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THE ROLE OF UNIVERSITIES IN SUPPORTING ENTREPRENEURIAL INTENTIONS OF STUDENTS TOWARD SUSTAINABLE ENTREPRENEURSHIP*

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Abstract. Entrepreneurship education should develop entrepreneurial people and aspiration by equipping individuals with the appropriate knowledge and skills to initiate and sustain enterprises. The concept of entrepreneurial intention becomes an interesting question when analysing the efficiency of university education in EU countries. The main aim of this paper is to find out whether universities support entrepreneurial intentions toward sustainability by providing necessary knowledge and skills. The conclusions are based on the opinions of students collected by the surveys conducted at Polish, Czech, Hungarian and Slovak universities in 2018/2019. The general conclusion is that in all studied countries the support is expected by students, but it seems to be insufficient in the area of knowledge provided by the university.

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1. Introduction

Entrepreneurship since ancient times was connected, whether in terms of economic or psychological aspects, with exploration and implementation of new forms of development and the change of social status by the active individuals, societies and nations. For this reason, the interest of the researcher's head to the people who decide to start their own business. The variety of questions revolves around their characteristics and reasons for such a decision, around the concept of entrepreneurial activities and entrepreneurship. Entrepreneurial intentions are the expectation of individuals to start a business (Bosma et al., 2012; Grancay et al., 2015). Individuals undertake entrepreneurship for two reasons: to exploit a potential opportunity or out of necessity (Beynon et al., 2016; Lemańska-Majdzik & Sipa, 2015). The expansion of entrepreneurial activities i.e. internationalization is about conducting activities beyond the borders of the home country, crossing regional borders and being represented in different sectors of the national economy (Mura, 2019). Entrepreneurial intent can be personally, socially or even culturally driven (Autio et al., 2001; Jašková, 2019). The researchers constantly try to identify the factors of its intensification and measure the effects of entrepreneurial intent in long term perspective. Many recent researches on the relation of personality characteristics and entrepreneurship focus on the role of personality in the formation of entrepreneurial intentions and resulting business performances (Hmieleski & Baron, 2009; Zhao et al., 2010). However, already in 1990, Baumol calls for formal institutions to channel entrepreneurial energy into more productive activities. One of the most important groups influencing the entrepreneurial intention and its transformation into formalized entrepreneurial activity (enterprise) are higher education institutions. There are research studies focused on the connection between the university's education and entrepreneurial intentions of their students from several perspectives (Autio et al., 2001; Zyminkowska et al., 2019, Papadaki). Some of them are focused on specific target group of students (Barba-Sánchez & Atienza-Sahuquillo, 2018). University graduates should represent the driving force of the local economy thanks to their acquired knowledge, skills and natural intelligence (Belás et al., 2017; Girdzijauskaite et al., 2019).

The importance of effective education creates a research gap in the need to make comparisons between education systems in different countries in order to identify and implement best practices. This is what's new in the article that makes comparisons in four countries from the V4 group. Main research problem developed in this article is focused on the students' perception of support that provides their universities in case of their entrepreneurial intention creation.

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2. Theoretical Background

The need for entrepreneurial knowledge, skills and activity in all areas of life becomes more imperative, and education plays a crucial role in creating an entrepreneurial society and business culture. Organisations recognize the need for knowledge management on a strategic level and they use the appropriate tools (Bencsik et al., 2019). The number of educational programs in entrepreneurship at all levels of education continues to grow worldwide. Graduates of economic universities should be treated as the driving force of any economy due to the volume of their knowledge and natural intellect. Perspective future entrepreneurs belong to a group of people who, with their creativity and activity, are helping their countries to develop (Dvorsky et al., 2018). Entrepreneurship education should develop entrepreneurial people and aspiration by equipping individuals with the appropriate knowledge and skills to initiate and sustain enterprises (Kadir et al., 2012). Although these education programs vary by organizational structure, table of contents, methodology and educative techniques, all of them are created due to similar themes - stimulating the economic development of the environment in which they operate (Peterka et al., 2015). Reviews of the literature on enterprise and entrepreneurship education provide some evidence that these programs are successful in encouraging entrepreneurs to start businesses or improve the performance of businesses (Peterman & Kennedy, 2003).

Policymakers are also convinced that increased levels of sustainable entrepreneurship can be reached through education and especially entrepreneurship education. Sustainability behaviour can be predicted by intentions Entrepreneurship education has a positive influence on the development of the entrepreneurial spirit of young people, their intentions towards starting their own business, their employability and finally their role in society (Jakubiec, 2016). Therefore, a number of EU Member States have successfully introduced national strategies for entrepreneurship education or made entrepreneurial learning a mandatory part of school curricula – but more is needed. The important issue of students' entrepreneurship is their support. The practice showed, that the impact of entrepreneurial intervention according to Svabova et al. (2019) is rather short term in case of entrepreneurial sustainability. The European Commission's initiatives promoting entrepreneurship are summarized in an Entrepreneurship 2020 Action Plan, which is the newest version of several previous documents promoting entrepreneurship in EU. It aims to reignite Europe's entrepreneurial spirit through entrepreneurial education and training to support growth and business creation (European Commission, 2019; Ivanova et al., 2015).

2.1 Entrepreneurial Intentions

Entrepreneurial intention is a consolidated and rapidly developing area of research within the field of entrepreneurship, with a growing number of studies using entrepreneurial intentions as a significant theoretical framework (Fayolle & Liñán, 2014). The increasing interest in exploring the factors that build one's entrepreneurial intention is due to the fundamental role that entrepreneurs and entrepreneurial activities play in fostering economic and social development (Jünger & Piskorzová, 2009; Bagheri & Pihie, 2014, Baubonienė et al., 2018). Policymakers believe that more entrepreneurship is required to reach a higher level of economic growth. Indeed, empirical research promotes positive linkages between entrepreneurial activity and economic outcomes such as innovation and economic growth (Štverková & Humlová, 2016; Pellešová, 2016, Horecký & Blažek, 2019, Fabus, 2015, Shuyan & Fabus, 2019).

