



Celina Solek-Borowska

Management Institute
Collegium of Management and Finance
Warsaw School of Economics,
Warsaw, Poland
csolek@sgh.waw.pl

Katarzyna Laskowska-Chudy

Quantitative Methods Department
Management Faculty
Rzeszow University of Technology,
Rzeszow, Poland
kacha877@prz.edu.pl

**Exploring entrepreneurial attitudes of students in Poland:
An interregional comparison**

DOI: 10.22367/jem.2017.30.08

Accepted by Editor Ewa Ziemia | Received: July 14, 2017 | Revised: October 25, 2017; November 11, 2017; November 15, 2017; November 16, 2017 | Accepted: November 16, 2017.

Abstract

Aim/purpose – The purpose of the paper is firstly to identify the entrepreneurial attitudes of Polish students from two universities and secondly to assess the contribution of these Polish universities in enhancing entrepreneurial attitudes amongst students through entrepreneurship education and training programs.

Design/methodology/approach – Paper questionnaires were used to survey students studying at Warsaw School of Economics and Rzeszow University of Technology. The respondents were undergraduate students participating in the general module of Management at Warsaw School of Economics and Statistics Methods at Rzeszow University of Technology. Participation in the survey was voluntary.

Findings – The results reveal that 41% of the university students were optimistic and interested in starting their own business, but only after gaining a few years of working experience which will enable them to deepen their knowledge and feel comfortable within a business environment. Only 12% of students would like to set up their own business immediately after graduation. The study confirms that entrepreneurial education can positively reinforce student attitudes towards an entrepreneurial career choice within a developing country such as Poland. It is also apparent that students at SGH had more exposure to informal education than those from Rzeszow University of Technology.

Research implications/limitations – The research findings are of interest to academia and policy makers. The study suggests that entrepreneurial attitudes amongst Polish students can be influenced by exposure to entrepreneurship education. Overall, the study indicates a need for entrepreneurship education, at programme and course levels, to nurture entrepreneurship among students in Poland.

Originality/value/contribution – Very few studies have examined university students' attitude to entrepreneurship and entrepreneurship education in Poland. This study helps to bridge that gap.

Keywords: university, students, entrepreneurial education.

JEL Classification: I23, L26, M53.

1. Introduction

The demand for including enterprise and entrepreneurship studies in the education system, at all levels, has gained much attention from academia and societies all over the world. This prolonged and heightened interest in entrepreneurship is prompted by several factors. First, for developed economies, entrepreneurial activity (new venture formation) is a means of revitalizing stagnated economies and of coping with unemployment problems by providing new job opportunities. Moreover, entrepreneurship is a great force for economic growth, recovery and societal progress in terms of employment, social empowerment and innovation [Soomro & Shah 2015]. However, it has a more critical role for economies of developing countries since entrepreneurship is seen as an engine of economic progress, job creation and social adjustment. Thus, small business growth / new business formation is widely encouraged by national economic policies to stimulate economic growth and wealth creation. There is little research devoted to entrepreneurial attitudes of students in different regions of one country. On the contrary, an argument can be made that because of regional differences, rich regions will have a low level of entrepreneurship as there are many opportunities to find a job, and poor regions will have a higher level of entrepreneurship because of a lack of employment opportunities. All the research exploring Polish entrepreneurial attitudes regards Poland as one country with no consideration of regional differences.

The traditional role of educators – that of producing good employees – has been challenged by those seeking to encourage and support enterprise culture, particularly for students who aim to work for themselves and employ others [Clawson 2014]. Although many universities in the world offer courses on entrepreneurship, little evidence is available about students taking these courses and their intentions to become entrepreneurs [Basu & Virick 2008]. Roxas, Cayoca-Panizales & de Jesus [2008] claim that knowledge gained from formal entrepreneurship education programs will boost individual entrepreneurial intentions. The idea of the entrepreneurial university has recently entered into the debate [McGowan, Sijde & Kirby 2008]. It is argued that a country's develop-

ment and economic growth can be achieved by promotion of enterprise education among students – a trait that requires knowledge of entrepreneurship, financial resources and the business environment [Milius & Sarkiene 2008]. The review by Gorman, Hanlon & King [1997] indicates that by aligning education with entrepreneurship, countries lacking resources and employment opportunities can foster entrepreneurial attributes, and the potential of students, which in turn could bring several economic benefits.

The aims of this research are twofold. Firstly, to identify the entrepreneurial attitudes of Polish students, and secondly to determine the role of Polish higher education institutions in cultivating an entrepreneurial attitude amongst students through entrepreneurship education and training. To this end two institutions were studied: the Warsaw School of Economics (SGH) and Rzeszow University of Technology (PRZ).

The remainder of this study is structured as follows. Section 2 reviews the literature on the state of entrepreneurship in Poland, followed by the development of research questions, research design and methodology in Section 3. The empirical results and discussion of the findings are presented in Section 4.

2. Theoretical background

2.1. State of art in entrepreneurship

As research on entrepreneurship shows, there is no universal definition or concept of entrepreneurship in existing organizations [Davidsson 2005]. Instead, the concept is rich with different approaches and assumptions. Therefore there is no single construct of entrepreneurship, which results in different operationalizations of this concept [Dyduch 2008].

Research literature reveals entrepreneurship as a socioeconomic force, a state of mind in the business economy which can generate employment opportunities, particularly new businesses, via intuitive ability, instincts, unique values, attitudes and skills [Acs & Megyesi 2009; Azhar et al. 2010; Johansen, Schanke, & Clausen 2012]. The impact of entrepreneurship is always seen as positive in the economy.

With the increasing expansion of the European Union it is essential that member states network and share their expertise and talent. In 2004, Poland and nine post-communist states became an integral element of the European Union [Nikodemaska-Wolowik, 2006]. Countries such as Poland offer several advantages for business including a competitively priced and educated workforce,

proximity to the centre of the EU and a huge indigenous market [Por & White 1991]. Since the collapse of communism in Eastern European countries, expectations were raised within the population of improved standards of living [Foley et al. 1996; Reichal & Rudnicka 2009].

