

## COMPETENCY MODELS IN BUSINESS STUDENTS AND BUSINESS OWNERS: A CROSS-NATIONAL CASE STUDY OF CZECHIA AND ROMANIA

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**Abstract.** *Purpose* – The main goal is to compare and contrast the expectations of millennials, which skills will be needed for business in contrast to the entrepreneurial experience of the focus group of eight successful entrepreneurs from each country.

*Research methodology* – A cross-national case study is made, based on two focus groups per country (80 business students and eight entrepreneurs from the Czech Republic and Romania), qualitative research findings are presented.

*Findings* – Two competency models were evaluated, when the Romanian model is mostly motivation-oriented and the Czech model is performance-oriented.

*Research limitations* – Future studies should use an extended research sample and compare various methods for teaching entrepreneurship to students from different study areas and compare the impact of education on their mind-set before and after business courses finish.

*Practical implications* – The development of competency models in cooperation with experienced entrepreneurs would have the potential to increase students' willingness to start up and prepare tailored business education. Possibility to create own generic models.

*Originality/Value* – The originality could be seen in comparison of two focus groups – students and entrepreneurs – which have not been done before from a conflict comparison point of view.

**Keywords:** competencies, millennials, entrepreneurship, employment.

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## **Introduction**

The youth labour market is closely connected with the concept of heterogeneous labour market structure (Ahmad et al., 2010; Perciun & Balan, 2013; Bell & Blanchflower, 2011; Šebestová et al., 2018, 2019; Vodá et al., 2021). A biannual study by the OECD (OECD & European Union, 2019) showed that more than 40 per cent of young people (20–29 years old) were interested in starting up but never did so. More than adults reported that they did not have entrepreneurial skills. These studies show that while young people are willing to start a business, they are not starting.

Surprisingly, according to the Labour Force Survey (Eurostat, 2019), Romania reports 10.5% of unemployed young people compared to 4.5% in the Czech Republic. These figures make both countries an exciting contrast, although they have similar educational systems and economic development from the central plan economy. Both have pretty similar historical roots – both were a part of economies in transformation after an “open” economy replaced the communist regime, and both are new members of the European Union accepted in 2004 (Czechia) and 2007 (Romania).

The main goal is to compare and contrast the expectations of young people, which skills will be needed for the success of start-up businesses. Primary and secondary data analysis was provided to find similarities or differences in those countries as a reason for the different development of youth entrepreneurship.

The paper contributes to the current state of research by conducting a literature review that connects competencies and expectations with business start-up. Therefore, implications and valuable recommendations for practitioners are provided based on preliminary research results.

Considering the results of the paper and the size of the student and entrepreneur sample, we should point out the limitations of the study: first, the sample size consists of only 80 students and eight entrepreneurs; second, sample composition favoured students studying a business degree. The development of competency models in cooperation with entrepreneurs would have the potential in entrepreneurship education to increase the student's self-confidence to start a company.

## **1. Review of the literature and research subject**

We must first define the target group of students who belong to the group of millennials and then define the competencies that include not only managerial skills for business – they include knowledge, skills, and behaviour.

### **1.1. Millennials and self-business activity**

Active entrepreneurial activities for each age group are determined not only by the generations in which they were born, but also by the significant role they play in their environment, values and motivations. Each generation is different in behaviour, sometimes it is difficult to understand it and motivate it properly (Eken, 2017) not only to start up but also to be

a “good” employee. These days, most entrepreneurs as potential employees come from the generation of Baby Boomers and Generation X, when Generation Y, mostly called “Millennials”, is on the supply-side of the labour market.

When most entrepreneurs came from two generations (mainly Baby Boomers and Generation X), it is necessary to define their primary values, and they will probably expect the same behaviour from future employees (Generation Y). Baby boomers are highly motivated in making a “stable career” with salary, title, and recognition. They are also an independent, goal-oriented generation because they believe in power, responsibility, and authority in the workforce. Rather than that, Generation X is characterized as pessimistic, independent, self-reliant, and sceptical. They enjoyed the first computers or the Internet, making them more adaptable than other generations (Gorman et al., 1997; Lancaster & Stillman, 2002; Eken, 2017). Millennials at work are multitaskers, and they can use their skills and talents simultaneously to learn new things according to their personal skills. In their future job, Millennials expect supervision and mentoring. They seek to be graded, evaluated, and ranked (Lancaster & Stillman, 2002; Kamau et al., 2014; Twenge et al., 2012). They need to develop an entrepreneurial spirit because they have a strong self-starter mentality. They prefer to work without micromanagement because they prefer to work in open and co-working spaces (Maize, 2017; Visser, 2018). The tension between highly experienced Baby Boomers approaching retirement and the ambitious, technologically educated, and collaborative millennials who will replace them has been a subject of intense discussion.

