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Financial aspects of business model in

entrepreneurship

"Финансови аспекти на бизнес модел по

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The dissertation has a total volume of 161 pages, structured as follows: introduction, six chapters, conclusion, list of cited literature and appendices. The dissertation contains 25 graphs, 2 tables and 6 appendices. The bibliography list includes: 87 cited academic monographs, articles and studies, 19 books on the topic used, as well as 60 statistical and internet sources.

Composition of academic panel:

1. 2. 3. 4.

5.

The (public) dissertation defense will be held x/x/2021 via online platform. All relevant materials will be available at VUZF library.

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1. GENERAL CHARACTERISTICS OF THE DISSERTATION

1.1 Research Relevance

There are three main sources responsible for the recent growth of entrepreneurship education - policy-makers, students and academics. Policy makers are convinced that entrepreneurship is a way to cope with economic problems, such as unemployment. Generally, youth is additionally exposed to the consequences of economic crises than adults. Students' demand for entrepreneurship education tends to be seen a result of changing structure of economies - downsizing by companies, shifting business patterns or outsourcing to different markets ¹. As long as entrepreneurship becomes a serious career opportunity, it is obvious that a growing number of students will enroll for entrepreneurship programs in order to develop their entrepreneurial capacities. Academics from various specializations, e.g. economics, social or educational sciences are driven to entrepreneurship, as a field of research or as a topic for teaching, by their tendency to consistently update and innovate study curriculums or as a response to policy making directives and students' demand for this subject.

It is not surprising that the last decade has witnessed a trend of focused introduction and integration of the subject of entrepreneurship within national school curricula in most European countries (Education, Audiovisual and Culture Executive Agency, 2012). Bulgaria started implementing a National Strategy for Entrepreneurial Education in School in 2008 and is currently in the second stage of implementation measures ². Few Bulgarian vocational high-schools, mostly economic high-schools with business profiles, have taught entrepreneurship as a compulsory subject before the introduction of the National Strategy in 2008.³ According to recent GEM Bulgaria National Expert Survey⁴ high schools and universities in Bulgaria scored low 3.5 (scale of low 1 - 9 high) on providing good and adequate preparation for startups and growing new firms. In its research design, the report obtains data from national expert surveys and/or adult population surveys. Based on expert ratings (not on students' opinion), the quality of entrepreneurship education at school level has been negatively rated, i.e. a clear sign that the high- school system in Bulgaria is failing to adequately prepare learners for successful participation in the economy.

¹ Hynes, 1996; Mwasalwib, 2012

² Ministry of Youth and Sports, 2012

³ Cardoso, 2008

⁴ Global Entrepreneurship Monitor Annual report Bulgaria, 2017

Entrepreneurship at high school level is not taught widely, nor effectively enough. The report data further indicates a lack of sufficient academic competences in teachers to inspire and support students in hands-on learning experiences. The experts scored particularly low the deficiencies of education systems in Bulgaria and evaluated somewhat more positively (but still low) the state of business and management education at graduate level (score of 4). In the light of the assessment of the Bulgarian education by the Global Competitiveness ranking 2016/2017, the biggest problem appears to be the quality of education, which is instrumental for social integration through life-long skills.

Overall, the research seemed to provide limited insights and mainly descriptive data into the question if and to what degree following entrepreneurship classes affected the entrepreneurial intentions of Bulgarian high-school or university students. The limited body of knowledge on the effectiveness of entrepreneurship in higher education together with the basically non-existent data calls for more research on the topic. The literature is unanimous that more insight is necessary, so that the quality of the offered academic programmes can be improved (OECD, 2012) (European Comisson, 2013).

1.2 General framework and subject of the study

This research will make an attempt to investigate **the effectiveness of entrepreneurship curriculums in Bulgarian HEIs and provide recent empirical insights into the extent to which these classes succeed in motivating future entrepreneurs.** For the purpose of the study, definitions of entrepreneurship based on the reflections, meanings and needs of most key stakeholders put on the phenomena are used. This also follows Fayolle and Gailly's (Fayolle & Gailly, 2008) (Fayolle & Gailly, 2006) argument that the needs of these groups should be addressed when formulating curriculum an educational objectives. This dissertation paper will then formulate a framework of entrepreneurial education in Bulgaria, linking it to some of the features of higher education in the country, as well propose some guidelines for improving the methodological basis for entrepreneurial education. The main research hypothesis is formulated, as follows: *Bulgarian University Entrepreneurship Education influences positively students' entrepreneurial intentions. It will study the characteristics of University Entrepreneurship Education that facilitate their inclinations towards possible entrepreneurial career.* Following Ajzen's argument (Ajzen I., 2006), intentions and behaviors can be formed via educational interventions. The Theory of Planned Behavior (TPB) can be applied as a concept to design intervention strategies, to assess the results of interventions or to foresee behavioral intentions (Ajzen I., 2006). When TPB or other intention models are used, however, one needs to take into account the aims of such an educational intervention. Hytti (Hytti, 2005) argues that, as an intervention, entrepreneurship education serves three main purposes: first, to create awareness of entrepreneurship, which is argued to be the first step in training individuals to an entrepreneurial career. Secondly, to equip students with a more entrepreneurial approach in their daily work, e.g. becoming more innovative towards the demand of the current work environment. Third, to prepare individuals to act as entrepreneurs by starting new business ventures and be able to manage them (Hytti, 2005). As previously outlined, most of these teaching goals not only seek to accommodate for appropriate entrepreneurship knowledge, skills and competences among students, but they are also a drive for behavioral change (Mwasalwib, 2012), hence influencing their perceptions, confidence, attitudes, and interests toward entrepreneurship.