Poland has historically faced high unemployment [18.2% in 2005, the highest in the EU], corruption, excessive bureaucracy and migration of skilled workers to other EU member states, issues which remain ongoing concerns [Smallbone & Welter 2001]. The ongoing decline of the public sector controlled coal mining industry has caused further problems in the Upper Silesia region which has been criticized for its lack of entrepreneurial activity, although benefiting from EU assistance [Blazyca, Heffner & Helinska-Hughes 2002]. There have, however, been some major improvements [Kostera 1995]. For example, Poland has benefited from significant foreign investment from major manufacturing companies including Fiat, Hewlett Packard, Toyota, Cadbury, Dell and Sharp [Foley et al. 1996; Packham et al. 2010] aiming to capitalize on the lower operating costs. Moreover, Waters [1999] notes that there has been significant growth within the retail service sector driven by the introduction of multinational companies such as Tesco, Unilever, Jeronimo Martin Dystrybucja, to name just a few. Currently the unemployment rate is 7.7%.

Due to the dynamic nature of the Polish labor market university graduates have found themselves in a relatively difficult situation. Today, youth unemployment is already 28.2% (Central Statistical Office in Poland, 2017 [www 1]) and there is little evidence on the possibility of improving this situation. Extending the retirement age has caused a blockage of many jobs in the next few years, so graduates frequently have no chance to replace older workers. In addition, the market is saturated with specialists in various industries and professions, resulting in a lack of jobs for people with similar qualifications who do not have professional experience. The consequence of the lack of employment opportunities for young people is to look for other types of income. The best opportunity for graduates seems to be setting up their own business. Many young graduates, perceiving little chance of finding good and forward-looking work commensurate with their education and ambitions, decide to set up their own business. According to the Central Statistical Office, one-third of currently operating Polish companies are run by people who are under 30 years of age. Despite all the difficulties and concerns, more and more people decide to start their career in their own company. According to research conducted by the Foundation for Initium, as many as 78% of students would like to start their own company, and 4% already are the owners of them [Chmielniak 2013].

2.2. Entrepreneurship education

Entrepreneurial education is perceived as one of the most important challenges of modern educational systems and socio-economic development [Wach 2016]. Although entrepreneurial education is currently a hot topic in the literature on entrepreneurship worldwide, it is only an emerging subject in Poland, although it is increasingly undertaken by researchers in various fields [Wach 2016].

According to Reynolds, Hay & Camp [1999] appropriate education and training programs in entrepreneurship are expected to increase the number of people becoming entrepreneurs because the better educated the population the higher the level of entrepreneurial activity. There has been a notable expansion in the number of entrepreneurship programs globally in recent times [Katz 2003], although participation does not always lead to nascent entrepreneurship [Kuratko 2005; Matlay & Carey 2007]. This has often been driven by the belief that education is best placed to equip students with the necessary knowledge and skills required to prosper in working environments [Adcroft, Dhaliwal & Willis 2005]. In terms of the entrepreneurial experience however, there is ongoing debate regarding the essential attitudes towards education components of an effective entrepreneurship education programme [Pittaway & Cope 2006]. Indeed, Anderson & Jack [2008] argue that entrepreneurship education is a difficult area to lecture on due to its variability, complexity and contingency.

The authors consider entrepreneurship education as an important part of managerial education. Entrepreneurial competencies are not limited to those that aim to set up a new business venture. On the contrary, they are important to managers, specialists or almost any employee working in contemporary, changing organizations. Entrepreneurial means being innovative, forward looking for opportunities, undertaking new initiatives. Those people with such skills are destined to work for any type of business.

Business and management school graduates are expected to possess appropriate knowledge, skills and social competencies. Some of them will become managers, company owners and should help to guide us through the turbulent world of modern organizations [Kostera 1995].

Studying business seems to be fashionable and needed. Representatives of different jobs like doctors, farmers and painters decide to study business to help move forward through difficult and challenging economic times. Entrepreneurship education is needed in any kind of profession, as no one knows at which stage of life they will become an entrepreneur.

The aim of teaching entrepreneurship (education for entrepreneurship) is to promote creativity, innovation and employment [Garavan & O’Cinneide 1994; Wach 2013], and includes:

- developing personal qualities and skills that underlie entrepreneurial spirit and entrepreneurial behavior, creativity, sense of initiative, risk taking, independence, self-confidence, leadership, team spirit),
- raising awareness of students about self-employment and entrepreneurship as well as career opportunities,
- working on specific business or business projects, providing specific business skills and knowledge about how to set up and run your own business.

Social skills and competencies have become a fashionable field within managerial education, not only at business schools and universities but also in training companies’ programs. Today, more people recognize the importance of “soft” skills in different areas of business life. Communication skills, cooperation, commitment and loyalty are factors difficult to identify or create in the organizations, but they have a strong impact on how it functions [Brzozowska, Glinka & Postuła 2014]. Within entrepreneurship research and education there is on-going debate over how entrepreneurial individuals come into being. Are they made or born? [Glinka & Gudkova 2011].

In the literature regarding entrepreneurship education where the role of education is mentioned, there is no differentiation between various institutions. This study identifies the difference between two universities located in different regions of one country.

3. Research methodology

The research was undertaken at Warsaw School of Economics (SGH) and Rzeszow University of Technology (PRZ) in the summer semester of May 2016. The students at both universities were asked to complete a paper questionnaire about entrepreneurship. Students were assured of anonymity in the reported results and could withdraw their participation at any time. As a pilot, an online version of the questionnaire was sent first to five students and five other teachers to check whether the questions are properly understood and to check validity.

3.1. Warsaw School of Economics

Warsaw School of Economics is considered to be one of the best business-oriented universities in Poland. It is known for its connections with businesses,

and associations to international organizations. There is a very strong link with businesses that is visible through courses run by academic teachers and managers from companies. Moreover student organizations are very active in organizing events like the Marathon of consulting firms or exhibition days. Students aim to create a platform of communication between the best students and market leaders, and they highlight that international corporations are the best places to start their business career¹. In such situations the issue of starting their own business seems to be put under a question mark. “What career path should I follow...?” seems to be an interesting question for both SGH and Rzeszow University students.