## **1.2. Competency models in entrepreneurship practice**

In general, competences are often reviewed in literature and are primarily dealt with differently by researchers in terms of their definition of meaning, composition, and achievement. According to Pickett (1998), it is the sum of the experience, knowledge, abilities, values and attitudes we have acquired during our lives. These traits include general or specific knowledge, physical and intellectual abilities, personality traits, motives, and self-knowledge (Klemp & McClelland, 1986; Šebestová & Rylková, 2011; Bercu & Lupu, 2020).

Generally, a “pack of competencies” is knowledge, networking, customer orientation, strategic thinking, risk taking, negotiation, integrity and action. They could be divided into hard skills, which can be learned and improved, they can be measured relatively easily (Bednář, 2012), in the opposite of soft skills, which are mostly are interpersonal and intrapersonal skills and they objectively identified with a person’s Emotional Intelligence Quotient (Iland, 2013). In particular, knowledge is closely linked to innovation, export direction, and networks. (Moen, 1999; Braunerhjelm, 2008; Matthews & Brueggemann, 2015).

Competences can also be described as the behaviour of individuals to achieve a goal (Mitchelmore & Rowley, 2010; Markman, 2007). A large number of authors try to define competencies at their discretion and use different justifications. The origins of the competence model are the EntreComp Competency Model (Bacigalupo et al., 2016), which places the main emphasis on business resource and optimization. Table 1 summarizes the work of academics according to key terms used to describe competencies.

Table 1. A summary of competency definitions (source: authors review)

Competencies definition	Authors
Experience, knowledge, skills, values, attitudes	Pickett (1998)
Properties, knowledge, abilities, personality traits, motives, self-knowledge	Kanungo and Misra (1992)
Behaviour, attitudes, personality characteristics, knowledge, skills	Mitchelmore and Rowley (2010)
Skills / abilities, knowledge / experience, attitudes / personality traits	Bartlett and Ghoshal (1997)
Basic, personnel, managerial competencies	Abraham et al. (2001)
Skills	Brightman (2004), Hofener (2000)
Skills versus competency	Kanungo and Misra (1992), McKenna (2004)
Characteristics, knowledge, skills, personality traits	Man et al. (2002)
Knowledge, motives, features, own images, social roles, skills	Bird (1995)
Traits, personality, attitudes, social roles, self-knowledge, skills, knowledge, experience	Man and Lau (2005), Bercu and Lupu (2020)
A combination of hard and soft skills	Šebestová and Lejková (2020), Šebestová et al. (2018)
Successful entrepreneurial role models	Boldureanu et al. (2020)
Entrepreneurial and managerial competencies	Penchev and Salopaju (2011)
Innovation, knowledge management, and intellectual capital development	Popescu (2020) Audretsch et al. (2008)
Systemic, Professional, and Disciplinary competencies	Ferreras-Garcia et al. (2021)

This review shows a different mixture of competence definition and growth of interest in entrepreneurial competencies. More recent authors propose a concrete set of hard and soft skills which could be used in entrepreneurial practice.

*Soft versus hard skills.* Soft skills, or so-called soft skills, do not only represent communication skills. These competencies are primarily personal and interpersonal skills and are closely related to EQ, i.e. the individual's emotional quotient (Bradberry & Greaves, 2007; Šebestová et al., 2018). It is a "package" of abilities and skills related to personal development, which mainly includes socialising, communication and language skills, personal habits, assertiveness, friendly, and last but not least, happy relationships with other people. Therefore, soft skills can be applied not only in professional life, but also in personal and family life. Hard skills can be acquired and improved through education and they can be measured relatively easily (Jogaratnam, 2002).

