Entrepreneurial Attitude and Education of Entrepreneurs from the Podlaskie Voivodeship[1]

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***Abstract*—Discovering the elements responsible for the formation of entrepreneurship in individuals is essential because the identification of the strongest relations "education - entrepreneurial attitude" would help to uncover the opportunities for the development of entrepreneurship, and especially to adapt the appropriate form of education for students' needs. Therefore, in 2015 research about the impact of education on the entrepreneurs of the Podlaskie Voivodeship was conducted. A random sampling and a specifically designed interview questionnaire were used to meet the needs of this study. The research was aimed at discovering the relations between entrepreneurs' attitudes and their participation in the selected forms of formal and informal education. It seems that the various forms of education are shaping the entrepreneurial attitudes of different groups of entrepreneurs to varying degrees. There are a few aims of the article. First, the characterization of the analysed sample, presentation of the attitudes of entrepreneurs, and the evaluation of the selected ones activating the educational process forms in the context of developing the entrepreneurial attitudes, and the last one is to present the relationship between the selected forms of formal and informal education and the level of entrepreneurial attitudes.**

I. INTRODUCTION

The role of entrepreneurship in driving global economic growth, job creation and local development has been acknowledged (Cassia et al., 2014; Gorman et al., 1997). Nowadays, entrepreneurship represents a broad category of phenomena including processes, attitudes, behaviours and values in human life (Dembińska, 2012). More frequently, entrepreneurship refers to many different new activities requiring human initiative, solving economical and technical problems, or taking an entrepreneurial attitude in everyday life (Haber, 2011 in: Walczak-Duraj, 2011), not only setting up a company (Jamka, 2012). The behaviour based on opportunities detection, the desire to follow them, confidence and the possibility of success achieving a goal are becoming a key element in the entrepreneurship process (Stevenson & Jarillo, 1990). Because of that, entrepreneurship in this study is not only limited to owning a business, but also encompasses attitudes aimed at stimulating professional activity and improvement of individuals, for example: undertaking voluntary jobs to contribute to the society. These actions can be defined as the desire to create a specific economic culture focused on improving entrepreneurship in the society.

There are many instruments supporting the development of entrepreneurship (Zimnoch, 2012). An important aspect is education, which should provide the basis for entrepreneurial training, but also it should shape the entrepreneurial personality. The attitude can also be developed through education, which is a key determinant of shaping people's attitudes, skills and culture (*Entrepreneurship Education*.., 2012). Through their three missions: research (Jaffe 1998; Mansfield 1991), education, and business support, universities become crucial institutions in the facilitation of regional economies and social development, thereby regional entrepreneurship (Roessner et al. 2010, in: Cassia et al., 2014). This development is because institutions of Higher Education are identified as centers of knowledge generation in the society (Odora, 2015) and more and more often have a very important role in the development of entrepreneurial activity.

Entrepreneurship education can be described as the integration of knowledge, skills, experience (Mohd, 2016) and attitudes. Other segmentation divide it into learning about entrepreneurship as a phenomenon, or learning useful skills in order to become an entrepreneur (Rasmussen, Sørheim, 2006) because one of the objectives of entrepreneurship education is also encouraging, especially students, to start a career as entrepreneurs (Chen et al., 2015). The purpose of entrepreneurship education generally follows the approaches varying across the spectrum of preparing an individual to start, own and manage a business ("*for*", "*through*" and "*about*"). What is more, this provides general life and work skills (O'Connor, 2013 in: Bikse et al., 2014). Similar division on four categories of entrepreneurship education was introduced by T. L. Jensen (2014): „*about*", „*for*", „*through*", „*embedded*".

Unfortunately, the organization of the educational process in the context of the development of entrepreneurship is often limited to providing just basic knowledge about running a business, less often providing skills training. Actually, this kind of education should also shape multi-dimensional entrepreneurial attitudes.

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Preparing course of entrepreneurship properly adopted to the local needs is a challenge. The concept of entrepreneurship needs development of professional education in line with other fields in business, because still, there is no common framework or agreement about best practice how to educate entrepreneurs (Brockhaus et al., 2001 and Fiet, 2001 in: Rasmussen, Sørheim, 2006). Hence, to successfully develop a new generation of people with entrepreneurial skills (both in terms of entrepreneurs owing a company and entrepreneurial people presenting their attitude in other ways) it is important to perform the study of entrepreneurship in the context of education. It is important to consider the following aims based on the Spearman correlation coefficient: what forms of formal and informal education may be associated with the *entrepreneurial attitudes* of its participants, or with *owning a company*, as well as, what is the strength of existing relations.