The presence at SGH of global companies like McKinsey, Procter and Gamble, L’Oréal Polska, Deloitte or Ernst and Young is a confirmation of the high level of teaching and high caliber of students. Companies have the opportunity to engage with potential employees and students can acquaint themselves with the business world. The relationship is beneficial to both parties.

3.2. Rzeszow University of Technology

Rzeszow University of Technology, located in the south-eastern part of Poland, is amongst the best technical universities in Poland. The Management Faculty was created in 1993 in response to increased demand for management education. The business links are well established with Aviation Valley, which supports automotive and aviation provision companies.

The Business Council was created in 2012 on the initiative of the Dean’s office, with associate business leaders operating mainly in Podkarpackie Province. The main goal of the Council is the formation of a platform to advise on creating high quality scholarly achievements, modernization of teaching processes, activation of business contacts and initiating promotional and marketing activity. It is the task of the Business Council to improve the exchange of experience between academic teachers and practitioners of management.

3.3. Sample

The study involved 566 students (Table 1). The research was conducted at two universities: in Rzeszow (Ignacy Łukasiewicz University of Technology) where students constituted 46% of the respondents and in Warsaw (Warsaw School of

¹ Exhibition leaflet, Exhibition of FMCG, prepared by the Students’ Association at SGH.

Economics) where students constituted 54%. The proportion of female students and male students was around 50%. The majority of respondents had an average of grade 4 and above (slightly over 66%). Most of them were first year students (75% of the study group). The “other” option includes third-year students and masters students). The most-represented discipline is Finance (27%), International Relations (27%) and Logistics (17%). Other disciplines include economics, e-business, econometrics, computer science and data analysis.

Table 1. Characteristic of the sample

	Characteristics	Sample size	Percentage
Gender (3 persons did not answer this question)	women	227	49.2%
	men	286	50.8%
Average grade (24 persons did not answer this question)	from 3.0 up to 3.49	12	2.2%
	from 3.5 up to 3.99	170	31.4%
	from 4.0 up to 4.4	271	50%
	from 4.5 up to 5.0	89	16.4%
Discipline/ Specialization (15 persons did not answer this question)	Finance	148	26.9%
	Management	51	9.3%
	International relations	148	26.9%
	Logistics	93	16.9%
	Quantitative methods and information systems	58	10.5%
	Other	53	9.6%
Year of study (4 persons did not answer this question)	1st year	424	75.4%
	2nd year	99	17.6%
	3rd year	39	7%
Place	Rzeszow	260	54%
	Warsaw	306	46%

Source: Personal questionnaire.

The research questions are as follows:

1. What are the attitudes of students (of both universities) towards entrepreneurship? (i.e., are they interested in setting up their own businesses after graduation?)
2. Does the university education of students influence their attitude towards entrepreneurship?
3. What kind of activities are students undertaking to enhance their entrepreneurial attitudes?

The null and alternative hypotheses are as follows:

H^0 – entrepreneurial attitudes of students in both groups are quite similar.

H^1 – entrepreneurial attitudes of students in both groups are different.

It is recognized that, whilst there is a body of literature on entrepreneurial intentions and attitudes, there is a lack of research in different regional contexts

and the current paper adds to this body of literature and makes a significant contribution to the research on factors influencing entrepreneurial attitudes among students. Moreover, the investigated role of the universities in shaping entrepreneurship education offers a new perspective.

4. Research findings

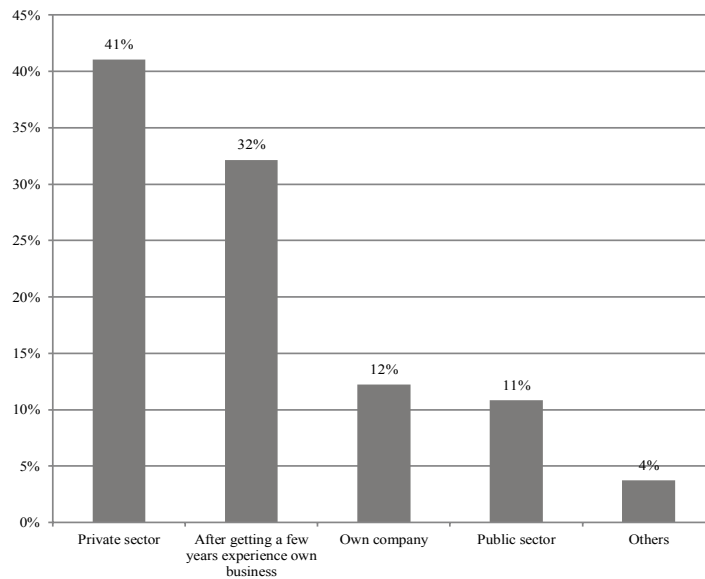
According to Safin [2014], there is a conviction in Polish society that a successful career of a young person is related to finding interesting work in a large company, rather than the establishment of his own company. Such a view is influenced not only by the recent past, in which the company was a rather marginal and often forced undertaking, but also a contemporary assessment of the professional prestige of the entrepreneur. According to the “Rzeczpospolita” daily rankings, the entrepreneur is in a distant position. Although a relatively high-value entrepreneur enjoys a high reputation (but it is relatively rare to find a wealthy entrepreneur), small entrepreneurs, who account for 90% of all companies in Poland, enjoy the same status as a person without a profession.

4.1. Students’ attitudes to set up a business

In order to select the entrepreneurially inclined students, the question “what are you planning to do after graduation?” was asked. The results are presented in Figure 1. It is not surprising that 32% of students responded that after obtaining a few year of work experience they plan to open their own business. Students consider working for a company as a possibility of gaining the experience and expertise necessary to set up their own business. As a result only 12% of students consider setting up their own business just after graduation.