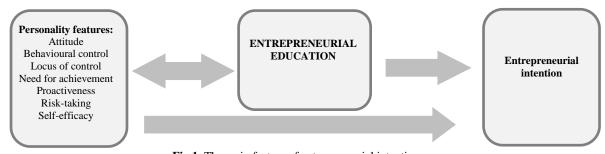
The literature does not provide a universally acceptable definition of the term "entrepreneurial intention". An intention can be defined as an anticipated outcome that guided by planned actions. In the entrepreneurship context, intention can be identified by the property needs to create a new venture in the business process, and as a predictor of the new reliable company (Kadir et al., 2012). Karabulut (2016) considers that entrepreneurial intention initiates entrepreneurial actions. Entrepreneurial intention shows the objective of an entity to choose entrepreneurship as a professional career. People who have entrepreneurial intentions plan to take calculated risks, gather required resources and create their venture. Hmieleski & Corbett (2006) stated that entrepreneurial

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intentions can be defined as the intentions toward starting a business with high growth potential. According to Thompson (2009, 676), the individual entrepreneurial intent defined as follows "a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future".

Given the importance attributed nowadays to the entrepreneurial capacity as a source of competitive advantage and economic development in the world of globalization, research focused on the analysis of entrepreneurial intentions is becoming an ever more important. Wu & Wu (2008) distinguish two categories of aspects relevant to the study of entrepreneurial intention - individual and social. To become entrepreneurs, individuals must first become nascent entrepreneurs. The process that is the basis for the creation of entrepreneurial intentions and behaviour is of the utmost importance. As regards social aspects, the level of entrepreneurial intention reflects the economic potential and economic environment of the country (Kordos et al., 2016). Understanding the level of entrepreneurial intentions provides perceptions to researchers and policy-makers to predict future entrepreneurial potentials and entrepreneurship activities that can be used to achieve economic goals (Yıldırım et al., 2016).

Various theories and models were developed to elucidate the decision to establish a new business, each addressing different factors of intentional entrepreneurial activity. Some researchers ascribe the intention to become an entrepreneur to personal traits and cognitive abilities. While, other studies emphasize the role of factors such as education and training that motivate and prepare students for establishing a new venture (Krueger et al., 2000). Some studies are based on an integrated approach that examines both - internal (personal) and external (contextual and environmental) factors that influence one's decision to establish new venture and how interactions among these factors affect the decision (Yıldırım et al., 2016). Personality features have a direct influence on entrepreneurial intention. However, as can be seen in Figure 1, the positive impact of these traits on entrepreneurial intention can be enhanced through entrepreneurial education moreover.



 $\textbf{Fig.1.} \ \ \textbf{The main factors of entrepreneurial intention}$

Source: own processing based on Remeikiene et al., 2013.

In the theoretical background, there are numerous approaches to the study of entrepreneurial intentions and also efficiency (Kuncová et al., 2015). Fayolle & Liñán (2014) conducted a review of the literature and divided the most influential papers on entrepreneurial intentions, published in the years 2004 to 2013, into five main subareas of research. The first category includes papers studying the core entrepreneurial intention model (Hmieleski & Corbett, 2006; Thompson, 2009). These papers analyse the central elements of the model and solve theoretical of methodological issues affecting this model.

The second category encompasses papers focusing on the influence of personal characteristics, psychological variables, demographics or experience on entrepreneurial intention. As population ageing leads to great changes in the population structure, it is necessary for society to respond to this trend in several areas of social life (Grmanová, 2017). The impact of university studies on the formation of entrepreneurial intention is analysed by Wilson et al. (2007). They found entrepreneurship education have a greater impact on women's self-efficacy and,

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through it, on intentions. This category is according Liñán & Fayolle (2015) represented as well for example by works Segal et al. (2005), Carr & Sequeira (2007), Liñán & Santos (2007), Guerrero et al. (2008). The third group of papers looks at the association between entrepreneurship education and entrepreneurial intent of its participants. They are classified study by Fayolle et al. (2006), Souitaris et al. (2007), Pittaway & Cope (2007), etc. The role the context and institutions play in the configuration of entrepreneurial intentions is addressed by papers from the fourth category. Authors of these papers focus on the influence of regional, cultural, institutional environments on the formation of entrepreneurial intentions (De Pillis & Reardon, 2007; Engle et al., 2011). The fifth research area considers the entrepreneurial process and the intention-behaviour link. This area is represented by works of Nabi et al. (2006) and Kolvereid & Isaksen (2006). In addition to the five above-mentioned categories, Liñán & Fayolle (2015) identified the sixth category, which includes several new research papers that cannot be classified into the five research areas. This last category represents "new research areas" – social entrepreneurship, sustainable entrepreneurship and other.

Among the most important theoretical frameworks investigating student's entrepreneurial intentions can be included Ajzen's theory of planned behaviour (TPB) and Shapero's Entrepreneurial Event Model (SEE). TPB is a general model to explain individual behaviour. Ajzen argues that intentions in general depend on perceptions of personal attractiveness, social norms and feasibility (Ajzen, 1991; Ajzen et al., 2009). Experts maintain the theory is appropriate to explain entrepreneurial intention as a conscious and intentional behaviour that can be enhanced by education and training (Krueger et al., 2000). According to the theory, intention to become an entrepreneur is the consequence of dynamic relations between approach toward entrepreneurship (awareness of the importance and positive or negative value of the new venture creation and its consequences), control over entrepreneurial behaviour (perceived competencies to carry out the tasks and roles of an entrepreneur and persistence in the face of problems) and subjective and social norms (Bagheri & Pihie, 2014). According to the SEE model person's intent to start a business is influenced by perceived desirability, perceived feasibility, and propensity to act (Shapero & Sokol, 1982). These factors are presented as direct antecedents to entrepreneurial intentions.

2.2 The Role of the University Education in Enhancing of Entrepreneurial Intentions

In today's competitive world entrepreneurship is one of the main concerns of various institutions and organizations including universities around the world (Yıldırım et al., 2016). One reason for the increasing interest in entrepreneurship and entrepreneurship education is the positive impact of entrepreneurship on sustainable economic growth. Entrepreneurship education can be one way to increase the prevalence rate of entrepreneurs and, thereby, stimulate economic growth, job creation, sources of innovation and productivity. This led to the fact that many countries decided to invest in an entrepreneurship-friendly institutional infrastructure in general and entrepreneurship education in particular (Walter & Block, 2016).

