

Entrepreneurship Determinants among the Students of the Maria Curie-Skłodowska University in Lublin in the Light of the Conducted Research

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Abstract

Purpose – The goal of this article is to present results of the research conducted among the students of the Maria Curie-Skłodowska University in Lublin with regard to factors stimulating their entrepreneurship or constituting a barrier in that area. The research covered one of the dimensions of entrepreneurship, i.e. the conducting of one's own business.

Design/Methodology/Approach – The following questions were asked as a part of the research procedure:

- 1) What is the entrepreneurial activity level of the MCSU students?
- 2) What factors motivate them to start their businesses?
- 3) What factors discourage them from managing their firms?

The sample-based study method was applied; because of that, it was necessary to get the empirical material from individuals belonging to a representative research sample. Students from all MCSU departments participated in the research. Data were collected in 2014–2016 with the use of a categorized interview questionnaire on 1,219 respondents selected at random. Thanks to the information contained in the metrics, it was possible to divide participants in the research on the basis of the following criteria: sex, study degree, field of studies, degree of financial dependency on third parties, business experience of parents or caretakers. The statistical materiality of differences in participants' declarations was determined with the use of the chi-square test and derivative measures such as V-Cramer, T-Czuprow or Yule coefficients. An analysis of the structural similarity index had a supporting significance in that area.

Findings – Levels of entrepreneurial activity among the MCSU students were analysed. Factors stimulating and discouraging them from being entrepreneurs were identified. Materiality of these factors was also determined for the entire research sample and for distinguished groups of respondents. The dependence of the entrepreneurship levels among students on their participation in individual groups was analysed.

Practical implications – Results obtained in this manner and conclusions drawn from this research will allow one to work out an end-to-end program of academic entrepreneurship development aimed at the development of entrepreneurial attitudes and behaviours among students and graduates as well as the promotion of entrepreneurial culture in academic circles.

Original value – The originality of the analysis results from the specific nature of the research



conducted. It was the first time when the entrepreneurship research covered students of all MCSU faculties. The exploration took place in groups distinguished from the research sample, which allowed for a greater integrity of analyses. The obtained results constitute a stimulus to continue the research with the use of focus groups. The final goal of the research will consist of an original training curriculum relating to academic entrepreneurship.

Article type – Research paper.

Keywords – academic entrepreneurship, starting a business, students, entrepreneurship determinants.

1. Introduction

Entrepreneurship is currently one of the most valuable attributes of human activity.¹ It can be understood as resourcefulness or the ability to achieve above-the-average benefits in a situation.² Entrepreneurship is very often identified with one's own business.³ It may also be perceived as the fourth production factor in addition to labour, capital and land that guarantees the optimum allocation and coordination of available resources, leading to their effective use.⁴ Thanks to it, people, organizations and national economies attain measurable benefits, e.g. in the form of the shortened duration of processes, cost reductions, effectiveness increase, improved innovativeness or, more generally, an improved quality of life for the society.⁵

The modelling of entrepreneurial attitudes and behaviours among members of the society is very important even at early stages of their lives.⁶ However, it is during the university studies when a special opportunity for a significant improvement of the entrepreneurial maturity exists.⁷ Some of the tools used to make it happen include the training in entrepreneurship offered in an increasing number of universities in Poland and worldwide.⁸ Students today also have more and more opportunities to take entrepreneurial action in students' organizations, business environment institutions and also by taking up volunteer work, a paid job or their own business.⁹ Unfortunately, some students demonstrate a warped understanding of entrepreneurship and define it as activities that are not always ethical, aimed at the realization of one's own intention as quickly and easily as possible.

¹ P. F. Drucker, *Innovation and Entrepreneurship, Practice and Principles*, Harper & Row, New York 1985.

² T. Kraśnicka, Przedsiębiorczość jako przedmiot badań ekonomistów, *Ekonomia – Rynek – Gospodarka – Społeczeństwo*, 2001, No. 4, p. 198.

