

The Analysis of the Effect of Entrepreneurship Education, Perceived Desirability, and Entrepreneurial Self-Efficacy on University Students' Entrepreneurial Intention

Suratno, Ekawarna*, Ade Kusmana

Faculty of Teaching Training and Education, Universitas Jambi, Indonesia

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Abstract This study aims to analyze the effect of Entrepreneurship Education (EE), Perceived Desirability (PD), and Entrepreneurial Self-Efficacy (ESE) on Entrepreneurial Intentions (EI) in the context of graduates of Jambi University – Indonesia. The study adopted inferential design with cross-sectional data. The sample was alumni of 11 faculties of Jambi university, totaling 505 (47.72% men, 51.68% women). The result is EE positively and significantly affects PD, ESE and EI. PD and ESE positively and significantly affect EI. The limitation of the study is it focuses only on the antecedents of EI by ignoring entrepreneurial behavior, which is how respondents start new businesses. Besides, this study used cross-sectional data, so the link of causality was carefully interpreted. Longitudinal datasets use is needed for future analysis. The study practical implication is this study provides a conceptual framework for thorough evaluation for EE organizers to establish learning outcomes, study materials, learning methods, learning environments, and networking with business communities in providing students authentic experiences in how to start businesses. The originality value of this study is it uses a combination of two models - Shapero's Model of "Entrepreneurial Event" (1982) and Ajzen's Model of "Theory of Planned Behavior" (1991) – to explain EI.

Keywords Entrepreneurship Education (EE), Perceived Desirability (PD), Entrepreneurial Self-Efficacy (ESE), Entrepreneurial Intentions (EI)

1. Introduction

Entrepreneurship Education (EE) can be seen as a key factor for generating new entrepreneurs who will play a role in increasing economic growth and sustainable development. It contributes to growing a country's

competitiveness in its national and international markets; overcoming unemployment as a solution to this ever-growing problem; encouraging entrepreneurs in bringing innovative ideas to the market and achieving their personal growth (Acs and Szerb, 2010). [1] Therefore, many educational institutions in almost all over the world - including universities - are developing entrepreneurship education, preparing new entrepreneurial cadres. For example, over the past three decades the number of Entrepreneur Education Programs (EEPs) has increased tenfold in the United States and elsewhere (Spiteri and Maringe, 2014). [2] Since 2012, as a mid-term and long-term project, the Korean Ministry of Education has led the activation of creative entrepreneurship, entrepreneurship education and entrepreneurial culture in universities by establishing entrepreneurship centers in 61 universities (Yoon et al., 2015). [3]

According to Shaomeng Jia (2018), entrepreneurship is also an effective tool to reduce poverty in underdeveloped countries (United Nations General Assembly (UNGA) Resolutions A / RES / 69/320, 2014, p. 3). For example, the Organization for Economic Co-operation and Development Strategy (OECD) launched a synthesis of the first cross-country policy on "Fostering Entrepreneurship" in 1998. The report concluded that the vibrations of entrepreneurship depend on institutions, government programs and cultural factors. (OECD, 1998). The World Bank has similar projects aimed at promoting entrepreneurship, including the info Dev and the Women Entrepreneurs Finance Initiative (We-Fi). In particular, these programs and projects focus on technological innovation and finance start-ups. According to the Independent Evaluation Group (2013, p. 41), the World Bank has an "investment portfolio of \$ 18.7 billion" in innovation and entrepreneurship during the fiscal year 2000-2013. These projects target "R&D infrastructure, entrepreneurial capabilities reinforcement, and start-ups financing" in low and middle income countries. Likewise,

the United Nations Foundation, the Global Entrepreneurs Council, and Entrepreneurs for Social Change Project all use the concept of entrepreneurship as a solution to global and regional level problems. Entrepreneurship is also positioned to support sustainable development (United Nations, 2015 Sustainable Development Goals). [4]

In Indonesia, various programs and entrepreneurial activities at University are launched by the Government. In 2013, the Indonesian government targeted the addition of five million new entrepreneurs by 2025 by developing human resources for the advancement of national entrepreneurs. Since February 2011, the Indonesian government has issued many policies to support the progress of entrepreneurship in Indonesia, especially for students who already graduate from university. To foster an entrepreneurial spirit, the Indonesian government continues to roll out entrepreneurial empowerment programs. For example: 1000 graduates of entrepreneurship programs, Entrepreneurship Student Creative Program (PKMK), entrepreneurship training programs, social assistance reinforcement programs and financing programs through Corporate Social Responsibility. [5]

Entrepreneurship is understood as an activity that produces innovation, work, and growth in the long term; therefore, it is considered by the government as a solution to social and economic problems (Thornton et al., 2011). [6] In fact, establishing new companies means creating alternative ways to reduce unemployment - especially in the current period - where such issue has been influenced by the global economic crisis (Brancu et al., 2015). [7] At present the number of intellectual unemployment in Indonesia is still relatively high due to limited employment opportunities for college graduates. Based on data submitted by Statistics Indonesia (BPS), the open unemployment rate of university graduates rose by 1.13 percent from 2017 to 2019, increasing from 5.18 percent to 6.31 percent. [8] Current conditions tend to get worse in the situation of global competition because college graduates from Indonesia have to compete with those from other universities from around the world. Thurik and Wennekers (2004) concluded that entrepreneurship is an effective instrument for reducing social problems. [9] Nawaser et al. (2011) indicate that there is a positive relationship between entrepreneurship and poverty reduction. [10] The entrepreneurial literature has recognized that entrepreneurship education can overcome the problem of unemployed graduates (Jones and Colwill, 2013). [11]

Entrepreneurship education is very important for economic and social development, be it regionally, nationally or internationally. It is because it has been understood as a priority on the political and economic agenda and debate in various countries in the world, including discussions at the highest level of the UN (Lima et al., 2015). [12] It is known that the development and

implementation of entrepreneurship education programs follows the recommendations of the United Nations Educational, Scientific and Cultural Organization (UNESCO) for 21st century education, namely learning how to know, learning how to do, learning how to live and learning how to be.

According to DeTienne and Chandler (2004), "Entrepreneurship education is the transfer of knowledge and discussion in business management to students with insight into their creation in the effort of creation. [13] Entrepreneurship education refers to "pedagogical [programs] or any educational process regarding entrepreneurial attitudes and skills" (Fayolle et al., 2006). [14] The aim of entrepreneurship education is to help students increase the likelihood of their business success and to improve careers that they can choose (Nabi et al., 2017). [15] In addition, Schmitz et al., (2017) argue the aim of offering entrepreneurship education at universities is not only to encourage students to start their own businesses but also to make them more creative and innovative. [16] This is in line with Kirkley (2017) who state that entrepreneurship education can legitimize entrepreneurship as a viable career choice and develop a culture of entrepreneurship among students. [17] This can give students the opportunity to meet famous entrepreneurs and influence attitudes towards entrepreneurship. In other words, entrepreneurship courses can help students find their role models to become entrepreneurs. Entrepreneurship education is positively related to financial and nonfinancial business performance (Cho and Lee, 2018). [18] This study examines the effect of Entrepreneurship Education (EE), Perceived Desirability (PD), Entrepreneurial Self-Efficacy (ESE) on Entrepreneurial Intentions (EI), in the context of university graduates in Indonesia. The model used in this study is a combination of the two models.

