



## STUDENTS' ENTREPRENEURIAL ORIENTATION AND PLANS OF SETTING UP BUSINESS - THE IMPORTANCE OF EDUCATIONAL SYSTEM

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### Abstract

As there is a common opinion in literature that entrepreneurship can be taught, the role of education system in providing the knowledge and skills necessary for future entrepreneurs is undeniable. The growing need for entrepreneurial knowledge, skills and actions in both professional and private life becomes more imperative, and education plays an important role in creating an entrepreneurial society and business culture. The number of educational programs in entrepreneurship at all levels of education systematically grow worldwide. Entrepreneurship education should develop entrepreneurial individuals and aspiration by equipping people with the appropriate knowledge and skills to initiate and sustain enterprises. Entrepreneurship education has a positive impact on the development of the entrepreneurial spirit of youth, its intentions towards starting own business, higher employability and finally more significant role in society. Entrepreneurial intention initiates entrepreneurial actions. Entrepreneurial intention shows the objective of an individual to choose entrepreneurship as a professional career. Within organization, entrepreneurial intention are the basis for entrepreneurial orientation of the whole company. Entrepreneurial orientation can be described as a individual's natural inclination or attitude towards entrepreneurship. From this point of view, it can be developed and strengthened during the upbringing, especially within the educational system. It is analyzed within strategic management of enterprise. Creating entrepreneurial attitudes and behaviors brings benefits not only to individuals, but also translates into the economic results of enterprises, and in a broader perspective, contributes to the economic development of a given country. As the entrepreneurial orientation is a multi-dimensional construct of a complex nature, actions and attitudes should be studied and compared in relation to each dimension of the construct. Construct could be described as multidimensional when we are dealing with several separate but related dimensions, treated as one coherent theoretical concept. The dimensions of entrepreneurial orientation most often mentioned in the literature include: proactivity, organizational autonomy, competitive aggressiveness, internal innovation and risk taking. This paper is a research article in character. The main aim of the article is to investigate the correlation between entrepreneurial attitudes and entrepreneurial intentions of students, understood as a declaration of willingness to start their own business. The article presents the results of a survey among 250 students in Poland, conducted in the first quarter of 2021. Entrepreneurial attitudes of students were examined as elements of entrepreneurial orientation, and were assessed in 5-point Likert scale. To data analysis, the descriptive statistics were used, and Gamma correlation coefficient to analyze the correlation between non-parametric variables. The study confirmed a positive relationship between the potential for entrepreneurial orientation and the intentions to start a business.

KEY WORDS: business projects; education; entrepreneurial orientation; entrepreneurship; management.

### Introduction

Entrepreneurship is a process of creativity and innovation where there is potential to add value to products, create jobs, increase productivity, improve competitiveness and diversify markets, improve social welfare, and further economic development (Esfandiar et al., 2019). Individual entrepreneurship is believed to change the mindset and empowerment to promote economic development through job creation and global economic integration. Hence, in order to successively increase the number of entrepreneurs in a market economy, scientists and decision makers should be aware of the entrepreneurial intentions of potential entrepreneurs, as well as the factors favoring their entrepreneurship (Dao et al., 2021).

Entrepreneurship training and education is recognized as a solid strategic tool for regional development (Galvão et al., 2018). Entrepreneurship education courses are indicated among the most frequently indicated creators of entrepreneurial intentions (Tantawy et al., 2021), which not only provide students with entrepreneurial skills and abilities, but above all lead to increasing students' awareness of entrepreneurship as a career option (Fretschner, Lampe, 2019).

When undertaking a business, entrepreneurial intentions are considered a good predictor of future entrepreneurial behavior (Rauch, Hulsink, 2014). Entrepreneurship is often viewed as a process, so intention becomes a natural precursor to entrepreneurial activity (Ismail et al., 2015). Consequently, most studies on the impact of entrepreneurship education assess whether courses or programs strengthen the entrepreneurial intentions of participants (Ewijk, Belghiti-Mahut, 2019).