³ D. F. Kuratko, *Entrepreneurship – Theory, Process, Practice*, CENGAGE Learning, Boston 2016, p. 5; E. Santarelli and M. Vivarelli, Entrepreneurship and the Process of Firms' Entry, Survival and Growth, *Industrial and Corporate Change*, June 2007, pp. 455–488.

⁴ J.-B. Say, *Traktat o ekonomii politycznej*, PWN, Warsaw 1960, p. 550.

⁵ H. H. Stevenson and D. E. Gumpert, The Heart of Entrepreneurship, *Harvard Business Review*, March–April 1985, pp. 85–94.

⁶ Cf. R. Linton, *Kulturowe podstawy osobowości*, PWN, Warsaw 2000, pp. 47–53.

⁷ D. F. Kuratko, The Emergence of Entrepreneurship Education: Development, Trends and Challenges, *Entrepreneurship Theory & Practice*, 2005, Vol. 29, No. 5, pp. 577–597.

⁸ Cf. A. Lundstrom and L. A. Stevenson, *Entrepreneurship Policy – Theory and Practice*, Springer, New York 2005, pp. 77–82.

⁹ M. Jelonek, *Studenci – przyszłe kadry polskiej gospodarki*, Polska Agencja Rozwoju Przedsiębiorczości, Warsaw 2011.

The goal of this article is to present results of the research conducted among the students of the Maria Curie-Skłodowska University in Lublin (MCSU) with regard to factors stimulating their entrepreneurship or constituting a barrier in that area. The research covered one of the dimensions of entrepreneurship, i.e. the conducting of one's own business.

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2. Research methodology

The goal of the research was to identify factors stimulating and restraining the entrepreneurship of the MCSU students. The sample-based study method was applied; because of that, it was necessary to get the empirical material from individuals belonging to a representative research sample. Students from all MCSU departments participated in the research. Data were collected in 2014–2016 with the use of a categorized interview questionnaire on 1,219 respondents selected at random. Thanks to the information contained in the metrics, it was possible to divide participants in the research on the basis of the following criteria:

- sex (variants: woman [A1], man [A2]);
- study degree (variants: first-degree studies [B1], second-degree studies [B2]);
- field of studies (variants: economic [C1], non-economic [C2]);
- degree of financial dependency on third parties (variants: entirely dependent [D1], partially dependent [D2], entirely independent [D3]);
- business experience of parents or caretakers (variants: parents/caretakers conduct business [E1], parents/caretakers had a firm in the past [E2], parents/caretakers do not have and have not had any firm [E3]).

The statistical materiality of differences in participants' declarations was determined with the use of the chi-square test and derivative measures such as V-Cramer, T-Czuprow or Yule coefficients. An analysis of the structural similarity index had a supporting significance in that area.

The following issues were subjected to an in-depth analysis as a part of the research:

- entrepreneurial activity level of respondents;
- their willingness to conduct own business;
- incentives encouraging them to start conducting business;
- factors discouraging them from starting business activities.

3. Entrepreneurial activity of students

According to the conducted research, 74.3% of respondents considered themselves entrepreneurial. Men declared that they were entrepreneurial more frequently (78.8%) than women (70.9%). For the sake of comparison, we can note that Ukrainian (79.0%) and Latvian students (75.0%) considered themselves more entrepreneurial, while Russian (60.2%), Lithuanian (64.6%) and Hungarian students (67.3%) regarded themselves as less entrepreneurial.¹⁰ The evaluation of the degree of one's own entrepreneurship varied very slightly in the case of students of economic and non-

¹⁰ M. Kunasz, *Zachowania przedsiębiorcze studentów w świetle badań ankietowych*, *Gospodarka Narodowa*, 2008, No. 3, p. 72.

economic faculties and on various degrees of studies. The diversification was much greater in the case of the degree of financial dependence and business experience of parents or caretakers. Financially dependent persons perceived themselves as entrepreneurial more frequently (72.2%) than financially independent people (69.6%). In turn, those students whose parents or caretakers had no business experience considered themselves entrepreneurial more frequently (73.1%) than those respondents whose caretakers had such experience (71.7%).

