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# ENTREPRENEURIAL INTENTIONS OF MANAGEMENT STUDENTS AS ROOTS FOR NEW VENTURES. EMPIRICAL INVESTIGATION

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#### **Abstract**

Entrepreneurial intentions (EI) that direct attention, experience and activities towards business concepts, create the form and direction of organizations at their inception stage. Future organizational outcome, such as survival, development and growth are based on these intentions.

The objective of the study is to examine undergraduates' EI on the example of the students of Faculty of Management of Czestochowa University of Technology (FoMCUT). Various dimensions of EI are discussed in the context of gender, student specialization, the level of studies and selected components of entrepreneurial attitude orientation. The conducted research leads to the conclusions concerning the level of EI of students of the faculty which is strictly connected with the science and practice of management and entrepreneurship.

The survey took place in December 2013 and January 2014 on the randomly selected sample of 332 students of FoMCUT. The sample amounted to 6.9% of the total population of students of the Faculty. The research tool constructed by the author was the questionnaire. The respondents were the students of both full- and part-time course of study.

This study is the basis for the future research on predictors of EI as the foundation of new business ventures. It directs attention towards relationships between entrepreneurial ideas and their possible results. It outlines the background for examining entrepreneurial traits and contexts which are important both for the development of every economy and creation of directions for the practice of management of microand small enterprises.

**Key words:** *entrepreneurship, new venture creation, education, students.* 

#### Introduction

Entrepreneurship is a complex and multi-layered phenomenon. Taking a decision on starting a business activity is the final stage of the process of triggering the entrepreneurial activity in a human being. It is preceded by intentions created by a set of different factors resulting from both the specificity of a given individual and their environment.

Entrepreneurial intentions (EI) that direct attention, experience and activities towards business concepts, create the form and direction of organizations at their inception stage. Future organizational outcome, such as survival, development and growth are based on these intentions. As B. Bird (1988, pp. 442-453) underlines, ideas of entrepreneurs and their intentions formulate the initial strategic template of new organizations and are the underpinnings of new venture development of a relevant and crucial value.

Recently, particularly within the last two decades, the problem of entrepreneurial intentions has been increasingly the center of scientific attention (Abebe, 2012, pp. 1-23), though,

there is little empirical research on the actual attitudes and feelings of university students towards entrepreneurial activities (Martinez et al., 2007, pp. 92-117; Roudaki, 2009, pp. 36-53).

#### Research Focus

The creation of new businesses accounts for one fourth to nearly one third of the variation in the economic growth in a large number of industrialized countries (Reynolds, 2000, pp. 153-227). Discovering EI and the factors influencing an individual's choice to pursue independent business creation may lead to the insights that would have an impact on economic growth and development.

The aim of the study is to examine undergraduates' EI on the example of students of Faculty of Management of Czestochowa University of Technology (FoMCUT). Various dimensions of EI are discussed in the context of gender, type of studies, level of studies and selected components of entrepreneurial attitude orientation. The conducted research leads to the conclusions concerning the level of EI of students of the faculty which is strictly connected with the science and practice of management and entrepreneurship.

## **Methodology of the Research**

#### General Background of Research

The motivation and demotivation about objects, issues, feelings, beliefs and also many other verbal and nonverbal expressions commonly referred as intention may be positive or negative (Bird, 1988, pp. 442-453).

Intention is an individual's specific propensity to perform an action or a series of actions. It is the result of conscious thinking that directs behavior (Parker, 2004). Intentionality is a state of mind that directs an individual's attention towards a specific goal (Bird, 1988, pp. 442-253). As I. Ajzen (1991, p. 181) states "Intentions are assumed to capture the motivational factors that influence a behavior and to indicate how hard people are willing to try or how much effort they would exert to perform the behavior". So, the next step is transforming the intentions into behavior, so intentions concerning entrepreneurship may be considered as predictors of entrepreneurial behavior.