*Competency models.* The competency model is created based on the identification of competencies. It is a set of competencies that are important for the management of the company. The business competence model should meet two aspects. *One aspect is a description of the types of competency.* In essence, different entrepreneurial competencies are associated with both different aspects of human behaviour and the individual's ability to exhibit such behaviour. *The second aspect is the level of competencies.* The existence of each competence is

at different levels within the individual. Therefore, each of the competencies can exist within the individual at different levels. On the unconscious level, there are the individual's motives in contrast to the self-assessment that exists on the conscious level. (Boyatzis, 1982; Šebestová et al., 2019; Šebestová & Lejková, 2020). The success of an entrepreneur depends mainly on their attitude and on the competencies that relate to them (Frederick et al., 2007; Lukeš & Zouhar, 2016; Von Graevenitz et al., 2010; Stokes et al., 2010; Schneider & Albornoz, 2018).

In light of the literature review above and in line with the objective of this article, the key research questions of this article are:

- RQ1. What are the characteristics that entrepreneurs use the most to choose the competency model?
- RQ2. Are there differences between competence models within Czechia and Romania?

## 2. Research methodology and description of country data

Our previous research confirmed the differences between entrepreneurship theory and the expectations of the Millennials when comparing these two groups. In this research phase, improved methods were implemented to integrate the same variables into the competency model and become internationally comparable. Mixed research methods have been used for that case studies, when a fully mixed sequential dominant status research design was used. It means that in the first phase a qualitative approach was used, then a form of questionnaires was applied, but qualitative evaluation is predominant (Leech & Onwuegbuzie, 2009), when main variables were in a line with Blenker et al. (2014) and Barba-Sánchez et al. (2016) or Boldureanu et al. (2020) and Cardenas-Gutierrez et al. (2021). Secondary country data analysis about young entrepreneurs was performed before primary research.

### 2.1. Primary research design

This research was designed in three phases (see Figure 1). The first two phases are connected with data collection from two different groups (entrepreneurs as business owners and the students), and final phase was dedicated to the development of competence models. Both phases were implemented from December 2019 to March 2020, when personal meetings were possible.

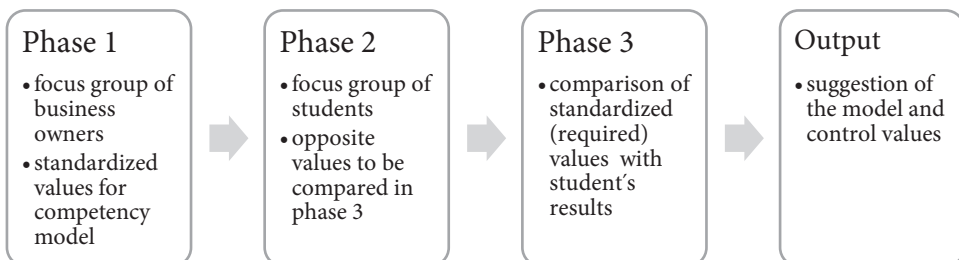


Figure 1. The research framework

**Phase One.** A checklist was introduced for focus group evaluation (see Appendix). To be able to compare within countries, a table with all variables has to be standardized. A Likert scale was used for consensus evaluation to obtain information about the importance of the competence model (presented by mode value). In the first step, eight entrepreneurs were randomly selected for cooperation to meet the criteria for the focus group discussion (Mishra, 2016).

In that meeting, we introduced a list of items based on theoretical review introduced in Table 1, divided into following dimensions: (a) motivation to start up, (b) knowledge of processes, and (c) knowledge of financial issues. The responses were recoded to the Likert scale (1 – strongly agree, 5 – strongly disagree).

Both samples consist of four female and four male entrepreneurs (in the role of business owners). The average age was 41 to 55 years (37.5%) and they hold a university degree of 62.5%. A significant descriptive factor was their business experience; most of them spent more than ten years in business (75%).

In the second step, the panellist evaluation weights developed to summarize each competency group in one number. The evaluation, by panel consensus, was according to the Likert scale as:

- Likert scale 1 – I strongly agree, the weight of 1.
- Likert scale 2 – I agree, the weight of 0.75.
- Likert scale 3 – I do not know, the weight of 0.5.
- Likert scale 4 – I disagree, the weight of 0.25.
- Likert scale 5 – I strongly disagree, the weight of 0.05.