As definitions of entrepreneurship are varying, there are a great number of success indicators that researchers have used to assess the impact of entrepreneurship courses. To mention a few - academic performance, students' level of satisfaction, innovations, number of start-ups, contributions to society and even graduates income at the work place (Charney & Libecap, 2000) (Gartner, 1989). Research results indicate that graduates tend to start their own business 5 to 10 years after graduation (Galloway & Brown, 2002). Therefore, this time difference, reduces much of the relevance of physical indicators (e.g. new venture, contribution to society, business performance, etc.), if one wants to measure the impact immediately after completing the course. The idea behind the choice of intentions is aligned with the TPB of Ajzen (Ajzen I. , 2006) with the argument that intentions are the best predictors of individuals' future behavioral acts.

1.3 Research problem, goals and objectives

This study is set up primarily as an empirical quantitative research targeting a representative sample of all HEIs in Bulgaria, which currently offer entrepreneurship programmes on either Bachelor or Master level. Fieldwork took

place during first semester of the academic year (October – November) 2019-2020, involving students from various fields of specializations and universities. A choice for primary quantitative data collection, combined with secondary research within electronic databases, scientific journals, government publications is used to measure influence, increase accuracy and reduce bias. An already validated Entrepreneurial Questionnaire (translated and adapted in Bulgarian) was employed to collect primary data (Fayolle & Gailly, 2006), (Liñán & Chen, Y., 2009). The analysis was mainly quantitative. Cross tabulation, correlation and regression analysis were performed to establish the predictive significance of variables used in the TPB model. In addition, desk research and comparative documentary analysis of government policies and university curriculum outlines was employed. This also happens to be aligned with current best practices in educational and entrepreneurship research where both qualitative and quantitative methods are said to complement each other (Hytti & Kuopusjärvi, 2004); (Wellington, 2000).

Trakia University, Stara Zagora, public	Industrial Business and Entrepreneurship		
University of Ruse "Angel Kanchev", public	Entrepreneurship and Innovation		
University of National and World Economy, UNWE, Sofia, public	Entrepreneurship		
University of Economics, Varna, public	International business and Entrepreneurship		
University of Finance, Business and Entrepreneurship, VUZF, Sofia, private	Business economics, entrepreneurship and innovation		
Varna Free University "Chernorizec Hrabar", private	Entrepreneurship		

Figure 1: Institutes of higher education, offering entrepreneurship programmes, 2019/2020; Source: author's own data

The main research hypothesis leads to the formulation of the following, more specific subresearch goals:

- 1. Evaluation of objectives and learning outcomes in entrepreneurship education by looking at current situation of entrepreneurship university programmes and institutional support (theoretical)
- 2. Estimating the effectiveness of existing entrepreneurship programmes in Bulgaria to encourage students to become successful entrepreneur (empirical)
- 3. Measuring the extent and ways in which university entrepreneurship education in influence students' attitudes, perceptions and intentions towards entrepreneurship (empirical)

4. Evaluating and implementing entrepreneurship education model, using financial support, suitable for graduate business programmes in Bulgaria? (theoretical)

Research goal 1 aims at making an inventory of state-of-the art of entrepreneurship education by identifying its objectives, audiences and impact. Research goal 2 seeks to estimate university entrepreneurship education in terms of understanding what it is attempting to achieve among students. Research goal 3 attempts to assess influence of some of the factors that affect graduates' progression from university to a career in entrepreneurship and is set to measure the significance, direction and impact that Bulgarian university entrepreneurship education has on students' intentions to become entrepreneurs. Research goal 4 analyzes how university entrepreneurship education can incorporate some of the issues that students face in their entrepreneurial attempts and proposes a relevant model for implementation. Additionally, after a thorough desk research on literature of entrepreneurial intentions, the following four hypotheses were formulated, followed by operationalized dependable (DV) and independable variables (IV), that can be tested:

H1: Positive students' attitudes towards entrepreneurship, have a positive influence on their entrepreneurial intentions.

H2: Positive students' perceptions of students on close peoples' (family and friends) support towards entrepreneurship, have positive influence on their entrepreneurial intentions.

H3: Positive students' perceptions of social values towards entrepreneurship, have positive influence on their entrepreneurial intentions.

H4: Positively perceived entrepreneurial behavior of students has a positive influence on their entrepreneurial intentions.

DV: Influence of entrepreneurship education, operationalized as students' intentions and confidence towards owing a business.

IV:

- close family/friends/institutions (IV 1) measured on a Likert scale 1-5;
- social values on entrepreneurship (IV 2) measured on ordinal scale strongly agree, agree, neither agree/disagree, disagree, strongly disagree;
- positive attitudes towards entrepreneurship (IV 3) measured on a Likert 1-5 scale;
- positive own behavior towards entrepreneurship (IV 4) measured on ordinal scale strongly agree, agree, neither agree/disagree, disagree, strongly disagree;

Accurate measurement of independent variables is a prerequisite for evaluating the validity of the empirical findings that will follow. Informed respondents evaluated the relative degree of each of these variables, ranging from "low" to "high" on a Likert five-point scale. The conducted survey with sample size (N= 83) is relatively small, however, an effort has been made to select non-biased sample with anonymous respondents (purposeful sampling, justified by saturation) that would represent adequate views among **all entrepreneurship HEIs** in the country. Given the small size and the response rate 31 % (83 responses collected from sample of 267 and their distribution, these results should not be considered conclusive. Instead, effort was made to explore the opinions of a range of informed participants, generate confirmation for findings and stimulate further research in the area.

