ENTREPRENEURIAL ATTITUDE OF STUDENTS - COMPARATIVE STUDY BETWEEN CHINA AND POLAND*

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Abstract. One of the crucial topics in the field of entrepreneurship is analysis of having a specific entrepreneurial mindset. In this paper Authors investigate perception of chosen characteristics of entrepreneurial person in China and Poland. Consequently, the primary aim of this paper is to discover differences and similarities of view regarding the characteristics of entrepreneurial person in China and Poland. The secondary aim is to examine the intentions to start a company and verify whether the students in analysed countries regard themselves as entrepreneurial persons. The sample size of described pilot study is 226, whereas 124 questionnaires were accepted in Poland and 102 in China. Questionnaire based survey was conducted from June till September 2016. To quantize the results of the questionnaire, the AHP (Analytic Hierarchy Process) model proposed by Saaty was used. As top three features that characterise an entrepreneurial person students from both analysed countries indicated readiness to bear responsibility; diligence, enthusiasm and conscientiousness in action and resourcefulness and organising. This study has an exploratory character but results clearly show that students from China less often characterize themselves as persons having an entrepreneurial attitude or intentions.

Keywords: entrepreneurship; entrepreneurial attitude; entrepreneurial intention; China; Poland

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1. Introduction

In both analysed countries, China and Poland, entrepreneurship is one of the most popular research areas. Entrepreneurship has many forms and may be analysed in various aspects, but in this paper focus is placed on entrepreneurial attitude of students, taking into consideration cultural differences between analysed countries. Young people during their education acquire different skills, one of them are entrepreneurial competences. Do they, thinking about their professional career, plan to establish an own company? Do they believe that during the whole process of education they have the possibility to learn how to be a successful entrepreneur? What are the characteristics of entrepreneurial person? Are there any cultural differences? Those questions gave an impetus to conduct research among students from different countries such as Poland, Germany, Romania, China, Turkey, Georgia and Sri Lanka. In this paper the emphasis is placed on the presentation of research results from two countries: Poland (European culture, HDI 0.834) and China (Asian culture, HDI 0.727). The target group of the survey was constituted by young people, students, who will soon start or recently started to shape their professional development.

The primary aim of the paper is to discover differences and similarities of view regarding the characteristics of entrepreneurial person in China and Poland. The secondary aim is to examine the intentions to start a company and verify whether the students in analysed countries regard themselves as entrepreneurial persons. The paper is organised as follows. Section 2 is devoted to the explanation of phenomenon of entrepreneurship with special focus on entrepreneurial spirit and consciousness. Section 3 presents the methodology and characteristics of the sample. Section 4 shows the main results and discussion of findings, and lastly, Section 5 reflects conclusions together with limitations of the study and future research directions.

2. Literature review

If the 19th century is the era of industrial revolution, the 20th century is the era of management science, then the 21st century will be the entrepreneurial era of knowledge-based economy. In this era, the global industrial structure is facing a complete deconstruction and reorganization movement. The entrepreneurial spirit is the most important driving force for this reorganization. Drucker (1995) pointed out that the knowledge economy was shifting from a big company-dominated economy to an entrepreneurial economy. The so-called "entrepreneurial economy" is based on entrepreneurship and innovation, with the new "entrepreneurial company" as the main way to achieve the individual value of entrepreneurs in the micro sense and to promote the country's economic development in the macro sense. The Our Competitive Future: Building the Knowledge Driven Economy (DTI, 1998), published by the British government, provides the following statement on why the spirit of entrepreneurship is advocated: "Entrepreneurship in innovation is the focus of innovative economic growth that increases productivity and creates job opportunity". Drucker expects the 21st century to be the era of entrepreneurial economy and society. Innovation and entrepreneurship will become the normal behaviour of knowledge economy society, whether it is government, industry, or academia, they have shown more and more intense interest and concern on entrepreneurial phenomena and entrepreneurial theory. Especially in the past ten years, the phenomenon of entrepreneurship has aroused widespread concern, it also attracts many scholars and entrepreneurs in this field to do theoretical and practical exploration continuously.