Each variable was planned to be finally recalculated as weight multiplied by scale in phase three.

**Phase Two.** The same checklist was introduced for a student evaluation focus group. The size of the group was 80 in each university (one in Czechia / one in Romania) when just one condition was set: a student is not involved in business, and it is studying business economics or entrepreneurship. This research was primarily performed quantitatively when students tick their preferences into personal competency checklists. Data collection was done anonymously without personal data collection.

Due to diversity of millennials profiles from Delloite (2018a) study, we expected quite different final competency model requirements in the phase three.

**Phase Three.** Researches developed competence models and evaluate significant ties between variables, using Spearman correlation in p-value of 0.05.

Output: The standardized value for each variable will be possible to use for the next research.

## 2.2. Cross-country comparison

A group of millennials represents a significant group of potential entrepreneurs in the future. The Labour Force Survey (2019) indicated that self-employed young people in the Czech Republic were 9.1% of their population when the unemployment rate was 4.5% (versus Romania 11.3% self-employed young people and 10.5% of youth unemployment). It seems that a country with a higher youth unemployment rate has a higher self-employed young generation, mainly necessity driven entrepreneurs (Dvouletý et al., 2018).

In the population of adult self-employed in the Czech Republic, the situation is mostly stable (18.8% of the total population). The number of young men in the entrepreneurial population is declining (from 11.6% in 2009 to 7.9% in 2018). Opposite to that, Romanian statistics do not offer evaluation according to male and female entrepreneurship. The youth entrepreneurship rate is lower than in the Czech Republic (4.7%), which is correlated with the total active population of adults (6.93% in 2018). When the proportion in education groups in the Czech Republic is mostly the same in both groups (adults and youth), at least 68% with secondary education and 26% with tertiary education, in the Romanian case, employees have a higher level of education than active entrepreneurs – most of them 42% have primary education completed to 52% of secondary educated and 6% with university level (Eurostat, 2019).

### 2.2.1. Young millennials in the Czech Republic

Czech millennials seek work on job portal sites to find out large employers. Consistent with that, the Deloitte survey (2018a) confirmed most of the previous findings. Significant is the growth of millennials who want to move abroad (75.3%), which is alarming for domestic employers to get millennials into their companies. On the other hand, the growth is in their expectation in work position initially as most of them want to be managers, with almost 44% of those surveyed telling us they are aiming for either a mid-level or a high-management position. Notable is that they plan to be managers, but on the other side, they do not like to take a risk to establish a company (7.6% only). Second, they believe that their personal development is only in the company's hands, and they are not personally responsible for taking care of their competence (53%). In the case of generation diversification, millennials want to work in a diverse environment, particularly in the age diversity, when 94% view older colleagues as a source of valuable knowledge for those who are younger and less experienced, what is a positive way, how to deal with multigenerational teams.

### 2.2.2. Young millennials in Romania

A share of 43.5% of young Romanian university graduates want to work in a big corporation, and only 17.3% want to become entrepreneurs. They prefer to be educated, as 75% of Romanian students wish to continue their education to a post-graduate level, compared to 39% in Central and Eastern Europe (Furnea, 2018), because they feel that they would have more skills which will be appreciated by potential employers (analytical skills, decision-making skills, teamwork). Millennials prefer teamwork or are active in CSR activities to have a good relationship with the company and feel the social impact of their work (Business Review, 2017). Against that, Stamule and Todea (2017) described them as ethnocentric, when they prefer foreign goods than domestic product, which influence their motivation to work for multinational companies.

Unlike Czech millennials, they prefer to be an expert in their field, and they are hard workers. The primary motivation to work for the company is not a salary for Czech millennials, but a space for development (59.7%). In addition, they reported being more entrepreneurial (17.3%). The same problem is that they see a job opportunity abroad and in a large company (Deloitte, 2018b).

### 3. Results of cross-national evaluation

The competency model is created based on the identification of competencies. It is a set of essential competencies for the company's management, both from the point of view of entrepreneurs and from the point of view of students. The first part presents the focus group of entrepreneurs (in the role of business owners) from both countries, their evaluation of the three groups of competencies that they would expect from millennials to do business successfully or to motivate them to start their own business.

