

ENTREPRENEURIAL EDUCATION AND ATTITUDES AMONG YOUNG GENERATIONS IN A GENDER PERSPECTIVE: THE CASE OF POLISH EDUCATIONAL SYSTEM

*Magdalena Popowska*¹

Abstract

This article is an attempt to analyze the impact of entrepreneurship education on entrepreneurial attitudes and intentions of young people: male and female students of Polish high schools and universities. The author makes an effort to verify the impact of the exposure to the business education and entrepreneurs on the decision to start-up. Special emphasis will be placed on the gender differences when discussing a respective factors' impact and on the country context, especially when analyzing the influence of perception of entrepreneurs by young generation of respondents. The article will provide also a number of tips and guidelines for decision-makers in the wider area of entrepreneurship education, and thus ensuring proper orientation of policy support in this largely underestimated field of education.

Keywords: entrepreneurship education, gender perspective

Introduction

Small and Medium Enterprises (SMEs) account for 99.8% of all businesses in Europe. Their role in the economic growth and job creation has been recognized at the regional, national and European level. This leads the policy makers at all levels to look for measures enhancing the firm creation activity. Recent efforts are being pursued by numerous entities, including governments, business support institutions and universities, as there is a strong believe that increased levels of entrepreneurship can be reached through education (European Commission, 2006) and in particular entrepreneurship education.

The scientific debate on the possibility of “creating entrepreneurs” through teaching activity is very old (McClelland, 1961, Gorman et al., 1997). There is evidence confirming this influence (Shinnar et al., 2009, Teixeira and Forte, 2008,

¹ Politechnika Gdańska/Gdańsk University of Technology

Oosterbeek et al., 2009) as well as denying this thesis (Davidsson et al., 2006). The same for the discussion on the positive impact of the exposure to social influences which begins with Kets de Vries (1977), and especially the parental role models considered as an effective way of conveying the entrepreneurial values and know-how to the children generation, during primary socialization and also in later life stages (Scherer et al., 1989).

The policy makers at the EU level, at the beginning of XXI century, enthusiastically joined the camp of those who strongly believe that the entrepreneurship skills can be taught and are not only fixed personal characteristics. Since many of the entrepreneurship researchers (Douglass, 1976, Isenberg, 2008, Peters and Brijlal, 2011) believe that education has a positive impact on entrepreneurial activity, this assumption has been promoted through many official European documents, including Lisbon Strategy (2000), which established entrepreneurship as a basic skill that education in EU Member States should provide and Oslo Agenda for Entrepreneurship Education in Europe (2006). Both documents became a flagship “political” answer to the visible inequality among European citizens entrepreneurial intentions in comparison to United States (2007).

Additionally, since it has been shown that the effect of general education measured in length of schooling on entrepreneur performance is positive (Van der Sluijs et al., 2005, Van der Sluijs and Van Praag, 2007), the mandatory entrepreneurship teaching has been introduced also in the secondary schools.

This article is an attempt to analyze the impact of entrepreneurship education on entrepreneurial attitudes and intentions of young people: male and female students and secondary school pupils. Using a quite recent study and matching it with a new empirical research, we will be checking the assumptions posed by Peterman and Kennedy (2003) on the impact on entrepreneurial decisions of factors such as:

- entrepreneurship education increases the desirability of entrepreneurship;
- entrepreneurship education impacts are stronger among pupils with a positive prior exposure to entrepreneurs;
- entrepreneurship programs have a significant effect on the self-perceived feasibility to start-up a company;
- a positive image of an entrepreneur have a significant effect on the self-perceived feasibility to start-up a company.

Special emphasis has also to be placed on the country context when discussing a respective factors impact. Rousseau & Fried (2001) suggest that at a minimum contextualization requires a “thicker description of the settings”. As Schneider (1985) suggests, contextualization facilitates the robustness of our models and our results. Whereas entrepreneurship education is increasingly recognized as a *sine qua non*, both in mature and transition economies, to enhance a positive attitude among pupils and students towards entrepreneurship and entrepreneur values. The evidence that contextual factors and personality traits play a significant role in explaining entrepreneurial intent was shown also by Lüthje and Franke (2003).

Research context and evidence

The communist system which has existed in Eastern Europe for more than 40 years in the post-war period has left some splinters in people's hearts and has impacted on how entrepreneurship "is seen, constructed and enacted" (Starnawska, 2009). As a result, whereas in the Western world (but largely more in the Anglo-Saxon countries than in the rest of the Western countries) the idea of the entrepreneur as a „positive hero" has been cultivated, in Central Eastern Europe there are few successful stories of entrepreneurs, as the political and institutional regimes of that part of the continent did neither give space nor opportunity to the development – if not the survival – of such a social and economic actor. On the contrary, the political propaganda has been successfully destroying the image of private agents, as blood-suckers, *geschäft* man or *kulaks*. This negative picture has survived in the common thinking and was explicitly reflected in the approach of institutional agents toward entrepreneurs even during the transition years.