Entrepreneurship is the further deepening of students' academic study. The healthy development of career choice is an attempt for students to take the initiative to participate in social competition. As a new trend of students' modern career choice, its significance is far beyond its form. The world has entered the era of achieving success with wisdom, achieving self-realization by entrepreneurship. Self-employment is one of the best choices for students facing the current employment pressure, shaping their ideal life, but also the best way to reflect and display their creativity, which might be a key success factor of entrepreneurial venture (Hirschmann, Hartley and Roth, 2020). Young and enthusiastic students possessing professional quality are excited by such a possibility to
conduct an own company and become an entrepreneur. It is worth noting that creativity is also one of crucial competencies related to social entrepreneurship (along with i.e. empathy, risk taking or recognition of opportunities) (Saxena, 2019). Entrepreneurship has become a trend of young people, and entrepreneurship is also a process from awareness to practice. It carries the ideals of young people, and also carries the responsibility and commitment of young people. Due to this fact entrepreneurial education is crucial. One of the aims of such education is promoting self-employment, innovativeness and creativity (Kozlinska, 2011; Kajrunajtys and Grodek-Szostak, 2013). Raising awareness of students about different types and forms of entrepreneurial behaviour along with development of soft skills such as leadership, risk taking and risk tolerance or teamwork management constitute part of entrepreneurial education promotion (Grodek-Szostak, Jando and Kajrunajtys 2017; Jando, 2018).

Drucker pointed out that the entrepreneurial economy is a significant part of the national economy and one of the important ways to provide employment opportunities and create value. The 21st century is not only an era more focusing on personal development than any other time before, but also offers the best opportunity for young people to start business. Starting their own business for students is not only an attempt, but also a trend. At present, both Chinese and Polish economies are facing further development problems, and students are the main promoters of future economic development. This paper will compare and contrast the different attitudes towards entrepreneurial awareness and entrepreneurial spirit between Chinese and Polish students. The results might benefit both parties. They can learn from each other. More importantly, it not only promotes students’ personal growth, but is also beneficial to the progress of society as a whole.

Entrepreneurship is an multidimensional aspect and research interest and objective that cuts across various scientific fields. Siropolis (1989) argues that entrepreneurship refers to creating a new business by an entrepreneur based on his own ideas and hard work. In the “Global Entrepreneurship Monitoring” project jointly organized by The London Business School and the Babson School of Business in the United States, the entrepreneurial concept is defined as a process relying on individuals, organizations or an existing business to create a new business or re-expand existing enterprises.

Chinese scholar Zhang (2011) argued that some individuals bear some necessary risks and engage in business activities using existing capability and resources in order to obtain a certain profit, even though they do not even establish a business, which can also be defined as "quasi-business". That is to say, it can be defined as the activity of using opportunities and resources to convert them into value and at the same time assuming a certain risk. Students’ business activities in many colleges and universities can be included in this range. Ge Jianxin (2004) in the book "Entrepreneurship" defined entrepreneurship in a narrow sense as certain economic activities with individual characteristics which combine a variety of economic elements with innovative methods in order to create a new business and to maximize profits for the fundamental purpose. In this context entrepreneurial activities are relate to bearing a certain risk.

According to the Polish literature entrepreneurship is related to innovativeness, creativity, problem solving, risk management, seizing opportunities and others. It can be also described as an attitude or as a process of setting up and conducting an enterprise (Misiak-Kwit, 2020). Bieniok (2005) presented entrepreneurship as a set of features such as foresight, determinedness in achieving goals, resourcefulness, ingenuity, self-reliance or ability to deal with difficult situations. Person which might be described as entrepreneurial is characterized by having and skilfully using an initiative. Initiative, in turn, is understood as creation of intentions and an attempt to implement them (Kotarbiński, 1982).

From the long-term economic growth, innovation and technological progress play an important role, while entrepreneurs play the role of innovative micro-subject. According to the Encyclopedia Americana, the term ‘entrepreneur’ was coined by the Frenchman Richard Cantillon (1755), referring to the expeditions made by the
generals from Central Europe in the fifteenth century, by which they gained profit. The basic characteristic of these people is to take risks. After the 20th century, many Western scholars began to summarize entrepreneurship as some characteristics an entrepreneur should have. Among them, Schumpeter (1934) is the first who systematically expounded the core of the entrepreneurial spirit. Schumpeter pointed out that innovation is one of the cores of entrepreneurial spirit in the ‘economic development theory’. Entrepreneur is the enterprise development promoter, but also might be the destroyer of creativity, which reflected the essence and connotation of the entrepreneurial spirit. Voorhis (1980) argued that entrepreneurs have the following five qualities: preferring competition, being the implementer rather than the planner, tending to control their own destiny, having an independent character, moderate risk preference.