Entrepreneurship is about the exploitation of a business idea for self-employment (Martinez et al., 2007, pp. 92-117; Sipa, 2010, pp. 43-65), whereas EI may be regarded as inclinations towards or willingness to start a new business. N.F. Krueger (1993, pp. 5-23) defined EI as involvement aiming at the start-up of a new business. EI means the possibility of starting a business in the future.

Entrepreneurial intention can be defined as a conscious awareness and belief by an individual that he or she intends to set up a new business venture and plans to do that in the future (Thompson, 2009, pp. 669-694). Bird (1988, pp. 442-453) defines intention as the state of mind directing a person's attention and action towards self-employment as opposed to organizational employment. The process of starting a new firm can thus be regarded as voluntary with conscious intentionality. Significantly, intention has been considered as the most powerful predictor of entrepreneurial behavior (Autio et al., 2001, pp. 145-166; Krueger et al., 2000, pp. 411-452).

El are of vital importance in understanding the entrepreneurship process, due to their key role in opening the door to the establishment of a new enterprise (Uygun, Kasimoglu, 2010, pp. 24-40). An intention implies planned behavior - an individual's intent to create an organization amounts to planning it as a result of this behavior (Hmieleski, Corbett, 2006, pp. 45-63). In this framework, intention can be defined as a mental state moderating individual's attention, experi-

ence and behavior towards realization of a certain intention and developing methods to achieve it (Bird, Jelinek, 1988, pp. 21-29). Intentions take shape depending on individual's perception of social and physical environments and the perceived contexts, expectations, attitudes, beliefs and choices influence the development of intentions and, moreover, these perception may be affected by factors belonging to the individual's background (Boyd, Vozikis, 1994, pp. 63-77).

Pre-organizational phenomena such as the ones deciding on the initiation of an entrepreneurial career are both important and interesting (Bird, 1988, pp. 442–454). It is best to predict any planned behavior by observing intentions towards that behavior - not by attitudes, beliefs, personality, or mere demographics. Intentions are the single best predictor of planned behavior (Bagozzi et al., 1989, pp. 35–62).

In its simplest form, intentions predict behavior, while in turn, certain specific attitudes predict intention. Intentions thus serve as a conduit to better understanding the act itself (Ajzen, 1987, pp. 1–63; Ajzen, 1991, pp. 179–211). As such, intentions serve as important mediating variables between the act of starting a business venture and potential exogenous influences (Krueger et al., 2000, pp. 411-432).

Meta-analyses conducted by Kim and Hunter (1993, pp. 331-364) empirically prove that intentions successfully predict behavior, and attitudes successfully predict intentions. Across a wide range of studies relating to a wide variety of types of behaviors and the intentions to engage in those behaviors, attitudes explain over 50% of the variance in intentions.

Gelard and Saleh (2010, pp. 10707-10717) investigated the impact of educational support, structural support, among others on entrepreneurial intentions. They confirmed the key role of education for the development of entrepreneurial intentions, which implies that the educational unit (e.g. university) may influence the EI.

As P. Kyrö and K. Ristimäki (2008, pp. 259-265) underline, the examination of the intentions seems to be particularly reasonable in the context of the overall definition of entrepreneurship, whose essence may amount to searching for the explanations of the dynamics of behavioral processes taking place in people, renewal of the institutional and organizational culture and aiming at the development of methodological solutions oriented towards the research on the processes and enabling the specification of their dynamics.

## Sample of the Research

The sample amounted to randomly selected 332 students of FoMCUT, which accounted to 6.9% of the total population of students of the Faculty. In the research there participated 213 women and 119 men aged 20 to 58 (mean age – 23.62, whereas median - 22). The respondents were the students of both full-time studies (250 people) and part-time studies (82 people). From among the respondents, one person did not answer the question concerning entrepreneurial intentions, whereas 15 people (4.52%) ran their own business activity. These people were, therefore, excluded from the research concerning the identification of entrepreneurial intentions, since the research was directed towards the exploration of the intentions connected with the first business. As a result, the subject of the research were 316 people (n=316). The characteristics of the final sample are presented in Table 1.