Very little information is presently available about entrepreneurship education in Poland. We can notice, however, an increased interest in entrepreneurship in higher education from the 1990s onwards – at the beginning at the bachelor level in management schools (BSc). In 2008, with the introduction of new educational standards entrepreneurship became an obligatory course only for the major in "management" at graduate level (MA/MSc). Furthermore entrepreneurship courses were launched as an integral part of some other majors and in some universities entrepreneurship specializations have been developed since. However, entrepreneurship education for non-business students is still almost non-existent. The situation should improve with the last higher education reform of 2011, which introduced the National Qualifications Framework for Higher Education, specifying the outcomes of education, where among competences are team work, creativity and entrepreneurship.

As for secondary schools, during the transition period they were mostly responsible for the delivery of basic knowledge in economics. Since 2002, Polish curriculum of high schools has been enriched with a new compulsory course *Introduction to Entrepreneurship* with four goals, presented here with the importance indication (Wachowiak et al., 2007), provided by teachers: understanding of the basic economic phenomena and mechanisms (26.2%), ability to form their own opinions and judgments on the main changes in Polish economy (1.4%), ability to design their own carrier and to the effective job searching (52.5%), and only for 14.9% acquisition of the entrepreneurial behaviors including business ethics.

According to research by GEM Global Report (Bačlawski et al., 2005), carried out in Poland among 54 national experts on the determinants of entrepreneurship, according to the method of Entrepreneurship Framework Conditions, in the category "Education" Poland obtained the score of minus 0.25, while positive values indicators were attributed to China, Iceland, Singapore, USA and Hungary. It is worth noting that the opinions about the quality of education preparing to start-up are



not conclusive: according to more than one third of Polish experts (37%) higher education institutions provide a good foundation, while the opposite view is shared by 29.7% of the national experts. However, it is not an isolated opinion that “*very few universities convey the entrepreneurial spirit to the young generation*”. Universities are “delivering” employees rather than entrepreneurs. Educational programs include the basics of economics, but do not show how to run business activity.

An interesting evidence comes from the research conducted in three post-transitional countries (Poland, Czech Republic and Slovakia) by Kraśnicka (2007). This study has been a comparative analysis of the attitude among students, toward selected aspects of enterprise. Opinions of students were quite similar for both, perception of the phenomenon of enterprise and its growth conditions and the perception of their own “entrepreneurial potential” or their vision of the future: almost 90% of the surveyed would like to work for a company, particularly an important one; the most important barriers for the growth of companies are corruption and bureaucracy; stereotyped images of entrepreneur “*entrepreneur as inventor*” or “*you need to be a natural born entrepreneur*” are largely dominating among these students. Some conclusions have been drawn for entrepreneurship education indicating the necessity to change the university curricula in order to enable students to get in touch with business and non-business organizations in practice and to stimulate their creativity and self-confidence.

Very interesting findings brings also the study conducted by PARP (Polish Agency of Enterprise Development) in 2008–2009 (Węławska, Zadura-Lichota, 2010) among generation of Polish youngsters. One-third (31.1%) of the surveyed consider the possibility of starting their own business activity and the positive attitude toward being entrepreneur increase with the education level.

Another recent research (Szymkowska et al., 2010) conducted on a group of final year students in the Pomorskie province shows, however, that most of them (58%) declared to be exposed to “*activities related to the development of entrepreneurship*.” At the same time this study showed that students are very active in the field of raising an entrepreneurial self-awareness. They claimed finding inspiration to start up one day in their own knowledge + passions + ideas (63%), analysis of market needs (47%), advice + success of another company (42%). For only 22% of the students, the inspiration came from classes at the university. Only one out of five students indicated that after graduation he/she would start-up and among the main concerns were listed the most often “*insufficient knowledge*” and “*lack of experience*”.

The most recent data on Polish entrepreneurship are provided by GEM in its last report, released in 2012, where Poland has been placed in the group of efficiency-driven economies². According to this report findings, slightly more than one-third (33.1%) of Poles perceive business opportunities, and it is quite similar in men and

² Economy characterized by increased industrialization and economies of scale. Large firm dominate, but supply chain niches open up for small and medium-sized enterprises. GEM, 2012.



women population. Meanwhile, women evaluate their entrepreneurial knowledge and capabilities lower than men and they are much more afraid of failure in business.