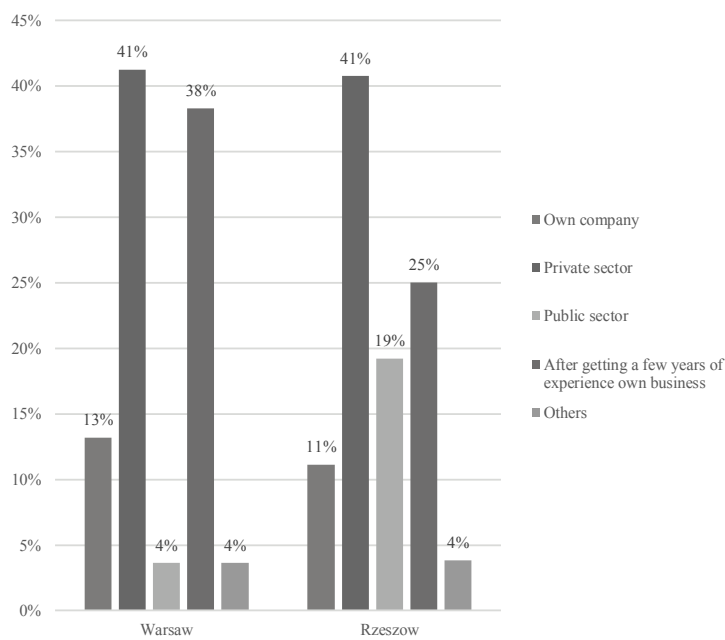
The research results are consistent with the research conducted within the GUESS project which indicates that 17.4% of students would like to set up their business in Poland after graduation [Safin, 2014].

It was also checked if the differences in terms of students’ attitudes – of setting up a business between the regions are of great significance. The plans that students have after graduation are different in the studied groups, i.e. $p < \alpha$ [$p = 0.0000$] which is presented in Figure 2.

Figure 1. Student employment plans after graduation

Note: n = 566.

Source: Personal questionnaire.

Figure 2. Student employment plans after graduation in both universities

Note: n = 306 (SGH) and n = 260 (PRZ).

Source: Personal questionnaire.

The breakdown between the two groups of students is shown in Figure 2. In both groups the largest percentage (41%) would like to work in the private sector. In the Warsaw group as many as 38% would like to start their own business after gaining experience, while in the Rzeszow group the figure is lower at 25%. 19% of Rzeszow students would like to work in the public sector compared to only 4% of students in Warsaw.

The students' attitudes – to set up their own business immediately after graduation is expressed by 13% of Warsaw students and 11% of Rzeszow. This small difference between both groups is not as significant as we thought it would be prior to our research. We expected that because the Podkarpackie region does not have as many companies to work for, its students would be much more inclined to start their own business.

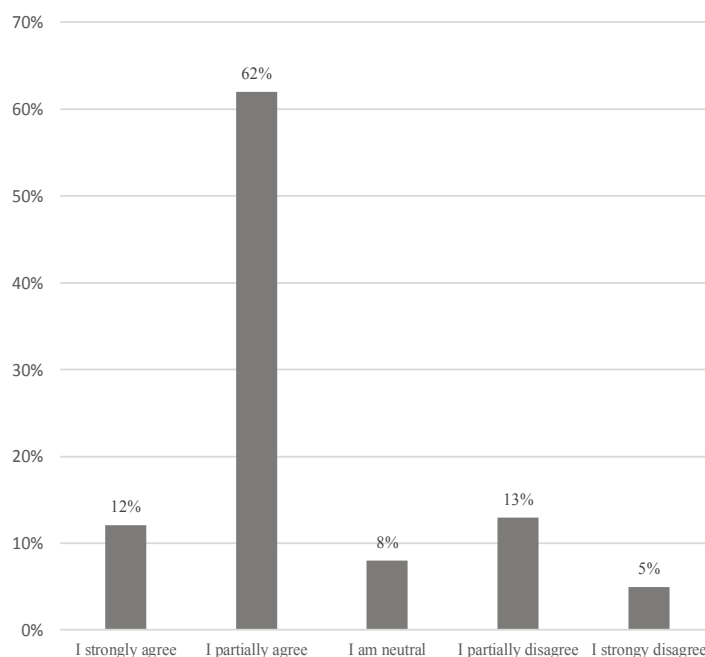
In this case the H^0 hypothesis is confirmed, namely that entrepreneurial attitudes between both groups are similar.

A greater difference exists concerning setting up one's own business after gaining a few years of experience. 38% of SGH students would like to open their own business compared to 25% of PRZ students. What is quite surprising is that only 4% of students in the Warsaw group would like to work in the public sector, compared to 19% of students from the Rzeszow group. This may be due to the fact that working for the public sector is a symbol of stability and security in smaller towns. Perhaps the business and companies clustered round Warsaw School of Economics encourage students to be more entrepreneurial.

4.2. Students' education in entrepreneurship

Education is one of the factors that stimulate entrepreneurship, especially in terms of fostering entrepreneurial awareness [Wach 2016]. Programs that support entrepreneurship through financial grants, training and internships do not appear to deliver the expected results and end their lives at the end of the required period. One of the main reasons is the ineffective education process in this context as noted by Safin [2014].

Students were asked whether one can *learn* to be an entrepreneur. More than half (56%) of students claim that entrepreneurship is partly learned. Therefore the next question followed: do you think that the education you are gaining at university by participating in different modules enhances your entrepreneurship skills? Students could select from 1 – I strongly disagree, to 5 – I strongly agree using the Likert scale. The results are presented in Figure 3.

Figure 3. Education in entrepreneurship

Note: n = 566.

Source: Personal questionnaire.