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**Table 1. Research Sample Demographics.** 

N=316 Frequency								
Male	109	Part-time studies	72	Post bachelor master's study	78			
			%					
Female	66%	Full-time studies	77%	Bach. /Eng.	75%			
Male	34%	Part-time studies	23%	Post bachelor master's study	25%			

#### Instrument and Procedures

The survey took place in December 2013 and January 2014. The research tool constructed by the author was the questionnaire. The statements used in the questionnaire were prepared on the basis of the research conducted successfully on the students of Sunyani Polytechnic Marketing Students (Samuel et al., 2013, pp. 37-49). The respondents were requested to express their attitude towards the nine statements (Table 3), reflecting the attitudes towards life goals (including the professional ones), the future start-up of a business activity and the level of potential involvement and sacrifice for the implementation of self-employment. This way of measurement of EI is acknowledged as the correct one according to the available literary sources (Uddin, Bose, 2012, p. 130; Hashemi et al., 2012, pp. 94-102). The respondents gave answers on a five-point Likert scale, where the answers amounted to: 1-I strongly disagree, 2-I rather disagree, 3-I neither agree nor disagree (difficult to say), 4-I rather agree, 5-I strongly agree.

## Data Analysis

Descriptive statistics are used to describe the main features of the sample and also correlation coefficients are calculated so as to trace the close specificity of the answers. The analyses were made using MS Excel and PQStat Software. The probability value at the level of p<0.05 was assumed as statistically significant, whereas p<0.01 as statistically highly significant.

#### **Results of Research**

The respondents' attitude towards life goals is worth regarding as a starting point for the analysis of the results of the conducted research. The research results in this area are presented in Table 2. The 'I agree' responses constitute the accumulation of the answers: 'I rather agree' and 'I strongly agree', whereas the 'I disagree' responses constitute the accumulation of the answers: 'I rather disagree and 'I strongly disagree'.

Table 2. The Respondents' Life Goals.

	N=31	6						
	<u>Frequ</u>	iency			<u></u> %			
	l disagree	Difficult to say	l agree	Total	l disagree	Difficult to say	l agree	Total
I want to achieve something in life	2	11	303	316	1	3	96	100
I have strictly defined life goals	18	69	229	316	6	22	72	100

The statements presented above, concerning the goals are simultaneously the operation-alization of one of the dimensions of Entrepreneurial Attitude Orientation (EAO) (Robinson et al., 1991, pp. 13-31) – goal orientation. Although the full analysis of EAO is not included in the objectives of the present paper, the thread of goal orientation was assumed as an important background for the considerations on entrepreneurial intentions. 72% of those questioned declare that they possess strictly defined life goals. In this case, it is important that 6% of the respondents do not formulate such goals, and 22% cannot express their opinion on this issue. Simultaneously, the vast majority declares that 'they want to achieve something in life', which may be identified with the desire to succeed. Such a response was given by as much as 96% of the respondents (the accumulation of the answers 'I agree' and 'I rather agree').

The results of the research on the attitudes concerning entrepreneurial intentions are presented in Table 3 and 4. The 'I agree' an 'I disagree' answers constitute the accumulation performed like in case of Table 1. Correlation coefficients of the individual responses given by the respondents were presented in Table 5.

Table 3. Selected descriptive statistics for EI1-EI9.

	El1	EI2	EI3	EI4	EI5	EI6	EI7	EI8	EI9
Average	2,9303	3,5158	3,6645	3,0981	3,3006	3,1075	3,1613	2,9651	2,9462
St. error	0,0654	0,0613	0,0635	0,0621	0,0624	0,0618	0,061	0,0616	0,0552
SD	1,1635	1,0909	1,1303	1,1040	1,1104	1,0988	1,0907	1,0963	0,9825
Min	1	1	1	1	1	1	1	1	1
Max	5	5	5	5	5	5	5	5	5