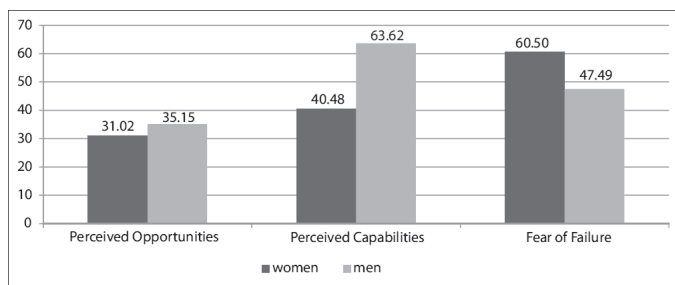


Figure 1. Perceived opportunities among men and women in Poland

Source: GEM 2011, p. 21

What is more, Poland, among other efficiency driven economies, has one of the biggest differences between men and women from the early-stage level, calculated with TEA index (total early-stage entrepreneurial activity). Table 1 shows comparison of Poland and the average of efficiency-driven economies.

Table 1. Total early-stage entrepreneurial activity in Poland and the average of efficiency-driven economies [in %]

TEA Index	Poland	Efficiency-driven economies
TEA Index Total	9.07	13.77
TEA Index – Men	13.09	16.53
TEA Index – Women	5.05	11.01

Source: own compilation based on Global Entrepreneurship Monitor, 2011 Extended Report: Entrepreneurs and Entrepreneurial Employees across the Globe, Babson College, 2012, p. 28

Generally, the total early-stage entrepreneurial activity (for both men and women) in Poland is lower than the average of the group. However, the TEA Index for women is two times less than the average. Furthermore, the difference between the index for men and women is very significant.

Considering the population sample of our study, it is interesting to know what is the situation regarding the business creation in different age groups and at various education levels.

Education is considered by respondents an important factor of entrepreneurship growth, unfortunately the level of teaching entrepreneurship in Poland is rather low. The experts assessed *the level of skills and knowledge for starting up business*

activity in Poland as average (2.5), which is on the average level of innovation-driven economies³.

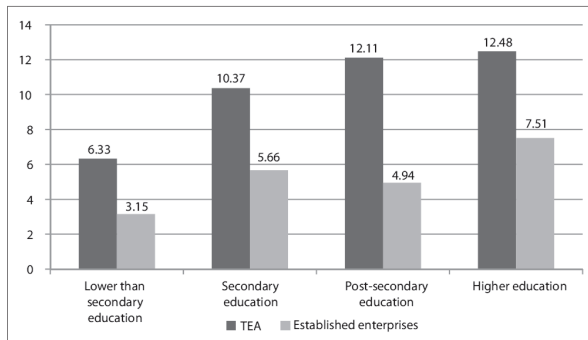


Figure 2. TEA and established enterprises by education in Poland [%]

Source: GEM 2011, p. 21

Methods of surveying and the characteristics of the population under study

The empirical study has been carried out at the same time at two different education levels: university and high school. At the secondary school level the study was conducted in three general high schools of Gdansk. The total number of the surveyed pupils was 488, and they were 17–18 years old, having completed already the *Introduction to Entrepreneurship* course. Regarding the students survey, it has been carried out during the first year of full-time programs at the Faculty of Management and Economics, Gdansk University of Technology. A total of 436 students were questioned, including three specializations: Management, European Studies, Informatics & Econometrics. The age group for all specializations is 20–21 years, as the data has been gathered at the beginning of their initial semester. Both studies were carried out in the academic year 2009/10.

Table 2. Distribution of respondents by education level, specialty and gender [%]

Sex	Higher Education			Secondary Education	Total
	Management	European Studies	Informatics & Econometrics		
Men	34.6	30.1	61.8	57.9	46.0
Women	65.4	69.9	38.2	42.1	54.0

Source: own elaboration based on the research

³ R&D, knowledge intensity and expanding service sector. Greater potential for innovative entrepreneurial activity. GEM, 2012



To conduct the survey, a special questionnaire, including 10 questions and some demographic and social data, based on Peterman and Kennedy theory, has been prepared. Most of the participants come from cities (91%).

Study limitations

The data for this study were collected through a survey instrument. Respondents provided their opinions and perceptions about entrepreneurs, entrepreneurial disposition, occupational aspirations. All the observed relations were reported by two groups of respondents: the one representing the secondary education – three different high schools from Gdańsk, the second – three different programs from one university. Therefore, any discovered relations may be partially a result of common method effect (Fiske, 1982). However this is a quite common limitation for the majority of empirical studies in this area and for the most survey research.