Individuals display behaviours like innovativeness, taking risks and the initiative to take action, then he or she has entrepreneurial spirit. Sharma & Chrisman (1999) summarized the opinions of Gartner (1989), and Stopford & Baden-Fuller (1994), and defined it as: entrepreneurial spirit encompasses new organizations both within and outside the existing organization, updating and innovative activities. Sharma & Chrisman distinguish the entrepreneurial spirit from the concept of the system as follows: the individual entrepreneurial spirit and the organization's entrepreneurial spirit.

Zhuang Ziyin (2010) stressed that the core of entrepreneurial spirit is the continuous technological innovation and imitation, the micro-organizational mechanism in the long-term economic growth, the driving force of long-term economic development. Entrepreneurs are also the bearers of risks. His research shows that business with strong entrepreneurial spirit has a higher economic growth rate and per capita income than the one with weak entrepreneurial spirit. Among the many expositions on the concept of entrepreneurial awareness, the definition of Peng Gang (1995) is the most widely cited. He argued that entrepreneurial awareness refers to the individual tendency which motivates entrepreneurs in entrepreneurial practice, including motivations for entrepreneurship, the need, ideals, interests, beliefs and other elements. At the same time, he believed that entrepreneurial consciousness displayed the social nature of the entrepreneurial qualities. This awareness directed the attitude and behaviour of entrepreneurs in the entrepreneurial activities. It is not only an important part of entrepreneurial quality, but also a strong internal driving force for people who engage in entrepreneurial activities.

Having an entrepreneurial intention and spirit is prior to the decision of organizing a business venture (Engle et al., 2010). Polish scholars point out that entrepreneurial intention has an individual character (Arent and Walczyna 2018) which results from external and internal determinants. Internal determinants are linked with features and attitudes of potential entrepreneur. External determinants, on the other hand, occur in the environment and can be assessed as push or pull factors.

Intentions, according to the theory of planned behaviour, depend on three independent elements (Ajzen 1991, Linan and Chen 2009, Urban, Chantson, 2019). First factor is attitude toward behaviour together with positive or negative personal assessment of certain behaviour (Kolvereid, 1996). Perceived behavioural control is understand as a level of difficulty of managing a behaviour. Third determinant, subjective norms, examine perception of received help from others (i.e. family, friends).

The theory of entrepreneurial intentionality describes intention as an intrinsic factor that not only supports the entrepreneurial effort but also shapes the resources in order to formulate appropriate entrepreneurial competence (Mishra and Zachary, 2015).

Individual entrepreneurial awareness varies from person to person and varies from place to place. Some scholars argue that the measurement of entrepreneurial awareness requires a continuous measurement rather than an absolute measurement (Thompson, 2009). Chen, Greene and Crick, in 1998, designed a five-topic questionnaire. The five questions are "whether interested in creating new businesses", "thoughts on the creation of new
businesses", "the preparation for the new business", "the possibility of making best effort to start a new business" and "when will a new business start". A five-point score was used with a Colombian alpha coefficient of 0.92, which was used as a good calibration and was also cited by many researchers. Chinese scholars represented by Zhang (2008) made a preliminary survey on the college students' entrepreneurial awareness. They designed a questionnaire for contemporary college students, analysed the data collected from 867 students, got findings about the contributing factors of entrepreneurial consciousness of college students. The total scale of the Colombian alpha coefficient was 0.9240.

Students are particularly relevant research group. First of all recognition of their intentions might become a fundamental basis to develop activities under entrepreneurial education. On the other hand, this group will soon enter a labour market, where a new venture might be an alternative to the full-time employment (Piróg, 2013). Regardless the option, soft skills along with entrepreneurial attitude are desirable from the point of view of knowledge-based economy and modern labour market (Zioło 2008; Wronowska 2016).

After the relevant literature analysis, it can be found that more research on entrepreneurial spirit and organizational innovation focused on quantitative study and theoretical analysis. At the same time, there is a lack of in-depth study of students' entrepreneurial awareness and there are few articles on the international comparison and contrast of students' entrepreneurial awareness. According to the authors, different cultural backgrounds, different economic development status, different educational ideas affect young people's world viewpoint and entrepreneurial attitude. A comparison and analysis of the similarities and differences of students’ entrepreneurial awareness between Poland (European country) and China (Asian country) is not only a theoretical supplement and addition to the existing literature, but also has a strong practical significance.