**Table 4. Entrepreneurial Intentions. The Distribution of Answers.** 

	N=31	6						
	Freq	uency			%			
Operationalization of the El scale	l disagree	Difficult to say	l agree	Total	l disagree	Difficult to say	lagree	Total
The main goal in my professional life is setting up my own business	99	125	92	316	31	40	29	100
I prefer to be an entrepreneur to an employee	50	103	163	316	16	33	52	100
I want to be my own boss	46	77	193	316	15	24	61	100
I'm seriously thinking of setting my own business after I graduate	85	121	110	316	27	38	35	100
I've decided to set up my own business someday	67	106	143	316	21	34	45	100
I'm determined to establish my own company in the future	81	121	114	316	26	38	36	100
I'm willing to take any effort to set up my own business	81	107	128	316	26	34	41	100
I'm ready to do anything to become an entrepreneur	93	126	97	316	29	40	31	100
I will have set up my own business within the next 5 years	80	167	69	316	25	53	22	100
	The main goal in my professional life is setting up my own business  I prefer to be an entrepreneur to an employee I want to be my own boss I'm seriously thinking of setting my own business after I graduate I've decided to set up my own business someday I'm determined to establish my own company in the future I'm willing to take any effort to set up my own business I'm ready to do anything to become an entrepreneur I will have set up my own business within the next	Operationalization of the EI scale  The main goal in my professional life is setting up my own business  I prefer to be an entrepreneur to an employee 50 I want to be my own boss 46 I'm seriously thinking of setting my own business after 85 I graduate I've decided to set up my own business someday 1'm determined to establish my own company in the future I'm willing to take any effort to set up my own business I'm ready to do anything to become an entrepreneur  I will have set up my own business within the next  80	The main goal in my professional life is setting up my own business  I prefer to be an entrepreneur to an employee 50 103  I want to be my own boss 46 77  I'm seriously thinking of setting my own business after 85 121  I graduate  I've decided to set up my own business someday 67 106  I'm determined to establish my own company in the future  I'm willing to take any effort to set up my own business  I'm ready to do anything to become an entrepreneur  I will have set up my own business within the next  I will have set up my own business within the next  I will have set up my own business within the next  I want to be my own business after 85 121  I set 107	Operationalization of the EI scale  The main goal in my professional life is setting up my own business I prefer to be an entrepreneur to an employee 50 103 163 1 want to be my own boss 46 77 193 I'm seriously thinking of setting my own business after 85 121 110 1 graduate I've decided to set up my own business someday 1'm determined to establish my own company in the future I'm willing to take any effort to set up my own business I'm ready to do anything to become an entrepreneur  I will have set up my own business within the next 80 167 69	Comparison of the El scale   Comparison of	Operationalization of the EI scale    Part   Part	Operationalization of the EI scale    Prequency   Prequency   Prepare   Prep	Prequency   Preparation   Prequency   Preparation   Prep

Table 5. Spearman's rank-order correlation coefficients (EI1-EI9).

	El1	EI2	EI3	EI4	EI5	EI6	EI7	EI8	EI9
EI1	1.000000								
EI2	0.573943	1.000000							
EI3	0.549053	0.587569	1.000000						
EI4	0.698905	0.559675	0.552648	1.000000					
EI5	0.710820	0.520312	0.589415	0.753958	1.000000				
EI6	0.694399	0.504456	0.574768	0.698744	0.787049	1.000000			
EI7	0.650384	0.559930	0.486181	0.586504	0.613102	0.651255	1.000000		
EI8	0.596976	0.630873	0.527378	0.589613	0.596730	0.611246	0.737682	1.000000	
EI9	0.616228	0.477839	0.520220	0.690178	0.660519	0.605151	0.514468	0.516552	1.000000