2. Literature Review and Hypothesis

2.1. Entrepreneurial Intentions (EI)

EI is a state of conscious mind that precedes action and directs attention towards goals such as starting a new business (Moriano et al., 2012). [19] However, various factors influence a person's conscious decision to start a new business (Liñan and Chen, 2009). Behavior performance depends on motivation (intention) and ability (behavioral control) (Ajzen, 1991). Both personal and situational factors will play an important role in determining a person's decision to take the initiative to do entrepreneurship. Previous studies show that in addition to the personality of an individual, external factors have a role in inviting students to engage in entrepreneurial behavior. Iakovleva et al. (2011) underline that the economic environment in developing countries appears to

be less stable, often characterized by strong turbulence. This makes choosing a career in developing countries a difficult task for graduates because they cannot expect the same demand for salaried employees as in developed countries. The same applies to career advancement. However, the volatile economy offers opportunities for entrepreneurial activities, perhaps even wider than that of a stable and advanced economy. [20]

The study of EI has received much attention from researchers and this has led to the formulation of different entrepreneurial models that aim to understand an individual's intention for business creation. Each model tries to both capture the psychological process of individual intentions and predict individual behavior. The former emerges from social psychology while the latter analyzes the behaviors and mental processes that occur when changing attitudes and beliefs into effective actions (Clara Gieure, 2019). [21] Therefore, in literature there are two models for explaining entrepreneurial intention (EI), namely Shapero's Model of the "Entrepreneurial Event" (1982) and Ajzen's Model of "Theory of Planned Behavior" (1991). The first model explains EI based on perception of desire, perceived feasibility, and tendency to act. PD refers to the extent to which he feels an interest in certain behaviors (to become an entrepreneur), while perceived feasibility is defined as the extent to which people consider themselves personally to be able to perform certain behaviors (Linan, 2004). The second model describes intention using personal attitudes, subjective norms (SNs), and perceived behavioral control (PBC) (Van Gelderen et al., 2008). [22] Both models present a high level of compatibility (Krueger et al., 2000). [23] According to Linan and Chen (2009), perceived behavioral control (PBC) is interpreted as a perception of ease or difficulty being an entrepreneur. Therefore, the concept is very similar to self-efficacy (SE) (Bandura, 1997), [24] and perceived feasibility (Shapero, 1984). [25] Finally, intention can predict individual behavior, so understanding the factors forming EI will provide insight into the process of business creation (Galanakis, and Giourka, 2017). [26] Thus, an intention-based model offers a lot of entrepreneurial research because entrepreneurial activity is planned behavior and the intended understanding can help detect potential actions.

2.2. Entrepreneurship Education (EE)

In recent years, unprecedented growth in EE programs in higher education has been seen throughout the world (Fayolle et al., 2006), [27] which is an instrument capable of fostering the skills, knowledge, and attitudes needed for creation company (Greene and Saridakis, 2008). [28] Sanchez, et al., (2019) stated that there was an increased interest in research in this study, which was shown by a significant increase in the number of articles and citations recently. [29] Westhead and Solesvik (2016) describe EE

as "the main driver of entrepreneurial performance". While education generally helps equip people with the knowledge, skills, attitudes and values they need to live and function well in society; educational programs that concentrate on entrepreneurship play an important role in influencing student attitudes toward EI and behavior. [30] The results show that EEP (entrepreneurship education program) strongly and positively influences some of the physiological characteristics, skills, and knowledge of participants, which is an antecedent of entrepreneurial intentions (Pedrini, Langella and Molteni, 2016). [31]

According to the European Commission (2012), "EE in higher education enhances students' basic competencies in entrepreneurship to strengthen students' Entrepreneurial Intention (EI)". [32] Empirically, research shows that EE can influence the development of EI (Pedrini et al., 2017). [33] Küttime et al. (2014) also showed that students participating in EE in 17 European countries had the intention to engage in entrepreneurship. [34] Research results of Puni et al. (2018) found that EE positively affected EI and Self-Efficacy. The study by Passoni and Glavam (2017) shows that EE has a positive effect on EI among undergraduate management and engineering students. [35] Data analysis in Otache's research (2019) shows a significant positive relationship between EE and EI students on the one hand and between EE and perceived entrepreneurial lecturers (PEL) on the other. [36] Sun, et al., (2016) found that entrepreneurship education had an effect on attitudes, social norms, self-efficacy and entrepreneurial intentions. [37] Education can develop and improve one's self-efficacy (UNCTAD, 2010). [38] Gradually acquired through education, self-efficacy significantly increases the level and content of personal aspirations, goals and decisions of people (Bandura et al., 2001). [39] Zhao et al. (2005) found a significant relationship between formal learning and ESE. Similarly, Dickson et al. (2008) found that entrepreneurship training had a positive impact on individual perceptions about their ability to start new businesses. [40] Recently, Rauch and Hulsink (2015) concluded that entrepreneurship education increases the control of behavior perceived by students. [41]

On the other hand, some research results show different results. In a recent meta-analytic review, Bae et al. (2014) found that although entrepreneurship education has a positive effect on EI, the effect is weak or small. [42] Even Fayolle and Gailly (2015) found the impact of entrepreneurship education on entrepreneurial intentions was negatively affected by previous student experience about entrepreneurship. Because of the level of experience of the average newborn entrepreneur or early stage is high, the effectiveness of education may not be that strong. [43] EEP (entrepreneurial education program) can have a negative impact on EI (Martin, MacNally, and Kay, 2012). [44] Finally, a series of studies found that EEP has no impact on EI (A do Paço et al., 2015). [45]

This difference is possible because of differences in curriculum, learning environment, learning strategies and material for study on entrepreneurship education between universities. The hypotheses proposed are:

- H₁: Entrepreneurship education (EE) influences entrepreneurial intentions (EI)
- H₂: Entrepreneurship education (EE) influences perceived desirability (PD)
- H₃: Entrepreneurship education (EE) influences entrepreneurial self-efficacy (ESE)