Paper is aimed to investigate the dependence between entrepreneurial attitudes and entrepreneurial intentions of students, understood as a declaration of willingness to start their own business. The novelty of the research is visible in relation to the selected population, in this case students in Poland, and to study this population with an original research tool.

This paper is organized in five sections: introduction; literature review on entrepreneurial orientation; methodological framework for the empirical research; research results; and conclusions.

## Entrepreneurial orientation and its creation within education system – theoretical background

Entrepreneurial orientation (EO) can be defined as an individual's natural inclination or attitude towards entrepreneurship (Ngah et al., 2016). EO is an important management concept that reflects the organizational decision-making attitude regarding key activities at the enterprise level, strategic practices and management philosophy in the search for new opportunities for dynamic development and renewal (Wales et al., 2013). Scientists generally adopt EO as a tool to measure a firm's propensity for entrepreneurship (Lages et al., 2017). The organizational design of EO manifests itself in such a way that entrepreneurial attitudes and behaviors permeate the organization at all its levels, and the way it is implemented in enterprises can affect its ability to drive economic performance. Research in this area significantly contributed to the outlining of the omnipresence of EO as an organizational phenomenon (Wales et al., 2011).

EO is a multidimensional construct and in this case we are dealing with several separate but related dimensions, treated as one coherent theoretical concept. Although the number of dimensions of EO varies across the literature, the most common approach is to adopt a five-dimensional structure of EO consisting of proactivity, autonomy, competitive aggressiveness, innovation and risk taking (Lumpkin et al., 2009).

Entrepreneurial intentions drive towards the goal of starting a business, creating a planned behavior. Becoming an entrepreneur involves engaging in a well-thought-out process aimed at making an idea come true through all activities from its creation to its full implementation. Entrepreneurial intention indicates the effort an individual is willing to make to implement such an entrepreneurial behavior. Research indicates that, compared with many individual and situational variables, entrepreneurial intentions have been shown to be the most effective predictors of planned behavior (Krueger et al., 2000) as they guide future actions and influence an individual's choices.

Knowledge and skills are the base that allows an individual to perform certain activities. Hence, an individual with acquired entrepreneurial knowledge and skills strives to start a business in an easier way (Kautonen et al., 2013). In general, being capable of carrying out certain entrepreneurial activities, or even being interested in entrepreneurial activities, requires demonstrating the ability to act as intended and engage in business. All these activities take place before the actual start of the project.

The decision to become an entrepreneur is influenced by a wide range of factors, including family background, experience, education, etc. Acquiring knowledge is considered a fundamental value for people wishing to be successful. There is a common opinion in literature that entrepreneurship can be taught (Kuratko, 2005), and the attributes of entrepreneurship can be acquired through educational programs. There is a direct link between entrepreneurship education and entrepreneurial intentions, and, consequently, entrepreneurship acts. Effective entrepreneurial education develops a stronger

intentionality in relation to entrepreneurship and shows a more positive attitude to undertaking entrepreneurial activities of various nature, both as establishing a separate company, but also as undertaking entrepreneurial challenges within the organization (internal entrepreneurship). Basically, having knowledge about setting up and managing a business has a positive impact on the business intentions of students (Gieure et al., 2020).

Entrepreneurship education focuses on the comprehensive aspect of starting or running a new venture. This can take the form of an entrepreneur starting a business, innovation (start-up), new business development, small business management, opportunity recognition techniques and steps to start a new venture. However, the role of entrepreneurship education, which aims to instill entrepreneurial behavior and attitudes as general skills, and embedded entrepreneurship education, where aspects of entrepreneurship are part of other multi-subject courses, should be emphasized (Pittaway, Edwards, 2012).

## Method

Main aim of the conducted research was to investigate the correlation between entrepreneurial attitudes and entrepreneurial intentions of students, understood as a declaration of willingness to start their own business.

The research involved conducting an empirical survey among 250 students in Poland. The study was not representative, therefore the conclusions of the study should be treated as preliminary conclusions, indicating the regularities and directions of further research.