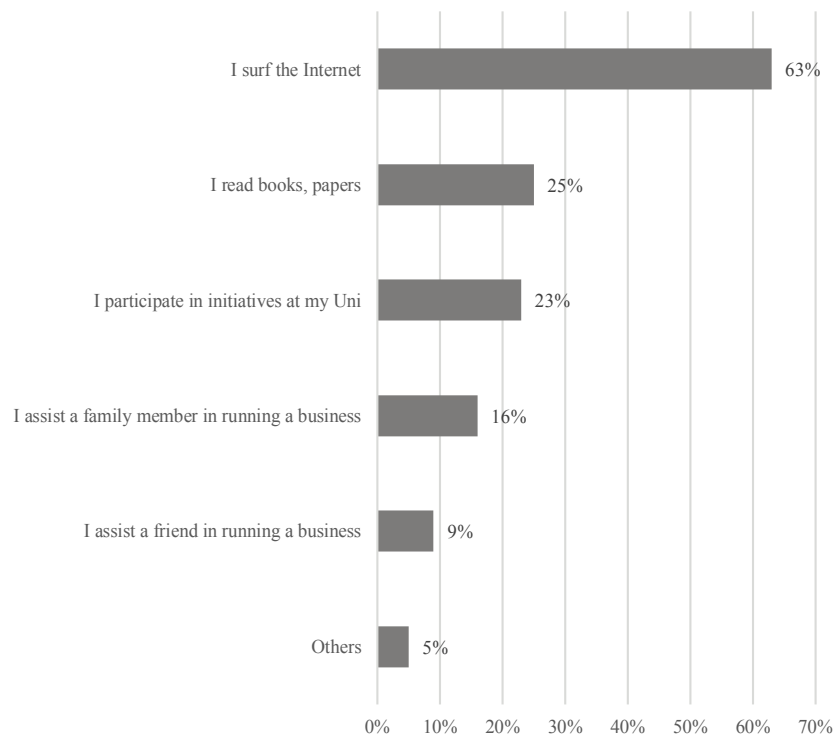
12% of students strongly agree, and 62% of students partially agree that the education they are gaining at university enhanced their entrepreneurial attitude, confirming the role of the university in shaping this attitude. This is strong evidence that there is an important place for academic teachers to include entrepreneurial studies in education and is in line with the view of Wach and Jiménez-Moreno & Wach who state that education, and in particular teaching entrepreneurship, shapes the entrepreneurial attitude and entrepreneurship intentions [Wach 2013, 2015; Jiménez-Moreno & Wach 2014].

4.3. Students' activities forming entrepreneurial attitudes

In creating an entrepreneurial attitude it is important to know one's predispositions and talents and to create opportunities to develop them during didactic or individual work. Such attitudes can be developed at school, in the local community or in the home environment. It is of particular importance to create situations in which a young person can become acquainted with themselves, in order to find his future place in changing social and professional structures [Ziolo 2012].

The question: “how do I enhance my entrepreneurial attitude” is meant to analyze what steps students undertake to develop their entrepreneurial attitude. The question was not obligatory and meant to be answered only by entrepreneurially inclined students, but all students answered this, which confirms that students from both universities regard entrepreneurship in a wider aspect and even though some want to work for someone else they still want to develop their entrepreneurial attitude. Students were able to tick as many answers as were relevant to them. The most popular answer was: “I regularly surf the Internet” which was expressed by 63% of students. Students are also using the Internet, especially social media like Youtube, to learn about success stories of start-ups. The second option was circled by 25% of students, who were inclined to read books, articles, and success stories of entrepreneurs. 16% of students helped family members or a relative to run a company. These responses are presented in Figure 4. Some students are also involved in students projects that deal with problems concerning the setting up of a business.

Figure 4. Ways of developing entrepreneurial attitude



Note: n = 566.

Source: Personal questionnaire.

Every second student pointed out that the University prepares them to work for someone else, and nearly every fourth student reported that university education prepared them to set up their own business. But still every fourth student did not know what to answer. The conclusion seems to be that university education is not focused to teach entrepreneurial attitudes.

These research results are consistent with the research run by Safin [2014] who points out that students do not regard university as an innovation and creativity crucible and do not feel that the atmosphere existing in universities would encourage them in the development of entrepreneurship, although they do appreciate university efforts in creating such initiatives [Safin 2014].

5. Discussion

The study tested whether differences in students' attitudes towards entrepreneurship exist between two regions: Mazovian with a University located in the capital Warsaw and Podkarpackie with a University located in the capital of the province that is Rzeszow. As the analyzed variables are of qualitative character, a chi-square statistic was utilized to establish the statistical significance of the differences. The test was conducted assuming $\alpha = 0.05$. The results are presented in Table 2.

If the calculated probability of the test statistic p is less than the significance level α , then it indicates significant differences in the answers of the students of the Warsaw and Rzeszow groups.

Table 2. Results of Chi square test

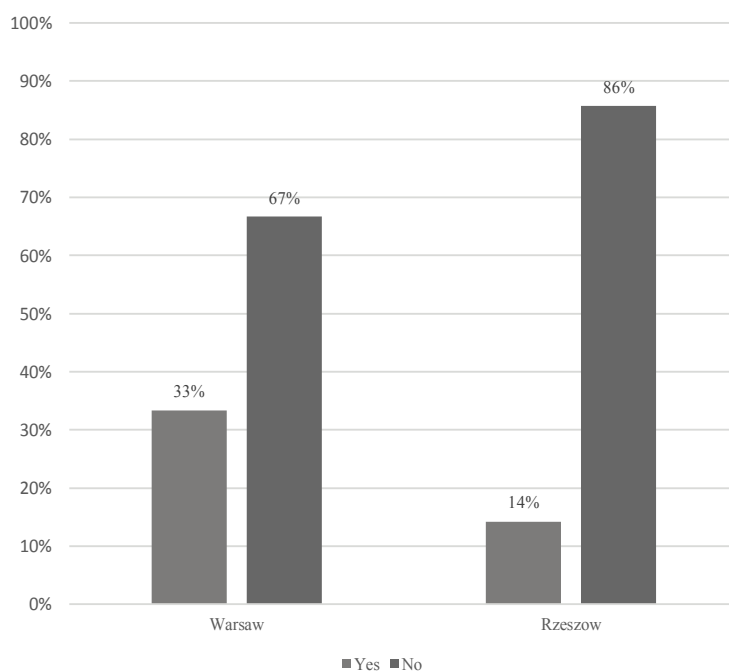
Specification	p
Plan after graduation	0.00000***
Factors that influenced setting up own business	
parents	0.00211**
friends	0.02431*
managers, owners of other companies	0.02080*
initiatives i participate in	0.00685**
none	0.91884
Running a company by parents	0.00001***
You can learn to be an entrepreneur	0.02268*
Education and entrepreneurial skills	0.61959
Ways to enhance entrepreneurial attitudes	
reading books	0.00000***
I help in running a business – family	0.25786
I help in running a business – friend	0.29504
I participated in conferences	0.00000***
I surf the Internet	0.05216
University prepares me	0.13094

Note: ***, ** and * indicate significant differences at the 0.01, 0.05 and 0.10 levels, respectively; $n = 566$.