Ambad & Damid (2016) stated that university education plays an important role in promoting entrepreneurship as a career choice by providing necessary exposure through knowledge about entrepreneurship. There are more universities offering courses on entrepreneurship in order to provide and prepare students with the necessary theoretical and practical knowledge. Besides, the courses are considered to be the best channel to create awareness in students to apply their skills and knowledge as potential entrepreneurs (Mat et al., 2015).

The literature identifies several advantages of entrepreneurship education. Walter & Block (2016) argue that the existence of entrepreneurship education can indicate the desirability of entrepreneurship and therefore sensitize students to entrepreneurial careers. Entrepreneurship education effects students' carrier choice and improves a student's vision to start their own business with innovation (Wilson et al., 2007; Küttim et al., 2014). Peterman & Kennedy (2003) discovered that participation in an entrepreneurship program significantly increased the perceived feasibility of starting a business, which implies that entrepreneurial education can increase entrepreneurial intention. Individuals learn to more effectively or rapidly bring business ideas to market than

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others, or feel more capable of doing so. In Rauch & Hulsink (2015) opinion students participating in entrepreneurship education show an increase in attitudes and perceived behavioural control and they have developed entrepreneurial intentions. They stated that entrepreneurial intentions mediate the effect of entrepreneurship education on subsequent behaviour accompanying with the creation of new business activities.

In theory, may be found a few studies suggest even negative, discouraging effects of entrepreneurship education. Oosterbeek et al. (2010) argue that it leads to students gaining a more realistic perspective on their entrepreneurial abilities, preferences and the requirements of successful entrepreneurial careers.

3. Research Description and Method

The main aim of the paper is to find out whether universities support entrepreneurial intentions by providing the necessary knowledge and skills towards sustainable entrepreneurship. The base for the scientific consideration in the article was the empirical research conducted by authors in Slovakia (SK), Poland (PL), Czech Republic (CR) and Hungary (HU) in 2018/2019, at managerial faculties. In addition, the respondents were selected within Master studies as to ensure the quality of the research, which should be conducted among respondents with the proper knowledge on the topic and being on the stage of life when the transformation of entrepreneurial intention into entrepreneurial actions is possible. The sample selection for each country was calculated according to formula (1) from Cochran (1977).

$$n_0 = \frac{Z^2 * p * (1-p)}{e^2} \tag{1}$$

Where: n_0 is the requested sample size, Z is the Z value (e.g. 1.96 for 95% confidence level), p is the estimated proportion of an attribute that is present in the population. The level of p was calculated using the share of master students of management faculties in the total number of such students in the country. For Slovakia p=0.18, for Poland p=0.13, for Czech Republic p= 0.14 and for Hungary p = 0.22. e is the desired level of precision (in our study (e = 0.04).

We found out that according official registers (Ministries of education and Statistical offices) in each country in 2018/2019, there were in master study programs: 30 087 students in Slovakia, from which 18% represented students at managerial faculties, 438 201 students in Poland, from which 13% represented students at managerial faculties and 33 081 students in Czech republic, from which 14% represented students at managerial faculties and 33 081 students in Hungary, from which 22% represented students at managerial faculties. According formula (1) we calculated the required minimum sample size for each country: in Slovakia (355), in Poland (272), in the Czech Republic (289) and Hungary (412). The next stage of the survey was the questionnaire form fulfilment by selected respondents in electronic or paper form. After the preliminary assessment of the obtained material, 1456 properly completed questionnaires were accepted, including 366 from Slovak universities, 290 from Polish universities, 322 from Czech universities and 478 from Hungarian universities. The structure of respondents according two categories (country and gender) presents table 1.

ISSN 2345-0282 (online) http://doi.org/10.9770/jesi.2020.8.1(40)

Table 1. The structure of respondents

Category	Characteristics	SK	PL	CZ	HU	
Gender	Men	22,68%	40,00%	21,74%	53,77%	
	Women	77,32%	60,00%	78,26%	46,23%	
	Total	366	290	322	478	

Source: own research

To reach the main aim of this research, the statistical analysis of the obtained material was realised in the next step. We set out the following hypothesis for this research:

- H1A: There is a statistically significant difference in the consideration of students about starting own business after graduation in terms of country from which they come from.
- H1B: There is a statistically significant difference in the consideration of students about starting own business after graduation in terms of gender.
- H2A There is a statistically significant difference in the declaration of students about sufficiency of knowledge gained at university in terms of country from which they come from.
- H2B There is a statistically significant difference in the declaration of students about sufficiency of knowledge gained at university in terms of gender.
- H3A There is statistically significant difference among students' perception of professional skills provided by V4 universities that are sufficient and useful for own business running after graduation in terms of country from which they come from.
- H3B There is statistically significant difference among students' perception of professional skills provided by V4 universities that are sufficient and useful for own business running after graduation in terms of gender.

For the processing of obtained results, the statistical methods of Chi-square test ($\chi 2$) of homogeneity was used to see whether the students' decisions about starting their business and their expectations in respect to the university's support in setting up and running students' own business differ in observed countries. The stated hypotheses were tested on the significance level of p=0.05. If the calculated p-value was lower than the significance level, the stated hypotheses were accepted. The calculations were made through the software STATISTICA6.

4. Results of Research

The results of the research devoted to the students' perception of selected issues related to doing business after graduation within V4 countries are stated in this part of the paper. At the beginning, students declared if they consider own business after graduation (they could respond yes, no, or I don't know). The respondents' answers presents table 2.

Table 2. The students' declaration about starting own business after graduation

Attitude of students	SK			PL			CZ			HU		
Attitude of students	Men	Women	Σ	Men	Women	Σ	Men	Women	Σ	Men	Women	Σ
Yes	16	65	81	68	54	122	25	71	96	56	30	86
No	23	86	109	14	40	54	28	89	117	148	93	241
I don't know	44	132	176	34	80	114	17	92	109	51	95	146
Total	83	283	366	116	174	290	25	71	96	255	218	473
χ^2 (H1B)	p=0.57956			p=0.00002 p=0.15012				p=0.00000				
χ ² (H1A)			•	p=0.00			0000			•		

Source: own research

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In Slovakia 48.09% of students declared, that they don't know if they start with own business after graduation. In Poland the most of the students declared that they start with business after graduation. Students in the Czech Republic (36.34%) and Hungary (50.42%) declared that they do not plan to start own business. To start with own business requires to fulfil and to know the specific conditions of the business environment in each country. In the evaluation of this question, we try to find out, if there are differences in the relative frequency of responses in students' answers due to the country from which they came from (H1A-Table 2). The results of the calculated p-value (p=0.0000) are lower than the confidence level (p=0.05). It means that the H1A was accepted. There are statistically significant differences among answers of students from V4 universities. The hypothesis H1B (Table 2) was confirmed for Poland (p=0.00002) and for Hungary (p=0.00000).