According to Ajzen (Ajzen I., 1991) perception on social norms is associated with the perceived social pressure of an individual to perform or not a certain behavior. First, the issue of facing the opinions of others before deciding to behave in a certain way, e.g. parents, spouse, close relatives etc., or simply facing people whose views matter before making a decision (Veciana, Aponte, & Urbano, 2005) (Ajzen I., 1991). Secondly, what causes more pressure is the general tolerance of such actions in the society where an entrepreneur would operate. Society sets traditionally accepted norms, values or beliefs that influence the acceptability of a

certain type of behavior. For the purposes of this study, identifying possible changes in social values in Bulgaria or pressure from others will be approached as well.

For the purposes of this research, triangulation will be used in terms of methods, sources, and theories. Triangulation refers to the utilization of multiple methods or data sources to develop a comprehensive and complete understanding of specific phenomena and thus enhance validity (Verhoeven, 2019). The first one involves the use of (multiple) methods of data collection techniques about the same phenomenon, i.e. a questionnaire and in-depth interview. Source triangulation refers to the collection of data from different types of people and e.g. desk research, in order to gain numerous perspectives and validation of information. Last type consists of using various theories to analyse and interpret data. In this way different theories or hypotheses can assist in supporting or refuting findings. The triangulation method is most appropriate as it results in a broader and deeper understanding of the phenomenon and it will allow for comparison of responses. Secondly, it increases the validity of study findings and gathered data (Verhoeven, 2019).

1.4 Methodology of empirical research

For reaching the objective of this dissertation and answering the hypothesis, the study combines a variety of research methods to achieve the defined objective like "comparative research method", "concretization" and "specialization", "abstraction", "induction" and "generalization", "observational study", "descriptive statistical approach", "predictive analysis", "analysis", and synthesis.

An Entrepreneurial Questionnaire (EQ) translated and adapted in Bulgarian was employed as a data collection tool, based on Linan (Linan F., 2008), who had developed and validated the instrument in different cultural contexts (Liñán & Chen, Y., 2009). The EQ addressed multiitems in a 5 Likert types scale questions. The questions were adapted and designed to measure the variables according to the TPB: (1) personal attitudes towards entrepreneurship, (2) perceptions on subjective norms, (3) perceived behavioral control, (4) entrepreneurial intentions. As mentioned above, students' entry-profiles were address, in this case a few questions were introduced for identifying students' entry-level. These questions form the following additional variables: (1) gender, (2) if student ever started/run own business, (3) if taken prior entrepreneurship courses, (4) if student had any work experience. All questions related to students profile are dichotomous (i.e. yes or no questions). This study targeted undergraduate/ graduate students from six institutions of higher education (state and private) namely University of National and World Economy, Sofia (UNWE), Trakia University, Stara Zagora (Uni-SZ), University of Finance, Business and Entrepreneurship, Sofia (VUZF), "Angel Kanchev" University of Ruse (Uni-Ruse), Varna Free University (VFE), University of Economics Varna (UE- Varna). Students come from various specializations (business management, entrepreneurship, entrepreneurship and management, regional economics, etc.), various years of study year 1 to alumni (see Appendix 3) and age distribution 18-40. After obtaining official permissions to administer the questionnaire, at all times, it was communicated to students that their participation was voluntary, and that their responses would be handled with confidentiality. Once cases with missing information were processed, the data were entered and coded in SPSS and therefore qualified for further data analysis.

The 83 surveyed students had an average age /mean/ of 23,3 years (standard deviation = 4,25), 26,5 % of the respondents are males (n=22) and majority 55,4 % are females (n=46), 18 % of the students (n=15) did not respond the gender question. A number of respondents (36,1 %, figure 8) indicated they had started or already run own businesses. As specified, the surveyed students have diverse specializations. The highest numbers of respondents were studying industrial business and entrepreneurship, from University of Trakia, Stara Zagora, followed by University of Economics, Varna, which is explained by their share of distribution. In order to check for differences across different programs and institutions, ANOVA analysis was conducted. The analyses showed no significant differences could be observed between the students from the different university study programs, in terms of age, entrepreneurial experience or social values.



Figure 2: Number of students in professional field, 2019 (economics); Source: https://rsvu.mon.bg/rsvu4/#/



Figure 3: University response distribution; Source: author's own data

Questions in the survey were formulated in Bulgarian and for convenience were distributed both digitally and/or paper based. The answer categories were presented on a 5-point Likerttype scale, where respondents could indicate the degree at which they can locate their learning expectations in questions like: "to what extent do you expect that this course will help you (1) obtain a general knowledge about entrepreneurship; (2) to obtain necessary skills to work as an entrepreneurial employee, (3) obtain the necessary skills to start your own business venture". Extra questions were added, asking students to specify the level at which they find paid employment or entrepreneurship more desirable.

The data from the survey were studied in three stages – firstly, a descriptive analysis to establish: (1) students' broad profile (i.e. age, university, year of study, gender, percentage of those who had started/run a business); (2) students' general levels of learning expectations and interest towards paid employment or entrepreneurship. Then, at the second step, a correlation analysis was performed to ascertain how/if students' learning expectations related to: (a) students' profile (i.e. age, gender, entrepreneurial experience, and entrepreneurial attempts); (b) students' levels of career attraction (i.e. paid employment and entrepreneurship/self-employment). During the last stage, ANOVA analyses were run to observe the differences among the universities and variables tested.