Source: Personal questionnaire.

There are significant differences in 9 of the 15 categories surveyed. Further detail on these differences is shown in Figures 5 and 6. The sources of knowledge used by students in seeking information on entrepreneurship are different when reading books and professional magazines and participating in various initiatives, workshops and conferences. In the Warsaw group, every third student is active in terms of reading and studying, whilst in Rzeszow the figure is only 14%.

Figure 5. Reading books and professional magazines in enhancing entrepreneurial attitudes

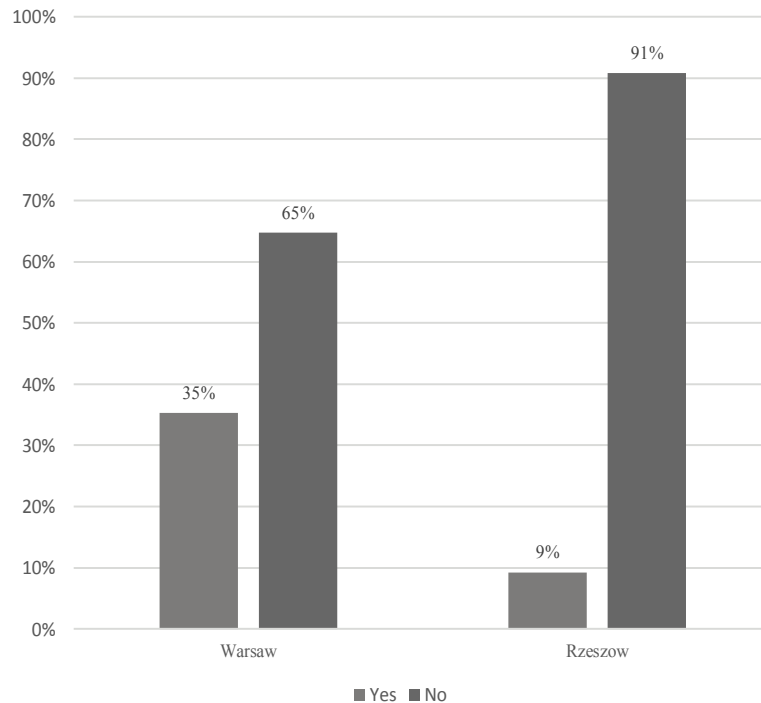


Note: n = 566.

Source: Personal questionnaire.

Many more students from the Warsaw group participate in various initiatives, conferences or workshops – 35% of students compared to less than 10% in Rzeszow. The students at PRZ do not take the opportunity of enhancing their knowledge, perhaps forgetting that later on in their adult life they will never have so much time to read, write and develop their abilities when constrained by work and family obligations. Students at SGH appear to appreciate the value of meeting with people from the business world and take advantage of that. This may be due to the fact that students at Warsaw School of Economics have more opportunities to attend such conferences, business meetings.

Figure 6. Expanding knowledge, participating in different initiatives (conferences, workshops) in enhancing *entrepreneurial* attitudes



Note: n = 566.

Source: Personal questionnaire.

Overall, the study confirms that entrepreneurial education can positively reinforce student attitudes towards an entrepreneurial career choice within a developing country such as Poland. It is apparent that students' entrepreneurial attitudes developed accordingly, and they demonstrated heightened interest in the opportunity of a future or immediate entrepreneurial career. The students at SGH have more opportunity to enhance their wider entrepreneurial skills.

6. Conclusions

Entrepreneurs are recognized as important drivers of economic and social progress, and entrepreneurial initiatives for young people are regarded as an important factor in the future growth of a nation. Consequently, universities are expected to play a major role in propagating an entrepreneurial attitude among students and graduates and nurturing future entrepreneurs. This explains why

a growing number of universities start to offer specialized entrepreneurship courses and programs in their business curriculum.

The aim of this study is to investigate students' attitudes to setting up their own business, focusing on the cases of the Warsaw School of Economics and Rzeszow University of Technology and the role of the university in developing enterprise education in Poland.

To sum up, it can be stated that entrepreneurial attitudes amongst Polish students is not high for both groups of students, although there is a switch towards setting up a business after gaining a few years of work experience.

However, the study observes that university, by establishing effective connections with global business, can help students by providing such exposure and could be the right place to impart enterprise education. Students at Rzeszow Technical University indicate a lot of activity in terms of taking forward these initiatives. Entrepreneurship by SGH students is perceived in a wider aspect. It is not necessarily about being able to set up their own business but being forward looking, innovative, involved in students projects, attending classes, listening and reading success stories of start-ups. Students at Rzeszow University of Technology appear to have fewer such possibilities. The study indicates that the introduction of certain modules or activities promoting enterprise or specific educational programs on enterprise education could be valuable for students in Poland.

6.1. Research contribution

The contribution of this study is to add to the understanding of entrepreneurial attitudes amongst two distinct groups of students.

The practical implications of this research are three-fold:

- The percentage of students wanting to set up their own business just after graduation in the two regions is very similar, pointing towards a uniformity of entrepreneurial culture in Poland that may be a potential factor significantly contributing to setting up a business.
- The education system plays a significant role in shaping entrepreneurial attitudes.
- Informal education plays a significant role in enhancing such attitudes, particularly in the case of the greater exposure of SGH students.

In conclusion, it is apparent that SGH undergraduate students have an entrepreneurial mindset and an appetite for entrepreneurial education to acquire relevant knowledge that they can utilize to inform career opportunity and choice

as proposed by Socha & Weisberg [2002] and Kierulff [2005]. SGH students do not regard setting up their own business as a necessary response to not having the possibility to find a job, as noted in the Social Report by Chmielniak [2013].