#### 3.1. Czech and Romania business owners' competence model

As already mentioned, the competency model consists of three parts and each of the groups chose the importance of the individual element proposed by the compromise method. Tables 2 to 4 will present the individual sections related to motivation, financial indicators, and business processes.

Table 2. Motivation to start-up competencies (source: survey data, compromise solution values, differences are in bold)

Factor	Czechia	Romania
Financial stability of the family	1	1
Self-employed family members	2	2
Friends who have own business	4	2
Education	2	1
The desire for freedom and success	1	1
Social background from which I came	4	2
Personal attitudes to life (working longer, being reliable, etc.).	1	1
Practical skills related to business	1	1

Table 2 shows the fundamental differences in the perception of business motivation, where panels of entrepreneurs (in role of business owners) differ in three areas, namely the influence of friends, social background, or education. Influential entrepreneurs consider education for business to be less critical (mark 2), but there is a big difference in the influence of social background or friends, who do not consider it at all as motivators or drivers of starting a business. Therefore, according to their attitude, it could be missing in the Czech competence model.

In the next part, indicators related to financial issues and the need for their use were evaluated (Table 3). Differences were found in four indicators, where two according to the evaluation of Romanian entrepreneurs would not even be in the competency model (mark 4 – claims, stock planning). In other cases, the mark differed slightly (costs and productivity); otherwise, the evaluation was the same.



Table 3. Financial issues – importance (source: survey data, compromise solution values, differences are in bold)

Factor	Czechia	Romania
Profit	1	1
Costs	1	2
Business outcomes	1	1
Cash-flow	2	2
Profitability	1	1
Liquidity	2	2
Commitment structure	2	2
Types of claims	2	4
Stock planning	2	4
Sales	1	1
Quality	1	1
Planning working time	2	2
Productivity	2	1

The third part (Table 4) focused on critical processes, revealed what is not popular or used in business practice. In both panels, both in Czech and Romanian, we can observe agreement on the significance of processes up to three of them, which Czech entrepreneurs would not include in their competencies, namely non-standard forms of employment, outsourcing, and business agenda (mark 4).

Table 4. Key processes for business – hard skills (source: survey data, compromise solution values, differences are in bold)

Factor	Czechia	Romania
Non-standard forms of employment (home office, part time jobs)	4	2
Outsourcing	4	2
Personnel processes	2	2
Internal logistics	2	2
Reverse logistics	4	4
Distribution logistics	2	2
Recovery of machinery (investments to machinery, technology)	2	2
Maintenance	2	2
Business agenda	4	2

*Those values and results (Tables 2 to 4) are treated in the final step as the level requested for each competency in the national model.*

To evaluate the differences in the thinking of business owners, the relationships between individual evaluations were compared. Their relationship was expressed using the Spearman correlation coefficient at the level of significance  $\alpha = 0.05$ .

Although Czech entrepreneurs did not prefer a business agenda or the influence of social background on future business in the model, these links nevertheless proved to be statistically significant in the model in connection with other variables. Social background has a positive correlation with personnel processes (0.609), maintenance (0.660), and business agenda (0.656). This means an influence of social background on business behaviour. In case of Romanian business owners, three essential groups of ties were found based on examples of family members, working time planning, and logistics. The members of the entrepreneurial family as an example influenced the relationship with friends, who provided the business (0.954) and their attitude toward sales (0.629) and negatively toward reverse logistics (-0.698).

### 3.2. Cross-national student competency model

The same process was repeated for students who individually decided on the importance of individual hard and soft skills for business and the necessary knowledge of business economics. Tables 5 to 7 present differences in their evaluation.

In the motivation (Table 5), four differences were noted, two insignificant (only a slight change in preference, mark 2) in the area of education and financial stability of the family. A very opposite reaction was observed among Czech students when evaluating the impact of social environment or friends on business, where items would not play a significant role in the model (mark 4).