Following the analysis of selected literature, the statistical analysis which was based on the research conducted among the entrepreneurs from the Podlaskie Voivodeship was performed. The results of the research, initially show the characteristics of the entrepreneurs from the Podlaskie Voivodeship, entrepreneurial attitudes of entrepreneurs, the evaluation of the selected educational forms in the context of developing the entrepreneurial attitudes of entrepreneurs, then the relationships between their participation in formal and informal education and the entrepreneurial attitude were presented.

Knowing the differences in entrepreneurship formation of individuals is essential. Focusing on them would help to uncover opportunities for entrepreneurship development. The discovered relationships can be an important factor in the process of preparation of efficient educational programmes and modified instruments of business development. What is more, it may be found that various forms of activity shape the attitudes of individuals with various levels of education, differently. The Enterprise Overall Index (interchangeably called Overall Entrepreneurial Attitudes Index) used in the presented study has been created by the author.

II. MATERIAL AND METHOD

The study to isolate and determine the strength of the association between participation in the selected forms of formal and informal education, and the shaping of entrepreneurship was conducted on a group of 104 entrepreneurs from Podlaskie Voivodeship in Poland in the year 2015.

The study used an interview questionnaire, designed specifically for the needs of this study. The research sample was based on random selection but is not representative. The minimum sample size was around 400 entrepreneurs, but cost of the research and the aversion of entrepreneurs resulted in a smaller sample.

One question in the interview included thirteen statements about personality traits identified by the researcher, describing the entrepreneurial mindset, and are aimed at identifying the intensity of the people's individual characteristics as entrepreneurs.

The statements regarding the revealed entrepreneurial attitudes are: It is easy for me to establish contact with other people; I am not afraid of unusual solutions; I can take responsibility for my actions; I have organizational skills; I treat emerging problems as challenges; I am eager to get involved in new projects; I like to take the initiative in ongoing projects; I adapt easily to changes in my environment; I have a lot of ideas I would like to realize; When I set myself a goal, I work hard to achieve it; I undertake activities in the field of personal development; In difficult situations, I am composed/calm; I believe that I am enterprising person.

The participants in the study could respond to these statements by giving an answer to each as follows: definitely not, rather not, rather yes or definitely yes. Ranks were assigned to the answers: definitely not - 0, rather not – 1, rather yes - 2, and definitely yes - 3. The Enterprise Overall Index, in short EOI (interchangeably called Overall Entrepreneurial Attitudes Index), was based on the average scores determined from all the statements. Thus, the index value is oscillating in the range of [0-3]. According to the values of the Index, four types of entrepreneurial attitudes were isolated. If the ratio was in the range of [0-1], it indicates the lack of enterprising attitude. The interval of [1-2] points indicates a low-level of entrepreneurial attitude. The interval of [2-2.5] points represents the average degree of entrepreneurial attitude, while the number of points contained in the range of [2.5-3] points means a high degree of entrepreneurial attitude. For each of the thirteen statements describing the entrepreneurial attitude, a detailed index, i.e. an average score for only the selected statement can be calculated. It allows to assess not only the average level of The Enterprise Overall Index but also the average level of every given feature in the study group.

There is a specific system of education in Poland consisting of: public and private education. It is obligatory for everyone below the 18 years of age to learn at public schools which are free, or at non-public schools which are payable. After high school, students can continue education at public or non-public universities. What is more, they can benefit from different forms of the educational system, or they may learn outside that system. It means that the knowledge or the attitude of participants may depend on different forms of formal or informal education. In the research, the questionnaire was limited to the process of higher education, secondary education and vocational education (called formal), as well as education acquired outside the system (informal).