In the next step students expressed, if the level of gained knowledge at university were sufficient and useful for them in case of their own business running (Table 3). For expression, they used the 5-points Likert scale (1-strongly disagree, 2 - disagree, 3 - neither agree nor disagree, 4- agree, 5- strongly agree). Analysing this aspect in four countries the significant differences can be seen (Figure 2). In terms of providing knowledge, the education system in Hungary (mean 4.54) was rated the highest and the lowest in Poland (mean 3.30). In turn, the acquisition of knowledge at the universities in the Czech Republic and Slovakia - countries with a common tradition of building educational systems - was equally assessed. When analyzing the level of standard deviation, it should be stated that the highest diversity of answers was recorded among Polish respondents, and the lowest diversity among respondents from Slovakia.

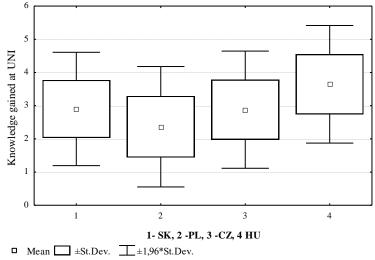


Fig.2. The assessment of students' perception of gained knowledge in V4 countries

Source: own research

As Table 3 depicts, that the most students (490) in V4 countries neither agree nor disagree with the statement related to gained knowledge at university as sufficient and useful for the running of their own business. The most students who signed this statement were from Slovakia (49.73%). The statistical analysis with using Chi-square test (Table 3) confirmed hypothesis H2A (p=0.0000) and H2B for the Czech Republic (p=0.00010) and Hungary (p=0.000755).

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Table 3. The assessment of gained knowledge	Table 3.	The assessment	of gained	knowledge
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Attitude of students	SK		Σ	PL		Σ	CZ		~	HU		Σ
Attitude of students	Men	Women		Men	Women	4	Men	Women		Men	Women	
Strongly disagree	12	16	28	20	24	44	8	10	18	20	0	20
Disagree	19	51	70	54	86	140	27	68	95	12	10	22
Neither agree nor disagree	37	145	182	24	40	64	18	102	120	69	55	124
Agree	15	67	82	18	22	40	14	72	86	126	123	249
Strongly agree	0	4	4	0	2	2	3	0	3	28	30	58
Total	83	283	366	116	174	290	70	252	322	255	218	473
χ ² (H2B)	p=0.041407			p=0.63016 p=0.00010						p=0.000755		
χ ² (H2A)				p=0.0000								

Source: own research

The next analysed area concerns students' opinions about professional skills obtaining during the study (Table 4) and its sufficiency for students' future from the point of view of sustainable entrepreneurship. As a general consideration, it should be emphasized that the acquisition of skills by students during university education was rated higher than the acquisition of knowledge in all countries studied. The distribution of the average response was, however, analogous, i.e. the highest average was noticeded in Hungary (mean 3.82) and the lowest in Poland (mean 2.67), while in the Czech Republic and Slovakia the average response was similar. In the case of acquiring skills, the standard deviation in all countries was significantly higher than in the case of acquiring knowledge, which indicates a greater diversity of respondents' answers.

The results of the mean analysis of students' declaration, that the university provided the skills necessary for the starting of their business towards sustainability (Figure 3) showed, that the most of Hungarian students (39.49%) agree with this statement.

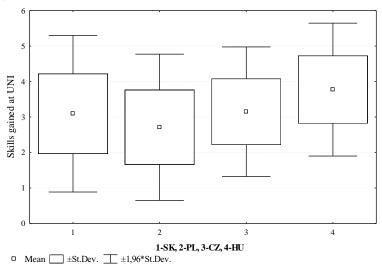


Fig.3. The assessment of students' perception of gained skills in V4 countries

Source: own research

The most students (39.49%) agree that professional skills gained at university will help them for running their business. This statement was confirmed by 17.45 of Hungarian students, 9.13% of Czech students and 8.79% of Slovak students. On the opposite side, the most of the Polish students disagree that their university provide the necessary skills for doing business.

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Table 4. The assessment of gained skills

Attitude of students	SK		~	PL		Σ	CZ		~		HU	Σ
Attitude of students	Men	Women	L	Men	Women		Men	Women	L	Men	Women	
Strongly disagree	12	35	47	16	12	28	3	13	16	17	5	22
Disagree	14	36	50	52	64	116	17	48	65	10	10	20
Neither agree nor disagree	23	93	116	14	58	72	15	87	102	57	35	92
Agree	22	106	128	30	30	60	32	101	133	116	133	249
Strongly agree	12	13	25	4	10	14	3	3	6	55	35	90
Total	83	283	366	116	174	290	70	252	322	255	218	473
Chi square p-value (H3B)		p=0.01175			0.01175		p=0.13	4209		p=0.00	5593	
Chi square p-value (H3A)	0.0000								•			

Source: own research

The results of p-value of Chi square test (p=0.0000) presented in Table 4 showed, that there are differences among students' perception of gained skills among V4 countries. We confirmed H3A. In case of H3B evaluation, based on the results of p-value, we can confirm this hypothesis for Slovakia (p=0.01175), Czech Republic (0.01175) and Hungary (p=0.005593). In these cases we can observe differences among respondents' answers in term of gender.