More than a half (59.3%) of the respondents declared that they were taking up some activity in addition to studying (e.g. in scientific associations, volunteering, traineeships in enterprises or institutions, participation in social projects). Far fewer people, i.e. 28.4% of participants in the research, took up paid jobs in the course of their studies, while even fewer (22.7%) worked freelance. An interesting thing is that respondents who took up no activity in addition to their studies considered themselves entrepreneurial people much more frequently (81.9%) than those who took up such an activity (65.4%).

The obtained results make it possible to conclude that a great majority of people participating in the research considered themselves entrepreneurial. Such a notion is particularly evident in the case of students making no attempt at an entrepreneurial activity, financially dependent on third parties and having no people with business experience among their family members. Opinions of respondents belonging to above-mentioned groups about their entrepreneurial skills have to be considered too optimistic. People with no business experience and not raised in the entrepreneurial culture thanks to their families' business activities can have an erroneous notion of the essence of entrepreneurship itself, which makes them prone to impute entrepreneurial attitudes and behaviours.

4. Students' interest in conducting their business – incentives and disincentives

Most students participating in the research would like to have their own firm (54.6%). Students of economic faculties had such a wish more frequently (57.9%) than students of non-economic faculties (51.1%). The group of those interested in having a firm contained much more men (64.8%) than women (43.9%). First-degree students (60.3%) financially independent from third parties (55.1%) and having no family members with business experience (58.7%) were more willing to start their own business than others. Students at second-degree studies (47.7%), entirely or partially dependent on third parties (49.8%) and having businesspeople in their closest environment (50.3%) were less interested in having their own firm.

Factors encouraging respondents to take up business activities in the future are presented in the table below.

Factors encouraging respondents to conduct business with the greatest importance for them included the prospective income higher than the gratification received from employers (78.3%) and greater independence from other people (71.5%). An opportunity to organize one's working time independently was also a material motivating factor (60.7%). Respondents put less emphasis on the possibility to make independent decisions (55.4%)

| Incentives | A | | B | | C | | D | | | E | | | Entire sample |
|---|------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| | A1 | A2 | B1 | B2 | C1 | C2 | D1 | D2 | D3 | E1 | E2 | E3 | |
| Prospective higher income | 77.5 | 79.2 | 75.8 | 80.4 | 81.2 | 73.1 | 74.6 | 77.0 | 80.8 | 81.3 | 79.0 | 77.1 | 78.3 |
| Greater independence from others | 70.2 | 71.9 | 70.3 | 72.2 | 71.7 | 71.2 | 70.9 | 71.4 | 73.3 | 75.2 | 70.3 | 66.8 | 71.5 |
| Possibility of independent organization of working time | 61.0 | 60.3 | 60.5 | 61.0 | 58.0 | 61.8 | 58.7 | 61.4 | 62.2 | 63.4 | 60.1 | 57.4 | 60.7 |
| Opportunity to make independent decisions | 53.9 | 56.1 | 54.0 | 56.7 | 53.9 | 57.4 | 54.7 | 55.5 | 56.8 | 57.8 | 55.1 | 53.7 | 55.4 |
| Opportunity to face new challenges | 40.4 | 44.6 | 42.0 | 42.2 | 44.1 | 40.6 | 39.9 | 40.7 | 44.6 | 45.0 | 43.5 | 39.5 | 42.1 |
| Opportunity to do important and useful things | 45.7 | 35.8 | 39.5 | 40.6 | 38.7 | 41.9 | 38.5 | 39.5 | 42.0 | 42.7 | 40.1 | 37.5 | 40.0 |
| Opportunity to manage people | 15.9 | 21.8 | 17.0 | 20.2 | 19.5 | 18.0 | 20.8 | 20.5 | 17.4 | 21.3 | 21.0 | 16.3 | 18.9 |

Legend: A – sex (variants: woman [A1], man [A2]), B – study degree (variants: first-degree studies [B1], second-degree studies [B2]), C – field of studies (variants: economic [C1], non-economic [C2]), D – degree of financial dependency on third parties (variants: entirely dependent [D1], partially dependent [D2], entirely independent [D3]), E – business experience of parents or caretakers (variants: parents/caretakers conduct business [E1], parents/caretakers had a firm in the past [E2], parents/caretakers do not have and have not had any firm [E3]).