6.2. Implications for researchers and practitioners

The Polish economy needs to develop its next generation of entrepreneurs from its graduate population as recognized by Baldassarri & Saavala [2006] to initiate further economic growth. However, the Polish university system needs to urgently consider how it can effectively embed entrepreneurship education across and within its curriculum using the appropriate delivery pedagogy across the country. Universities in big cities have the privilege of being surrounded by global companies which want to have close links with universities as a potential source of future employees. On the other hand it seems that universities located in smaller towns do not offer such close links with businesses, or maybe students do not perceive a need to take active participation in those types of endeavors. Therefore, universities in small towns need to address seriously the issue of setting close links with businesses. The results are consistent with the research conducted in 2009 and 2015 by the Polish Agency of Entrepreneurship Development, namely that the attitudes of young people to set up their own venture is influenced by training in terms of running a company and classes they have participated in during secondary school and Higher Education [Raport PARP 2009, 2015].

6.3. Research limitations and future work

Confinement to two universities in Poland in this study restricts the generalization to other universities located in different parts of Poland. Further research, looking specifically at the influence of the culture, place of study on entrepreneurship, including larger samples, other universities in different regions in Poland, and other countries in the European Union are recommended to validate and generalize the findings for Warsaw School of Economics and the Technical University in Rzeszow in Poland.

The research results are part of a bigger research project that aims to investigate entrepreneurial attitudes of students in Thailand, UK, USA and Canada.

This study provides compelling evidence that students want to start their entrepreneurial activity after gaining a few years of work experience. It would be inappropriate to generalize these results to actual entrepreneurial behaviors until

such a relationship is confirmed by other empirical research. Also the findings are not universally applicable to any country as the education system needs to be analyzed beforehand.

Our results are based solely on the self-evaluation of students, regarding their capability and awareness about starting a new business venture. This could have a strong impact on their perceptions and intentions. Further research could investigate whether the students have over-estimated or under-estimated their proficiency, and the extent to which the self-evaluations reflect their actual skills and the consequent impact on entrepreneurial ability.

References

- Acs Z.J., Megyesi M.I. (2009): *Creativity and industrial cities: A case study of Baltimore*. "Entrepreneurship and Regional Development: An International Journal", Vol. 21, No. 4, pp. 421-439.
- Adcroft A., Dhaliwal S., Willis R. (2005): *Insatiable demand or academic supply: The intellectual context of entrepreneurship education*. "European Business Review", Vol. 17, No. 6, pp. 518-31.
- Anderson A., Jack S. (2008): *Role typologies for enterprising education: The professional artisan?* "Journal of Small Business and Enterprise Development", Vol. 15, No. 2, pp. 259-273, <http://dx.doi.org/10.1108/14626000810871664>.
- Azhar A., Javaid A., Rehman M., Hyder A. (2010): *Entrepreneurial intentions among business students in Pakistan*. "Journal of Business Systems, Governance and Ethics", Vol. 5, No. 2, pp. 13-21.
- Baldassarri S., Saavala T. (2006): *Entrepreneurship – educating the next generation of entrepreneurs*. "Enterprise Europe" July, Vol. 22, pp. 16-20.
- Basu A., Virick M. (2008): *Assessing entrepreneurial intentions amongst students: A comparative study*. www.researchgate.net/publication/255583956_Assessing_Entrepreneurial_Intentions_Amongst_Students_A_Comparative_Study (access: 21.01.2016).
- Błazyca G., Heffner K., Helinska-Hughes E. (2002): *Poland – can regional policy meet the challenge of regional problems?* "European Urban and Regional Studies", Vol. 9, No. 3, pp. 263-276.
- Brzozowska A., Glinka B., Postuła A. (2014): *Role of university in creating entrepreneurial attitudes*. „Horyzonty Wychowania”, Vol. 13, No. 26, pp. 51-71.
- Clawson T. (2014): *UK universities gear up for enterprise education*. www.forbes.com/sites/trevorclawson/2014/12/16/uk-universities-gear-up-for-enterprise-education/ (access: 15.12.2014).
- Chmielniak W. (2013): *Raport społeczny: przedsiębiorczość studentów i absolwentów (Social report: Entrepreneurship of students and graduates)*. www.youngpro.pl/artykuly/sposob-na-kariere/raport-spoleczny-przedsiębiorczosc-studentow-i-absolwentow (access: 10.07.2017).

- Davidsson P. (2005): *Research Entrepreneurship*. Springer, New York.
- Dyduch W. (2008): *Corporate entrepreneurship measurement for improving organizational performance*. "Journal of Economics and Management", Vol. 4, pp. 15-40.
- Foley P., Hutchinson J., Kondej A., Mueller J. (1996): *Economic development in Poland: A local perspective*. "European Business Review", Vol. 96, No. 2, pp. 23-31, <http://dx.doi.org/10.1108/09555349610111839>.
- Garavan T.N., O'Connell B. (1994): *Entrepreneurship education and training programmes: A review and evaluation – part 1*. "Journal of European Industrial Training", Vol. 18, No. 8, pp. 3-12.
- Glinka B., Gudkova S. (2011): *Przedsiębiorczość (Entrepreneurship)*. Wolters Kluwer, Warszawa.
- Gorman G., Hanlon D., King W. (1997): *Some research perspectives on entrepreneurship education, enterprise education and education for small business management: A ten-year literature review*. "International Small Business Journal", Vol. 15, No. 3, pp. 56-77, <http://dx.doi.org/10.1177/0266242697153004>.
- Jack S.L., Anderson A.R. (1999): *Entrepreneurship education within the enterprise culture*. "International Journal of Entrepreneurial Behaviour & Research", Vol. 5, No. 3, pp. 110-25, <http://dx.doi.org/10.1108/13552559910284074>.
- Jiménez-Moreno J.J., Wach K. (2014): *The entrepreneurial profile of students. Participating in the Academic Entrepreneurship Course: Pilot study results*. "Horyzonty Wychowania", vol. 13, no. 26, pp. 121-143.
- Johansen V., Schanke T., Clausen T.H. (2012): *Entrepreneurship education and pupils: Attitudes towards entrepreneurs*. www.intechopen.com (access: 11.08.2013).
- Katz J. (2003): *Chronology and intellectual trajectory of American entrepreneurship education 1876-1999*. "Journal of Business Venturing", Vol. 18, No. 2, pp. 283-300.
- Kierulff H.E. (2005): *Entrepreneurship in Poland: Findings from the field*. "Human Factors and Ergonomics in Manufacturing", Vol. 15, No. 1, pp. 93-98.
- Kostera M. (1995): *Differing managerial responses to change in Poland*. "Organization Studies", Vol. 16, No. 4, pp. 673-697.
- Kuratko D.F. (2005): *The emergence of entrepreneurship education: Development, trends and challenges*. "Entrepreneurship Theory and Practice", Vol. 29, No. 5, pp. 577-97, <http://dx.doi.org/10.1111/j.1540-6520.2005.00099>.
- Matlay H., Carey C. (2007): *Entrepreneurship education in the UK: A longitudinal perspective*. "Journal of Small Business Enterprise and Development", Vol. 14, No. 2, pp. 252-63, <http://dx.doi.org/10.1108/14626000710746682>.
- McGowan P., Sijde P., Kirby D. (2008): *The role of universities in the entrepreneurship industry: Promoting the entrepreneurship agenda in HEIs*. "Industry and Higher Education", Vol. 22, No. 1, pp. 49-59, <http://dx.doi.org/10.5367/000000008783876986>.
- Milius P., Sarkiene J. (2008): *Entrepreneurship training for innovative start-ups: The KTC case*. In: *Teaching entrepreneurship*. Eds. P. van der Sijde, A. Ridder, G. Blaauw, C. Diensberg. Physica Verlag, Heidelberg, pp. 23-33, http://dx.doi.org/10.1007/978-3-7908-2038-6_4.