2.3. Perceived Desirability (PD)

According to Linan (2004) the construct of perceived desirability (entrepreneurial event-Shapero & Sokol, 1982) has similarities with personal attitudes and subjective norms (Theory of Planned Behavior-Ajzen's, 1991). Both are an explanatory variable of intention. According to him, the willingness to do entrepreneurial behavior (perceived desirability) can be understood as composed by personal attitudes and perceptions of social norms. In this sense, it can be remembered that Shapero & Sokol (1982) regard desire as a result of social and cultural influences. Researchers who applied Ajzen's (1991) theory of planned behavior (TPB) concluded that positive attitudes toward entrepreneurial behavior encourage subjective norms for entrepreneurial behavior and behavioral control that are perceived as beneficial for entrepreneurial behavior are positively related to EI (Bahadur and Naimatullah, 2015). [46] This means that people are more likely to engage in entrepreneurial behavior if they have the desired behavior rating, a positive perception that the person they are referring to agrees with the behavior, and a positive perception that their involvement in the behavior is appropriate. Similarly, the researchers who applied the Shapero and Sokol's (1982) entrepreneurial event model (EEM) revealed that the desired positive perceptions of an entrepreneurial business, a stronger tendency to act in an entrepreneurial manner and a possible perceived feasibility to start an entrepreneurial business increase individual tendencies to choose an entrepreneurial career (Urban and Kujinga, 2017). [47] This implies that people are more likely to be involved in entrepreneurship if they consider it interesting and practical - and if they have the capacity to act on identified opportunities (Bacq et al., 2016). [48]

Further, another similar study shows that the perceived positive desires of an entrepreneurial business, a stronger tendency to act in an entrepreneurial manner and a positive perception of eligibility to start an entrepreneurial business increase the tendency of individuals to choose an entrepreneurial career (Urban and Kujinga, 2017). [49] Solesvik's analysis, et al. (2014) reveals that students who have perceived desirability and perceived feasibility for entrepreneurship have significantly higher intensity of entrepreneurial intentions. [50] Bell's empirical evidence (2009) shows that attitudes, subjective norms and

perceived behavioral control mediate the relationship between perceptions of entrepreneurial motivation and entrepreneurial intentions. [51] Variable personal attitudes that can be predicted from EI (Buli and Yesuf, 2017). [52] The results of the study indicate a significant relationship between some entrepreneurial attitudes and several variables in student background and entrepreneurial intentions (Wassim J. Aloulou, 2016). [53] Proactive personality and perceived support for the concept of development are also important determinants of students' entrepreneurial intentions (Mustafa, et al., 2016). [54] Young people who are building their individual identities that will influence their choice of future work are strongly influenced by their individual characteristics (beliefs, attitudes, motivations) and by their socialization with family, friends and classmates (Falck, Heblich, & Luedemann, 2012). [55] Therefore, understanding what drives entrepreneurial intentions takes into account the motivation of students' personal careers, their perceptions of entrepreneurial work and the role of university education as a supporter and transmitter of entrepreneurship is important for designing targeted educational processes (Tognazzo, Gianecchini, and Gubitta, 2017). [56] The hypothesis proposed is:

- H₄: Perceived desirability (PD) influences entrepreneurial intentions (EI)

2.4. Entrepreneurial Self-Efficacy (ESE)

Self-efficacy is the belief that a person has sufficient abilities to excel in what he decides or wants to achieve (Bandura, 1997). According to him, entrepreneurial self-efficacy (ESE) is an important motivational attribute of the entrepreneurial process because individuals accept the provisions of ambiguity around business situations that require effort, perseverance, and planning. [57] People who have high self-efficacy tend to show higher intrinsic interest in entrepreneurial behavior and activities (e.g. Miranda et al., 2017). [58] The concept of self-efficacy has been applied in social sciences by many researchers, including ESE (Chen et al., 1998). [59]

Lent et al. (1994) highlight that self-efficacy is significantly related to career interest, career choice goals (intentions), and job performance. [60] In accordance with these findings, Zhao et al. (2005), suggest that ESE is a mediator in the relationship between three antecedent variables (effects of perceived learning from entrepreneurship-related courses, previous entrepreneurial experience, and risk trends) and the development of students' intention to become entrepreneurs. [61] ESE has emerged as an important antecedent of the intention to become an entrepreneur (Krueger, 2007). [62] In fact, one of the main contributions in research on ESE concerns its role in the formation of entrepreneurial intentions (EI) (Drnovšek et al., 2010). [63] Prabhu et al. (2012) have found that especially for people with high ESE levels, this

variable acts as a mediator in the relationship between high-proactive and EI personalities and EI's lifestyle. [64] Bello et al. (2017) states that ESE mediates the relationship between creativity and EI. [65]

Self-efficacy is believed to be strongly associated with EI because "entrepreneurship clearly represents planned and intentional behavior" (Krueger and Brazeal, 1994). [66] Assessment of self-efficacy has an influence on behavior and achievement of goals while strongly influencing EI and the possibility that EI will be followed by entrepreneurial actions (McGee et al., 2009). [67] Especially after the introduction of Ajzen's planned behavioral theory (1991), an important line of research emerged to investigate the relationship between ESE and EI (e.g. Schmutzler et al., 2018). [68] Empirical studies show a significant positive relationship between the two constructs (e.g. Shahab et al., 2018). [69] Newman et al. (2018) conducted a systematic review of the literature on ESE and concluded that there was a significant positive relationship between ESE and EI students and workers. [70] The results of Sahin's analysis, et al., (2019) show that high EI levels can be realized through various configurations of five major personality traits and ESE. [71] From this description, it is clear that ESE has a positive influence with EI. Liñán and Fayolle (2015) also support this argument by maintaining that self-confidence and strong self-confidence make individuals engage in entrepreneurial activities with a perception of low risk and increase their willingness to start new business ventures. Similarly, Tsai et al. (2016) found that individual attitudes towards entrepreneurship influenced the relationship between ESE and EI. ESE is positively and significantly related to EI (Bruce, et al., (2018). [72] Therefore, the hypothesis proposed is:

- H₅: Entrepreneurial self-efficacy (ESE) influences entrepreneurial intentions (EI)

3. Methods

3.1. Research Design

This study aims to analyze the effect of Entrepreneurship Education (EE), Perceived Desirability (PD), and Entrepreneurial Self-Efficacy (ESE) on Entrepreneurial Intentions (EI) in the context of Jambi University graduates in Indonesia. Thus, this study adopted inferential research designs. This is a cross-sectional study as the data in this study is collected at one point of time.

3.1.1. Participants

This empirical study was conducted on a sample of alumni from 11 faculties of Jambi University, Indonesia, who were willing to collaborate to voluntarily participate by filling out an online questionnaire. Participants were

guaranteed anonymity and were welcome to leave their contact number if they wished to participate in a follow-up study. Individuals of higher education graduates were chosen since they have been heavily involved in entrepreneurial activities. In this study 505 alumni were taken as the respondents (47.72% men, 51.68% women).