The questionnaire determined which forms of formal education the respondents attended. The forms that can activate the process of development of entrepreneurial attitudes in formal education contained: participation in the science and/or interest clubs, meetings with representatives of government authorities, meetings with representatives of financial institutions, meetings with

entrepreneurs, undertaking cooperation with the Academic Incubators of Entrepreneurship (AIE), e-learnings, educational competitions, research trips, undertaking educational and/or scientific projects, reading theme magazines, participating in scientific conferences (seminars), practical training courses, theoretical training courses, playing educational games, visiting research institutions, apprenticeships, completing paid professional internships, participating in theme meetings, solving case studies/instances, reading textbooks and "other" (Table 4). The inquiries about the participation in various forms of education depended on the last finished stage of education of the interlocutors.

The respondents were asked in what forms of activity, in the context of informal education, they had participated in. They were able to choose the forms of informal education slightly different from those implemented in the framework of formal education due to its nature. In the prepared answers, they could not find the participation in the interest or science clubs, and reading textbooks. Instead of these, they could chose listening to the radio and watching popular science TV programs. Available answers also included an option "other" (Table 4).

In order to identify the relationship between individual characteristics exhibited by the entrepreneurs and the participation in the selected forms of education (and to determine their strength), the Spearman's rank correlation coefficient was used.

III. ENTREPRENEURS IN THE PODLASKIE VOIVODESHIP- CHARACTERISTICS OF THE TESTED GROUP

104 entrepreneurs participated in the survey. In this group, characterizing it by gender, 41.3% were women and 58.7% were men.

The age of the respondents varied, 6.7% were aged up to 25 years inclusive, 33.7% were aged 26-35 years, 25% were aged 36-45 years, and 34.6% were aged 46 years and more.

Looking at the origins of entrepreneurs, 23.1% of respondents came from the countryside, while the remaining 76.9% from the city.

In the case of 39.4% of the entrepreneurs, they graduated from a general secondary school, 9.6% completed a profiled secondary school, 40.4% completed a technical secondary school, and 10.6% graduated from another school (vocational).

Among the interviewees, 44.2% never undertook studies, while 55.8% at the day of the survey had student status, or studied previously. Analysing the expression of entrepreneurs who undertook higher education, it is clear that most students, 43.11% were educated in a field of study belonging to a group of "social science, economics, and law" and 17.24% in a field from the group of "technology, industry, and construction." Among the entrepreneurs learning at a higher level, 1.72% did not reveal their undertaken field of study in the interview.

TABLE 1.
PARTICIPATION IN THE RESEARCH CONCERNING STUDYING ENTREPRENEURS TAKING INTO ACCOUNT THE FIELDS OF STUDY (IN %)

No.	Group of fields of study	
1	social sciences, economics, and law:	43.11
2	technology, industry and construction:	17.24
3	humanities and arts:	10.35
4	health:	10.35
5	science:	8.62
6	agriculture:	5.17
7	services:	1.72
8	education:	1.72

Source: Own based on Polish Central Statistical Office methodology.

Among the entrepreneurs, who have studied, 65.5% studied in full-time mode, and the remaining 34.5% in non-full-time mode; first degree studies were completed by 31% of the entrepreneurs, first and second degree studies by 25.9%, while 43.1% of interviewees completed a uniform master's degree.

In the study group, 31.1% of all entrepreneurs also undertook other courses of study.

The surveyed entrepreneurs appear to be not a very active group in the context of their current activity in the various forms of development: 5.8% were involved in an association, 3.8% in volunteering 8.7% in an affiliation, 3.8% in an organization, 5.8% in other forms of development, and 76.9% were not involved anywhere (this question was multiple choice, so the answers do not add up to 100%).

For 15.4% of the surveyed companies the conducted business activity is the first undertaken work. Other respondents, before starting their own business activities, undertook work, often in different occupations. At the same time, it is important that entrepreneurs often worked first in a profession, in which later they founded their businesses or where they acquired knowledge and skills useful later in their own businesses.

Entrepreneurs, who, before the foundation of their business, undertook other work, worked for various lengths of time, 36.4% worked up to five years, 30.7% for 5-10 years, 12.5% for 10-15 years, 13.6% for 15- 20 years, 4.5% for 20-25 years, 2.3% above 35 years.

55.8% of interviewees confirmed that the economic activity of entrepreneurs is consistent with the direction of education. In the remaining group, 52.1% of people reported that their education is useful in their business activity.

The total work experience of interviewees as entrepreneurs varied (Table 2), but the largest group were the entrepreneurs with experience up to 5 years (50%). The smallest group of entrepreneurs were those with experience over 35 years (1.9%).