Discussion and Conclusion

The role of the university in supporting the entrepreneurial intentions toward sustainable entrepreneurship of their students is widely described in economic and managerial literature. The efficient system of education can strengthen entrepreneurial attitudes and lead to their conversion into new ventures. There is a need to improve the administrative management system of the higher education (Yang et al., 2020) The literature emphasizes that human capital developed within a proper higher education may positively influence the number of entry into a new venture (Dheer & Lenartowicz, 2019). Entrepreneurship education could improve understanding and experience of young people increasing their self-efficacy level (Nguyen et al., 2019). It is pointed out that many universities are focused on entrepreneurship education to the university curriculum in order to encourage students to choose entrepreneurship as a viable career choice. Papadaki et al. (2017) emphasizes through their results, that 90% of the students in their research showed the highest interest of entrepreneurship. However, many studies proved that university students are not ready to take advantage of entrepreneurial opportunities and do not plan to start a business in the short term. This statement was explained by Iwu et al. (2019) who suggested that the motivating role of entrepreneurship education is visible as far as students perceived entrepreneurship education to be valuable. Edwards-Schachter et al. (2015) indicated that entrepreneurship education may not be sufficiently focused on raising soft skills like creativity. Esfandiar et al. (2019) pointed that educational programs fostering entrepreneurship should include active learning e.g. creative business thinking skills, teamwork, setting up a business, exercises to problem-solving as well as direct visits to prestigious business projects, and meetings with successful entrepreneurs. Fuller et al. (2018) emphasized that entrepreneurial education should be focused on developing creative self-efficacy and learning self-efficacy to increase entrepreneurial intentions. A current situation analysis confirms the need for development strategies and policy solutions towards education to increase entrepreneurship plans and actions among students and graduates (Neneh, 2019) through customized educational programs.

Sustainable education reflects the whole system perspectives, and it aims to achieve learning for change. Studying people usually complain of many theoretical concepts without obvious connections and practical applications. The general dissatisfaction with the quality of education can reduce the motivation of students to study (Snieska et al., 2020). It focuses on quality education that provides not only measurable learning outcomes and national standards, but also encourage lifelong learning and developing the knowledge, skills and competencies of

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individuals to strive to change (Didham and Ofei-Manu, 2020). As research of Berková et al. (2020) showed, although students have shown interest in doing business, they are not fully aware of the real situation in the area of taxes and accounting and other legislative processes. Sustainable education helps learners to examine and reflect upon their professional responsibilities, capabilities, and personal motivations (Mulà et al., 2017). When discussing how to improve the overall quality education including sustainable goals, four elements seem to be the most important: applying a well-developed curriculum, improving the quality of teaching methods, establishing a safe and effective learning environment, and inspiring cooperative and transformative learning (Didham and Ofei-Manu, 2020). Nowadays, critical challenges in ecology and aspirations of society brings the need to prepare leaders with a new set of skills, knowledge, attitude to make decisions and succeed in the process of shaping a future in sustainable world. Universities should enhance the capacity of individuals and organizations to gain knowledge and skills so that they can influence systems and participate in decision-making processes (Angeloni, 2020). To create new outcomes through the learning process, education system need to be transformed to disseminate new curricula, learning methods, research and outreach. Meanwhile, the pace at which universities and schools have fostered change seems to be slower than the pace at which the new challenges have threatened and warned global civilization (Assumpção and Neto, 2020).

Based on the conducted questionnaire research it can be concluded that in all studied countries the support in setting up and running own business is expected by students, especially in Hungary. Evaluating university support, students declare that the knowledge provided by the university is of limited sufficiency. It seems to be slightly better when professional skills were assessed. It could be concluded that teaching towards sustainable entrepreneurship should be improved in analyzed countries. And at the beginning of the improvement process, the basic question should be asked by university management: How could universities deal with the challenge of sustainable entrepreneurship in a systematically and strategically planned manner (Isenmann et al., 2020).

The main contribution of this paper to the knowledge from this area is the comparison of students' opinion from four countries, similar in economic development and historical changes in the economy.

The practical application of the study is visible in the possibility of improvement of the educational standards in the area of business and management education. It could be useful not only for economic faculties but for all kinds of studies to equip students with the knowledge and skills necessary to run their own business.

References

Ajzen, I. 1991. Theory of planned behavior, *Organizational Behavior and Human Decision Processes* 50: 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I.; Csasch, C.; & Flood, M.G. 2009. From intentions to behavior: Implementation intention, commitment and conscientiousness, *Journal of Applied Social Psychology* 39(6): 1356-1372. https://doi.org/10.1111/j.1559-1816.2009.00485.x

Ambad, S. N. A.; & Damit, D. H. D. A. 2016. Determinants of Entrepreneurial Intention among Undergraduate Students in Malaysia, *Procedia Economics and Finance* 37: 108-114. https://doi.org/10.1016/S2212-5671(16)30100-9

Angeloni, S. 2020. Education first: What really matters in working for sustainability, *Futures* 120: 102552. https://doi.org/10.1016/j.futures.2020.102552

Assumpção, M.R.d.; & Neto, M.P.M. 2020. State-of-the-art practices being reported by the PRME champions group: A reference to advance education for sustainable development, *The International Journal of Management Education* 18(2): 100369. https://doi.org/10.1016/j.ijme.2020.100369

ISSN 2345-0282 (online) http://doi.org/10.9770/jesi.2020.8.1(40)

Autio, E.; Keeley, R.; Klofsten, M.; Parker, G.; & Hay, M. 2001. Entrepreneurial intent among students in Scandinavia and in the USA, *Enterprise and Innovation Management Studies* 2(2): 145-160. https://doi.org/10.1080/14632440110094632

Bagheri, A.; & Pihie, Z. A. L. 2014. Factors influencing students' entrepreneurial intentions: The critical roles of personal attraction and perceived control over behavior, *The International Journal of Management Science and Information Technology (IJMSIT)*, Special Issue ICIE 2014: 16-28. http://hdl.handle.net/10419/178796

Barba-Sánchez, V.; & Atienza-Sahuquillo, C. 2018. Entrepreneurial intention among engineering students: The role of entrepreneurship education, *European Research on Management and Business Economics* 24(1): 53-61. https://doi.org/10.1016/j.iedeen.2017.04.001

Baubonienė, Ž.; Hahn, K. H.; Puksas, A.; & Malinauskienė, E. 2018. Factors influencing student entrepreneurship intentions: the case of Lithuanian and South Korean universities, *Entrepreneurship and Sustainability Issues* 6(2): 854-871. http://doi.org/10.9770/jesi.2018.6.2(26)

Belás, J., Dvorský, J., Tyll, L., & Zvaríková, K. 2017. Entrepreneurship of university students: Important factors and the propensity for entrepreneurship. *Administratie si Management Public*, (28)6: 6-25. http://www.ramp.ase.ro/en/_data/files/articole/2017/28-01.pdf