Source: Author's own study.

and even less on the opportunity to face new challenges (42.1%) and the opportunity to do important and useful things (40.0%). The least stimulating factor for students in their potential business activity was the possibility to manage people (18.9%).

When analysing research results in the groups distinguished in the research sample, we can observe regularities listed below. Five out of seven factors were more motivating for men than for women. Only the opportunities for independent working time organization and doing important and useful things were more important for women rather than men. In turn, each of the factors turned out to be more important for second-degree students, which means that the strength of influence of motivators depended on the duration of the period the respondents had left until the completion of studies and entry to the labour market. In turn, students of economic faculties attached greater importance than students of non-economic faculties to the following motivators: prospective higher income, greater independence from other people, an opportunity to face new challenges and to manage other people. Students of non-economic faculties considered the following factors more stimulating than students of economic faculties: independent organization of working time, independent decision-making and doing important and useful things.

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Table 1.
Factors encouraging conducting one's business

Interesting regularities were observed with regard to changes of importance of individual motivators in respondent groups distinguished depending on: their financial independence from third parties and the business experience of parents or caretakers. The higher the financial autonomy of students, the greater the importance of most motivators. An inverse dependence only occurred in the case of the opportunity to manage people. It seems that, with an increase in the financial independence resulting from the taking up of varied activities, people gather more life experience and, therefore, become more mentally mature. This is the reason why having power needed to manage people is perceived less as one of the goals and more as a tool to attain goals of higher rank. In turn, considering the level of business experience among family members, we can conclude that the higher it was, the greater materiality participants in the research ascribed to all motivating factors. The socialization process in families active in the business sector takes place in an entrepreneurial culture. People have an opportunity to observe entrepreneurial behaviours of their family from the youngest age. With time, they are gradually more and more engaged in the business process. The area is not foreign to them thanks to this fact. Because of that, they are able to evaluate the importance of factors characteristic for the process in a less intuitive and more rational manner.

The research also included the identification and evaluation of the importance of factors discouraging MCSU students from conducting business. They were presented in the table below.

In particular, there are two factors deterring the entrepreneurship of MCSU students involving their willingness to start and conduct business worthy of particular attention: the lack of a good business idea (88.7%) and insufficient capital necessary at the start of the business (77.2%). We can conclude that, in the respondents' opinion, these are key barriers as the next most important one, i.e. the lack of sufficient skills to become an entrepreneur, worried only 35.5% of the respondents. Even fewer people participating in the research suffered from insufficient knowledge and experience necessary to conduct business (30.6%). High stress level was discouraging for 20.8% of students, while insufficient knowledge of methods of establishment of a firm – 15.3%. The following factors demonstrated a relatively low negative impact on the willingness to establish one's business: necessary hard work (13.7%), necessary high fixed costs (12.2%) and the fear of failure (10.4%). Low importance that most respondents assigned to the last three factors makes it possible to assume that, in most cases, their knowledge of real dangers related to running one's business is incomplete. An in-depth analysis of research results obtained in individual groups of respondents allows us to conclude that the materiality of barriers varies among them. The importance of entrepreneurship disincentives in various groups depends on the knowledge and experience of their members. With the age reflected in the degree of studies and with the increasing level of knowledge gained in the studying process, students start to perceive the importance of certain barriers differently. They consider the following factors less important: the lack of a good business idea, the lack of sufficient financial funds at the start, the lack of sufficient skills to become an entrepreneur, insufficient knowledge and experience and insufficient knowledge about methods of establishing a firm. At the same time, they appreciate the negative impact of the following factors more: high stress level, necessary hard work, necessary high fixed costs and the fear of failure. It seems that respondents start modelling their professional