3.1.2. Study Measures

The instrument for measuring all research variables in this study adopted the Entrepreneurial Intention Questionnaire (EIQ) Version 2.05, with direct permission from F. Liñán & M.J. Rodríguez. The number of the themes and scales were adapted to the needs of on-line data collection and characteristics of students in Indonesia. After adaptation, the items were translated into Indonesian.

Entrepreneurial Intention: All items were measured using a 6-point Likert scale with response options ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). An example of an item was EI-1: I am ready to make anything become an entrepreneur, EI-6: I have a strong intention to start a company someday. The Cronbach's alpha for the scale was 0.894.

Entrepreneurial Education: All items were measured using a 5-point Likert scale with response options ranging from 1 (absolute ignorance) to 4 (full knowledge). Sample items included EE-1: Special training for young entrepreneurs, EE-5: Consultation services on favorable terms. The Cronbach's alpha for the scale was 0.919.

Perceived Desirability (personal attitude and perceived social norms): All items were measured using an 8-point Likert scale with response options ranging from 1 (strongly disagree) to 4 (strongly agree). Examples of items included PD-1: Your immediate family, World War 8: - It is commonly thought that entrepreneurs take advantage of other people. The Cronbach's alpha for the scale was 0.826.

Entrepreneurial Self-efficacy. All items were measured using a 6-point Likert scale with response options ranging from 1 (strongly disagree) to 4 (strongly agree). Sample items included ESE-1: Starting a company and still functioning will be easy for me, ESE-6: If I try to start a company, I will have a high probability of success. The Cronbach's alpha for the scale is 0.895.

3.2. Data Analysis

Using statistical software, the data was analyzed to determine whether there is a relationship between variables. Following accepted standards applied by several researchers (Koh, 1995; [73] Harris and Gibson, 2008; [74] Keat et al., 2011 [75]), we measured the correlation between variables and linear regression models between independent variables and dependent variable.

4. Results

4.1. Sample Characteristics

The sample characteristics are presented in Table 1. The sample is dominated by women (51.68%); this reflects the characteristics of the population of graduates of undergraduate programs of Jambi University every year, with women being the majority. As many as 94.26 percent of respondents were over 21 years old, and 85.74 percent of them did not have a family background of entrepreneurs. Only 60.40 percent of respondents had attended specialized entrepreneurship training.

Table 1. Summary of descriptive statistic sample characteristics

Variable		Obs.	Number	Percentage	Cumulative
Gender	Male	505	241	47,72	47,72
	Female		261	51,68	100
Age	< 20	505	22	4,36	4,36
	>21		476	94,26	100
Family Background	Entrepreneur	505	66	13,07	13,07
	Non-Entrepreneur		433	85,74	100
Entrepreneur Training	Ever	505	198	39,21	39,21
	Never		305	60,40	100

4.2. Validity and Reliability

Validity is obtained by looking at correlations between constructs or factors. Items must correlate more strongly with their own constructs than with anything else, indicating that they are perceived by respondents as their own theoretical constructs (Messick, 1988). [76] The results in Table 2 show a correlation matrix between predictor constructors. All constructs, EI, PD, ESE, and EE, correlate strongly with their own constructs. All variables have a positive and significant correlation. Leech et al. (2005) suggested that reliability is an indicator of the extent to which item differences, measurements, or judgments are consistent with each other, [77] whereas Zumbo (2007) sees the measurement or validation of test scores as an ongoing process in which one provides evidence to support conformity, meaningfulness; and the specific uses of conclusions are made from scores about individuals from the sample and context given. The approach used to examine two important assumptions is Cronbach's alpha - because it is believed to be the most common measurement of reliability scale (Andy, 2005). [79] In this condition, alpha values range from 0.826 to 0.919 (Table 2). Therefore, surveys can be considered reliable.

Table 2. Summary of test validity & reliability results

Variable	Item	Correlation			Reliability	
		r	Sig.	Status	Alpha Cronbach	Status
Entrepreneurship Intention	EI-1	.713**	.00	Valid	.894	Reliable
	EI-2	.813**	.00			
	EI-3	.831**	.00			
	EI-4	.831**	.00			
	EI-5	.829**	.00			
	EI-6	.832**	.00			
Perceived Desired	PD-1	.480**	.00	Valid	.826	Reliable
	PD-2	.531**	.00			
	PD-3	.578**	.00			
	PD-4	.704**	.00			
	PD-5	.781**	.00			
	PD-6	.772**	.00			
	PD-7	.753**	.00			
	PD-8	.715**	.00			
Entrepreneur - Self Efficacy	ESE-1	.743**	.00	Valid	.895	Reliable
	ESE-2	.768**	.00			
	ESE-3	.847**	.00			
	ESE-4	.862**	.00			
	ESE-5	.861**	.00			
	ESE-6	.808**	.00			
Entrepreneurship Education	EE-1	.858**	.00	Valid	.919	Reliable
	EE-2	.850**	.00			
	EE-3	.876**	.00			
	EE-4	.880**	.00			
	EE-5	.884**	.00			

*significant at 0.05, **significant at 0.01

4.3. Hypothesis Testing

The correlation matrix presented in Table 3 shows that there is a positive relationship between predictor variables and the dependent variable. The correlation coefficients between EE and EI are 0.507, ESE and EI 0.650, and PD and EI .463, suggesting all of them are positive and significant.

Table 3 correlation coefficient only shows the relationship between variables, but does not provide an indication of the direction of causality. Therefore, to determine the direction of quality, a hypothesis is tested by applying linear regression. The results are presented in Table 4. Based on Table 4, it is known that the direction of causality between variables are positive and significant, indicating that all of the proposed hypotheses are accepted.

Table 3. Summary matrix correlations

		EI	PD	ESE	EE
EI	Pearson Correlation	1	.463**	.650**	.507**
	Sig. (2-tailed)		.000	.000	.000
	N	505	505	505	505
PD	Pearson Correlation	.463**	1	.561**	.493**
	Sig. (2-tailed)	.000		.000	.000
	N	505	505	505	505
ESE	Pearson Correlation	.650**	.561**	1	.669**
	Sig. (2-tailed)	.000	.000		.000
	N	505	505	505	505
EE	Pearson Correlation	.507**	.493**	.669**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	505	505	505	505

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

Table 4. Summary hypothesis test

No.	Hypothesis	Effect	T-Statistic	p-Value	Description
1	Entrepreneurship Education → Entrepreneur Intention	.507**	13.198	.000	Significant
2	Entrepreneur Education → Perceived Desired	.493**	12.722	.000	Significant
3	Entrepreneur Education → Entrepreneur Self-Efficacy	.669**	20.204	.000	Significant
4	Perceived Desired → Entrepreneur Intention	.463**	11.708	.000	Significant
5	Entrepreneur Self-Efficacy → Entrepreneur Intention	.650**	19.167	.000	Significant