TABLE 2.
TOTAL WORK EXPERIENCE AS AN ENTREPRENEUR (IN %)

Experience:								
Up to 5 years	(5-10> years	(10-15> years	(15-20> years	(20-25> years	(25-30> years	(30-35> years	Over 35 years	Total:
50.0	15.4	7.7	5.8	12.5	2.9	3.8	1.9	100.0

Source: Own study based on research.

The activities of 2.9% of interviewees include production, 54.4% are engaged in services and 27.2% in trade, 5.8% are engaged in both manufacturing and services, and in the case of 9.7% of the entrepreneurs, their activities include both services and trade. Earlier activity in other sectors was declared by 13.5% of interviewees (service industries - 37.7%, trade - 57.2% and service and trade - 7.1%).

In the case of 30.8% interviewees, one parent or both conduct and / or conducted business activities, and in the case of 39.4% - agricultural activities.

IV. Entrepreneurial attitude - General indicator of entrepreneurship (EoI)

The average general indicator of entrepreneurship is 2.372. Entrepreneurial attitudes, divided into four separate types, are in this group as follows:

– lack of entrepreneurial attitude <EoI: 0-1) demonstrated by 0 entrepreneurs;
– low level of entrepreneurial attitude < EoI: 1-2) demonstrated by 20.2% of people;
– average degree of entrepreneurial attitude < EoI: 2-2.5) 37.5% of people;
– high degree of entrepreneurial attitude < EoI: 2.5-3> 42.3% of the surveyed entrepreneurs.

For comparison, in the representative study conducted in the same year among 2004 students from all the universities of the Podlaskie Voivodeship, the averaged overall index totalled 2.094. According to the previously applied division, it can be said that in the group of students, 1.7% of respondents showed a lack of entrepreneurial attitude, 34.03% showed a low degree of entrepreneurial attitude, 46.81% showed an average degree of entrepreneurial attitude, and only 17.46% showed a high degree of entrepreneurial attitude.

These results confirm that the people running their own business activities exhibit higher entrepreneurial attitude, thereby confirming the importance of research on entrepreneurial attitudes.

Overall, the average value of the indicator of entrepreneurship for all the questioned entrepreneurs is at the average level. The individual values of the detailed indicators, however, are varied, their values are presented in Table 3.

Table 3.
Detailed indicators of attitudes of entrepreneurs

No.	Statement	The value of the indicator (average)
1	It is easy for me to establish contact with other people.	2.452
2	I am not afraid of unusual solutions.	2.346
3	I can take responsibility for my actions.	2.798
4	I have organizational skills.	2.529
5	I treat emerging problems as challenges.	2.404
6	I am eager to get involved in new projects.	2.154
7	I like to take the initiative in ongoing projects.	2.288
8	I adapt easily to changes in my environment.	2.288
9	I have a lot of ideas I would like to realize.	2.163
10	When I set myself a goal, I work hard to achieve it.	2.519
11	I undertake activities in the field of personal development.	2.356
12	In difficult situations, I am composed/calm.	2.231
13	I believe that I am enterprising person.	2.308

Source: Own study based on research.

It turns out that among the surveyed entrepreneurs, in the case of three detailed features (No. - 3, 4 and 10) the indicator takes the high value of above 2.500. The highest value (2.798) refers to the ability to take responsibility for the actions taken, which logically confirms the entrepreneurship of these people - as undertaking their own business activity they undertake actions for which they are responsible. Running the business activities, necessarily is accompanied by the need to have organizational skills, and hard work to achieve this self-designated target (both features are also at a high-level). The lowest value, in turn, applies to the willingness to engage in new projects, which can be interpreted that entrepreneurs realize their own business activities. Therefore, their involvement in further projects may be smaller. In the event of none of the detailed characteristics of the surveyed entrepreneurs, there was a decline in the value of the indicator below the level of 2.000.

V. Participation in various forms of informal education

In the interview, the entrepreneurs indicated what forms of activity they were involved in outside the education system. The share of people participating in various forms of activities outside the education system (including higher education) are shown in Table 4.