| Disincentives | A | | B | | C | | D | | | E | | | Entire sample |
|--|------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| | A1 | A2 | B1 | B2 | C1 | C2 | D1 | D2 | D3 | E1 | E2 | E3 | |
| No good business idea | 90.2 | 89.1 | 91.3 | 87.9 | 91.3 | 87.0 | 89.4 | 88.6 | 88.0 | 80.4 | 88.3 | 95.2 | 88.7 |
| No sufficient financial funds at the start | 80.4 | 74.2 | 77.4 | 77.1 | 76.6 | 78.8 | 70.3 | 76.5 | 82.4 | 72.2 | 76.8 | 82.1 | 77.2 |
| No sufficient abilities to become an entrepreneur | 33.3 | 37.9 | 37.9 | 33.2 | 36.6 | 34.2 | 37.8 | 36.3 | 32.2 | 31.7 | 36.7 | 38.2 | 35.5 |
| No sufficient knowledge and experience | 34.7 | 26.3 | 35.2 | 25.7 | 25.7 | 35.7 | 31.9 | 31.5 | 28.5 | 27.7 | 29.5 | 33.2 | 30.6 |
| High stress level | 19.5 | 21.6 | 20.5 | 20.9 | 22.2 | 18.9 | 21.4 | 21.1 | 19.2 | 18.3 | 20.9 | 22.0 | 20.8 |
| Insufficient knowledge of methods of starting a business | 16.7 | 14.8 | 18.6 | 13.2 | 12.4 | 18.7 | 16.3 | 15.2 | 14.6 | 12.2 | 13.5 | 19.0 | 15.3 |
| Necessary hard work | 12.4 | 14.4 | 13.5 | 13.9 | 15.4 | 12.3 | 15.6 | 15.4 | 10.4 | 11.2 | 13.9 | 15.6 | 13.7 |
| Necessary high fixed costs | 13.0 | 11.3 | 10.3 | 14.7 | 15.9 | 9.4 | 13.5 | 13.6 | 10.0 | 14.5 | 10.5 | 12.4 | 12.2 |
| Fear of failure | 8.5 | 12.9 | 10.0 | 11.2 | 12.4 | 8.7 | 8.9 | 9.7 | 11.9 | 12.4 | 12.3 | 8.1 | 10.4 |

Legend: A – sex (variants: woman [A1], man [A2]), B – study degree (variants: first-degree studies [B1], second-degree studies [B2]), C – field of studies (variants: economic [C1], non-economic [C2]), D – degree of financial dependency on third parties (variants: entirely dependent [D1], partially dependent [D2], entirely independent [D3]), E – business experience of parents or caretakers (variants: parents/caretakers conduct business [E1], parents/caretakers had a firm in the past [E2], parents/caretakers do not have and have not had any firm [E3]).

Source: Author's own study.

plans in a more realistic manner at the final stage of their studies and are driven by more rational criteria when making decisions. Additionally, they start to believe that their personal potential improved in the course of the academic education.

The analysis of research results obtained in groups of students distinguished depending on the study direction provokes interesting observations. Respondents studying at economic faculties considered the following factors more discouraging than students of non-economic faculties: no good business idea, insufficient financial funds at the start, insufficient skills necessary to become an entrepreneur, high stress level, necessary hard work, necessary high fixed costs and the fear of failure. There were only two cases: insufficient knowledge and experience and insufficient knowledge about methods of establishing a firm, in which students of non-economic faculties mentioned their importance more frequently. The identified dependencies can show that, depending on the profile of studies, students of economic faculties consider themselves better prepared to conduct business than other respondents when it comes to substantive knowledge

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Table 2.
Factors discouraging from conducting one's business

necessary to run a business. For the same reason, they are more critical when evaluating their entrepreneurial skills and the value of their business ideas. They are also more rational in their perception of actual barriers occurring when running one's business. It is because they notice the materiality of factors such as: the real potential of failure, high fixed costs and hard work necessary and high stress levels accompanying self-employment.