- Nikodemka-Wołowik A.M. (2006): *Family enterprises – a chance to create a strong Polish identity*. "The Marketing Review", Vol. 6, No. 4, pp. 301-315.
- Packham G., Jones P., Miller C., Pickernell D., Thomas B. (2010): *Attitudes towards entrepreneurship education: A comparative analysis*. "Education and Training", Vol. 52, Nos. 8/9, pp. 568-586.
- Pittaway L., Cope J. (2006): *Entrepreneurship education: A systematic review of the evidence*. Working Paper Series, No. 2, National Council for Graduate Entrepreneurship, Birmingham, pp. 1-33, <http://dx.doi.org/10.1177/0266242607080656>.
- Por J.T., White J. (1991): *An entrepreneur's guide to Eastern Europe*. "European Business Review", Vol. 94, No. 3, pp. 33-43.
- Raport PARP (2010): Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce w latach 2008-2009 (Report on small and medium enterprises in Poland in 2008-2009). Warszawa, www.parp.gov.pl (access: 5.07.2017).
- Raport PARP (2015): Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce w latach 2013-2014 (Report on small and medium enterprises in Poland in 2013-2014). Warszawa, www.parp.gov.pl (access: 5.07.2017).
- Reichal J., Rudnicka A. (2009): *Collaboration of NGOs and business in Poland*. "Social Enterprise Journal", Vol. 5, No. 2, pp. 126-40, <http://dx.doi.org/10.1108/17508610910981716>.
- Reynolds P.D., Hay M., Camp S.M. (1999): *Global Entrepreneurship Monitor: 1999 Executive Report*. Kauffman Centre for Entrepreneurial Leadership at the Ewing Marion Kauffman Foundation, Kansas City, MO.
- Roxas B.G., Cayoca-Panizales R., de Jesus R. (2008): *Entrepreneurial knowledge and its effects on entrepreneurial intentions: Development of a conceptual framework*. "Asia-Pacific Social Science Review", Vol. 8, No. 20, pp. 61-77, <http://dx.doi.org/10.3860/apssr.v8i2.784>.
- Safin K. (2014): *Przedsiębiorcze zachowania studentów – stan i konsekwencje dla dydaktyki (Entrepreneurship of students – the current state and the consequences for didactics)*. "Horyzonty Wychowania", vol. 13, no. 26, pp. 327-340.
- Smallbone, D., Welter F. (2001): *The role of government in SME development in transition economies*. "International Small Business Journal", Vol. 19, No. 4, pp. 63-77, <http://dx.doi.org/10.1177/0266242601194004>.
- Socha M., Weisberg J. (2002): *Labour market transition in Poland – changes in the public and private sectors*. "International Journal of Manpower", Vol. 23, No. 6, pp. 553-577.
- Soomro B.A., Shah N. (2015): *Developing attitudes and intentions among potential entrepreneurs*. "Journal of Enterprise Information Management", Vol. 28, Iss. 2, pp. 304-322, <http://dx.doi.org/10.1108/JEIM-07-2014-0070>.
- Wach K. (2013): *Edukacja na rzecz przedsiębiorczości wobec współczesnych wyzwań cywilizacyjno-gospodarczych (Education for entrepreneurship in the face of today's civilizational and economic challenges)*. "Przedsiębiorczość – Edukacja", nr 9, pp. 246-257.

- Wach K. (2015): *Środowisko biznesu rodzinnego jako stymulanta intencji przedsiębiorczych młodzieży akademickiej (The family business environment as a stimulant for the entrepreneurial intentions of the academic youth)*. "Przedsiębiorczość i Zarządzanie", t. XVI, z. 7, cz. 3, pp. 25-40.
- Wach K. (2016): *Edukacja przedsiębiorcza: analiza bibliometryczna polskiego piśmiennictwa (Entrepreneurship education: Bibliometric analysis of Polish literature)*. "Horyzonty Wychowania", vol. 15, no. 34, pp. 11-26, <http://doi: 10.17399/HW.2016.153401>.
- Waters C. (1999): *Changing the role of the retail sector in Poland during a period of economic transition*. "International Journal of Retail & Distribution Management", Vol. 27, No. 8, pp. 319-27.
- Ziolo Z. (2012): *Miejsce przedsiębiorczości w edukacji (Place of the entrepreneurship in education)*. "Przedsiębiorczość – Edukacja", nr 8, pp. 10-23.
- [www 1] www.stat.gov.pl (access: 10.07.2017).