1.5 Limitations and scope of the study

In this study the impact of university entrepreneurship education in Bulgaria was evaluated. The main goal was to quantify the degree at which university entrepreneurship courses influence students' intentions towards entrepreneurship as a potential career. The study was based on entrepreneurial intentions as a success indicator. To do this, the validity of the TPB-based model of entrepreneurial intentions and of individual variables was examined.

Some limitations of the research should be noted, which might have prevented the accomplishment of the initial objectives. During the research process the author encountered a number of obstacles, the majority of which were out of the researcher's area of influence - for instance, the limited response rate (N:83), as well as respondents' willingness to provide complete information and/or providing own interpretation of the tested variables. In addition, this research was limited in time, restricting the quality of primary data gathered. Overall, the limitations and obstacles slowed down the research process and forced a pursuit of alternative solutions, without jeopardizing its validity and reliability.

The dissertation study contributes to the overall entrepreneurship education literature and education in fostering graduate entrepreneurship. Most of the study's contributions are specific to the context in Bulgaria, although some could be globally applicable. Concerning the set of personal profile variables - gender and previous student entrepreneurial experience are of interest. Firstly, gender and entrepreneurship have a distinctive connection. In most cases,

when the two are discussed it is on how entrepreneurship would encourage female empowerment. My findings in this study show that entrepreneurship education does indeed fulfill this function. Further research could focus on examining the behavioral patterns based on gender that contribute affecting entrepreneurial intentions between the two genders. Secondly, another area of study is the correlation between parents' career entrepreneurial status/ family business and students' career choice, as well as other elements than having an entrepreneurial background/parent. This dissertation paper did not go as far as to investigate those other factors. This might be another research opportunity, where the proposed research might tackle questions such as the function of parents' entrepreneurial success, quality of life enjoyed by having an entrepreneurial parent, etc.

Specifically, this study proved that the TPB is a valid model in the Bulgarian context. It becomes obvious that the TPB model of entrepreneurial intention can somehow be universally applied. The model works with the integration of variables i.e. personal attitudes, social values and perceived behavioral control. Further results show that while perceptions on close people did contribute to intentions, perceptions on social values had a negative contribution on intentions. As a limitation, this study could have researched non-entrepreneurship students or to compare the changes in intentions over time. But again, this could be rather costly, timeconsuming and also facing a difficulty in choosing the appropriate control group. In Bulgaria entrepreneurship programmes are being offered in a number of modes and to different levels of education. Future research could be designed to seek for more qualitative response, e.g. observation or focus groups. Also, although variables like gender and entrepreneurial status were used, there is evidence in correlational tables that other demographic variables may indirectly have influence on students' career choice as well (entrepreneurial parents, region, etc.). Future research can be directed into determining this level of influence in particular by studying differences between students - females and males and those from entrepreneurial families vs. non- entrepreneurial families. Some limitations of the research should be noted, which might have prevented the accomplishment of the initial objectives. During the research process the author encountered a number of obstacles, the majority of which were out of the researcher's area of influence - for instance, the limited response rate (N:83), as well as respondents' willingness to provide complete information and/or providing own interpretation of the tested variables. In addition, this research was limited in time, restricting the quality of primary data gathered. Overall, the limitations and obstacles slowed down the research process and forced a pursuit of alternative solutions, without jeopardizing its validity and reliability.

2. STRUCTURE AND CONTENT OF THE DISSERTATION

As already mentioned, the main focus of this research has been mindsets of students, i.e. their willingness and capacity to turn their ideas into practice, supported by necessary skills gained during EE. Therefore, general university economic or business courses that do not include this specific element have not been considered as "entrepreneurial" and have been excluded from the survey. Imposing such an "entrepreneurial threshold" as preliminary screening guaranteed for a sufficient level of entrepreneurship education among responding institutions, i.e. for a HEI to be considered to have entrepreneurship education, it should have at least one course where the subject of entrepreneurship accounts for min. 25 % of the course curriculum (5 ects) (see Appendix 2). The discussions presented below attempt to provide empirical answers in relation to how effectively existing entrepreneurship programmes encourage students to become successful entrepreneurs; and to what extent university entrepreneurship education in Bulgaria influence students' attitudes, perceptions and intentions towards entrepreneurship (RQ 2, 3). This dissertation consists of six chapters. The following section will give a brief overview of each of the included chapters:

1 INTRODUCTION AND BACKGROUND OF THE RESEARCH

- 1.1 Defining Entrepreneurship
- 1.2 Defining Entrepreneurship education
- 1.3 Bulgaria's Entrepreneurial Environment
- 1.3.1 Bulgaria in context
- 1.3.2 Higher education in Bulgaria
- 1.3.3 Implementation of Bologna process

2 RESEARCH DESIGN, METHODS AND FINDINGS

- 2.1 Research Problem and Research questions
- 2.1.1 Theoretical framework
- 2.1.2 Entrepreneurial Intentions
- 2.1.3 University entrepreneurship education as an intervention
- 2.2 Data Collection
- 2.3 Discussion on Empirical Findings

3 BEST PRACTICES ACROSS EUROPE

- 4 IMPLEMENTING A MODEL FOR GRADUATE ENTREPRENEURSHIP IN BULGARIA
- 4.1 Funding Entrepreneurship
- 4.2 Entrepreneurship within university