The degree of respondents' financial independence also materially influenced the evaluation of importance of business disincentives. Independent people demonstrate a higher general activity level than dependent ones. That activity translates into richer life experience and the ability to evaluate the surrounding reality in a more rational manner. For this reason, respondents belonging to that group perceived most disincentives as more important than people with high levels of financial dependence. Exceptions included the evaluation of two factors: insufficient financial funds at the start and the fear of failure. This situation can be explained by the habitual activity of financially independent people and their belief in the decisive causal power of the action taken to create the reality. These people know that man is responsible for the success or failure when he decides whether to take action at all, what its direction and intensity will be.

Respondents' evaluations were also influenced by whether they were raised in the entrepreneurial culture thanks to the business activity of their parents or caretakers. It was only in the case of two business disincentives, i.e. the need for high fixed costs and the fear of failure, that persons having families with business experience considered them more important than those whose parents or caretakers had no such experience. It is worth noting that above-mentioned factors are hardly controlled by the entrepreneur. Other factors can be influenced by the entrepreneur's activity. People raised in the entrepreneurial culture, while observing and also frequently participating in the running of their families' businesses, model their mentality towards the overcoming of barriers rather than surrendering to them, influencing the reality rather than surrendering to obstacles in their lives. This is probably why they considered the other factors less demotivating while starting their business than in the case of students whose families do not conduct business and have never done it.

5. Conclusions and recommendations

The research results allow us to conclude that MCSU students demonstrate high levels of entrepreneurial activities in the form of the acquisition of new experience in addition to university classes or in the form of paid jobs in comparison with Russian, Lithuanian or Hungarian students.¹¹

Young people taking up business activities expect, in particular, higher financial benefits than the benefits attainable in a job done on others' behalf. The possibility to be more independent from others or organize their working time independently is also significant for them. What discourages them most from starting their business is the lack of a good business idea and sufficient financial funds to start their business. Despite serious concerns about their successful future, more than a half of the respondents

¹¹ See M. Kunasz, *Zachowania przedsiębiorcze studentów w świetle badań ankietowych*, *Gospodarka Narodowa*, 2008, No. 3.

declared that they wanted to run a business after graduation. However, research results make it possible to conclude that the students' plans are significantly modified with time and the imminent graduation and entry to the labour market. The percentage of people at second-grade studies willing to start up a business was lower than those at the first-grade studies. Therefore, we can ask: what group of graduates established their business after graduation? The answer can be given with regard to graduates from the MCSU Economic Faculty who participated in the project titled "Synergy – modelling of competencies of students at the MCSU Economic Faculty by gaining practical knowledge" in 2009–2014. It was found in the course of the evaluation process that only 0.8% of graduates established their own business during the first year after graduation. The discrepancy between declarations of willingness to start a business and its actual establishment results from the fact that the decisions made at different stages of human life are made on the basis of different criteria. However, a low percentage of graduates deciding to run their business do not have to be a negative fact. A great group of graduates postpone the establishment of their firm until they have gained the necessary experience and capital. This approach has to be considered rational and entirely justified.

The research made it possible to notice interesting regularities. Financially independent people raised in an entrepreneurial culture are more active than others. Actions they take allow them to gain knowledge and new experience. According to the *learning by doing* concept, the above-mentioned practice is one of the most effective ways of improving the competence potential of a person.¹² Active people are also more entrepreneurial, can evaluate their surroundings and potential more rationally.

Therefore, the MCSU academic circles need the creation of an entrepreneurial culture stimulating the students' activity aimed at the attainment of financial independence. Universities are likely to be organizations obliged to create entrepreneurial attitudes among students and to guarantee authentic support in the seamless transition from the academic activity to professional one.¹³ Among other things, this transition can be realized thanks to an increasingly close cooperation with the business when it comes to the practicality of the education process, e.g. the organization of on-the-job training and internships for students, execution of certain didactic classes by practitioners or the execution of advisory projects ordered by enterprises and institutions.¹⁴ However, the curriculum related to entrepreneurship should make it possible to find answer to two general questions: 1) what has to be done in order to take advantage of benefits of running one's own business defined with incentives within the limits of the conducted research and 2) how should one overcome barriers or disincentives effectively? To give a valuable answer to above-mentioned questions, one has to conduct an in-depth research, for example, based on focus groups. Results obtained in this manner and conclusions

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¹² R. C. Schank, T. R. Berman and K. A. Macpherson, Learning by Doing, [in:] C. M. Reigeluth (Ed.), *Instructional-Design Theories and Models. A New Paradigm of Instructional Theory*, Lawrence Erlbaum Associates, New Jersey 2009, pp. 161–181.