Berková K.; Frendlovská D.; Pospíšil Závodný J.; Vojáčková H.; & Kolářová D. 2020. Education towards Entrepreneurial Careers in a Czech College: An Empirical Study. *Journal on Efficiency and Responsibility in Education and Science*, vol. 13, no. 1: 1-9. http://dx.doi.org/10.7160/eriesj.2020.130101

Bencsik, A.; Juhasz, T.; Mura, L.; & Csanadi, A. 2019. Impact of Informal Knowledge Sharing for Organizational Operation. Entrepreneurial Business and Economics Review, 7(3): 25-42. https://doi.org/10.15678/EBER.2019.070302

Beynon, M.J.; Jones, P.; & Pickernell, D. 2016. Country-based comparison analysis using fsQCA investigating entrepreneurial attitudes and activity, *Journal of Business Research*, 6: 1271-1276. https://doi.org/10.1016/j.jbusres.2015.10.091

Bosma, N.; Wennekers, S.; & Amorós, J. E. 2012. Global Entrepreneurship Monitor, 2011 Extended Report: Entrepreneurs and Entrepreneurial Employees across the Globe, Global Entrepreneurship Research Association. https://gemconsortium.org/report

Carr, J. C.; & Sequeira, J. M. 2007. Prior family business exposure as intergenerational influence and entrepreneurial intent: A Theory of Planned Behavior Approach, *Journal of Business Research* 60: 1090-1098. https://doi.org/10.1016/j.jbusres.2006.12.016

Cochran, W.G. 1977. Sampling Techniques. Wiley, New York.

De Pillis, E.; & Reardon, K. K. 2007. The influence of personality traits and persuasive messages on entrepreneurial intention: a cross-cultural comparison, *Career Development International* 12(4): 382-396. https://doi.org/10.1108/13620430710756762

Dheer, R. J. S.; & Lenartowicz, T. 2019. Cognitive flexibility: Impact on entrepreneurial intentions, *Journal of Vocational Behavior* 115: 103339. https://doi.org/10.1016/j.jvb.2019.103339

Didham, R. J.; & Ofei-Manu P. 2020. Adaptive capacity as an educational goal to advance policy for integrating DRR into quality education for sustainable development, *International Journal of Disaster Risk Reduction* 47: 101631. https://doi.org/10.1016/j.ijdrr.2020.101631

Dvorsky, J.; Rozsa, Z.; Petrakova, Z.; & Kotaskova, A. 2018. Evaluation of state aid for entrepreneurs and their access to financial resources: students' attitudes in Czech Republic, Poland and Slovakia. *Маркетинг і менеджмент інновацій*, (3): 11-20. https://doi.org/10.21272/mmi.2018.3-01

Edwards-Schachter, M.; García-Granero, A.; Sánchez-Barrioluengo, M.; Quesada-Pineda, H.; & Amara, N. 2015. Disentangling competences: Interrelationships on creativity, innovation and entrepreneurship, *Thinking Skills and Creativity* 16: 27–39. https://doi.org/10.1016/j.tsc.2014.11.006

Engle, R. L.; Schlaegel, Ch.; & Dimitriadi, N. 2011. Institutions and entrepreneurial intent: a cross-country study, *Journal of Developmental Entrepreneurship* 16(2): 227-250. https://doi.org/10.1142/S1084946711001811

Esfandiar, K.; Sharifi-Tehrani, M.; Pratt, S.; & Altinay, L. 2019. Understanding entrepreneurial intentions: A developed integrated structural model approach, *Journal of Business Research* 94: 172-182. https://doi.org/10.1016/j.jbusres.2017.10.045

ISSN 2345-0282 (online) http://doi.org/10.9770/jesi.2020.8.1(40)

European Commission. 2019. The Entrepreneurship 2020 Action Plan. https://ec.europa.eu/growth/smes/promoting-entrepreneurship/action-plan en

Fabus, M. (2015). Impact of foreign direct investment on unemployment development in selected regions of Slovak Republic. *Economic Annals* XXI, 19(155), 63-66. http://soskin.info/userfiles/file/Economic-Annals-pdf/S155-0014(14)063.pdf

Fayolle, A.; Gailly, B.; & Lassas-Clerc, N. 2006. Assessing the impact of entrepreneurship education programmes: a new methodology, *Journal of European Industrial Training* 30(8/9): 701-720. https://doi.org/10.1108/03090590610715022

Fayolle, A.; & Liñán, F. 2014. The Future of Research on Entrepreneurial Intentions, *Journal of Business Research* 67: 663-666. https://doi.org/10.1016/j.jbusres.2013.11.024

Fuller, B.; Liu, Y.; Bajaba, S.; Marler, L. E.; & Pratt J. 2018. Examining how the personality, self-efficacy, and anticipatory cognitions of potential entrepreneurs shape their entrepreneurial intentions, *Personality and Individual Differences* 125: 120-125. https://doi.org/10.1016/j.paid.2018.01.005

Girdzijauskaite, E.; Radzeviciene, A.; Jakubavicius, A. 2019. Impact of international branch campus KPIs on the university competitiveness: FARE method, *Insights into Regional Development* 1(2): 171-180. https://doi.org/10.9770/ird.2019.1.2(7)

Grancay, M.; Grancay, N.; Drutarovska, J.; & Mura, L. 2015. Gravity model of trade of the Czech and Slovak Republics 1995-2012: How have determinants of trade changed, *Politicka Ekonomie* 63(6): 759-777. https://polek.vse.cz/pdfs/pol/2015/06/04.pdf

Grmanová, E. 2017. Demographic ageing in the regions of Slovakia and the Czech Republic in 2011-2015. *Demografie* 59(4): 303-314. https://www.czso.cz/documents/10180/46203814/grmanova.pdf/f79dbbd2-d5b6-4d34-8760-02541d8911c8?version=1.1

Guerrero, M.; Rialp, J.; & Urbano, D. 2008. The Impact of Desirability and Feasibility on Entrepreneurial Intentions: A Structural Equation Model, *International Entrepreneurship and Management Journal* 4(1): 35-50. https://link.springer.com/article/10.1007/s11365-006-0032-x

Hmieleski, K. M.; & Baron, R. A. 2009. Entrepreneurs' optimism and new venture performance: A social cognitive perspective, *Academy of Management Journal* 52(3), 473-488. https://doi.org/10.5465/amj.2009.41330755

Hmieleski, K. M.; & Corbett, A. C. 2006. Proclivity for Improvisation as a Predictor of Entrepreneurial Intentions, *Journal of Small Business Management* 44(1): 45-63. https://doi.org/10.1111/j.1540-627X.2006.00153.x

Horecký, J.; & Blažek, M. 2019. Dependent work and internship. Central European Journal of Labour Law and Personnel Management, 2 (2): 7-20. https://doi.org/10.33382/cejllpm.2019.03.01

Isenmann, R.; Landwehr-Zloch, S.; & Zinn, S. 2020. Morphological box for ESD – landmark for universities implementing education for sustainable development (ESD), *The International Journal of Management Education* 18(1): 100360. https://doi.org/10.1016/j.ijme.2019.100360

Ivanova, E.; Kordos, M.; & Habanik, J. 2015. The competitiveness of V-4 Countries within the European Union, *Actual Problems of Economics* 167(5): 39-49.