Furthermore the study has been conducted among very young people, only starting to build their business experience and self-efficacy, therefore the level of business knowledge is for sure still quite limited. Additionally, considering the focus of this research, the distribution between specialties has been neglected for the majority of questions.

Results

The participants were asked whether they **know an entrepreneur**. Three possibilities have been proposed here: a close family member is an entrepreneur; a friend is an entrepreneur; nobody around the participant is an entrepreneur.

Table 3. Distribution of respondents by exposure to an entrepreneur in his/her close environment [%]

Answer	Higher Education						Secondary Education		Total	
	Management		European Studies		Informatics & Econometrics					
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Yes, close family member	35.7	44.9	30.1	27.3	10.3	34.7	46.8	44.9	30.6	37.9
Yes, friend	39.2	34.6	41.7	56.8	69.0	40.8	29.8	34.1	44.9	41.5
Nobody	25.1	20.5	28.2	15.9	20.7	24.5	24.1	22.4	24.5	20.6

Source: own elaboration based on the research



The respondents had to answer whether they **have helped their family or friend entrepreneurs**. More than half of those who declared having in their closer or more distant environment the entrepreneur, states that did not help in running this business (53%). Nearly 26% confirmed, however having assisted their family or friends entrepreneurs and gain already some experience in this type of activity.

Table 4. Distribution of respondents by experience in assisting/helping entrepreneurs they know [%]

Answer	Secondary Education		Higher Education		Total	
	Women	Men	Women	Men	Women	Men
Not applicable	21.3	20.5	22.5	19.4	21.9	20.0
Yes	21.3	31.7	16.2	35.1	18.7	33.4
No	57.4	47.8	61.3	45.5	59.4	46.6

Source: own elaboration based on the research

Breakdown by gender shows that men were nearly two times more likely to help entrepreneur friends than in running the company nearly two times more likely to help men. Most women, in spite of the declaration of the existence of entrepreneurs in their environment, did not provide such assistance. Distribution of answers to the same question, broken down into specialties is relatively uniform, therefore we decided to skip them in this work, because it does not give any field for analysis.

Students and pupils were surveyed about their **entrepreneurial disposition** (see table 5). They were asked to declare their self-evaluation of being or not entrepreneurial. Almost 75% of students surveyed described themselves as entrepreneurial, however absolutely sure about it is above 12%. Other students (61.8%) feel rather enterprising people. In case of high school pupils, more than half (56.1%) answered in the affirmative to this question, one-third was undecided.

Table 5. Students' and pupils' feeling about being entrepreneurial [%]

Answer	Secondary Education		Higher Education		Total	
	Women	Men	Women	Men	Women	Men
No	3.5	2.5	1.1	1.8	2.3	2.2
Rather no	9.3	9.3	2.2	3.6	5.7	6.5
Undecided	40.4	18.5	21.8	21.2	31.1	19.8
Rather yes	38.6	47.3	67.2	56.4	52.9	51.8
Yes	8.2	22.4	7.7	17.0	8.0	19.7

Source: own elaboration based on the research

Students' and pupils' occupational aspirations, in terms of their disposition to start-up, were examined and compared (see table 6). In the same question participants had to specify the time they would be ready to start their own business (if any).

Table 6. Students' and pupils' occupational aspirations, their disposition to start-up [%]

Answer	Secondary Education		Higher Education		Total	
	Women	Men	Women	Men	Women	Men
I already have my own business	–	–	0.4	1.2	0.4	1.2
Yes, I want to start up during studies	5.2	14.6	3.0	11.5	4.1	13.0
Yes, after studies	12.5	14.6	11.1	18.3	11.7	16.3
Yes, but I need some experience before	25.9	22.0	35.3	33.3	30.6	27.4
I do not know yet	42.9	42.0	46.5	34.5	44.6	38.1
No	13.5	6.8	3.7	1.2	8.6	4.0

Source: own elaboration based on the research

The high school pupils were not given to select the answer regarding being already entrepreneurs. Legally, they cannot be entrepreneurs because of underage. Comparing to students, they are less disposed to start-up, the strongest difference is visible in the female group.

Few students already have their own business, they are more often men than women. Most students, however, is undecided (41.35%), more often in women than men population. More than one third of surveyed is determined to start the business after gaining experience at work (this response was more common among women than men). It is worth mentioning, considering one of the assumptions mentioned above, was the percentage of exposed students and pupils declaring the wish to start-up 69.4%, including slightly less women (63.2%), than men (75.6%). All results indicate a positive attitude towards business. It is, of course, certain that in many cases, these predictions do not check, however, the admission of such a possibility in itself is comforting.