4.3 Entrepreneurial competences
4.4 Curriculum development
4.5 Entrepreneurship minor using financial support
5 VALIDITY, LIMITATIONS AND FUTURE RESEARCH DIRECTIONS
6 CONCLUSION AND RECOMMENDATIONS
APPENDICES

BIBLIOGRAPHY LIST

- Chapter 1 was introductory based on research question 1. As presented in the methods section, the chapter gives a comprehensive review of literature which was aimed at establishing the state-of-the-art of global entrepreneurship education in terms of its generic objectives, teaching methods, indicators and other definitional issues within the field of entrepreneurship education. The review used a semi-systematic review of published articles in entrepreneurship education (n = 87).
- Chapter 1 and 2 answers research question 2. The question sought to identify the contextual factors and research methodology that shape graduate entrepreneurship in Bulgaria. The empirical qualitative investigation covered political, economic, sociological, technological factors as well as reviewed recent higher education system processes in the country typical for the second decade of last century.
- Chapter 3 was addressing research question 4. The question was both exploratory and evaluative, seeking to identify and assess best practices of entrepreneurship education in Europe capturing universities from both east and western part. It therefore involved identifying drivers, objectives, students' profile, learning expectations, applied teaching methods, and how the EE had met both its teaching objectives as well as learners' expectations.
- Chapter 3 and 4 were set to establish three issues: (1) the validity of the (Ajzen, 1991) TpB-base model of Entrepreneurial Intentions to the Bulgarian sample of students; (2) the significance of each of the variables to entrepreneurial intentions; (3) the

significance of changes and intentions after students had attended the EE; 4) propose an implementation model for entrepreneurship education with financial support applicable across universities in Bulgaria. Empirical findings from these chapter were published in VUZF review⁵ (see list of publications).

• The paper ends with Chapters 5 and 6 which summarize the results from all previous chapters and present a discussion of their implications to theory and practice and address the validity and limitations of the research. Chapter 6 also serves as a concluding chapter to the whole study and therefore offers a complete picture of what has been achieved in answering the main research question, highlight the limitations faced in this study and gives directions and recommendations for future areas of further research.

3. SYNTHESIZED REVIEW OF THE DISSERTATION

In this study the impact of university entrepreneurship education in Bulgaria was evaluated. The main goal was to **quantify the degree at which university entrepreneurship courses influence students' intentions towards entrepreneurship as a potential career.** The study was based on entrepreneurial intentions as a success indicator. To do this, the validity of the TPB-based model of entrepreneurial intentions and of individual variables was examined.

A survey instrument was used to collect students' data among target participants of undergraduate students taking an entrepreneurship course in Bulgaria. According to rankings of Ministry of Education in Bulgaria, in all 6 universities 29 845 students were taking economics classes in academic year 2018/2019 (Ministry of Education, Bulgaria, 2020). A total of N= 83 students took the survey and hence qualified for analysis of educational outcomes (UNWE n=8 (9.6%); VUZF, n=4 (4.8%); Ruse- Uni n=15 (18,1%); Trakia -SZ n =26 (31.3%) and VFE n=6 (7,2%). The reasons for non-participation of students was mainly non-attendance on the day that the questionnaires was administered due to the fact that students had received no information about of the exact date and time, hence non-response was purely by chance rather than intentional. Following the method by which the questionnaire was

⁵ Todorova, T. (2020). Effects of graduate entrepreneurship education in Bulgaria. *VUZF REVIEW*, 5(1), 3-10. Retrieved from <u>https://papersvuzf.net/index.php/VUZF/article/view/101</u>

administered, voluntary and anonymous, it is assumed that there was no selectivity issues for the non- response.

The 83 surveyed students had an average age /mean/ of 23,3 years (standard deviation = 4,25), 26,5 % of the respondents are males (n=22) and majority 55,4 % are females (n=46), 18 % of the students (n=15) did not respond the gender question. A number of respondents (36,1 %), indicated they had started or already run own businesses. As specified, the surveyed students have diverse specializations. The highest numbers of respondents were studying industrial business and entrepreneurship, from University of Trakia, Stara Zagora, followed by University of Economics, Varna, which is explained by their share of distribution. In order to check for differences across different programs and institutions, ANOVA analysis was conducted. The analyses showed no significant differences could be observed between the students from the different university study programs, in terms of age, entrepreneurial experience or social values.

Moving onto personal profile information in this survey, female respondents (n=46) outnumber male respondents (n=22), however, gender had no relationship to any of the variables, e.g. students (male/female), who had started/run own business had no significant positive link with future attempts to run own business. Both categories of students with or without previous experience, male or female, are equally determined to have own entrepreneurship career. This finding is confirmed by GEM annual report for Bulgaria 206/2017 (Global Entrepreneurship Monitor Bulgaria association, 2016/2017) where the ratio of female to male is somewhat higher for Bulgaria compared to some of the benchmark countries, but indicating more gender equality regarding early-stage entrepreneurial endeavors. Unlike the common view based on previous global GEM research (male are more entrepreneurial), the share of female entrepreneurship in Bulgaria is very similar to the male equivalent (Global Entrepreneurship Monitor Bulgaria association, 2016/2017).