Table 4.
Forms of activity, attended by the entrepreneurs outside the education system in relation to the respondents in total (in %)

No.	Form of activity	Participating in a given form within the framework of informal education
1	Reading theme magazines	49.0
2	Watching popular science programs	45.2
3	Theoretical training courses	43.3
4	Practical training courses	41.3
5	Listening to the radio	31.7
6	Meetings with entrepreneurs	28.8
7	Participation in theme meetings	26.9
8	Doing apprenticeships	25.0
9	Other forms, not mentioned earlier	24.0
10	Meetings with representatives of government authorities	18.3
11	Participating in scientific conferences (seminars)	15.4
12	Meetings with representatives of financial institutions	14.4
13	*E-learning*	9.6
14	Completing paid professional internships	9.6
15	Educational competitions	7.7
16	Playing educational games	7.7
17	Visits to research institutions	6.7
18	Research trips	3.8

19	Solving a case study / instances	3.8
20	Undertaking cooperation with Academic incubators of entrepreneurship	2.9
21	Undertaking educational and / or scientific research projects	2.9

Source: Own study based on research.

Most interviewees participated in reading thematic magazines (49%), watching popular science programs (45.2%), and training programs: theoretical (43.3%) and practical (41.3%). The share of people participating in other forms of development is also high (24%). Within these forms, entrepreneurs mentioned many activities that are also important in business activities, for example, fairs, business trips, courses, trade guilds, running their own training programs. On the other hand, the smallest number of the surveyed entrepreneurs participated in the implementation of educational and / or research projects, and in cooperation with AIP (2.9% each), followed by solving a case study / instances and participating in research trips (by 3.8%).

VI. EVALUATION OF SPECIFIC FORMS OF EDUCATION BY ENTREPRENEURS

Forms of education can essentially shape entrepreneurial attitudes of people participating in them, which has been variously evaluated by the entrepreneurs (Table 5).

TABLE 5.
RATING THE ACTIVATING FORMS MADE BY THE SURVEYED ENTREPRENEURS - RANKING ACCORDING TO THE AVERAGE MARK

Ranking	Activating form	Share of individual responses in the responses of evaluators in %					Average rating	Standard deviation	No. of evaluators (in %)
		1	2	3	4	5			
1	Practical training	3.1	4.1	9.3	34	49.5	4.23	0.995	93.3
2	Apprenticeships	4.1	5.1	14.3	27.5	49	4.12	1.096	94.2
3	Meetings with entrepreneurs	5.5	4.4	12.1	33	45	4.08	1.118	87.5
4	Paid internships	5.6	9	16.9	24.7	43.8	3.92	1.218	85.6
5	Participation in theme meetings	3.1	8.3	29.2	32.3	27.1	3.72	1.053	92.3
6	Undertaking educational and / or scientific projects	10.(6)	6.(6)	16	38.(6)	28	3.67	1.256	72.1
7	Cooperation with AIE	13.7	7.8	21.6	19.6	37.3	3.59	1.417	49
8	Research trips	14.8	2.7	17.6	39.2	25.7	3.58	1.314	71.2
9	Theoretical training	8.7	10.9	25	29.3	26.1	3.53	1.235	88.5
10	Reading theme magazines	7.3	9.4	28.1	35.4	19.8	3.51	1.133	92.3
11	Practicing public speaking	13.6	8.6	22.2	27.2	28.4	3.48	1.352	77.9
12	Solving a case study / instances	8.3	11.1	29.2	27.8	23.6	3.47	1.21	69.2
13	Clubs of interest and / or scientific	12.5	12.5	20	31.25	23.75	3.41	1.319	76.9
14	Scientific conferences (seminars)	8.6	12.4	34.6	25.9	18.5	3.33	1.173	77.9
15	Educational competitions	14.7	13.3	36	25.3	10.7	3.04	1.191	72.1
16	Watching popular science programs	13.3	20	26.7	33.3	6.7	3.00	1.161	86.5
17	E-learning	20	18.4	23.1	23.1	15.4	2.95	1.363	62.5
18	Playing educational games	19.1	17.7	29.4	25	8.8	2.87	1.245	65.4
19	Meetings with representatives of financial institutions	23.6	20.2	27	18	11.2	2.73	1.312	85.6
20	Listening to the radio	21.2	24.7	30.6	14.1	9.4	2.66	1.23	81.7
21	Meetings with representatives of authorities	26.4	19.6	25.3	21.8	6.9	2.63	1.277	83.7

Source: Own study based on research.