Students and pupils who declared that they do not want to start-up were asked to give the reason of such negative attitude toward being their own boss (see table 7). The most interesting is result showing women aversion to the risk in both groups of respondents.



Table 7. Students' and pupils' reasons of negative attitude towards being their own boss [%]

Answer	Secondary Education		Higher Education		Total	
	Women	Men	Women	Men	Women	Men
I have no business idea	2.2	2.6	4.3	3.6	3.3	3.1
I do not like risk	6.8	0.2	9.5	1.4	8.7	0.8
I am not fit to run a business	2.9	1.4	2.4	0.7	2.7	1.0
I have not enough knowledge	1.7	2.6	1.4	2.8	1.5	2.7
Other	2.5	1.4	0.9	1.4	1.7	1.4

Source: own elaboration based on the research

Among answers provided under “other” possibility we could find: *heritage, well paid job, entrepreneur carrier is not a fascinating one.*

Taking into account the negative image of entrepreneurs in Poland, developed during the communist regime and maintained during the transition time, the attempt to verify this aspect now seemed the natural one. On a 5-point Likert-type scale ranging from 1 (*I fully disagree with this opinion*) to 5 (*I fully agree with this opinion*), students and pupils ranked fifteen perceptions of entrepreneurs (see table 8).

In the opinion of pupils **self-confidence** is a typical characteristic of an entrepreneur. With the statement assigning him such a feature strongly agreed 58% of pupils respondents and another 37% confirmed their tendency to agree with that opinion. Results broken down by gender show a certain polarization of opinions. Women were more likely than men perceiving the entrepreneur as a person who is self-confident (74.5% vs. 70% of men). 4% of respondents had no opinion on this feature. The notion of entrepreneur confidence, especially among students, dominated in European Studies (96%). This view is less popular among students in other fields, the difference is a few percentage points.

“*An entrepreneur is well organized*” was the statement shared by the great majority of respondents, especially in the pupils group. In total women are more convinced than men about good organization skills among entrepreneurs.

The vision of the entrepreneur as a **dynamic** person is also relatively common. Although 11% of respondents had no opinion on the subject, 73% of respondents shared this perception of entrepreneurs. The dynamism of entrepreneurs has been pointed out more often by men (79%) than by women (67%).

One fifth of the surveyed had no opinion on whether the entrepreneur is **charismatic**. More than half of the respondents (58.5%) agreed with such feature and the percentage of those who strongly attributed to entrepreneurs charisma is stronger among women (62%).

Table 8. Students' and pupils' perceptions of entrepreneurs [%]

Answer	Secondary Education		Higher Education		Total	
	Women	Men	Women	Men	Women	Men
Entrepreneur is self-confident	90.0	85.0	59.0	55.0	74.5	70.0
Entrepreneur is well organized	93.0	87.0	80.0	68.0	86.5	77.5
Entrepreneur is dynamic	47.0	75.0	87.0	83.0	67.0	79.0
Entrepreneur is charismatic	76.0	66.0	48.0	46.0	62.0	55.5
Entrepreneur is dishonest	6.0	16.0	2.0	7.0	4.0	11.5
Entrepreneur likes risk	61.0	60.0	74.0	70.0	67.5	65.0
Entrepreneur adapts him-self easily	35.0	59.0	35.0	51.0	35.0	55.0
Entrepreneur is driven mostly by money	22.0	39.0	17.0	21.0	19.5	30.0
Entrepreneur has a relationship facility	83.0	77.0	92.0	85.0	87.5	81.0
Entrepreneur is creative	88.0	82.0	98.0	95.0	93.0	88.5
Entrepreneur feels responsible for others	58.0	57.0	75.0	65.0	66.5	61.0
Entrepreneur is only the business owner	11.0	16.0	4.0	6.0	7.5	11.0
Entrepreneur is stress resistant	55.0	56.0	56.0	50.0	55.5	53.0
Entrepreneur is convinced that he controls his life	45.0	62.0	48.0	63.0	46.5	62.5

Source: own elaboration based on the research

Dishonesty is definitely not any more a characteristic attributed by young generation to the entrepreneurs. Only 8% of the total number of respondents agreed with this perception and the difference between men and women is quite strong. Men were sharing this opinion almost three times more often in both groups of respondents.

The perception of entrepreneur as a **risk taker** is strongest among students than among pupils, in particular in the group of management students. Regarding the **adaptation capacity**, quite significant differences are noted in the perception of this feature by different specialties. The opinion that entrepreneurs adapt easily is the most popular in the Informatics & Econometrics (63%) group and the least among the European Studies specialty (38%).