Gender preference entrepreneurship					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	22	26,5	32,4	32,4
	Female	46	55,4	67,6	100,0
	Total	68	81,9	100,0	

Missing	System	15	18,1	
Total	1	83	100,0	

Figure 4: Percentage Gender preference "entrepreneurship"; Source: author's own data

Students' attraction to paid employment had no correlation with students' expectation to learn about or for entrepreneurship. However, the results indicate that attraction to paid employment (34.6%) had significantly positive correlation with expectations to acquire the necessary skills and knowledge for a paid job as an innovative employee, i.e. to learn in entrepreneurship . Also, students' attraction to a career in entrepreneurship (69,5%) correlated significantly with all the learning expectations, which may be due to the spread in attraction to entrepreneurship, which was high for most respondents.

In general, this part of the data analysis means that EE, in terms of learning about and in, has more or less met the students' expectations. As far as the most preferred learning expectation is concerned (to learn for entrepreneurship), EE in all six tested universities fell a bit short of students' high learning expectations in this area. It is also correct that although the courses did not meet some of the expectations, students are less attracted to paid employment and more attracted towards a career in entrepreneurship (69, 5 % vs 34,6 %). This score suggest that either the knowledge/skills they developed during the course contributed to students gaining more confidence about entrepreneurship as a potential career or it merely raised more awareness of own potential.

Previous Experience paid job						
					Cumulative	
		Frequency	Percent	Valid Percent	Percent	
Valid	Yes	71	85,5	85,5	85,5	
	No	12	14,5	14,5	100,0	
	Total	83	100,0	100,0		

Figure 5: Paid job/employment experience; Source: author's own data

Work preference "entrepreneur"					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	2	2,4	2,4	2,4
	3	3	3,6	3,7	6,1
	4	20	24,1	24,4	30,5
	5	57	68,7	69,5	100,0
	Total	82	98,8	100,0	
Missing	System	1	1,2		
Total		83	100,0		

Figure 6: Percentage work preference "entrepreneur" Source: author's own data

Still, variations were found to exist between students from universities in terms of the extent to which they specified they had actually learned about, for and in entrepreneurship. In particular, it appears that students joining in entrepreneurship courses at University of Economics, Varna and Trakia- SZ University are most determined to start their own business (figure 14, 15, 16) and revealed they learned the most about, in and for entrepreneurship of all groups. When comparing the difference between the average learning expectations and learning achievements the findings demonstrate that especially lecturers at VUZF and VFU struggled with meeting the expectations of students.

In relation to students' entrepreneurial profiles 22,9% of the students had taken a course that related to entrepreneurship previously, 36,1% and of the students had some experience in starting and /or running their own businesses and 85.5% of them had employment experience. While previous research suggests a positive correlation between having a parent/family who is entrepreneurial and starting a firm yourself⁶, results here show a negative correlation between past entrepreneurial attempts and entrepreneurial intentions.

What is also notable is the negative correlation between students' perceptions on support from university or other institutions and entrepreneurial intentions while support from friends, close

⁶ Mwasalwib, 2012

family remains significantly positively related to entrepreneurial intentions. Social values, i.e. society approving entrepreneurship graduates to enter an entrepreneurship career, appear to be negatively correlated as well. Furthermore, ANOVA analyses were conducted in order to explore potential differences across universities in terms of learning expectations and attractions towards entrepreneurship or paid employment. There were no significant differences established, where future entrepreneurial intentions was treated as a dependent variable to perception of close people, perceptions on social values and perceived behavioral control.

Overall results, so far, lead to largely accept hypothesis 1-4.

H1: Positive students' attitudes towards entrepreneurship, have a positive influence on entrepreneurial intentions.

H2: Positive students' perceptions of students on close peoples' (family and friends) support towards entrepreneurship, have positive influence on entrepreneurial intentions.

H3: Positive students' perceptions of social values towards entrepreneurship, have positive influence on entrepreneurial intentions.

H4: Positively perceived entrepreneurial behavior of students has a positive influence on their entrepreneurial intentions.

These results also confirm that education offers an important tool in stimulating people to consider entrepreneurship in addition to raising the awareness offered via other measures and campaigns implemented by the Bulgarian government. At the same time, findings in this paper should not be treated too enthusiastically. Rise in attraction to entrepreneurship can also be achieved without meeting students' learning expectations. This might be a caution signal that the awareness and attraction raised might only be short -term or that they will not be converted into real actions. Actually, current studies have indeed demonstrated that in particular cases partaking in a single entrepreneurship course may in fact lower students' intentions and behavior towards starting own business as they become aware of their own short comings and lack of needed skills in this area.⁷

⁷ Oosterbeek, van Praag, & Ijsselstein, 2001

4. CONCLUSION AND SCIENTIFIC CONTRIBUTIONS

4.1 Validation of a business model for HEI entrepreneurship

To conclude, progress of entrepreneurship education in Bulgaria is attainable. The growth of private universities in the country, the educational reforms in existing universities as a result of the Bologna process and the existing level of attraction towards entrepreneurship by students and policy makers should make it possible. Bulgaria has the unique position to learn from existing models worldwide and focus on adopting the most relevant, well established and high-quality practices into its HEIs. Sustainability and long term commitment are key, meaning that the goals of these programmes should be clear from the beginning and outcomes should be measured to guarantee that the intended achievements are being realized. The country's competitiveness, economic growth and level of innovation rely on the ability to generate business owners and leaders with entrepreneurial skills and attitudes to be applied in either creating their own firms or by innovating in large companies. Entrepreneurship education is then the first and perhaps the one of the most needed steps for implanting an innovative culture in Bulgaria.

