

DVOULETÝ, O. and LUKEŠ, M. 2016. Review of Empirical Studies on Self-Employment out of Unemployment: Do Self-Employment Policies Make a Positive Impact? *International Review of Entrepreneurship*, 14(3): 361–376.
FFE-YE. 2012. *Impact of Entrepreneurship Education in Denmark – 2011*. Odense: The Danish Foundation for Entrepreneurship – Young Enterprise.
HOLIENKA, M., PILKOVA, A. and JANCOVICOVA, Z. 2016. Youth Entrepreneurship in Visegrad Countries. *Entrepreneurial Business and Economics Review*, 4(4): 105–121.
JANSEN, S. et al. 2015. How education, stimulation, and incubation encourage student entrepreneurship: Observations from MIT, IIIT, and Utrecht University. *The International Journal of Management Education,* 13(2): 170–181.
KATZ, J. A. 2003. The chronology and intellectual trajectory of American entrepreneurship education: 1876–1999. *Journal of Business Venturing,* 18(2): 283–300.
KELLEY, D., SINGER, S. and HERRINGTON, M. 2016. *Global Entrepreneurship Monitor 2015/16 Global Report*. London: Global Entrepreneurship Research Association.
KLOOSTERMAN, R. C. 2010. Matching opportunities with resources: A framework for analysing (migrant) entrepreneurship from a mixed embeddedness perspective. *Entrepreneurship and Regional Development*, 22(1): 25–45.
KRUEGER, N. F., REILLY M. D. and CARSRUD, A. L. 2000. Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5): 411–432.
LASPITA, S. et al. 2012. Intergenerational transmission of entrepreneurial intentions. *Journal of Business Venturing*, 27(4): 414–435.
LINAN, F. and FAYOLLE, A. 2015. A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11(4): 907–933.
LINDQUIST, M., SOL., J. and VAN PRAAG, M. 2015. Why Do Entrepreneurial Parents Have Entrepreneurial Children? *Journal of Labor Economics*, 33(2): 269–296.
MARCHAND, J. and HERMENS, A. 2015. Student Entrepreneurship: a Research Agenda. *International Journal of Organizational Innovation*, 8(2): 266–282.
MARS, M. M., SLAUGHTER, S. and RHOADES, G. 2008 The State-Sponsored Student Entrepreneur. *The Journal of Higher Education*, 79(6): 638–670.
MINOLA, T. and CRIACO, G. 2014. Are youth really different? New beliefs for old practices in entrepreneurship. *International Journal of Entrepreneurship and Innovation Management*, 18(2/3): 233–259.
PINILLOS, M.-J. and REYES, L. 2011. Relationship between individualist–collectivist culture and entrepreneurial activity: evidence from Global Entrepreneurship Monitor data. *Small Business Economics*, 37(1): 23–37.
RAUCH, A. and FRESE, M. 2012. Born to Be an Entrepreneur? Revisiting the Personality Approach to Entrepreneurship. In: BAUM, J. R. et al. (Eds.), *The Psychology of Entrepreneurship*. New York, NY: Psychology Press.
SHAPERO, A. 1982. Social Dimensions of Entrepreneurship. In: KENT, C. et al. (Eds.). *Encyclopedia of Entrepreneurship*. Englewood Cliffs: Prentice-Hall, pp. 72–90.
SIEGER, P., FUEGLISTALLER, U. and ZELLWEGER, T. 2016. *Student Entrepreneurship 2016: Insights From 50 Countries*. St. Gallen/Bern: KMU-HSG/IMU.
SIMOES, N., CRESPO, N. and MOREIRA, S. B. 2016. Individual determinants of self-employment entry: What do we really know? *Journal of Economic Surveys*, 30(4): 783–806.
STENHOLM, P., ACS, Z. J. and WUEBKER, R. 2013. Exploring country-level institutional arrangements on the rate and type of entrepreneurial activity. *Journal of Business Venturing*, 28(1): 176–193.
UNGER, J. M. et al. 2011. Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, 26(3): 341–358.
VESTERGAARD, L., MOBERG, K. and JØRGENSEN, C. (Eds.). 2012. *Impact of Entrepreneurship Education in Denmark – 2011*. Odense: The Danish Foundation for Entrepreneurship – Young Enterprise.
WYRWICH, M., STUETZER, M. and STERNBERG, R. 2016. Entrepreneurial role models, fear of failure, and institutional approval of entrepreneurship: A tale of two regions. *Small Business Economics*, 46(3): 467–492.
XAVIER, S. R. 2013. *Global Entrepreneurship Monitor 2012 Global Report*. London: Global Entrepreneurship Research Association.
ZAMFIR, A. M. et al. 2013. Entrepreneurship among higher education graduates in 13 European countries. *Theoretical and Applied Economics*, 20(11): 73–82.

Contact information

Marian Holienka: marian.holienka@fm.uniba.sk
Peter Gál: peter.gal@fm.uniba.sk
Zuzana Kovačičová: zuzana.kovacicova@fm.uniba.sk