The next question was based on the finding that the entrepreneur is primarily concerned with **money**. This is another pejorative opinion on the entrepreneurs and



once again, the majority of respondents (75%) did not agree with this opinion. It should be emphasized that the differences in the perception of entrepreneurs as money driven were quite important by gender. Men more likely agreed with this opinion (30%).

The assumption that an entrepreneur is a person **having a facility of interpersonal relations** was confirmed by 84% of respondents. However gender plays an important role in the perception of this feature. With the image of easy networking entrepreneur agree 87.5% of women and 81% of men.

That an entrepreneur is **creative** were convinced 78.5% of respondents. This belief was stronger among women (93%) than among men (88.5%).

The majority of surveyed believe that the entrepreneur feels **responsible for others**. A sense of responsibility for others assigned to him more often women (66.5%) than men (61%).

Only 9% of respondents agreed that an entrepreneur can only be a person who **owns a firm**. The results suggest that students and pupils look at this statement in a way that differs from the stereotype.

More than half (54%) of respondents believed that the entrepreneur was rather **resistant to stress**. The difference by gender was only 2%.

The last statement was about the entrepreneurs conviction to be in **control of their life**. More than half (54.5%) of respondents believed that the sense of internal control characterizes the entrepreneur. Opposite view represented 16% of the respondents. Belief in the feeling of internal control is much more common in men population (62.5%) than women (46.5%).

Summarizing results related to the perception of entrepreneurs it is interesting to underline the fact that students and pupils perceive entrepreneurs as positive people, being well organized, creative, confident, social and dynamic. At the same time the vast majority of respondents do not perceive them as unfair and interested mostly in money (see figure 3).

Certainly, it is interesting to analyze how the answers change with age of respondents so indirectly with the length of the education and of the exposure to the business world: much more pupils than students is convinced about the entrepreneurs self-confidence, organization skills, dynamism and charismatic nature. More often pupils see entrepreneurs only as business owners and dishonest people. The conviction of entrepreneurs being driven by money mostly is stronger among pupils population, especially in the male group.

Respondents were also asked to decide which one of the three given factors is the most important for being successful entrepreneur. They had to decide about it on a 3-point Likert-type scale ranging from 1 (*most important*) to 3 (*less important*). The differences between students and pupils group were insignificant, so we decided to present the results for both populations, taking into account only gender factor. Respondents appreciate the knowledge the most (see figure 3).

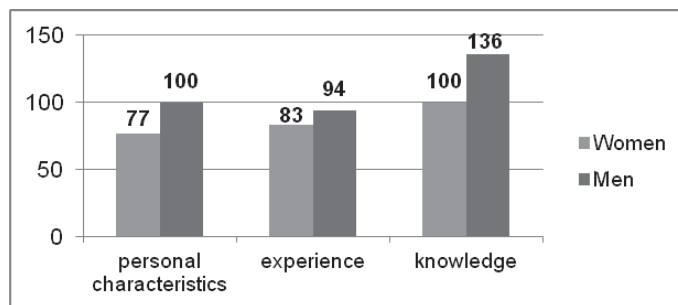


Figure 3. Respondent's opinion about the importance of success factors in business activity
Source: own elaboration based on the research

Meanwhile with deeper data analysis we found out that personal characteristics were the most important among students/pupils willing to start their activity during studies and the business experience was of the bigger value among students/pupils willing to start up after gathering experience. Knowledge is the most important among those who don't know yet if they will start up.

The secondary schools students were asked to evaluate the teaching methods and the course content. Their evaluations were rather positive (see figure 4).

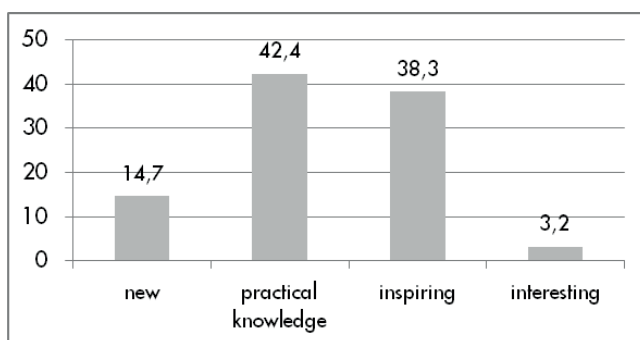


Figure 4. Pupils' opinions about the course content and teaching methods
Source: own elaboration based on the research

Conclusions

The comparative analysis of the opinions and perceptions about selected aspects of enterprise, entrepreneur, and entrepreneurship education among the surveyed male and female population has shown their important convergence, especially in terms of their attitude towards being entrepreneur and of their positive perception of entrepreneurs, both at the secondary and higher education levels. Entrepreneurs are rather perceived as: self-confident, dynamic, well organized, creative and honest people by the female et male respondents. However the length of schooling and



social exposure to the business world appear being decisive for the opinions polarization. Probably if this questions would be asked some years ago or in the different age group, such positive attitudes would be not so obvious. Hopefully, the new generation doesn't remember an early image-laden "camp beds" entrepreneurship period in Poland.