Table 5. Motivation to start-up – A student view (survey data mode values, differences are in bold)

Factor	Czechia	Std.dev	Romania	Std.dev
Financial stability of the family	2	1.067187	1	1.594261
Self-employed family members	2	1.171863	2	1.414883
Friends who have own business	4	1.368672	2	1.560036
Education	2	1.142609	1	1.197377
The desire for freedom and success	1	0.986013	1	0.977008
Social background from which I came	4	1.274074	2	1.488593
Personal attitudes toward life (working longer. Being reliable. ...)	1	0.866025	1	1.0234
Practical skills related to business	1	1.01977	1	0.98377

In financial issues, Czech students are more profit-oriented than Romanian students (grade 1, four indicators), while Romanian students exclude types of claims and stock planning (grade 4) from the model. Otherwise, the evaluations are identical.

The area of key processes offers a very controversial comparison (Table 7). Differences were found in most indicators. Although in most cases, there was only a slight deviation in the evaluation (marks 1 and 2) in two cases, opposite opinions on the given competence were found. These are nonstandard employment and reverse logistics forms, which Romanian students would completely exclude from the model (mark 4).

Table 6. Financial issues – A student view (survey data mode values, differences are in bold)

Factor	Czechia	Std.dev	Romania	Std.dev
Profit	1	0.433013	2	0.658568
Costs	1	0.45453	2	0.950478
Business outcomes	1	0.406116	2	1.197377
Cash-flow	1	0.702179	2	0.913908
Profitability	1	0.433013	1	0.889757
Liquidity	2	1.01977	2	1.223197
Commitment structure	2	1.053269	2	1.252271
Types of claims	1	1.067187	4	1.297579
Stock planning	1	0.978058	4	1.436141
Sales	1	0.866025	1	1.153059
Quality	1	0.865022	1	1.000947
Planning working time	2	0.953794	2	1.07485
Productivity	1	0.745356	1	0.795346

Table 7. Key processes – A student view (survey data mode values, differences are in bold)

Factor	Czechia	Std.dev	Romania	Std.dev
Non-standard forms of employment	2	1	4	1.386488
Outsourcing	2	0.934486	2	0.819969
Personnel processes	1	0.840593	2	0.97215
Internal logistics	1	0.702179	2	1.253027
Reverse logistics	2	1.165922	4	1.197377
Distribution logistics	1	0.702179	2	1.225518
Recovery of machinery (investments to machinery. technology)	1	0.862007	2	1.245446
Maintenance	1	1.306368	2	1.202113
Business agenda	1	1.414214	2	1.231684

To evaluate the differences in entrepreneurial thinking, the relationships between individual evaluations were compared. Their relationship was expressed using the Spearman correlation coefficient at the level of significance  $\alpha = 0.05$ .

By evaluating the answers of Czech students, we concluded that they show more focus on the performance of the company, where significant statistical links were demonstrated with competencies in the field of commitment structure, business agenda, and logistics. A commitment structure has a positive relationship with the types of claim (0.720) and “planning working time” (0.676). This process continues by the influence of planning working time on liquidity vs. (0.660). When students prefer to use the business agenda, two connected variables were found such as stock planning (0.570) and maintenance (0.712). Finally, a logical link

between internal and reverse logistics was confirmed (0.659). Unlike Czech students, Romanian students showed a connection between motivation and other business factors, especially the influence of the role of financial stability of the family and the desire for their business success. Financial stability of the family has a positive relationship with friends who have their own business as a positive influence (0.536), but negative ties were confirmed with practical skills related to business (-0.483), a need to find their own path to success. Costs (-0.469) and personnel processes (-0.435) also indicate the need for freedom, without any influence on family.

### 3.3. A conflict between expectation and business experience

In the last step, the results were compared internationally and between students and entrepreneurs. To standardize the significance of individual evaluations, they were assigned to individual weight values (WS) according to the explanation in the section 2.1.

#### 3.3.1. Development and evaluation

The model of Czech entrepreneurs *as business owners* (ENT) and students (S) highlights areas where both groups differ in their views on the issues under consideration. As can be seen in Table 8, the most different view is on business processes, where students focus on lean business, that is, not to waste time on activities that are not directly related to their own business and use outsourcing or cooperation with others through alternative forms of employment (which entrepreneurs rated by a mark 4).