3. Materials and Methods

The aim of the conducted pilot study was to realize the attitude of young people in setting up an own company in different countries. In this paper, the researchers selected the Polish and Chinese university students as the objects of study for comparative analysis. It’s based on the following reasons: First, after the victory of World War II and before economic transformation, China and Poland were deeply affected by the former Soviet Union, the political and economic systems of the two countries were very much similar. Second, although China's population is much larger than the size of Poland, the Human Development Index (HDI) of the two countries was very close (Table 1). Third, in the 1980s, both countries experienced a reform, both have achieved remarkable results, especially small and medium enterprises developed very well under government's support and encouragement. Fourth, since 1990s, both countries have attached great importance to the development and quality of higher education, the number of students in the school rise steadily. Both countries also emphasize the cultivation of applied talents. The comparison of basic indicators in China and Poland is presented in Table 1.

<table>
<thead>
<tr>
<th>Description</th>
<th>China</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per capita GDP (USD, 2018)</td>
<td>9,770.8</td>
<td>15,424.0</td>
</tr>
<tr>
<td>Human Development Index (2017)</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Start-up procedures to register a business (number) (2018)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>School enrolment, tertiary (% gross)</td>
<td>51% (2018)</td>
<td>68% (2017)</td>
</tr>
</tbody>
</table>

Taking into consideration research group, it is worth to indicate the tertiary enrolment rate in analysed countries. In Poland 68% of the population has tertiary education, while in China 51%, as shown in Table 1. Also GDP per capita is higher in Poland than in China. Looking at the procedures to register a business, the number of those is slightly lower in China then in Poland. From this point of view, it may be easier for Chinese students to establish an own company.

The authors share the opinion that it is worth to notice differences and similarities between Asian and European countries, which is crucial concerning future cooperation between those countries. To discover them, authors have compared the research results from China and Poland. Questionnaire based survey was conducted from June till September 2016. Microsoft excel and YaAhp 4.0 were used as the analysis tools. A preliminary data and a recheck was carried out in order to ensure that there were no missing values. Pivot tables were used to compare the responses from both countries. Tables are described based on the aggregate mean values for two countries. The study was conducted among young people, students, who will soon start or recently started to shape their professional development. The characteristics of the surveyed group is presented in the Table 2.

<table>
<thead>
<tr>
<th>Table 2. Characteristics of the surveyed group participating in research in China and Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Place of residence</strong></td>
</tr>
<tr>
<td>Rural areas</td>
</tr>
<tr>
<td>Urban areas</td>
</tr>
<tr>
<td><strong>Year of birth</strong></td>
</tr>
<tr>
<td>1989 or earlier</td>
</tr>
<tr>
<td>1990</td>
</tr>
<tr>
<td>1991</td>
</tr>
<tr>
<td>1992</td>
</tr>
<tr>
<td>1993</td>
</tr>
<tr>
<td>1994</td>
</tr>
<tr>
<td>1995</td>
</tr>
<tr>
<td>1996 or later</td>
</tr>
</tbody>
</table>

*Source: own collaboration based on the conducted research*

Altogether, the sample size of this pilot study was 226, whereas 124 questionnaires were accepted in Poland (out of 133) and 102 in China (out of 103). During sample selection multistage mixed sampling method was used. A simple random sample was selected from the students of Guangdong University of Foreign Studies and Ningbo University from China and University of Szczecin from Poland to represent the young people of each country.

In both countries the surveyed group was mainly represented by women, 75% in Poland and 83% in China. While analysing the data shown in Table 2, it can be also noted that persons living in urban areas mainly participated in the study – 73% in Poland and 63% in China. The biggest difference was the age – the people who took part in the survey in China were statistically younger than in Poland. The authors believe that the age difference has no greater impact on the differences in answers as all respondents belong to the group of young students.
3.1 Model Setting

In this paper, to quantize the results of the questionnaire, the AHP (Analytic Hierarchy Process) model proposed by Saaty (1970), an American operational research scientist, was used. It is a simple method to make decisions on some more complex and fuzzy problems, especially for those problems that are difficult to be fully quantitatively analysed. The specific steps are as follows:

Step 1. Establish multi-level hierarchical structure of evaluation indexes. In this paper, indicators come from the answers to the questions selected in the questionnaire, so there is only a secondary structure.