More young people with prior exposure to entrepreneurs than without declared the desire to start up. More than the half of surveyed declare being entrepreneurial and express the wish to start-up, this feeling is stronger in the men population. Knowledge and "good idea" seem to be the most important factors of the decision about starting-up the business. Great majority of pupils seems to be rather satisfied with the quality of the course and its content.

Considering this results and the general business and educational context in Poland, we assume that it is worth to continue with delivering teaching enabling young students to acquire the "technical" knowledge on business administration, for sure not only in the management programs but even more in all engineering disciplines. Hopefully, according to the new regulation on higher education in Poland, the role of university, among others, would be to shape the attitude, mostly entrepreneurial one, independently of the field of studies, and not only deliver the knowledge.

Since one of the main burdens to entrepreneurship indicated by young people was the lack of good idea, it is important to develop courses focused on creativity rather than general entrepreneurship. In this domain we are only at the beginning of the road, still remaining, for the most of cases, in the traditional entrepreneurship teaching.

Study implications

This study, despite its numerous limitations, maybe an interesting starting point for further research in the field of the entrepreneurship education in Poland. The author has the intention to come back to the same group of university respondents at the end of their studies in order to better shape the evolution in their attitudes and personal decisions about becoming entrepreneur. That shall determine not only the design of programs and of the specific courses content, but also if possible, enhance the trial of spreading this new approach to the entrepreneurship teaching among different departments of our technical university.

References

1. Bałowski K., Korczega M., Zbierowski P.: Studium przedsiębiorczości w Polsce w roku 2004 Global Entrepreneurship Monitor, Fundacja Edukacyjna Bachalski, Poznań 2005 (http://www.gemconsortium.org/national_reports.aspx).
2. ECORYS, EU SMEs in 2012: at the crossroads, Annual report on small and medium-sized enterprises in the EU, 2011/12, Rotterdam, September 2012.



3. Davidsson P., Shaker A.Z., Sapienza H.J.: Entrepreneurship and Dynamic Capabilities: a Review, Model and Research Agenda, *Journal of Management Studies*, 2006, Vol. 43, Issue 4, p. 917–955.
4. Douglass M.E.: Entrepreneurial education level related to business performance. *Academy of Management Proceedings* 1976.
5. Isenberg D.J., The global entrepreneur, *Harvard Business Review*, No 12, 2008.
6. European Commission, Entrepreneurship education in Europe: Fostering entrepreneurial mindset through education and learning, Final Proceedings of the Conference on Entrepreneurship Education in Oslo 2006.
7. Fiske D.: Convergent-discriminant validation in measurement and research strategy. In: D. Brinsberg, L. Kidder, eds. *New directions for methodology of social and behavioral sciences: Forms of validity in research*. San Francisco: Jossey Bass 1982.
8. Gorman G., Hanlon D., King W.: Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review, *International Small Business Journal*, 1997, 15(3), p. 56–79.
9. http://ec.europa.eu/enterprise/policies/sme/files/support_measures/training_education/doc/oslo_agenda_final_en.pdf
10. Kets de Vries M.F.R.: The entrepreneurial personality: a person at the crossroads, *Journal Of Management Studies*, 1977, Vol. 14, Issue 1, p. 34–57.
11. Kraśnicka T.: Students towards enterprise. Results of a survey on attitudes and opinions of university students in Poland, Czech Republic and Slovakia, *Journal of Economics and Management*, 2007, Vol. 3, The Karol Adamiecki University of Economics in Katowice, p. 78–86.
12. Lisbon European Council, Presidency Conclusions, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/00100-r1.en0.htm
13. Lüthje C., Franke N.: The making of an entrepreneur: Testing a Model of Entrepreneurial Intent among Engineering Students at MIT, *R&D Management*, 2003, 33, 135–147.
14. McClelland D.: *The Achieving Society*. London: The Free Press 1961.
15. Oosterbeek H., Van Praag M., Jsselstein A.: The impact of entrepreneurship from the public sector. Predispositional and contextual effects, *Management Science*, 2009, 55, p. 604–618.
16. Peterman N.E., Kennedy J.: Enterprise education: Influencing students' perceptions of entrepreneurship, "Entrepreneurship – Theory and Practice", 2003, no 28 (2), p. 129–144.
17. Peters R.M., Brijlal P.: The relationship between levels of education of entrepreneurs and their business success: a study of the province of KwaZulu-Natal, South Africa, *Industry and Higher Education*, 2011, No 4.
18. Popowska M., Starnawska M.: *Majsterkowanie dla każdego – czy każdy może być przedsiębiorcą w Polsce? Analiza przypadków. W poszukiwaniu strategii przedsiębiorczych, w Uwarunkowania rynkowe rozwoju mikro i małych przedsiębiorstw*, Szczecin: Wyd. Nauk. Uniw. Szczecińskiego 2009, p. 403–409.
19. Raport 2010, Sektor MSP na Pomorzu w warunkach pogorszenia koniunktury, Pomorskie Obserwatorium Gospodarcze, Agencja Rozwoju Pomorza S.A.
20. Rousseau D.M., Fried Y.: Location, location, location: contextualizing organizational research *Journal of Organizational Behaviour*, 2001, Vol. 22, p. 1–13.
21. Scherer, R.F., J.S. Adams, S.S. Carley & F.A. Wiebe, Role Model Performance Effects on Development of Entrepreneurial Career Preference, *Entrepreneurship*, 1989