The study used a questionnaire in which the entrepreneurial attitudes of students were examined as elements of entrepreneurial orientation and the willingness of respondents to start their own business. In order to assess them, a 5-point Likert scale was used. To assess the potential of entrepreneurial orientation among students, four questions were asked to assess each dimension of EO: proactivity (P), autonomy (A), competitive aggressiveness (CA), innovation (I) and risk taking (R), and the response values were then summed up.

Gamma correlation coefficient was used to analyze the correlation between non-parametric variables.

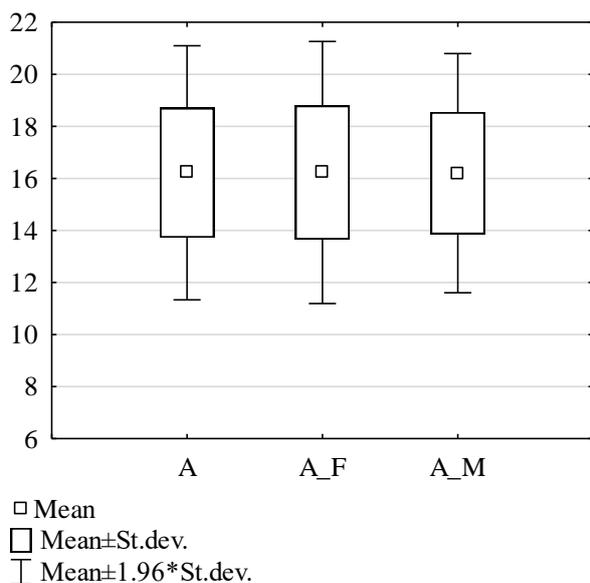
## Results

In order to assess the potential of students in the field of entrepreneurial attitudes and behaviors, an analysis of their approach and outlooks in 5 areas representing EO described in the literature was made.

When analyzing the obtained empirical results, it should be indicated that students rate their need for autonomy in actions the highest. Students value independence, they want to set goals for themselves, plan and make their own decisions.

Moreover, autonomy is the only dimension of entrepreneurial orientation, where it is noticed the higher potential for female students than male students. It can be assessed that for contemporary women the need for independence is of particular importance and there are

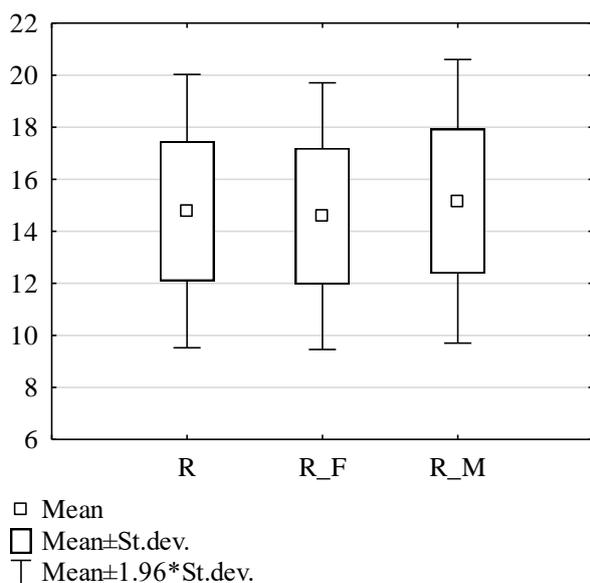
clear aspirations (expectations) to gain autonomy in professional activities in the future (Fig. 1).



**Fig. 1.** The assessment of the level of autonomy potential of students (A) with distinction on autonomy of female (A\_F) and male (A\_M) students (own research).