Step 2. Establish a pair comparison matrix.

Saaty suggested that the method of pairwise comparison matrix can be established by comparing two factors. In other words, the sum of two factors at a time is used to express the ratio of the influence of the sum to the pair, and all the comparison results are represented by judgment matrix. As for how to determine the value, Saaty and others suggest using the numbers 1 to 9 and their reciprocal as the scale. Table 3 lists the meanings of 1-9 scale.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indicates that the two factors are of the same importance</td>
</tr>
<tr>
<td>3</td>
<td>The former is slightly more important than the latter</td>
</tr>
<tr>
<td>5</td>
<td>The former is more important than the latter</td>
</tr>
<tr>
<td>7</td>
<td>The former is much more important than the latter</td>
</tr>
<tr>
<td>9</td>
<td>The former is extremely more important than the latter</td>
</tr>
<tr>
<td>2, 4, 6, 8</td>
<td>Represents the intermediate value of the above adjacent judgments</td>
</tr>
<tr>
<td>Reciprocal</td>
<td>If the ratio of factor $i$ to factor $j$ is $b_{ij}$, then the ratio of factor $j$ to factor $i$ is $b_{ji} = 1/b_{ij}$</td>
</tr>
</tbody>
</table>

Table 3. 1-9 scale meaning


Calculation of the weight vector of the hierarchical total sorting: first, calculate the weight vector $W_i$ of each element in the next layer to each element in the upper layer; second, arrange the weight vector of each element in the lower layer to each element in the upper layer in the following table form by columns, assuming that there are $m$ elements $A_1, A_2, \cdots, A_m$ in the upper layer $A$, and the weight vector of the hierarchical total sorting are $a_1, a_2, \cdots, a_m$, and there are $n$ elements $B_1, B_2, \cdots, B_n$ in the lower layer, then the column vector of the single sorting weight vector of the elements is $b_{ij}$, as shown in Table 4.
4. Empirical Analysis and Findings

Using the AHP model, authors quantized the question "Please rank the chosen characteristics of entrepreneurial person from 1 to 10" and got the weight values of each characteristics of respondents from China and Poland, as shown in Table 5.

Table 5. The weight values of each characteristics in China and Poland

<table>
<thead>
<tr>
<th>Question</th>
<th>Characteristics</th>
<th>China</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please rank the chosen characteristics of the entrepreneurial person from 1 to 10 (where 1 is the most and 10 the least characteristic feature)</td>
<td>The readiness to bear responsibility</td>
<td>0.325</td>
<td>0.134</td>
</tr>
<tr>
<td></td>
<td>Willingness to search for the new solutions</td>
<td>0.058</td>
<td>0.134</td>
</tr>
<tr>
<td></td>
<td>Hard-working, enthusiasm and conscientiousness in action</td>
<td>0.204</td>
<td>0.252</td>
</tr>
<tr>
<td></td>
<td>Resourcefulness and organizing</td>
<td>0.109</td>
<td>0.252</td>
</tr>
<tr>
<td></td>
<td>Practical skills</td>
<td>0.030</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>Intuition</td>
<td>0.011</td>
<td>0.018</td>
</tr>
<tr>
<td></td>
<td>Creativity and innovativeness</td>
<td>0.109</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>Ability to use knowledge</td>
<td>0.058</td>
<td>0.033</td>
</tr>
<tr>
<td></td>
<td>Confidence</td>
<td>0.078</td>
<td>0.033</td>
</tr>
<tr>
<td></td>
<td>Independence and the need of autonomy</td>
<td>0.019</td>
<td>0.012</td>
</tr>
</tbody>
</table>

Note: own collaboration based on the conducted research

On the basis of Table 5, some differences between China and Poland can be distinguished. In the Chinese young’s eyes, ‘The readiness to bear responsibility’ is the most important characteristic of the entrepreneurial person, while ‘Hard-working, enthusiasm and conscientiousness in action’ and ‘Resourcefulness and organizing’ are chosen by the young’s from Poland. ‘Intuition’ is the least important characteristic according to the Chinese
students but students in Poland chose ‘Independence and the need of autonomy’. Research results, conducted in other countries like Belgium, Serbia and Bosnia and Herzegovina, confirmed that among characteristics enhancing entrepreneurial potential can be distinguished capability of making decisions, creativity, diligence, independence, meeting challenges, problem solving and looking for new solutions (Maric, Subotic, Dudic, Melovic, Brankovic and Milisavjevic, 2021). Those characteristics are also on the list of the most important features of entrepreneur’s identity (Szostak and Sulkowski, 2021). Another research conducted in Oman and Sudan indicate that there is statistically significant impact of entrepreneurial features of students on their entrepreneurial intention (Atiya, Bilal, Abulhamid and Shoaib, 2019). Therefore, the Authors analysed entrepreneurial mindset and intention in China and Poland.