22. Effects on Development of Entrepreneurial Career Preference, *Entrepreneurship*, 1989
23. Schneider B.: Interactional psychology and organizational behavior. In: B. Staw, LL. Cummings, eds. *Research in Organizational Behaviour*, Vol. 5, Greenwich, CT: JAI Press 1985, 1±31.
24. Shinnar R., Pruett M., Toney B.: *Entrepreneurship Education: Attitudes across Campus*, Heldref Publications, 2009, p. 151–158.
25. Starnawska M.: The way things are done here – Polish Entrepreneurship having endowed heritage or burden? In: J.E. Wasilczuk, ed. *What do we know (and what would like to know) about Entrepreneurship in Poland*. Gdańsk: Gdańsk University of Technology 2009.
26. Szmytkowska M., Masik G., Czepczyński M.: Trendy rozwoju oraz ocena jakości kapitału ludzkiego w województwie pomorskim. Urząd Marszałkowski Woj. Pomorskiego 2010.
27. Teixeira A., Forte R.: Unbounding entrepreneurial intents of university students: a multidisciplinary perspective. *FEP Working Papers* 2008, p. 322.
28. Van der Sluijs J., Van Praag C.M.: Returns to education for entrepreneurs and employees: Identification by means of changes in compulsory schooling laws. Amsterdam: University of Amsterdam Working Paper 2007.
29. Van der Sluijs J.P., Craye M., Funtowicz S., Kloprogge P., Ravetz J., Risbey J.: Combining quantitative and qualitative measures of uncertainty in model based environmental assessment: the NUSAP System. *Risk Analysis*, 2005, 25 (2), p. 481–492.
30. Wachowiak P., Dąbrowski M., Majewski B.: *Kształtowanie postaw przedsiębiorczych a edukacja ekonomiczna*. Warszawa: Fundacja Promocji i Akredytacji Kierunków Ekonomicznych 2007.
31. Węclawska D., Zadura-Lichota P.: Wpływ edukacji na postawy przedsiębiorcze i przygotowanie młodych Polaków do działalności gospodarczej, in: *Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce w latach 2008–2009*. Warszawa: PARP 2010.

**EDUKACJA PRZEDSIĘBIORCZA I POSTAWY
MŁODEGO POKOLENIA W ZALEŻNOŚCI OD PŁCI:
PRZYPADK POLSKIEGO SYSTEMU EDUKACYJNEGO**

Niniejszy artykuł jest próbą analizy wpływu kształcenia w zakresie przedsiębiorczości na postawy przedsiębiorcze i intencje młodych ludzi: uczniów polskich szkół średnich i studentów szkół wyższych. Autorka stara się zweryfikować wpływ ekspozycji na edukację biznesową i kontakty z przedsiębiorcami na decyzję o założeniu firmy. Szczególny nacisk został położony na różnice płci w tym zakresie. Artykuł zawiera również szereg wskazówek i wytycznych dla decydentów w kontekście nauczania przedsiębiorczości, a szczególnie odnośnie zapewnienia właściwego ukierunkowania wsparcia w tej niedocenianej dziedzinie edukacji.