*significant at 0.05, **significant at 0.01

5. Discussion and Conclusions

In this study, the findings indicate that the EE, PD and ESE variables are useful models to explain IE. This means that graduates who have obtained EE have great potential to become new entrepreneurs. These results are consistent with previous studies (e.g. Müller, 2011; Zhang et al., 2014; Küttime et al. 2014; Pedrini et al., 2016 & 2017; Puni et al., 2018). Empirical evidence shows that EE is a very important variable because it has a significant effect on the formation of PD and ESE. Further, the subsequent effect of it is the emergence of EI, which is the intention of graduates to start new businesses. The next finding is that PD and SE have a significant influence on EI; and this is certainly in line with the theory of planned behavior (Ajzen, 1991), where PD (attitude towards the behavior,

and the subjective norms) and the perceived behavioral control or ESE are cognitive antecedents of intentions. Also, the research results of Alessandra T. (2017) revealed that cognitive antecedents of intentions (i.e. attitude towards entrepreneurship, subjective norms and perceived behavioral control) are positively related to entrepreneurial intentions. [80]

Therefore, this study has theoretical implications because it contributes to this literature by highlighting the moment graduates feel that EE has provided them with management skills and abilities to identify opportunities and develop networks. The graduates' EI grows as their understanding of attitudes, values and actions (entrepreneurial character) develops. Once such keeps going, then they will have a positive outlook on entrepreneurial careers to pursue their desired career. This

adds to the literature that shows that entrepreneurship and business education appear to have a positive relationship with EI (Bae et al., 2014). [81] Because EE has a significant influence on cognitive factors (PD and ESE) and IE, our findings also have practical implications, which is, the implementation of EE at an undergraduate level in Higher Education needs serious attention. EE can be regarded as the most effective way to instill an entrepreneurial culture in Higher Education through fostering the entrepreneurial mindset of students and developing a supply of future graduate entrepreneurs. Traditionally, universities initially focused on preparing students and graduates for employment, but Gibb and Hannon (2006) argued that titles were no longer "vouchers for lifelong work" - that was only "tickets to entry into the workforce." [82]

Kabongo and Okpara (2010), after conducting studies at 58 higher education institutions at Sub-Sahara University, found that there were several courses offered in key scientific disciplines such as entrepreneurial negotiation, leadership, developing new ideas, creative thinking, and technological innovation. They emphasize that existing educational practices need to be modified to enhance entrepreneurial self-efficacy, highlight entrepreneurial excellence and encourage the courage of wise risk-taking. [83] This is similar to the findings discovered by Mary Fenton and Almar Barry (2014), who state that Higher Education can foster greater entrepreneurship through EE; knowledge transfer; academic spin-off; spin-in; commercialization of R & D; campus incubator; and / or indirectly through networking and training. [84] They are considered as seeds of innovation that grow new knowledge and ideas that can be translated into commercial entities, exploit intellectual assets and increase economic growth. Florida (1999) believes that the main role of Higher Education Institutions (HEI) as "a nation's primary knowledge source" is to produce graduates or "knowledge workers". [85] Entrepreneurs and governments must support graduates with various entrepreneurial skills or mindsets with a focus on creativity, capacity for innovation, management, networking and risk-taking.

6. Limitations and Further Research

The sample consisting of 505 student graduates is certainly right to explore EI. This is beneficial because of the same age and qualifications so that it is more homogeneous. Focusing on one university allows us to control several factors, such as location, study materials, semester learning plans, methods and sources of learning, etc. However, it has obvious weaknesses as it is limited. Replication of this research is needed with a wider and more cross-sectional sample of universities and cultures involved so as to increase the generalization of our

findings. In addition, this study uses cross-sectional data, so the link of causality has to be carefully. The use of longitudinal datasets is needed for future analysis. In addition, it should be noted that different measuring instruments may cause different results. So, the definition of construction and size needs further attention. Finally, there is a saying that implies not all intentions will lead to behavior, one more factor known as opportunity is still required. Therefore, the results of the study cannot be absolutely made as an inference that all graduates who show entrepreneurial intentions will actually create a company or start a new business in the future. However, there are strong theories and empirical findings pointing out the fact that there is a strong link between intention and behavior.

REFERENCES

- [1] Acs, Z.J. and Szerb, L. (2010), "The global entrepreneurship and development index (GEDI)", Paper presented at the *Summer Conference on "Opening up Innovation: Strategy, Organization and Technology"*, Imperial College London Business School, 16-18 June.
- [2] Spiteri, S. and Maringe F. (2014), "EU entrepreneurial learning: perspectives of university students", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 8 No. 1, pp.51-70.
- [3] Yoon, H., Yun, S., Lee, J. and Phillips, F. (2015), "Entrepreneurship in East Asian regional innovation systems: role of social capital", *Technological Forecasting and Social Change*, Vol. 100, pp. 83-95.
- [4] Shaomeng Jia, 2018. Foreign aid: boosting or hindering entrepreneurship? *Journal of Entrepreneurship and Public Policy* Vol. 7 No. 3, 2018 pp. 248-268. DOI 10.1108/JEPP-D-18-00031
- [5] Kaijun and Ichwatus Sholihah, (2015). A comparative study of the Indonesia and Chinese educative systems concerning the dominant incentives to entrepreneurial spirit (desire for a new venturing) of business school, *Students Journal of Innovation and Entrepreneurship* 4:1, pp. 1-16. DOI 10.1186/s13731-014-0014-0
- [6] Thornton, P., Ribeiro-Soriano, D. and Urbano, D. (2011), "Socio-cultural factors and entrepreneurial activity: an overview", *International Small Business Journal*, Vol. 29 No. 2, pp. 105-118.
- [7] Brancu, L., Guðmundsdóttir, S., Gligor, D. and Munteanu, V. (2015), "Is culture a moderator of entrepreneurship motivation? A comparative study of Romania and Iceland", *Amfiteatru Economic*, Vol. 17 No. 38, pp. 133-147
- [8] Florida, R. (1999), "The role of the university: leveraging talent, not technology", *Issues in Science and Technology*, June. 1999.
- [9] Mary Fenton and Almar Barry, (2014). Breathing space – graduate entrepreneurs' perspectives of entrepreneurship education in higher education. *Education & Training*, Vol.