Table 8. Evaluation of the Czech competencies model (source: survey data mode values, differences are in bold, WS/S- weighted score students, WS/E- weighted score entrepreneurs)

Factor	ENT	WS/E	S	WS/S		ENT	WS/E	S	WS/S
Start-up – factors (SUp)					Key processes (KP)				
Financial stability of the family	1	1	2	1.5	Non-standard forms of employment	4	1	2	1.5
Self-employed family members	2	1.5	2	1.5	Outsourcing	4	1	2	1.5
Friends who have own business	4	1	4	1	Personnel processes	2	1.5	1	1
Education	2	1.5	2	1.5	Internal logistics	2	1.5	1	1
The desire for freedom and success	1	1	1	1	Reverse logistics	4	1	2	1.5
Social background from which I came	4	1	4	1	Distribution logistics	2	1.5	1	1
Personal attitudes to life	1	1	1	1	Recovery of machinery	2	1.5	1	1
Practical skills related to business	1	1	1	1	Maintenance	2	1.5	1	1

End of Table 8

Factor	ENT	WS/E	S	WS/S		ENT	WS/E	S	WS/S
	-	-	-	-	Business agenda	4	1	1	1
Final score 1	2	2.12	1.12	1.18	Final score 2	1.53	1.23	1.26	1.11
Financial issues (F)									
Profit	1	1	1	1	Commitment structure	2	1.5	2	1.5
Costs	1	1	1	1	Types of claims	2	1.5	1	1
Business outcomes	1	1	1	1	Stock planning	2	1.5	1	1
Cash-flow	2	1.5	1	1	Sales	1	1	1	1
Profitability	1	1	1	1	Quality	1	1	1	1
Liquidity	2	1.5	2	1.5	Planning working time	2	1.5	2	1.5
Final score 3	2.88	1.33	1.27	1.16	Productivity	2	1.5	1	1

Standardization and summarization of the individual parts of the model were performed using the geometric mean of the individual evaluations to obtain a single mark for each area. Moreover, by this, we compared the importance of individual areas for both groups.

The behaviour of individual groups can be written according to individual scores, when entrepreneurs have  $KP (1.23) \leq F (1.33) \leq Sup (2.12)$ , which means that Czech entrepreneurs are mostly performance-oriented. In contrast to them, the students' competency model prefers a balanced model in each area  $KP (1.11) \leq F (1.16) \leq Sup (1.18)$ , but still we could still evaluate it as performance or process-oriented.

### 3.3.2. Development and evaluation

In contrast, the Romanian model does not show significant differences in opinion on the competencies presented, and many do not differ in the opinion of entrepreneurs and students. Motivation factors are identical, and minor differences are only in the processes and key financial indicators (Table 9).

Table 9. Evaluation of Romanian competencies model (source: survey data mode values, differences are in bold, WS/S- weighted score students, WS/E- weighted score entrepreneurs)

Factor	ENT	WS/E	S	WS/S		ENT	WS/E	S	WS/S
Start-up – factors (SUP)					Key processes (KP)				
Financial stability of the family	1	1	1	1	Non-standard forms of employment	2	1.5	4	1
Self-employed family members	2	1.5	2	1.5	Outsourcing	2	1.5	2	1.5
Friends who have own business	2	1.5	2	1.5	Personnel processes	2	1.5	2	1.5
Education	1	1	1	1	Internal logistics	2	1.5	2	1.5

End of Table 9

Factor	ENT	WS/E	S	WS/S		ENT	WS/E	S	WS/S
The desire for freedom and success	1	1	1	1	Reverse logistics	4	1	4	1
Social background from which I came	2	1.5	2	1.5	Distribution logistics	2	1.5	2	1.5
Personal attitudes to life	1	1	1	1	Recovery of machinery	2	1.5	2	1.5
Practical skills related to business	1	1	1	1	Maintenance	2	1.5	2	1.5
	-	-	-	-	Business agenda	2	1.5	2	1.5
Final score 1	1.37	1.18	1.37	1.18	Final score 2	2.22	1.44	2.44	1.38
Financial issues (F)									
Profit	1	1	2	1.5	Commitment structure	2	1.5	2	1.5
Costs	2	1.5	2	1.5	Types of claims	4	1	4	1
Business outcomes	1	1	2	1.5	Stock planning	4	1	4	1
Cash-flow	2	1.5	2	1.5	Sales	1	1	1	1
Profitability	1	1	1	1	Quality	1	1	1	1
Liquidity	2	1.5	2	1.5	Planning working time	2	1.5	2	1.5
Final score 3	1.84	1.19	2	1.26	Productivity	1	1	1	1