All the results obtained on the scales EI1-EI9 are highly significantly correlated with each other. In the context of the students' orientation towards goals, presented above, it is worth mentioning that 29% of the respondents declare that their main life goal is setting up their own business. The remaining part of those questioned either cannot adopt a standpoint towards this question (40%) or they deny such a state of affairs (31%). Another important thread of entrepreneurial intentions is based on the analysis of the respondents' attitude towards autonomy in the professional life. 52% of the respondents stated that they prefer to be an entrepreneur to an employee. 16% express a different opinion, which may be the evidence of lack of aiming at self-employment in the future. The responses to the question concerning the willingness to be one's own boss were formulated slightly clearer. In that case, 61% of the respondents declare such willingness, whereas 15% (46 people) express a different opinion. The increase in the percentage of people with reference to the previously discussed question, occurred, in that case, at the expense of the answer 'difficult to say'. At this point it is clearly visible that there is a group of people who, at the time of the research, were not interested in the implementation of self-employment. The essence of the respondents' responses allows to come to the conclusion that these people will seek employment as employees in the future. However, taking into consideration the course of studies, their goal may be managerial posts allowing for self-fulfilment in the field of enterprise management and using knowledge gained in the course of studies. Lack of determination in the area of self-employment (being an essential element of entrepreneurial intentions) may, however, amount to the low level of entrepreneurial orientation, while bringing about doubts concerning the area of generating intrapreneurship inside the organizations employing these people. Probably, these people may be appropriate candidates for managerial posts of lower level and others, not requiring the entrepreneurial features activating proactiveness, innovativeness or risk-taking.

Another level of EI analyzed in the present paper is revealing by the respondents the willingness to set up own business activity at some point in the future. 35% of the respondents declare that they are seriously thinking of setting up their own business after they graduate, whereas 27% deny such an attitude, and 38% cannot specify their attitude in this area. Some interesting results were obtained as an answer to another two questions. 45% of those questioned declare that they are definitely determined to set up their own business, 34% declare that it is difficult to say, whereas 21% deny such an attitude. 36% of the respondents stated the determination in aiming at the establishment of their own company in the future, 38% cannot unambiguously specify their attitude in this field, whereas 26% deny the existence of such determination on their side.

An important element, from the point of view of the EI analysis are entrepreneurial intentions concerning the dedication the respondents are ready for to implement self-employment. 31% of those questioned declare that they are ready to do anything to become an entrepreneur, 40% have no clearly defined attitude in this area, whereas 29% deny the existence of such determination. Slightly different responses were obtained with reference to the attitude towards the effort directed towards starting own business. The willingness to take any effort to achieve this aim was declared by 41% the respondents, 34% have no opinion on this issue, and 26% deny such a possibility.

The intention summarizing the presented research is the one aiming at starting one's own business activity within the next 5 years. In this case, in the question the respondents were asked, the time horizon was strictly defined, which should lead to certain filtering of the responses given by the respondents. Asking the question about the attitudes towards the statement 'I will start my own business within the next 5 years' probably made the respondents think more deeply and actually led to generating a slightly different structure of the responses. A very precise 'I agree' answer was given by 22% of those questioned, whereas 25% denied such a statement. More than a half of the respondents were not able to adopt a standpoint towards such an intention unambiguously. Therefore, the questions EI4 and EI9 were found the key ones, simultaneously clearly determining the respondents' intentions. The detailed distribution of the responses is presented in Table 6.

Table 6. The detailed distribution of the answers to the questions EI9 i EI4.

		N=316							
		Frequen	су			%	,		,
		I agree	Difficult to say	l disa- gree	Total	l agree	Difficult to say	I disagree	Total
EI9									
Gender	Female	35	110	62	207	17	53	30	100
Gender	Male	34	57	18	109	31	52	17	100
Туре	Full-time studies	52	133	59	244	21	55	24	100
of studies	Part-time studies	17	34	21	72	24	47	29	100
Level	Bach./Eng.	53	130	55	238	22	55	23	100
of studies	Post-bachelor's master study	16	37	25	78	21	47	32	100
EI4									
Candan	Female	65	81	61	207	31	39	29	100
Gender	Male	45	40	24	109	41	37	22	100
Туре	Full-time studies	86	99	59	244	35	41	24	100
of studies	Part-time studies	24	22	26	72	33	31	36	100
Level	Bach./Eng.	84	99	55	238	35	42	23	100
of studies	Post-bachelor's master study	26	22	30	78	33	28	38	100

31% of women and 41% of men agreed with the attitude expressed in EI4. Both the type of studies and their level do not diversify considerably the considerations concerning running one's own business activity in the future. 17% of women and 31% of men agreed with the attitude expressed in EI9. Therefore, it is necessary to conclude that men are more frequently prone

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to start an individual business activity within the next 5 years. Neither the type of studies nor their level diversify significantly the positive answer in this area.