Iwu, C. G.; Opute, P. A.; Nchu, R.; Eresia-Eke, C.; Tengeh, R. K.; Jaiyeoba, O.; & Aliyu, O. A. 2019. Entrepreneurship education, curriculum and lecturer-competency as antecedents of student entrepreneurial intention, *The International Journal of Management Education*, In press, 100295. https://doi.org/10.1016/j.ijme.2019.03.007

Jakubiec, M. 2016. Quality of Higher Education as a Factor of European Companies' Competitiveness - Case of Poland-Czech Republic Cross-Border. *The 3rd International Conference on European Integration 2016*, May 19-20, Ostrava, Czech Republic, 383-390.

Jašková, D. 2019. Assessment of social developments in Slovakia in the context of human resources. Central European Journal of Labour Law and Personnel Management, 2 (2): 21-32. https://doi.org/10.33382/cejllpm.2019.03.02

Jünger, J.; & Piskorzová, M. 2009. Význam podnikání ve společnosti. Podnikání v podmínkách Evropské unie, Katowice: Górnośląska Wyższa Szkoła Handlowa, Slezská univerzita v Opavě, Urzad Miejski w Chełmku.

ISSN 2345-0282 (online) http://doi.org/10.9770/jesi.2020.8.1(40)

Kadir, M. B. A.; Salim, M.; & Kamarudin, H. 2012. The Relationship Between Educational Support and Entrepreneurial Intentions in Malaysian Higher Learning Institution, *Procedia - Social and Behavioral Sciences* 69: 2164-2173. https://doi.org/10.1016/j.sbspro.2012.12.182

Karabulut, A. T. 2016. Personality Traits on Entrepreneurial Intention, *Procedia - Social and Behavioral Sciences* 229: 12-21. https://doi.org/10.1016/j.sbspro.2016.07.109

Kolvereid, L.; & Isaksen, E. 2006. New business start-up and subsequent entry into self-employment, *Journal of Business Venturing* 21(6): 866-885. https://doi.org/10.1016/j.jbusvent.2005.06.008

Kordos, M.; Krajnakova, E.; & Karbach, R. 2016. Cluster policies implementation in Slovakia, *Actual Problems of Economic* 181(7): 90-96.

Krueger, N. F.; Reilly M. D.; & Carsrud A. L. 2000. Competing Models of Entrepreneurial Intentions, *Journal of Business Venturing* 15: 411-432. https://doi.org/10.1016/S0883-9026(98)00033-0

Kuncová, M.; Bíza Bisová, S.; & Mulač, P. 2015. Public Universities in the Czech Republic: Analysis of Efficiency. *The 19th International Conference Current Trends in Public Sector Research*, 232-240. http://ctpsr.econ.muni.cz/wpcontent/uploads/2015/01/A5 sbornik 2015 bez znacek.pdf

Küttim, M.; Kallaste, M.; Venesaar, U.; & Kiss, A. 2014. Entrepreneurship education at university level and students' entrepreneurial intentions, *Procedia - Social and Behavioral Sciences* 110: 658-668. https://doi.org/10.1016/j.sbspro.2013.12.910

Lemańska-Majdzik, A.; & Sipa, M. 2015. Selected Aspects of Family Company Management in Employees View in Poland, *Conference on Current Problems of the Corporate Sector*, May 14-15, Modra-Harmonia, Slovakia, 358-366.

Liñán, F.; & 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. https://link.springer.com/article/10.1007/s11365-015-0356-5

Liñán, F.; & Santos, F. J. 2007. Does Social Capital Affect Entrepreneurial Intentions? *International Advances in Economic Research* 13(4): 443-453. https://link.springer.com/article/10.1007%2Fs11294-007-9109-8

Mat, S. C.; Maat, S.M.; & Mohd, N. 2015. Identifying Factors that Affecting the Entrepreneurial Intention among Engineering Technology Students, *Procedia - Social and Behavioral Sciences* 211: 1016-1022. https://doi.org/10.1016/j.sbspro.2015.11.135

Mulà, I.; Tilbury, D.; Ryan, A.; Mader, M.; Dlouhá, J.; Mader, C.; Benayas, J.; Dlouhý, J.; & Alba, D. 2017. Catalysing Change in Higher Education for Sustainable Development: A review of professional development initiatives for university educators, *International Journal of Sustainability in Higher Education* 18(5): 798-820, https://doi.org/10.1108/JJSHE-03-2017-0043

Mura, L. 2019. Entrepreneurship internationalization – Case of Slovak family businesses. *AD ALTA-Journal of Interdisciplinary Research*, 9(1): 222-226.