GEM annual report studies define those, who are able to recognize enough business opportunities for starting a business, as well as are confident they have the necessary skills, as potential entrepreneurs in the society. It is important to note that, at this stage they have not yet decided whether they will pursue the opportunity of not. There is a marked difference of almost 10 percentage points between residents in district centers and other cities in Bulgaria regarding their perception of entrepreneurship as a good career choice. Residents of district cities report a positive attitude to entrepreneurship at levels that surpass the national average. There is a relatively small variation in the perceived high status for successful entrepreneurs and media attention to entrepreneurship in Sofia, large district cities, and other cities. The data implies that even if there is a substantial difference between Sofia and the rest of the large district cities, it is even bigger between the large district cities and the remaining smaller cities and villages. A multifocal pattern of entrepreneurial developments seems to start emerging, in which the social attitudes to entrepreneurship in all large district cities appear to converge.

Further, from the review of contextual factors, it seems that national government and EU ambitions for more graduate entrepreneurs means charging universities with the responsibility

to generate these graduates, but not backed-up by enough strategies for supporting graduates, including financially. In other words, there is a need for a framework that would take over from EE.

From chapter 2 it can be seen that Bulgarian EE has a significantly accomplished creating positive intentions among students. The question is "what happens to these intentions after graduation?" Fishbein and Ajzen (Fishbein & Ajzen, 2005) argued that in order for an individual to implement an intention, two types of interventions might be needed: one to generate the desired intentions (e.g. teaching during the EE) and another very different intervention is to enable the implementation of the intended behavior.

Teaching for entrepreneurship, as an education objective, needs to be done by taking into consideration the gap between the world of universities and that surrounding a start-up business. University entrepreneurship education, as evidenced in this study, focuses more on theoretical entrepreneurship aspects, rather than on the implementation of an entrepreneurial project (Clergeau & Schieb-Bienfait, 2007). To balance the two is a challenge since it calls for a curriculum that is uncommon for traditional Bulgarian universities (i.e. professional bachelors). With the limited budgets that Bulgarian universities are confronted, the most reasonable solution would be to synchronize the teaching objectives in a way that these will align with educational inputs.

4.2 Opportunities for financing entrepreneurial programmes

This study and a number of others have recognized that **insufficient funding** has been a major barrier for most entrepreneurs to fulfil their entrepreneurial ambitions, which tend to fail while still the funding stage even before facing other institutional obstacles. The current funding model is the weak point in the entire higher education system in Bulgaria. On the one hand, this is due to the lack of sufficient resources set aside in national budgets. On the other hand, even the available, provided resources are inefficiently used, some of them are lost due to the high educational migration of students, teachers and talented scientists outside Bulgaria.⁸

Along with the inefficient use of available resources, the problem also comes from the lack of transparency and public control over the use of resources, including financial resources. There are no considered options and targeted efforts to provide other, extra-budgetary sources of funding /e.g. from the business / and the commercialization of the research results. The state

⁸ Ministry of Education and Culture, 2014

subsidy is distributed based on the number of students enrolled and continues to depend on the number of students. This in principle leads to equality, but the method of distribution does not encourage the achievement of a higher quality of the education offered. The development of strategically important for the country professional areas and specializations is not adequately stimulated.⁹ These are professional fields that have high priority for the needs of the economy and the labor market, as well as specialties that need to be protected, as they are not attractive for prospective students, but still necessary for the country. The current regulations do not allow universities to develop as a business, which is an obstacle to the creation of companies or the implementation of technology transfer.



Figure 6: Flowchart model for a graduate start -up using financial support; Source: author's own data

⁹ Science and Education -2020, 2014-2020

Furthermore, a key success factor for university entrepreneurship support should lie in collaboration with private sector/ professional business. Networking, incentives, incorporating the demands of private sector in programme curriculums can be all valuable to increase the effectiveness and efficiency of start-up support (Papazov & Mihailova, 2012). The exchange of good practices in innovative teaching methods allows for progress and innovation. In 2009 a survey covering a sample of 50 SMEs, including dairy producers, small wineries, food and nonfood products retailers was carried out in Bulgaria to study the utilization of modern methodological approaches to planning of business activities (Papazov & Mihailova, 2012). The results showed poor knowledge of basic methodological tools. This can be an incentive for students and researchers to start making first adjustments. Public policy organizations and universities will need to work 'hand in hand' in developing a monitoring and evaluation system which validates the impact of university entrepreneurship support and reveals the need for changes. At institutional level there are a large number of recommendations to be used. More specifically, HEIs in Bulgaria could further enhance their role in promoting entrepreneurial education by:

- ✓ Ensure that the highest level of the institution support the entrepreneurial agenda in order for the institution to become entrepreneurial; the entrepreneurial vision, the goals and aspirations need to be very explicit and known throughout the institution;
- ✓ The vision should reflect a broad definition of entrepreneurship. Entrepreneurship is much more than only "starting a business": it is a mindset for creating sustainable change;
- Entrepreneurship courses should support and be aligned with the overall entrepreneurial goals and strategies;
- \checkmark HEIs need to allocate funds to promote the entrepreneurial agenda;
- ✓ Facilitating and allowing for the use of EU structural funds for financing of entrepreneurial education initiatives in HEIs;
- \checkmark Including measurements and targets for the spread of entrepreneurial education;
- ✓ Initiate via EU-programmes facilities for exchange/mobility of entrepreneurial teachers across Europe (scholarships)'
- ✓ HEIs need to ensure that some parts of entrepreneurial education are credit bearing and they need to develop ways of evaluating the quality and relevance of their entrepreneurial teaching;
- ✓ HEIs need to be aware that entrepreneurial teaching staff act as role models for the students;