- 56 No. 8/9, 2014, pp. 733-744. DOI 10.1108/ET-05-2014-0051
- [10] Kabongo, J. and Okpara, J. (2010), "Entrepreneurship education in Sub-Saharan African Universities", *International Journal of Entrepreneurial Behaviour and Research*, Vol. 16 No. 4, pp. 296-308.
- [11] Gibb, A.A. and Hannon, P. (2006), "Towards the entrepreneurial university?", *International Journal of Entrepreneurship Education*, Vol. 4, pp. 73-110.
- [12] Bae, T.J., Qian, S., Miao, C. and Fiet, J.O. (2014), "The relationship between entrepreneurship education and entrepreneurial intentions: a meta-analytic review", *Entrepreneurship: Theory and Practice*, Vol. 38 No. 2, pp. 217-254.
- [13] Alessandra Tognazzo, Martina Gianecchini, Paolo Gubitta, (2017). "Educational Context and Entrepreneurial Intentions of University Students: An Italian Study" *In Entrepreneurship Education*. Published online: 25 May 2017; 47-74. <http://dx.doi.org/10.1108/S2040-724620170000007008>
- [14] Wassim J. Aloulou , (2016),"Predicting entrepreneurial intentions of freshmen students from EAO modeling and personal background: a Saudi perspective", *Journal of Entrepreneurship in Emerging Economies*, Vol. 8 Iss 2 pp.1-25. <http://dx.doi.org/10.1108/JEEE-09-2015-0050>
- [15] Strobl, A., Kronenberg, C., and Peters, M. (2012), "Entrepreneurial attitudes and intentions: assessing gender specific differences", *International Journal of Entrepreneurship and Small Business*, Vol. 15 No. 4, pp. 452-468.
- [16] Andy, F. (2005), *Discovering Statistic Using SPSS*, 2nd ed., SAGE Publications, London.
- [17] Cetindamar, D., Gupta, V. K., Karadeniz, E. E. and Egrican, N. (2012), "What the numbers tell: The impact of human, family and financial capital on women and men's entry into entrepreneurship in Turkey", *Entrepreneurship & Regional Development*, Vol. 24 No. 1-2, pp. 29-51.
- [18] Saraf, N. (2015), "What determines entrepreneurial intentions in India", *Journal of Entrepreneurship and Innovation in Emerging Economies*, Vol. 1 No. 1, pp. 39-55.
- [19] Turker, D. and Sonmez-Selçuk, S. (2009), "Which factors affect entrepreneurial intention of university students?", *Journal of European Industrial Training*, Vol. 33 No. 2, pp. 142-159.
- [20] Harris M.L., and Gibson S.G. (2008a), "Examining the entrepreneurial attitudes of US business students", *Education + Training*, Vol. 50 No. 7, pp. 568-581.
- [21] Keat, O.Y., Selvarajah, C., and Meyer, D. (2011), "Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students", *International Journal of Business and Social Science*, Vol. 2 No. 4, March, pp. 206-220.
- [22] Messick, S. (1988), "Validity", in Linn, R.L. (Ed.), *Educational Measurement*, 3rd ed., American Council on Education/Orix Press, New York, NY, pp. 33-48.
- [23] Leech, N.L., Barrett, K.C. and Morgan, G.A. (2005), *SPSS for Intermediate Statistics: Use and Interpretation*, 2nd ed., Lawrence Erlbaum Associates Publishers, Mahwah, NJ.
- [24] Zumbo, B.D. (2007), "Validity: foundational issues and statistical methodology", in Rao, C.R. and Sinharay, S. (Eds), *Handbook of Statistics*, Vol. 26, Elsevier Science B.V, AE Amsterdam, pp. 45-79.
- [25] Faruk Şahin, Hande Karadağ, Büşra Tuncer, (2019) "Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention: A configurational approach", *International Journal of Entrepreneurial Behavior & Research*, <https://doi.org/10.1108/IJEER-07-2018-0466>
- [26] Bruce M.K. Mwiya, Yong Wang, Bernadette Kaulungombe, Maidah Kayekesi, (2018) "Exploring entrepreneurial intention's mediating role in the relationship between self-efficacy and nascent behaviour: Evidence from Zambia, Africa", *Journal of Small Business and Enterprise Development*, <https://doi.org/10.1108/JSBED-03-2017-0083>
- [27] Koh, H.C. (1995), "Factors associated with entrepreneurial inclination: An empirical study of business undergraduates in Hong Kong", *Journal of Small Business Entrepreneurship*, Vol. 12 No. 2, pp. 29-41.
- [28] Krueger, N. and Dickson, P.R. (1994), "How believing in ourselves increases risk taking: perceived self - efficacy and opportunity recognition", *Decision Sciences*, Vol. 25 No. 3, pp. 385-400.
- [29] McGee, J.E., Peterson, M., Mueller, S.L. and Sequeira, J.M. (2009), "Entrepreneurial self-efficacy: refining the measure", *Entrepreneurship Theory and Practice*, Vol. 33 No. 4, pp. 965-988
- [30] Schmutzler, J., Andonova, V. and Diaz-Serrano, L. (2018), "How context shapes entrepreneurial self-efficacy as a driver of entrepreneurial intentions: a multilevel approach", *Entrepreneurship Theory and Practice*, doi: 10.1177/1042258717753142.
- [31] Shahab, Y., Chengang, Y., Arbizu, A.D. and Haider, M.J. (2018), "Entrepreneurial self-efficacy and intention: do entrepreneurial creativity and education matter?", *International Journal of Entrepreneurial Behavior & Research*, doi: 10.1108/IJEER-12-2017-0522.
- [32] Newman, A., Obschonka, M., Schwarz, S., Cohen, M. and Nielsen, I. (2018), "Entrepreneurial self-efficacy: a systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research", *Journal of Vocational Behavior*, Vol. 110, pp. 403-419.
- [33] Zhao, H., Seibert, S.E. and Hills, G.E. (2005), "The mediating role of self-efficacy in the development of entrepreneurial intentions", *Journal of Applied Psychology*, Vol. 90 No. 6, pp. 1265-1272.
- [34] Krueger, N.F. (2007), "What lies beneath? The experiential essence of entrepreneurial thinking", *Entrepreneurship Theory and Practice*, Vol. 31 No. 1, pp. 123-138.
- [35] Prabhu, V.P., McGuire, S.J., Drost, E.A. and Kwong, K.K. (2012), "Proactive personality and entrepreneurial intent: is entrepreneurial self-efficacy a mediator or moderator?", *International Journal of Entrepreneurial Behavior & Research*, Vol. 18 No. 5, pp. 559-586.