The form of activity assessed by the entrepreneurs as the best is practical training, for which the average score amounted to 4.23. At the same time, the deviation of the collected answers from the average was the lowest and amounted to 0.995. This assessment of this form was made by 93.3% of all entrepreneurs. In terms of the number of evaluators, practical training came in the second place among all evaluated forms.

The second position in terms of the average assessment is taken by Apprenticeships with an average assessment of 4.12 and a standard deviation of 1.096. This form was rated by 94.2% of the interviewees. An average rating of above 4.0, apart from that, was given only to meetings with entrepreneurs (average score - 4.08). The deviation of the collected answers from the average amounted to 1.118. This form was rated by 87.5% of entrepreneurs.

The assessment of entrepreneurs confirms the growing interest in converting theoretical knowledge into practical knowledge. In turn, the lowest average rating of meetings with representatives of authorities - 2.63, may seem strange. The entrepreneurs justified the assessment with the fact of the lack of openness on the part of the authorities or financial institutions, sometimes even resistance to the transfer of knowledge. This results in a low assessment of the impact of these forms of activity on the development of entrepreneurship, but at the same time entrepreneurs point to the need to improve the functioning of these institutions and the essence of obtaining practical knowledge through them.

VII. RELATIONSHIP BETWEEN EDUCATION AND THE DEVELOPMENT OF ENTREPRENEURIAL ATTITUDES

A. Formal education and the attitude of entrepreneurs

The relationships between the participation in various forms of formal education implemented within the framework of secondary schools and the attitude shown by the entrepreneurs is presented in Table 6.

TABLE 6.
CORRELATIONS BETWEEN THE PARTICIPATION IN VARIOUS FORMS OF FORMAL EDUCATION WITHIN THE FRAMEWORK OF SECONDARY SCHOOLS AND THE ENTREPRENEURIAL ATTITUDE OF ENTREPRENEURS

No.	The forms of formal education implemented within the framework of secondary education	Correlation value according to the level of significance		EoI or No. of Detailed Indicator
		0.01	0.05	
1	Theoretical training	0.304		2
			0.258	5
			0.256	EoI
			0.224	8
			0.207	12
2	Undertaking educational and / or scientific projects	-0.296		5
			-0.254	10
			-0.224	EoI
3	Apprenticeships	0.281		EoI
			0.212	6
			0.21	3
			0.207	4
			0.205	10
4	Reading theme magazines	0.275		7
		0.270		2
5	Practical training		0.259	2
			0.225	EoI
6	Research trips		-0.24	11

7	Paid internship		0.232	4
8	Visits to research institutions		-0.225	10
9	Meetings with representatives of authorities		0.207	11

Source: Own study based on research.

All of the observed correlations associated with secondary education demonstrate a weak relationship (range 0.2 - 0.4). Relationships have been reported between the participation in the nine forms of activity and EoI, as well as the detailed indicators - a total of 21 correlations. The highest correlation applies to theoretical training and the statement (2) "I'm not afraid of unusual solutions," it amounts to 0.304 (with significance of 0.01). The second highest level of correlation applies to the undertaking educational and / or scientific projects with the (5) treatment of the emerging problems as challenges, it is negative (-0.296, with the significance of 0.01). It should be pointed out that among the observed correlations between secondary education and the attitudes, five of them are negative, which means that the participation in a particular form has a negative impact on the development of a given feature, or that the people demonstrating a particular trait are less willing to participate in a particular form of activity.

Then the relationships between the participation in various forms of education implemented within the framework of higher education, and the attitude shown by the entrepreneurs have been presented (Table 7).

TABLE 7.
CORRELATIONS BETWEEN THE PARTICIPATION IN VARIOUS FORMS OF FORMAL EDUCATION WITHIN THE FRAMEWORK OF HIGHER EDUCATION AND THE ENTREPRENEURIAL ATTITUDE OF ENTREPRENEURS

No.	The forms of formal education within the framework of higher education	Correlation value according to the level of significance		EoI or No. of Detailed Indicator
		0.01	0.05	
1	Research trips	0.356		2
		0.350		8
2	Reading theme magazines	-0.355		6
			-0.261	13
3	Playing educational games		-0.336	2
			-0.326	3
			-0.270	4
			-0.276	5
			-0.263	10
4	Apprenticeships		-0.335	6
5	Visits to research institutions		0.310	2
6	Practical training		-0.307	6
7	Undertaking educational and / or scientific projects		0.296	13
			0.282	11
8	Clubs of interest and / or scientific		0.284	13
9	Cooperation with AIE		0.278	8

Source: Own study based on research.