- ✓ HEIs should involve the alumni and actively in their efforts to promote entrepreneurial education and build strong networks in the regional community;
- ✓ HEIs should set up an infrastructure that supports entrepreneurial education, entrepreneurial students and staff;

Given the context of the study, the two most noticeable findings from the empirical research are **entrepreneurial intentions are negatively influenced by perceptions on social values and support from university/institutions.** The results demonstrate that students' entrepreneurial intentions were **positively impacted by personal attitudes**, by **entrepreneurial behavioral control, as well as by the support of close family and friends.**

A general practical implication in Bulgaria may relate to the status of EE curriculum in terms of its efforts to accommodate for vocational teaching of entrepreneurship (i.e. educate for a particular profession = professional bachelor, similar to $hogeschools^{10}$ in the Netherlands, Germany or Austria). Typically, universities are theoretical in nature and research oriented, i.e. that they are more prepared to educate about entrepreneurship rather than for entrepreneurship. Following the findings in chapter 4 and 5 it is evident that the Bulgarian EE contributes in promoting entrepreneurship, but its impact is seen mostly on behavioral changes (e.g. change in attractions, attitudes and intentions) as opposed to the practical competences in setting up a new business (either at university campus or after graduation). A link between these behavioral qualities to the physical entrepreneurial effort is missing. A typical Bulgarian university is obviously theoretical and has rather limited relations to both industry/professional world and practitioners. Overall, the positive established impact of entrepreneurship courses in Bulgaria gives significance to the efforts in encouraging graduate entrepreneurship in the country. What is still questionable is the sustainability of these intentions when students actually confront the real world of entrepreneurship. This implies that the drive for fostering graduates entrepreneurship, as emphasized in all policy documents, should go immediately with practical improvements in the areas that have the potential to restrain graduates' startup attempts.

To conclude this paper, this research did not aim to provide evidence on whether the improved entrepreneurial intentions will materialize into real start-ups. In chapter 5 the TPB Model was used, which has its origin the West but proved to be valid among the Bulgarian sample as well.

¹⁰ Hogeschool- University of Applied Sciences in the Netherlands

This indicates the universal relevance of Ajzen (Ajzen I. , 1991), suggesting that entrepreneurship, regardless of context, rests in the same principles. In all scenarios, however, there is a hidden paradox in aligning the learning objectives (i.e. teaching for), the timing of impact assessment and the desired final outcome (e.g. new venture, new jobs, etc). Considering the 5 to 10 years' time that graduates are typically said to start their first company, this issue may be resolved with an extended research as a prolonged study, that traces graduates' career developments from university, and helps to recognize the sustainability of entrepreneurial intentions shaped during university years.

LIST OF IMPORTANT FINDINGS AND ACADEMIC CONTRIBUTIONS

- 1. Given the context of the study, the two most noticeable findings from the empirical research are: 1) entrepreneurial intentions are negatively influenced by perceptions on social values and 2) support from university/institutions. The results demonstrate that students' entrepreneurial intentions were positively impacted by personal attitudes, by entrepreneurial behavioral control, as well as by the support of close family and friends.
- 2. Results suggest that the EE had accomplished raising students' attractions towards a career in entrepreneurship and respectively reducing their attractions towards paid employment. Also, findings revealed that the EE had positive and significant influence on the causes of students' entrepreneurial intentions i.e. personal attitudes and perceived behavioral control.
- **3.** A general answer then to the first part of the research questions is that the Bulgarian EE achieves a significant level of success in influencing students' entrepreneurial intentions. Responding students had clearly shown increase both in their attraction towards career in entrepreneurship and in their intentions to start own business after graduation. The overall implication here is that EE has formed in students a sense of tolerance that entrepreneurship is a possible career option.
- **4.** Following the findings in chapter 2 it is evident that the Bulgarian EE contributes in promoting entrepreneurship, but its impact is seen mostly on behavioral changes (e.g. change in attractions, attitudes and intentions) as opposed to the practical competences in setting up a new business (either at university campus or after graduation).
- **5.** The TPB Model was used, which has its origin in the West but proved to be valid among the Bulgarian sample as well. This indicates the universal relevance of the model, suggesting that entrepreneurship, regardless of context, rests in the same principles. The dissertation study contributes to the overall entrepreneurship education literature and research efforts in Bulgaria, by clarifying the role (and limitations) of entrepreneurship education in fostering graduate entrepreneurship. Most of the study's contributions are specific to the context in Bulgaria, although some could be globally applicable.

6. Furthermore, a key success factor for university entrepreneurship support should lie in collaboration with private sector/ professional business. Networking, incentives, incorporating the demands of private sector in programme curriculums can be all valuable to increase the effectiveness and efficiency of start-up support. The exchange of good practices in innovative teaching methods allows for progress and innovation in Bulgaria. This dissertation document proposed a business model for university entrepreneurship programme with financial support, which can be used as a way of institutional self-funding in Bulgarian universities.

LIST OF PUBLICATIONS

- Todorova, T. (2020). Effects of graduate entrepreneurship education in Bulgaria. VUZF REVIEW, 5(1), 3-10. Retrieved from <u>https://papersvuzf.net/index.php/VUZF/article/view/101</u>
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- Todorova, T. (2020). Lobbying influence: public consultations and EU policy making. *VUZF Review*, 5(3), 3-12. <u>https://doi.org/10.38188/2534-9228.20.3.01</u>, https://papersvuzf.net/index.php/VUZF/article/view/120

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DECLARATION OF ORIGINALITY

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