- [36] Dmrovšek, M., Wincent, J. and Cardon, M.S. (2010), "Entrepreneurial self-efficacy and business start-up: developing a multi-dimensional definition", *International Journal of Entrepreneurial Behavior & Research*, Vol. 16 No. 4, pp. 329-348.
- [37] Benedetta Bellò, Veronica Mattana, Michela Loi, (2017) "The power of peers: A new look at the impact of creativity, social context and self-efficacy on entrepreneurial intentions", *International Journal of Entrepreneurial Behavior & Research*, <https://doi.org/10.1108/IJEER-07-2016-0205>
- [38] Alessandra Tognazzo, Martina Gianecchini, Paolo Gubitta, (2017). "Educational Context and Entrepreneurial Intentions of University Students: An Italian Study" In *Entrepreneurship Education*. Published online: 25 May 2017; 47-74. <http://dx.doi.org/10.1108/S2040-724620170000007008>
- [39] Falck, O., Heblich, S., & Luedemann, E. (2012). Identity and entrepreneurship: Do school peers shape entrepreneurial intentions? *Small Business Economics*, 39(1), 39-59.
- [40] Bandura, A. (1997), *Self-Efficacy: The Exercise of Control*, Freeman, New York, NY.
- [41] Miranda, F.J., Chamorro-Mera, A. and Rubio, S. (2017), "Academic entrepreneurship in Spanish universities: an analysis of the determinants of entrepreneurial intention", *European Research on Management and Business Economics*, Vol. 23 No. 2, pp. 113-122.
- [42] Chen, C., Greene, P. and Crick, A. (1998), "Does entrepreneurial self-efficacy distinguish entrepreneurs from managers?", *Journal of Business Venturing*, Vol. 13 No. 4, pp. 295-316.
- [43] Lent, R.W., Brown, S.D. and Hackett, G. (1994), "Toward a unifying social cognitive theory of career and academic interest, choice, and performance", *Journal of Vocational Behavior*, Vol. 45 No. 1, pp. 79-122.
- [44] Robin Bell, (2019) "Predicting entrepreneurial intention across the university", *Education + Training*, <https://doi.org/10.1108/ET-05-2018-0117>
- [45] Marina Solesvik, Paul Westhead, and Harry Matlay , (2014), "Cultural factors and entrepreneurial intention", *Education + Training*, Vol. 56 Iss 8/9 pp. 680 - 696. <http://dx.doi.org/10.1108/ET-07-2014-0075>
- [46] Bereket Mamo Buli, Wasihun Mohammed Yesuf, (2015) "Determinants of entrepreneurial intentions: Technical-vocational education and training students in Ethiopia", *Education + Training*, Vol. 57 Issue:8/9, pp.891-907, <https://doi.org/10.1108/ET-10-2014-0129>
- [47] Wassim J. Aloulou , (2016), "Predicting entrepreneurial intentions of freshmen students from EAO modeling and personal background: a Saudi perspective", *Journal of Entrepreneurship in Emerging Economies*, Vol. 8 Iss 2 pp.1-25. <http://dx.doi.org/10.1108/JEEE-09-2015-0050>
- [48] Michael James Mustafa, Ernesto Hernandez, Christopher Mahon, Lai Kei Chee , (2016), "Entrepreneurial Intentions of university students in an emerging economy: the influence of university support and proactive personality on students' entrepreneurial intention", *Journal of Entrepreneurship in Emerging Economies*, Vol. 8 Iss 2. <http://dx.doi.org/10.1108/JEEE-10-2015-0058>
- [49] Bacq, S., Ofstein, L.F., Kickul, J.R. and Gundry, L.K. (2016), "Perceived entrepreneurial munificence and entrepreneurial intentions: a social cognitive perspective", *International Small Business Journal*, Vol. 35 No. 5, pp. 639-659.
- [50] Urban, B. and Kujinga, L. (2017), "The institutional environment and social entrepreneurship intentions", *International Journal of Entrepreneurial Behavior & Research*, Vol. 23 No. 4, pp. 638-655.
- [51] Fayolle, A. and Gailly, B. (2015), "The impact of entrepreneurship education on entrepreneurial attitudes and intentions: hysteresis and persistence", *Journal of Small Business Management*, Vol. 53 No. 1, pp. 75-93.
- [52] Bae, T.J., Qian, S., Miao, C. and Fiet, J.O. (2014), "The relationship between entrepreneurship education and entrepreneurial intentions: a meta-analytic review", *Entrepreneurship: Theory and Practice*, Vol. 38 No. 2, pp. 217-254
- [53] Martin, B. C., MacNally, J. J. and Kay, M. J. (2012), "Examining the Formation of Human Capital in Entrepreneurship: A Meta-Analysis of Entrepreneurship Education Outcomes", *Journal of Business Venturing*, Vol. 28, pp. 211-224.
- [54] A do Paco, A., Ferreira, J.M., Raposo, M., Rodrigues, R.G. and Dinis, A. (2015), "Entrepreneurial intentions: is education enough?", *International Entrepreneurship and Management Journal*, Vol. 11 No. 1, pp. 57-75.
- [55] Bahadur, A.A. and Naimatullah, S. (2015), "Developing attitudes and intentions among potential entrepreneurs", *Journal of Enterprise Information Management*, Vol. 28 No. 2, pp. 547-567.
- [56] Urban, B. and Kujinga, L. (2017), "The institutional environment and social entrepreneurship intentions", *International Journal of Entrepreneurial Behavior & Research*, Vol. 23 No. 4, pp. 638-655.
- [57] Tirto.id. (2019). "BPS: Pengangguran Lulusan Universitas Naik 1,13 Persen", <https://tirto.id/bps-pengangguran-lulusan-universitas-naik-1.13-persen-cj3h>, diakses 20 Mei 2019
- [58] Thurik, R. and Wennekers, S. (2004), "Entrepreneurship, small business and economic growth", *Journal of Small Business and Enterprise Development*, Vol. 11 No. 1, pp. 140-149.
- [59] DeTienne, D.R. and Chandler, G. (2004), "Opportunity identification and its role in the entrepreneurial classroom: a pedagogical approach and empirical test", *Academy of Management Learning & Education*, Vol. 3 No. 3, pp. 242-257.
- [60] Lima, E., Lopes, R.M.A., Nassif, V.M.J. and Silva, D., 2015. Ser seu Próprio Patrão? Aperfeiçoando-se a Educação Superior em Empreendedorismo/Interested in Being a Business Owner? Improving Higher Education in Entrepreneurship. *Revista de Administração Contemporânea*, 19(4), p.419
- [61] Fayolle, A., Gailly, B. and Lassas-Clerc, N. (2006),