#### **Discussion**

As Liānâan et al. (2007, pp. 443-453) point out, different fields of study within the entrepreneurship research program are focused both on the analysis of the characteristics of existing entrepreneurs and their quality (Davidsson, 1991, pp. 405–429; Lumpkin, Dess, 1996, pp. 135-172; Santos, Guzmán, 2001, pp. 211-228) and also on the analysis of the characteristics of potential entrepreneurs and the firm-creation process (Krueger, Carsrud, 1993, pp. 315-330; Reynolds et al., 1999; Liñán, 2004, pp. 11-35). The present research is focused on the latter field of research. Most studies of entrepreneurial intentions use students as subjects (Sequeira, 2007, pp. 275-293) so this study follows the mainstream of EI recognition. Intentions are an unbiased predictor of action (Bagozzi, 1989, pp. 97-113), even when time lags exist. Thus, a strong intention to start a business should result in an eventual attempt, even if immediate circumstances may dictate a delay. Accordingly, the results outline future possible actions of students under research aiming at starting new business ventures.

The results of this study are convergent with the statement of N.F. Krueger et al. (2000, pp. 411-432), that in general, much of human behavior is planned. A vast body of existing research results also support the contention that entrepreneurial career decisions are planned in nature. There exists a high EI level among the respondents of the study. One may also conclude that relatively high level of EI among students is an indication of positive processes taking place in the economy and high level of potential for growth.

The results of the present research are consistent with the findings of Y.A. Samuel et al. 2013, pp. 37-49). Over 70% of their respondents would like to set up their own business after graduation and over 58% of the respondents have clear ideas of the type of business to start. Significant group consisting of 75% of respondents have the professional goal to become entrepreneurs. More than half of the respondents (55.8%) were willing to start their business in the next five years. The results are also consistent with the empirical evidence provided by Zain et al. (2010, pp. 34-44).

According to S. Kristiansen et al. (2004, pp. 55-78), EI of Norwegian students are low and EI of Indonesian students are high. Their research was conducted in one economically advance country (Norway) and one hit by crisis and permanently high unemployment rates. Summing up the responses to their survey they identified that the mean for 'I will choose a career as an entrepreneur' is 2.86 (answers were given on a 7 point Likert scale) for Norwegian students and 4.75 for Indonesian ones, where 1 means 'I strongly disagree' and 7 means 'I strongly agree'. As they underlined, the low score on the measure of EI among Norwegian students is adequate to the low level of self-employment in Norway, which is one of the lowest among the OECD countries. In highly developed economies, like Norway, much of the entrepreneurial and innovative processes take place within established and large-scale enterprises. In an economically poor and populous country like Indonesia, more of the economic development process is based on individual business starters and small-scale enterprises. The results of the present research are similar to the responses of a developing country rather than a highly developed one.

The results of the present research are also worth referring to the results of other studies carried out in the realities of Poland. In the 90s of the 21st century the entrepreneurship of Poland was flourishing and the business start-up became a real solution. Ambitions to run own business were common (Koczerga, 2013, pp. 84-106). According to A. Sęk (1999) aspirations of students of high schools to own their own business rose from 12% in 1990 to 23% in 1998. The willingness to own a business was a phenomenon particularly popular with boys whose parents run their business activity. The research conducted by M. Strzeszewski (2010) in 2010

showed that 51% of the respondents aged 18-24 declared the willingness to own a business. This percentage is similar to the level of EI recognized in the present study.