Nabi, G.; Holden, R.; & Walmsley, A. 2006. Graduate career-making and business start-up: a literature review. *Education and Training* 48(5): 373-385. https://doi.org/10.1108/00400910610677072

Neneh, B. N. 2019. From entrepreneurial intentions to behavior: The role of anticipated regret and proactive personality, *Journal of Vocational Behavior* 112: 311-324. https://psycnet.apa.org/doi/10.1016/j.jvb.2019.04.005

Nguyen, A. T.; Do, T. H. H.; Vu, T. B. T.; Dang, K. A.; & Nguyen, H. L. 2019. Factors affecting entrepreneurial intentions among youths in Vietnam, *Children and Youth Services Review* 99: 186-193. https://doi.org/10.1016/j.childyouth.2019.01.039

Oosterbeek, H.; Praag, M.; & Ijsselstein, A. 2010. The impact of entrepreneurship education on entrepreneurship skills and motivation, *European Economic Review* 54: 442-454. https://doi.org/10.1016/j.euroecorev.2009.08.002

Papadaki, S., Novák, P., & Dvorsky, J. 2017. Attitude of university students to entrepreneurship. *Economic annals-XXI*, (166): 100-104. https://doi.org/10.21003/ea.V166-20

Peterka, S. O.; Koprivnjak, T.; & Mezulić, P. 2015. Challenges of Evaluation of the Influence of Entrepreneurship Education, *Economic Review – Journal of Economics and Business* XII(2): 74-86. http://hdl.handle.net/10419/193853

ISSN 2345-0282 (online) http://doi.org/10.9770/jesi.2020.8.1(40)

Peterman, N.; & Kennedy, J. 2003. Enterprise Education: Influencing Students' Perceptions of Entrepreneurship, *Entrepreneurship Theory and Practice* 28(2): 129-144. https://doi.org/10.1046%2Fj.1540-6520.2003.00035.x

Pellešová, P. 2016. Selected Macroeconomic Factors of the Business Environment and their Development since the Czech Republic Joined to European Union. *The 3rd International Conference on European Integration 2016*, May 19-20, Ostrava, Czech Republic, Ostrava: VSB-TU, 755-762.

Pittaway, L.; & Cope, J. 2007. Entrepreneurship Education - A Systematic Review of the Evidence, *International Small Business Journal* 25(5): 479-510. https://doi.org/10.1177%2F0266242607080656

Rauch, A.; & Hulsink, W. 2015. Putting Entrepreneurship Education Where the Intention to Act Lies: An Investigation into the Impact of Entrepreneurship Education on Entrepreneurial Behavior, *Academy of Management Learning & Education* 14(2): 187-204. https://doi.org/10.5465/amle.2012.0293

Remeikiene, R.; Startiene, G.; & Dumciuviene, D. 2013. Explaining Entrepreneurial Intention of University Students: The Role of Entrepreneurial Education. *Active Citizenship by Knowledge Management and Innovation, Management, Knowledge and Learning International Conference* 2013, June 19-21, Zadar, Croatia, 299-307. http://www.toknowpress.net/ISBN/978-961-6914-02-4/papers/ML13-258.pdf

Segal, G.; Borgia, D.; & Schoenfeld, J. 2005. The motivation to become an entrepreneur, *International Journal of Entrepreneurial Behaviour and Research* 11(1): 42-57. https://doi.org/10.1108/13552550510580834

Shapero, A.; & Sokol, L. 1982. The social dimensions of entrepreneurship. Encyclopedia of Entrepreneurship. Englewood Cliffs, NJ: Prentice Hall, 72-90.

Shuyan, L., & Fabus, M. 2019. The impact of OFDI reverse technology spillover on China's technological progress: Analysis of provincial panel data. *Journal of International Studies*, 12(4), 325-336. https://doi.org/10.14254/2071-8330.2019/12-4/21

Souitaris, V.; Zerbinati, S.; & Al-Laham, A. 2007. Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources, *Journal of Business Venturing* 22(4): 566-591. https://doi.org/10.1016/j.jbusvent.2006.05.002

Štverková, H.; & Humlová, V. 2016. Assessment of the Competitiveness of SMEs through Bee Model in the Moravian-Silesian Region. *The 3rd International Conference on European Integration 2016*, May 19-20, Ostrava, Czech Republic. Ostrava: VSB-TU, 423-429.

Snieska, V; Navickas, V.; Grencikova, A.; Safrankova, J.M.; & Sikyr, M. 2020. Fundamental Human Resource Management Practices Aimed at Dealing with New Challenges in the Labour Market. *Transformations in Business & Economics*, Vol. 19, No 2(50): 38-51. http://www.transformations.knf.vu.lt/50/rp50.pdf

Svabova, L.; Durica, M.; Kramarova, K.; Valaskova, K.; & Janoskova, K. 2019. Employability and Sustainability of Young Graduates in the Slovak Labour Market: Counterfactual Approach. *Sustainability*, 11(16), 4462. https://doi.org/10.3390/su11164462

Thompson, E. R. 2009. Individual Entrepreneurial Intent: Construct Clarification and Development of an Internationally Reliable Metric, *Entrepreneurship Theory and Practice* (33)3: 669-694. https://doi.org/10.1111%2Fj.1540-6520.2009.00321.x

Walter, S. G.; & Block, J. H. 2016. Outcomes of entrepreneurship education: An institutional perspective, *Journal of Business Venturing* 31: 216-233. http://dx.doi.org/10.1016/j.jbusvent.2015.10.003

Wilson, F.; Kickul, J.; & Marlino, D. 2007. Gender, Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for Entrepreneurship Education, *Entrepreneurship: Theory & Practice* 31(3): 387-406. https://doi.org/10.1111%2Fj.1540-6520.2007.00179.x

Wu, S.; & Wu, L. 2008. The impact of higher education on entrepreneurial intentions of university students in China, *Journal of Small Business and Enterprise Development* 15(4): 752-774. https://doi.org/10.1108/14626000810917843

Yang, Y.; Fabus, M.; Bae, K.-H.; & Zhang, M. 2020. A diamond model based analysis for improving the sustainable competitiveness in educational exports by Chinese colleges and universities, *Entrepreneurship and Sustainability Issues* 7(3), 1858-1871. https://doi.org/10.9770/jesi.2020.7.3(28).

ISSN 2345-0282 (online) http://doi.org/10.9770/jesi.2020.8.1(40))

Yıldırım, N.; Çakır, Ö.; & Aşkun, O. B. 2016. Ready to Dare? A Case Study on the Entrepreneurial Intentions of Business and Engineering Students in Turkey, *Procedia - Social and Behavioral Sciences* 229: 277-288. https://doi.org/10.1016/j.sbspro.2016.07.138

Zhao, H.; Seibert, S. E.; & Lumpkin, G. T. 2010. The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review, *Journal of Management* 36: 381-404. https://doi.org/10.1177%2F0149206309335187

Zyminkowska, K. et al. 2019. Academic Entrepreneurship in International Context: the Visegrad Countries Perspective. Warszawa, Poland: Wydawnictwo naukowe PWN.

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