- “Assessing the impact of entrepreneurship education programmes: a new methodology”, *Journal of European Industrial Training*, Vol. 30 No. 9, pp. 701-720
- [62] Nabi, G., Liñán, F., Fayolle, A., Kruger, N. and Walmsley, A. (2017), “The impact of entrepreneurship education in higher education: a systematic review and research agenda”, *Academy of Management Learning and Education*, Vol. 16 No. 2, pp. 277-299
- [63] Kirkley, W.W. (2017), “Cultivating entrepreneurial behavior: entrepreneurship education in secondary schools”, *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 11 No. 1, pp. 17-37.
- [64] Schmitz, A., Urbano, D., Dandolini, G.A., de Souza, J.A. and Guerrero, M. (2017), “Innovation and entrepreneurship in the academic setting: a systematic literature review”, *International Entrepreneurship and Management Journal*, Vol. 13 No. 2, pp. 369-395
- [65] Diego Passoni, Rafael Bianchini Glavam, (2017), "Entrepreneurial intention and the effects of entrepreneurial education: differences among management, engineering, and accounting students.", *International Journal of Innovation Science*, <https://doi.org/10.1108/IJIS-05-2017-0042>
- [66] Kütüta, M., Kallastea, M., Venesaara, U. and Kiis, A. (2014), “Entrepreneurship education at university level and students’ entrepreneurial intentions”, *Procedia – Social and Behavioral Sciences*, Vol. 110, pp. 658-668.
- [67] European Commission (2012), *Effects and Impact of Entrepreneurship Programmes in Higher Education*, European Commission, Brussels.
- [68] Pedrini, M., Langella, V. and Molteni, M. (2017), “Do entrepreneurial education programs impact the antecedents of entrepreneurial intention? An analysis of an entrepreneurship MBA in Ghana”, *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 11 No. 3, pp. 373-392
- [69] Hongyi Sun, Choi Tung Lo, Bo Liang, Yuen Ling Belle Wong, (2016). "The Impact of Entrepreneurial Education on Entrepreneurial Intention of Engineering Students in Hong Kong", *Management Decision*. <https://doi.org/10.1108/MD-06-2016-0392>
- [70] Innocent Otache, (2019) "Enhancing the effectiveness of entrepreneurship education: the role of entrepreneurial lecturers", *Education + Training*, <https://doi.org/10.1108/ET-06-2018-0127>
- [71] Rauch, A. and 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*, Vol. 14 No. 2, pp. 187-204.
- [72] Dickson, P.H., Solomon, G.T. and Weaver, K.M. (2008), “Entrepreneurial selection and success: does education matter?”, *Journal of Small Business and Enterprise Development*, Vol. 15 No. 2, pp. 239-258.
- [73] Bandura, A., Barbaranelli, C., Caprara, G. and Pastorelli, C. (2001), “Self-efficacy beliefs as shapers of children’s aspirations and career trajectories”, *Child Development*, Vol. 72 No. 1, pp. 187-206.
- [74] UNCTAD (2010), “Entrepreneurship education, innovation and capacity-building in developing countries: note by the UNCTAD secretariat”, UNCTAD Secretariat, Geneva, available at: http://unctad.org/en/docs/ciimem1d9_en.pdf (accessed 12 Mei 2019).
- [75] Shapero, A. (1984), “The entrepreneurial event”, in Kent, C.A. (Ed.), *Environment for Entrepreneurship*, DC Heath, Lexington, MA, pp. 21-40.
- [76] Galanakis, K. and Giourka, P. (2017), “Entrepreneurial path: decoupling the complexity of entrepreneurial process”, *International Journal of Entrepreneurial Behavior & Research*, Vol. 23 No. 2, pp. 317-335.
- [77] Fayolle, A., Gailly, B. and Lassas-Clerc, N. (2006), “Assessing the impact of entrepreneurship education programmes: a new methodology”, *Journal of European Industrial Training*, Vol. 30 No. 9, pp. 701-720.
- [78] Westhead, P. and Solesvik, M.Z. (2016), “Entrepreneurship education and entrepreneurial intention: do female students benefit?”, *International Small Business Journal*, Vol. 34 No. 8, pp. 979-1003.
- [79] Matteo Pedrini, Valentina Langella, Mario Molteni. (2016). "Do entrepreneurial education programs impact the antecedents of entrepreneurial intention? An analysis of an entrepreneurship MBA in Ghana", *Journal of Enterprising Communities: People and Places in the Global Economy*. <http://dx.doi.org/10.1108/JEC-12-2016-0043>
- [80] Amador Durán-Sánchez, María de la Cruz Del Rio-Rama, José Álvarez-García, Diego Fernando García-Vélez, (2019) "Mapping of scientific coverage on education for Entrepreneurship in Higher Education", *Journal of Enterprising Communities: People and Places in the Global Economy*, <https://doi.org/10.1108/JEC-10-2018-0072>
- [81] Greene, F.J. and Saridakis, G. (2008), “The role of higher education skills and support in graduate selfemployment”, *Studies in Higher Education*, Vol. 33 No. 6, pp. 653-672.
- [82] Yun Hee Cho, Joo-Heon Lee, (2018) "Entrepreneurial orientation, entrepreneurial education and performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 Issue: 2, pp.124-134, <https://doi.org/10.1108/APJIE-05-2018-0028>
- [83] Moriano, J.A., Gorgievski, M., Laguna, M., Stephan, U. and Zarafshani, K. (2012), “A cross-cultural approach to understanding entrepreneurial intention”, *Journal of Career Development*, Vol. 39 No. 2, pp. 162-185.
- [84] Iakovleva, T., Kolvereid, L. and Stephan, U. (2011), “Entrepreneurial intentions in developing and developed countries”, *Education + Training*, Vol. 53 No. 5, pp. 353-370.
- [85] Clara Gieure, Maria del Mar Benavides-Espinosa, Salvador Roig-Dobón, (2019) "Entrepreneurial intentions in an international university environment", *International Journal of Entrepreneurial Behavior & Research*, <https://doi.org/10.1108/IJEER-12-2018-0810>
- [86] Van Gelderen, M., Brand, M., van Praag, M., Bodewes, W., Poutsma, E. and van Gils, A. (2008), “Explaining

entrepreneurial intentions by means of the theory of planned behaviour”, *Career Development International*, Vol. 13 No. 6, pp. 538-559.

- [87] Krueger, N.F. Jr, Reilly, M.D. and Carsrud, A.L. (2000), “Competing models of entrepreneurial intentions”, *Journal of Business Venturing*, Vol. 15 Nos 5-6, pp. 411-432
- [88] Liñán and Chen, (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions, *Entrepreneurship Theory And Practice*, pp. 593-617. Series: <http://www.recerca.net/bitstream/2072/2213/1/UABDT06-7.pdf>.
- [89] Nawaser, K., Khaksar, S.M.S., Shakhshian, F. and Jahanshahi, A.A. (2011), “Motivational and legal barriers of entrepreneurship development”, *International Journal of Business and Management*, Vol. 6 No. 11, pp. 112-116.
- [90] Jones, P. and Colwill, A. (2013), “Entrepreneurship education: an evaluation of the young enterprise Wales initiative”, *Education + Training*, Vol. 55 Nos 8/9, pp. 911-925