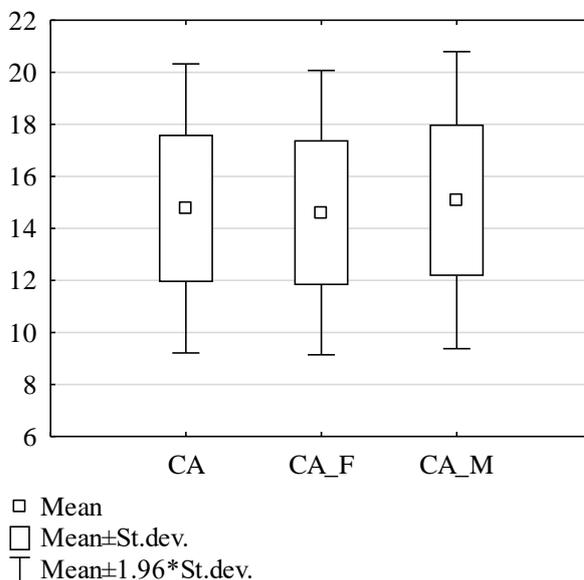
Potential for future risk taking was rated slightly lower than potential for autonomy. Risk-taking by young people is undoubtedly a condition of entrepreneurship, which will result in starting a new venture (Fig 2).

Although the research results indicate that male students are more willing to take risks, the difference in potential for women and men in this area is small. As the study covered students of various fields of study, it seems to be a regularity that indicates that both male and female students are ready to take risks in professional activities, and this gives hope for a higher level of entrepreneurship in general.



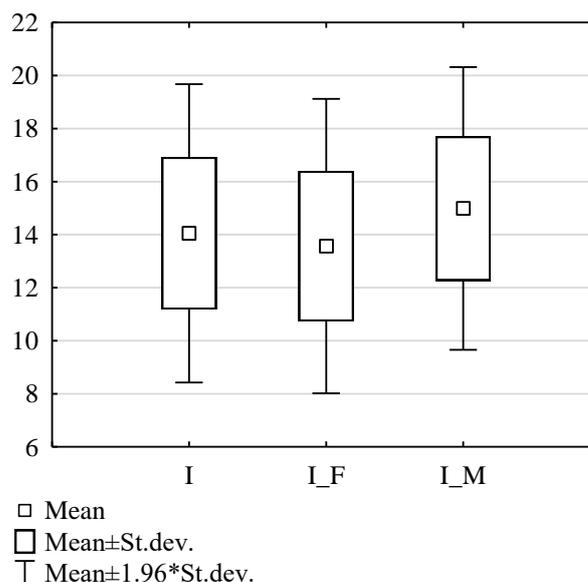
**Fig. 2.** The assessment of the level of risk taking potential of students (R) with distinction on risk taking of female (R\_F) and male (R\_M) students (own research).

Aggressive attitudes towards competition as a potential of students, show regularities very similar to the above-discussed propensity to take risks (Fig 3). The average of the responses is slightly higher here, but at the same time a smaller standard deviation is visible, which suggests greater consistency of the response.



**Fig. 3.** The assessment of the level of competitive aggressiveness potential of students (CA) with distinction on competitive aggressiveness of female (CA\_F) and male (CA\_M) students (own research).

Innovation is one of the basic factors of economic development in modern times. Hence, students should develop innovative attitudes during their studies in order to be able to fully use their creative potential later (Fig. 4). Perhaps such a conservative approach is due to a longer functioning in the constraints of the Covid-19 pandemic, which do not favor innovation.



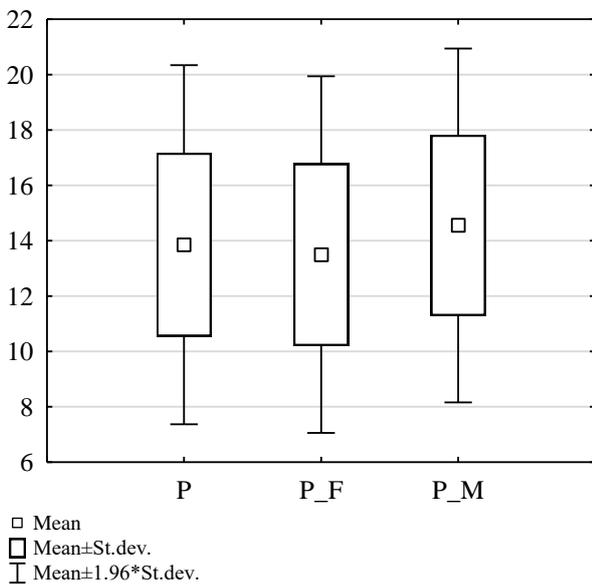
**Fig. 4.** The assessment of the level of innovativeness potential of students (I) with distinction on

innovativeness of female (I\_F) and male (I\_M) students (own research).