Also in the case of the analysis of relationships of higher education, all of the observed correlations demonstrate a weak relationship (range 0.2 - 0.4). The highest level of correlations in the field of higher education is related to research trips and two features: (2) lack of fear of unusual solutions – 0.356, and (8) easy adaptation to changes in the environment – 0.350. This means that the people leaving e.g. to conduct research in the field are not afraid of unusual solutions and develop the ability to adapt to changes in their environment, which tends to introduce new, usually unfamiliar surroundings discovered during the trips. Also, in the case of higher education, negative correlations have been observed, but with four forms of activity.

B. Non-formal education and the attitude of entrepreneurs

The relationships occurring between the participation in various forms of non-formal education pursued outside the education system and the attitude shown by the entrepreneurs are presented in Table 8. All of the noticed correlations demonstrate positive values in this case, which stresses the importance of choices made independently, and not imposed by the educational system.

TABLE 8.
CORRELATIONS BETWEEN THE PARTICIPATION IN VARIOUS FORMS OF NON-FORMAL EDUCATION (OBTAINED OUTSIDE THE EDUCATION SYSTEM) AND THE ENTREPRENEURIAL ATTITUDE OF ENTREPRENEURS

No.	The forms informal education	Correlation value according to the level of significance		EoI or No. of Detailed Indicator
		0.01	0.05	
1	Meetings with entrepreneurs	0.290		7
		0.261		8
			0.224	2
2	Meetings with representatives of financial institutions	0.280		11
3	Listening to the radio		0.220	7
4	Research trips		0.207	8
5	Playing educational games		0.201	11
6	Meetings with representatives of authorities		0.199	11

Source: Own study based on research.

The highest level of correlation (0.290) refers to the participation in meetings with entrepreneurs and (7) taking initiative in the implemented projects. This means that the talks with the entrepreneurs can teach, or encourage to take the initiative in the activities undertaken. In this part of the study the lowest level of correlation (less than 0.200) was the one relating to the participation of entrepreneurs in the meetings with the representatives of the authorities. Together, the relationship between the participation in six forms of activity and the specific indicators was observed, eight correlations in total.

VIII. CONCLUSIONS

Entrepreneurs, as a social group, are very diverse in many respects, including: the undertaken, a broadly defined education, or a previous career path. As part of their school education (also higher education) they engaged in many different forms of activities, beginning with the more practical, such as: practical training, apprenticeships, or direct contact with institutions serving entrepreneurs, to more theoretical ones, such as: reading theme magazines, or theoretical training. Education with the use of these forms may significantly shape entrepreneurial attitudes.

The entrepreneurs themselves, assessing the impact of participation in the various forms of development on the formation of entrepreneurship, made it possible to create a ranking, in which the highest rating was given to practical training. In turn, meetings with the representatives of financial institutions or authorities have been relatively low-rated, which may indicate their quality.

The conducted research demonstrated weak associations between the participation in the selected forms of formal and informal education and entrepreneurial attitudes of entrepreneurs.

Although the correlations in the range of 0.200-0.400 are described as weak, the studies carried out seem to be valuable. According to many factors (economic, cultural, psychological) affecting people, the discovered relations may be important ones. The participation in the various forms of education can therefore contribute to the shaping of entrepreneurial attitudes of the society.

The study did not include, however, a number of interesting aspects. In the case of obtaining such extensive data concerning education and the respondents themselves, there was a need to make some generalizations. Therefore, it became impossible to note the diversity of entrepreneurs' experiences with the various forms of education and their influence in detail. It is possible that further studies in the subject will provide more interesting knowledge.

Nevertheless, it is clear that there is a need to continue and expand this study, as the observed relations can provide important knowledge for the people responsible for preparation of the curriculum and additional programs. It could also be helpful to modify the instruments supporting the development of entrepreneurship, and focus the attention on those selected forms of education that showed the highest correlations with the desired attitudes. The entrepreneurs are the catalysts of economic development, and the efforts to develop entrepreneurial attitudes in the society that would be strong enough to produce such ventures as a company, should be a priority.

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