The breakdown of the answers to the questions about having an entrepreneurial mindset and intention is shown in Table 6.

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific entrepreneurial mindset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>27.72 %</td>
<td>56.15 %</td>
</tr>
<tr>
<td>No</td>
<td>41.58 %</td>
<td>14.62 %</td>
</tr>
<tr>
<td>I do not know</td>
<td>31.68 %</td>
<td>29.23 %</td>
</tr>
<tr>
<td>Entrepreneurial intention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>30.7%</td>
<td>51.5%</td>
</tr>
<tr>
<td>No</td>
<td>38.6%</td>
<td>12.3%</td>
</tr>
<tr>
<td>I do not know</td>
<td>30.7%</td>
<td>36.9%</td>
</tr>
</tbody>
</table>

Note: own collaboration based on the conducted research

Table 6 shows that the respondents from Poland are more entrepreneurial, 56.15% of Polish students think they have an entrepreneurial mindset, while only 27.72% Chinese students believe so. The largest proportion (41.58%) of Chinese young people clearly believe that they do not have an entrepreneurial mindset. At the same time, more than half of the surveyed young people in Poland plan to open an own business (51.5%). In comparison, 30.7% of Chinese students would like to open an own business in the future. It is also worth to notice that the share of undecided students, who are not sure whether to establish a company is pretty high and was noted as 30.7% in China and 36.9% in Poland. From this point of view, in would be crucial to examine actual entrepreneurial behaviour in order to complement the research on entrepreneurial intentions. It is also worth to compare this results with other research. According to Zhang, Wang and Owen (2015) and their examination of students in U.S. attitude fails to generate a significant impact on intention to behave in an entrepreneurial way. However, research conducted in Spain clearly show that subjective norms, such as attitude and perceived behavioural control are positively related to entrepreneurial intention (Entrialgo and Iglesias, 2017). Those results might be an indicator for future research to examine similarities and differences in all countries.

For the question about career plans after graduation, it can be seen from Figure 1 that 23.8% of Poland’s students chose to open an own company, while the percentage of Chinese students who plan to do so is only 10.9%. Most of the respondents from China (with 42.6%) would like to get a job in private company.
Looking for similarities, it can be concluded that students both in Poland and in China chose “The possibility of higher earnings”, “Independence, self-reliance” and “Self-realization” as the top three biggest advantages of running an own business. The internal motivation is considered more reliable than external leadership in maintaining and developing entrepreneurial potential of students (Mukesh, Prabhu, Koodamara, Chakraborty and Kamath, 2020). Despite the country, the possibility of higher earnings seems to be very important factor, so students were also asked to indicate whether they think that establishing an own company can give better possibility for higher income than working for somebody. Answers to that question are shown in Figure 2.

**Figure 1.** Career plans after graduation - answers according to the respondents from China and Poland

*Source: own collaboration based on the conducted research*

**Figure 2.** Establishing an own company gives better possibility for higher income than working for somebody – answers in % according to the respondents from China and Poland

*Source: own collaboration based on the conducted research*
According to the data presented in Figure 2, 81.5% of respondents from Poland and 63.4% of respondents from China answered positively and agreed that conducting business can give them better possibility for higher income than working for somebody. However, studies conducted in Romania did not confirm that income influence willingness to start a business. Desirability of entrepreneurship is rather determined by feasibility and social stability (Paucescu, Popescu and Duennweber, 2018).