#### **Conclusions**

Summing up, more than half of the respondents would like to implement self-employment, almost a half have made a decision to start their own business someday, in certain unspecified future. Only slightly more than a fifth of the respondents show the intentions directed towards starting their own business activity in specified time horizon of the nearest 5 years. This is the evidence for the existence of high potential for growth of new ventures and growth of the economy. It is probably the result of the education process realized in FoMCUT. The students are exposed to the theory of enterprise management and stimulated by various courses, programs and assignments concerning entrepreneurship and entrepreneurial behavior. This seed is then boosted by real business life analysis and case studies, enhancing the awareness of the specificity of entrepreneurship. Additionally, as M. Gelderen et al. underline, business students (such as students of any faculty of management), being well educated and having multiple options, typically choose entrepreneurship because they feel pulled towards it (Gelderen et al., 2008, pp. 538-559).

In spite of the fact that many people would like to run their own business independently, it is possible to notice a rather high degree of indecision. At this point, an essential role may be played by a university and its employees directing student towards the increasing representing of entrepreneurial attitudes, being transformed into intentions and willingness to start own business.

This descriptive study is the basis for the future research on the predictors of EI as the foundation of new business ventures. It directs attention towards relationships between entrepreneurial ideas and their possible results. It outlines the background for examining entrepreneurial traits and contexts which are important both for the development of every economy and creation of directions for the practice of management of micro- and small enterprises.

In the view of the fact that both the essence of the questions about attitudes in the area of EI and the answers allow to presume the existence of the five dimensions of EI, in further research, it would be advisable to conduct the factor analysis, check the reliability of the scale and bring all the measurement scales of EI, used in the present study, to a single variable. This would enable further analyses of the impact of different factors on EI and possible examination of their mutual interactions in the process of determining EI. Among the directions of further research, it would also be possible to suggest the implementation of the analyses and assessment of predictors of students' entrepreneurial intentions.

#### References

- Abebe, M. A. (2012). Social and Institutional Predictors of Entrepreneurial Career Intention: Evidence from Hispanic Adults in the US, *Journal of Enterprising Culture*, 20 (1), 1-23.
- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in social psychology. *Advances in Experimental Social Psychology*, 20, 1–63.
- Ajzen, I. (1991). Theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Autio, E., Keeley, R. H., Klofsten, M., Parker, G. G.C., & Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, 2 (2), 145-160.
- Bagozzi, R., Baumgartner, H., & Yi, Y. (1989). An investigation into the role of intentions as mediators of the attitude-behavior relationship. *Journal of Economic Psychology*, 10, 35–62.

- Bagozzi, Richard P. (1989). An Investigation of the role of affective and moral evaluations in the purposeful behaviour model of attitude. *British Journal of Social Psychology*, 28 (2), 97-113.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13 (3), 442–453.
- Bird, B., & Jelinek, M. (1988). The operation of entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 13 (2), 21-29.
- Boyd, G. N., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18 (4), 63-77.
- Davidsson, P. (1991). Continued entrepreneurship: Ability, need and opportunity as determinants of small firm growth. *Journal of Business Venturing*, *6*, 405–429.
- Davidsson, P., Lindmark, L., & Olofsson, C. (1994). New firm formation and regional development in Sweden, *Reg. Stud.*, 28 (4), 395–410.
- Douglas, Evan J., & Dean, A. S. (2002). Self-employment as a career choice: Attitudes entrepreneurial intentions, and utility maximization. *Entrepreneurship Theory and Practice*, *26*, 81-90.
- Gelard, P., & Saleh, K. E. (2010). Impact of some contextual factors on entrepreneurial intention of university students. *African Journal of Business Management*, 5 (26), 10707-10717.
- Gelderen, M., Brand, M., Praag, M., Bodewes, W., Poutsma, E., & Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13, 6, 538-559.
- Hashemi, S. M. K., Hosseini, S. M., & Rezvanfar, A. (2012). Explaining entrepreneurial intention among agricultural students: Effects of entrepreneurial self-efficacy and college entrepreneurial orientation. *Research Journal of Business Management*, 6 (3), 94-102.
- Hmieleski, K. M., Corbett, A. C. (2006). Proclivity for improvisation as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 44 (1), 45-63.
- Katz, J., & Gartner, W. (1988). Properties of emerging organizations. *Academy of Management Review*, 13, 429–441.
- Kim, M., & Hunter, J. (1993). Relationships among attitudes, intentions and behavior. Communication Research 20, 331–364.
- Koczerga, M. (2013). In search of rationality: business students on family-owned firms. *Poznan University of Economics Review*, 13 (2), 84-106.
- Kristiansen, S., & Indarti, N. (2004). Entrepreneurial intention among Indonesian and Norwegian students. *Journal of Enterprising Culture*, 12 (1), 55-78.
- Krueger, N. F. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship Theory and Practice*, 18 (1), 5-23.
- Krueger, J. R. N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15, 411-432.
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behavior. *Entrepreneurship and Regional Development*, *5*, 315–330.
- Kyrö, P., Ristimäki, K., (2008). Expanding arenas and dynamics of entrepreneurship education. *The Finnish Journal of Business Economics*, *3*, 259-265.
- Liñán, F. (2004). Intention-based models of entrepreneurship education. *Piccolla Impresa/Small Business*, 3, 11–35.
- Liänâan, F., & Santos F. (2007). Does social capital affect entrepreneurial intentions? *International Advances in Economic Research*, 13 (4), 443-453.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21 (1), 135–172.
- Martínez, D., Mora, J. G., & Vila, L. E. (2007). Entrepreneurs, the self-employed and employees amongst young European higher education graduates. *European Journal of Education*, 42 (1), 92–117;
- Parker, S. C. (2004). *The economics of self-employment and entrepreneurship*. Cambridge, UK: Cambridge University Press.
- Reynolds, P. D., Hay, W. M., & Camp, S. M. (1999). *Global entrepreneurship monitor 1999, executive report*. London: London Business School & Babson College.
- Reynolds, P. D., (2000). National panel study of U.S. business startups: Background and methodology. In: Katz, J.A. (Ed.), *Advances in Entrepreneurship, Firm Emergence, and Growth*, vol. 4, Stanford, CT: JAI Press, 153-227.

- Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship Theory and Practice*, *15* (4), 13-31.
- Roudaki, J. (2009). University students perceptions on entrepreneurship: Commerce students attitudes at Lincoln university. *Journal of Accounting, Business & Management, 16* (2), 36-53.
- Samuel, Y. A., Ernest, K., & Awuah, J. B. (2013). An assessment of entrepreneurship intention among Sunyani polytechnic marketing students. *International Review of Management and Marketing*, *3* (1), 37-49.
- Santos, F. J., & Guzmán (2001). The booster function and the entrepreneurial quality: An application to the province of Seville. *Entrepreneurship and Regional Development*, *13*, 211–228.
- Sęk, A., (1999). Plany, dążenia i aspiracje życiowe młodzieży, Komunikat CBOS nr 2149, Warszawa.
- Sequeira, J., Mueller, S. L., & McGee, J. E. (2007). The influence of social ties and self-efficacy in forming entrepreneurial intentions and motivating nascent behavior. *Journal of Developmental Entrepreneurship*, 12 (3), 275-293.
- Sipa, M. (2010). Czynniki wpływające na zwiększanie obszaru działalności małych przedsiębiorstw. In: *Współczesne koncepcje i strategie Zarządzania. Teoria a praktyka,* J. Wnuk, J. Ryśnik (Eds.), Wyższa Szkoła Ekonomiczno-Humanistyczna, Bielsko-Biała 2010, pp. 43-65.
- Strzeszewski, M., (2010). Polacy o prowadzeniu biznesu, Komunikat CBOS nr 4397, Warszawa.
- Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, *55* (3), 669-694.
- Uddin, M. R., & Bose, T. K. (2012). Determinants of entrepreneurial intention of business students in Bangladesh. *International Journal of Business and Management*, 7 (24), 128-137
- Uygun, R., Kasimoglu, M. (2013). The emergence of entrepreneurial intentions in indigenous entrepreneurs: The role of personal background on the antecedents of intentions. *International Journal of Business and Management*, 8 (5), 24-40.
- Zain, Z. M., Akram, A. M., Ghani, E. K. (2010). Entrepreneurial intention among Malaysian business students. *Canadian Social Science*, 6 (2), 34-44.

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