The marks were standardized for further comparison. Business preferences in the model we could evaluate as  $SUP (1.18) \leq F (1.19) \leq KP (1.44)$ . It indicates a preference of motivated entrepreneurs, rather than performance. The students' point of view copies the general entrepreneurial meaning of  $SUP (1.18) \leq F (1.26) \leq KP (1.38)$ .

## Discussion

Czech entrepreneurs would prefer in the competency model (according to RQ1) mostly financial indicators such as profit, costs, business outcomes, sales, quality and profitability to the competence model. In second place as motivational factors they prefer the desire for freedom and success, personal attitudes to life, and practical skills related to business. In line with that, Romanian entrepreneurs (following RQ2) prefer financial stability of the family, education, the desire for freedom and success, personal attitudes to life, and practical skills related to business. In the area of business economics, they prefer to include profit, profitability, sales, quality, and productivity.

The international comparison (CZ / RO) shows a difference in the preferences of individual types of competencies, where the Romanian focus group prefers motivation to do business, which supports the results of the OECD survey on entrepreneurship out of neces-

sity in case of high youth unemployment and high involvement in entrepreneurship (OECD & European Union, 2019; Dvouletý et al., 2018). Furthermore, the finding that education for entrepreneurship makes sense and impacts young people's willingness to start a business has been confirmed, supported by the Boldureanu et al. (2020) and Šebestová et al. (2019) studies. Due to the developed standardization of competence evaluation is possible to continue in other cross-national studies. We also confirmed the study of Cardenas-Gutierrez et al. (2021), where operations and Marketing Competencies were the most important in the study of Spain (N = 237), unfortunately in our study financial indicators were more important than in the mentioned study.

## **Conclusions**

The conclusions of the study can be divided into three areas of practical use. The first is the perspective of policy makers. Thanks to this analysis, it is possible to find out which factors are considered by entrepreneurs (in the role of owners) to be important for entrepreneurship and can motivate them to adapt entrepreneurship education so that they can get as close as possible to the requirements of practice. The second area is the individual point of view. Thanks to the checklist, everyone can easily carry out a self-evaluation and find their own level of business competencies. By consulting entrepreneurs with long experience, it can be said that they can help personal development and strengthen the commitment to entrepreneurship. The third dimension can be the evaluation of employees by the entrepreneur. Thanks to the recommended values of the model, as well as the method of its creation, he can set his own set of criteria with an evaluation scale and the recommended value that the employee should have in the selected position. Simplicity and replicability is just a big added advantage of these generic competency models.

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## **Author contributions**

JDS and AIV conceived the study and were responsible for the design and development of the data analysis. RK, AIV and AMB were responsible for data collection and analysis. JDS and AIV were responsible for data interpretation. JDS, RK wrote the first draft of the article. AIV and AMB revised the paper and added conclusion. Final version was made by JDS, AIV, RK and AMB.

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All authors declare that they do not have any competing financial, professional, or personal interests from other parties.

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## APPENDIX

### A checklist of competencies

Evaluate how important are those competencies for business processes and economics. Please use the scale from 1 to 5 (1 – I am strongly agree to 5 – I am strongly disagree).

#### Motivation to start-up

Factor	Your score
Financial stability of the family	
Self-employed family members	
Friends who have own business	
Education	
The desire for freedom and success	
Social background from which I came	
Personal attitudes to life (working longer, being reliable, etc.).	
Practical skills related to business	

#### Financial issues

Factor	Your score
Profit	
Costs	
Business outcomes	
Cash-flow	
Profitability	
Liquidity	
Commitment structure	
Types of claims	
Stock planning	
Sales	
Quality	
Planning working time	
Productivity	

**Key processes**

Factor	Your score
Non-standard forms of employment	
Outsourcing	
Personnel processes	
Internal logistics	
Reverse logistics	
Distribution logistics	
Recovery of machinery (investments to machinery, technology)	
Maintenance	
Business agenda	