Meanwhile, the innovative potential is not the highest-rated dimension of entrepreneurial orientation, and a much lower propensity to innovate is visible for female students than for male students. This can be assessed as an unfavorable phenomenon that should be eliminated within the education system.

The lowest, paradoxically, was the tendency to be proactive. Taking up challenges, focusing on the future or analyzing trends and potential changes turns out to be a bit less useful (Fig. 5). Proactivity may be hindered in times of a pandemic, with various constraints, hence post-crisis research results may differ from the present ones.

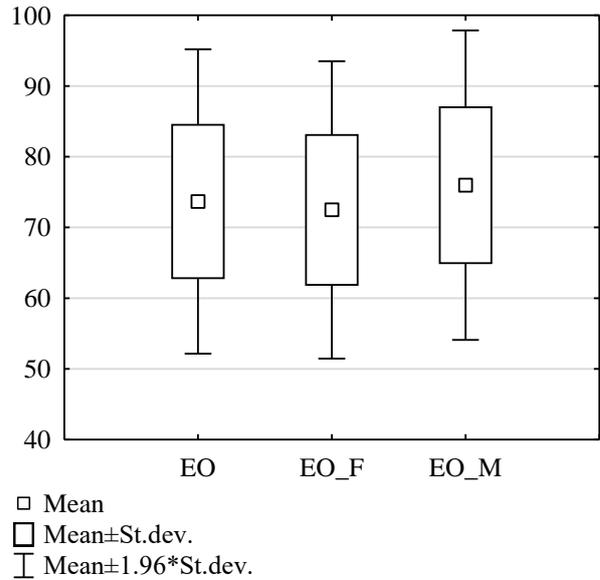
In the case of proactivity, the proactive potential of women is also lower than that of men in the surveyed group of respondents.



**Fig. 5.** The assessment of the level of proactivity potential of students (P) with distinction on proactivity of female (P\_F) and male (P\_M) students (own research).

Analyzing the entrepreneurial orientation as a meta-variable, consisting of five interconnected dimensions, which, however, can occur and change in different ways and scope, it can be concluded that the entrepreneurial potential of students is relatively high (Fig. 6).

When distinguishing the entrepreneurial orientation of students by gender, a clear difference is visible, consisting in the lower potential of women. Women are still lagging behind in the professional field at the very beginning of their careers, which indicates the need to intensify efforts to achieve full gender equality.



**Fig. 6.** The assessment of the level of entrepreneurial orientation potential of students (EO) with distinction on entrepreneurial orientation of female (EO\_F) and male (EO\_M) students (own research).

Correlation analysis using the Gamma coefficient showed a positive relationship between the assessment of students' potential for EO and the willingness to start a business. The strength of the correlation for the overall approach to EO can be described as moderate. When examining the individual dimensions of EO, the strongest relationship should be identified with autonomy, and the weakest with competitive aggressiveness (Tab. 1).

**Table 1.** Gamma correlation between potential for entrepreneurial orientation and entrepreneurship intentions of students in Poland ( $p \leq 0,05$ )

	proactiveness (P)	autonomy (A)	competitive aggressiveness (CA)	innovativeness (I)	risk taking (R)	entrepreneurial orientation (EO)
entrepreneurship intentions	0,354	0,400	0,162	0,299	0,319	0,368

**Conclusions**

Starting a new business is a process that begins when a person develops and intends to engage in entrepreneurial activity (Wurthmann, 2014) and ends when that person creates and runs a business. An important role in this process is the education system, which can provide students-potential entrepreneurs with knowledge and skills, but also generate the willingness to start a business. This applies to all types of studies and courses.

The conducted research showed that entrepreneurial attitudes and traits clearly favor the willingness to set up one's own business. Hence, the education of students

should be focused on intensifying/highlighting those features that cause entrepreneurial orientation in future life.

Research is not free from limitations. The main limitation here is the lack of representativeness of the research sample, as well as the selective analysis of individual dimensions of EO.

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