The respondents were also asked to assess whether the skills acquired in the process of education (school, studies) are useful for running an own business. 69.3% of students in China think that graduation from the university will guarantee receiving the necessary diploma as well as knowledge, but 46.2% of students in Poland deem that graduation from the university will give them just a diploma. Moreover, 59.4% of Chinese students and only 30.8% of Polish students agree that the education system has a positive effect on developing entrepreneurial students. Presented data indicate that according to Polish students, higher education could focus more on developing entrepreneurial skills. The relevant scheme of the entrepreneurship education process, together with teaching methods and tools, is proposed by Wasilczuk and Richert-Każmierska (2020). The acquisition of entrepreneurial competences during studies is of great significance for majority of students (Menshikov and Ruza, 2021).

Important aspect while analysing the phenomenon of entrepreneurship is getting to know the perception of barriers to running a business. During the research, the respondents had the possibility to choose maximum three answers (Figure 3).

The Chinese students chose ‘very high risk’ as the most important barrier. Next five barriers obtained similar number of indications: ‘lack of adequate capital’, ‘no business contacts’, ‘no idea for business’, ‘high competitiveness’ and ‘lack of appropriate skills’. As a biggest obstacle students from Poland indicated ‘lack of adequate capital’. Next, respondents pointed out: ‘no idea for business’, ‘very high risk’, ‘legal difficulties’ and

**Figure 3.** The biggest obstacles of running an own business – answers in % according to the respondents from China and Poland

Source: own collaboration based on the conducted research
‘no business contacts’. According to students from both analysed countries, ‘low prestige of entrepreneur’s profession’ is the least significant barrier to entrepreneurship. Taking into consideration the international scope of presented research results, the role of digital capabilities should be emphasized (Davenport and Redman, 2020). Having skills to use digital technologies positively effects international entrepreneurial intentions, and not having them can become a vital barrier, as research conducted in Germany proved (von Arnim and Mrozewski, 2020).

Conclusions

The primary aim of the paper was to discover differences and similarities of view regarding the characteristics of entrepreneurial person in China and Poland. The secondary aim was to examine the intentions to start a company and verify whether the students in analysed countries regard themselves as entrepreneurial persons. This international comparison constitutes an added value of this research. This paper also fills in a gap regarding acquisition of entrepreneurial competences and research results might be important for researchers and practitioners from both analysed countries. The obtained results indicate that higher education should be more focused on developing entrepreneurial competences. The listed differences and similarities might become indications for people cooperating with students, current and future entrepreneurs regarding their intentions, mindset or perceived obstacles.

According to students from both analysed countries, the top three features that characterise an entrepreneurial person are the readiness to bear responsibility; diligence, enthusiasm and conscientiousness in action and resourcefulness and organising. As the least important features respondents indicated independence and the need for autonomy and intuition.

Results presented in the paper allow to conclude that respondents from both countries see the same advantages of having an own enterprise. Although, the possibility of higher earnings is indicated as biggest advantage, only 63.4% of Chinese students agreed that running an own company can give them better possibility for higher income then working for somebody. Looking for similarities, it can be also concluded that respondents indicated the same most important and least important barriers. As biggest obstacles students identified external barriers to entrepreneurship, which are related to risk and lack of capital. At the same time, they did not consider low prestige of entrepreneur’s profession as a significant barrier.

One of the differences between the respondents from the surveyed countries concerns the assessment of the education system. Students from China assess their education process higher then students from Poland.

The differences include also the fact that students from Poland more often characterise themselves as entrepreneurial persons then the students from China. Greater share of Polish students also plans to establish an own company. Important question that arise from this fact is ‘why’? Why so few Chinese students perceive themselves as a person having an entrepreneurial mindset? What are the reasons (according to students in China) for choosing a paid job as a better option? Why the respondents do not want to conduct an own business? The questions posed indicate the direction of future research. It would be also worth to realise how current situation caused by pandemic influenced the perception of young people considering further career development.

It is also worth to mention the limitations of the study. In this paper Authors present results of a pilot study and due to small sample size, the numbers are not sufficient to generalize the findings. However, the presented analysis was made on the basis of descriptive measurements (i.e. weight values). This study has an exploratory character and is a decent starting point for further analysis concerning perception of the entrepreneurial spirit in different countries.
References


Grodek-Szostak, Z., Jando, O., & Kajrunajtys, D. (2017). Kluczowe kompetencje w podejmowaniu i prowadzeniu działalności gospodarczej: wyniki badań własnych (Key competences in starting and running a business: research results), Zeszyty Naukowe Wyższej Szkoły Ekonomii i Informatyki w Kraków, 13, 47-64.


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