¹³ A. De Vos, T. Dewilde and I. De Clippeleer, Proactive Career Behaviors and Career Success During the Early Career, *Vlerick Leuven Gent Working Paper Series* 2009/05, pp. 1–28.

¹⁴ J. Howells, R. Ramlogan and S. L. Cheng, Innovation and University Collaboration: Paradox and Complexity Within the Knowledge Economy, *Cambridge Journal of Economics*, 2012, Vol. 36, No. 3, pp. 703–721.

drawn from this research will allow the author to work out an end-to-end program of academic entrepreneurship development aimed at the development of entrepreneurial attitudes and behaviours among students and graduates as well as the promotion of entrepreneurial culture in academic circles. The program will be presented in the future scientific paper from the series focusing on academic entrepreneurship.

References

- De Vos, A., Dewilde, T. and De Clippeleer, I. (2009). Proactive Career Behaviours and Career Success During the Early Career, *Vlerick Leuven Gent Working Paper Series*, May.
- Drucker, P. F. (1985). *Innovation and Entrepreneurship, Practice and Principles*, Harper & Row, New York.
- Howells, J., Ramlogan, R. and Cheng, S.-L. (2012). Innovation and University Collaboration: Paradox and Complexity Within the Knowledge Economy, *Cambridge Journal of Economics*, Vol. 36, No. 3, pp. 703–721.
- Jelonek, M. (2011). *Studenci – przyszłe kadry polskiej gospodarki (Students – Future Cadres of the Polish Economy)*, Polska Agencja Rozwoju Przedsiębiorczości, Warsaw.
- Kraśnicka, T. (2001). Przedsiębiorczość jako przedmiot badań ekonomistów (Entrepreneurship as a Research Subject of Economists), *Ekonomia – Rynek – Gospodarka – Społeczeństwo*, No. 4.
- Kunasz, M. (2008). Zachowania przedsiębiorcze studentów w świetle badań ankietowych (Entrepreneurship Behavior of Students in the Light of Surveys), *Gospodarka Narodowa*, No. 3.
- Kuratko, D. F. (2016). *Entrepreneurship – Theory, Process, Practice*, CENGAGE Learning, Boston.
- Kuratko, D. F. (2005). The Emergence of Entrepreneurship Education: Development, Trends, and Challenges, *Entrepreneurship Theory & Practice*, Vol. 29, No. 5, pp. 577–598.
- Linton, R. (2000). *Kulturowe podstawy osobowości (Cultural Background of Personality)*, PWN, Warsaw.
- Lundstrom, A. and Stevenson, L. A. (2005). *Entrepreneurship Policy – Theory and Practice*, Springer, New York.
- Santarelli, E. and Vivarelli, M. (2007). Entrepreneurship and the Process of Firms' Entry, Survival and Growth, *Industrial and Corporate Change*, Vol. 16, No. 3, pp. 455–488.
- Say, J.-B. (1960). *Traktat o ekonomii politycznej (A Treatise on Political Economy)*, PWN, Warsaw.
- Shank, R. C., Berman, T. R. and Macpherson, K. A. (2009). Learning by Doing, [in:] C. M. Reigeluth (Ed.), *Instructional-Design Theories and Models. A New Paradigm of Instructional Theory*, Lawrence Erlbaum Associates, New Jersey.
- Stevenson, H. H. and Gumpert, D. E. (1985). The Heart of Entrepreneurship, *Harvard Business Review*, March–April.