International Journal of Instruction e-ISSN: 1308-1470 • www.e-iji.net



October 2025 • Vol.18, No.4 p-ISSN: 1694-609X pp. 441-458

Article submission code:

Received: 00/00/2025 Revision: 00/00/2025 Accepted: 00/00/2025 OnlineFirst: 00/00/2025

Competence Models as Determinants for Shaping Educational Content for Managers and Employees in the Education Sector

Miroslava Kubičková

	University kubickova@k	Ružomberok,	Faculty	of	Education,	Slovakia,
		Ružomberok,	Faculty	of	Education,	Slovakia,
Zuzana Go		D × 1 1	E l	c		C1 1

Catholic University in Ružomberok, Faculty of Education, Slovakia, zuzana.goncarova@ku.sk

Mária Vrábliková

Corresponding author, Catholic University in Ružomberok, Faculty of Education, Slovakia, maria.vrablikova@ku.sk

Milan Droppa

Catholic University in Ružomberok, Faculty of Education, Slovakia, milan.droppa@ku.sk

This study explores the role of competence models in determining the focus and content of education for managers and employees within the education sector. Based on a sample of 436 respondents in Slovakia, data were collected using a self-developed questionnaire. The study applied statistical methods to assess differences in the perception of managerial competencies based on gender, position, and work experience. Findings indicate that gender influences perceptions of technical, project, and innovative competencies, while managerial level and experience showed no significant differences. The results inform recommendations for integrating competence-based approaches into professional development programs, with specific emphasis on coaching, creativity development, and personal typology analysis using tools like the Wealth Dynamics model.

Keywords: competence model, education, innovation, management, managers, shaping educational content, education sector

Citation: Kubičková, M., Ďurajdová, D., Gončárová, Z., Vrábliková, M., & Droppa, M. (2025). Competence models as determinants for shaping educational content for managers and employees in the education sector. *International Journal of Instruction*, *18*(4), 441-458.

INTRODUCTION

In the 21st century, service-based economies increasingly rely on intangible assets such as human capital, creativity, and innovation. Within this shift, the education sector must adapt by developing competencies that go beyond technical knowledge. Competence models serve as tools for identifying, cultivating, and aligning skills with organizational goals, particularly for those in managerial roles. The properties of the services provided (and the creativity contained in them) are difficult to measure exactly, so new concepts are created at the corporate level, such as the perspective of learning and growth within the BSC and at the regional level the concept of the creative economy. Important and developing services include educational services (Horeháj, 2005; Štefko & Krajňák, 2013; Gončárová, Piteková & Vrábliková, 2020).

Globalization, the growth of new educational institutions, the high pace of technological changes, the amount of available information and the growth of innovation are just some of the determinants that significantly affect the success of an educational institution on the market. Today, it is not enough to have only modern technologies, but it is necessary to pay attention to human resources, which are creators of added value. Some are acquired, others are acquired through socialization, others are acquired through practice, age. Due to the high work pace and the rapid development of technologies, certain abilities (competences) are needed in the educational process for each job position (Ivanička et al. 2014; Abidemi, Halim, Alshuaibi 2017; Comunian et al., 2021).

About importance of human capital, its creativity and competences also says the new trend, which is the new part of managerial concept Industry 5.0 – the Human-centricity. It emphasizes the wellbeing of individuals, including their physical and emotional health, and views their employment as an investment rather than a cost. The Fifth Industrial Revolution will connect people with robots to take advantage of human ingenuity and brainpower to speed up processes by fusing workflows with intelligent technologies. Designing human-centered smart environments that promote human wellness while retaining production effectiveness is one of Industry 5.0's most pressing concerns (Nahavandi, 2019; Coronado et al., 2022; Battini et al., 2022; Xu et al., 2021).

Literature Review

From the point of view of etymology, the term "competence" means according to Armstrong (2022) the "duties, powers and responsibilities of employees to fulfill goals. On the basis of professional and psychosocial competences, it is possible to create a certain framework of expectation of what people must be able to do if they are to achieve the results required by the workplace". Each individual has certain personality characteristics and naturally develops his abilities (Lozoviy, 2007).

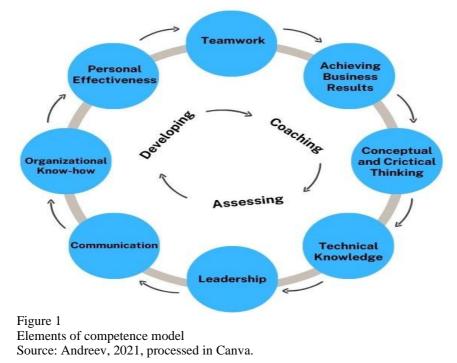
The words "competence" and "competency" need to be perceived differently. Most foreign researchers associate the concept "competence" with requirements for human activity ("what can people do?"), and the concept "competency" is associated with personality traits and its behaviour ("how can people do?") (Wen & Korsun, 2023). Also according to the quality management standard ISO 9001:2015, article 7.2. the

organization must determine the required competences of the persons performing the tasks and must ensure that these persons are competent on the basis of appropriate education, preparation, training and experience.

Competence model

The competence model (Droppa, 2012; Kalyani, 2016) enables the exact definition of professional and personal requirements (competences) for a certain work performance (job position). It is the result of identifying the competences of pedagogical workers, which together create the prerequisites for successful performance in a specific educational environment. It describes a specific combination of knowledge, skills and other personality characteristics. The existence of competence models also facilitates the recruitment of employees in terms of the design of educational and development activities (Šajbidorová, Lušňáková & Hrdá, 2018).

The competence model is a guideline developed by a Human Resource department that sets out the specific skills, knowledge and behavioural requirements that enable an employee to perform their job successfully. A job description and a competency model sound almost alike because they both seem to describe what an employee is required to do in the job. What is the difference? The difference is that a job description is a general summary of the skills required for a job, whereas a competency model provides specific behaviours that an employee must do on the job in order to be successful (Figure 1, Andreev, 2021)



Human capital alone, even if highly valuable, does not guarantee the success of the organization. To be successful, human capital needs to be energized, i.e. to direct its use for the set goals. Among the main tasks of the teacher-manager is the search for the most suitable combination of human resources with interest obligations and constantly fine-tuning this combination (Vágner, 2006; Janošková & Ubrežiová, 2021). For the purposes of this article, the following competences were chosen by the authors - technical, relational (social maturity), conceptual, project and innovative.

Technical competences

Technical competences can be defined as a set of skills and knowledge that a teachermanager uses to perform practical tasks. They are learned skills that are acquired and developed through practice, repetition and education. They refer to the expertise required to perform complex activities, tasks and processes. A manager-pedagogue at the line level of management (class teacher) should control e.g. methods of making plans and their evaluation, principles and techniques of the decision-making and control process, delegation, selection of the most suitable candidate for the job in question based on his professional profile and the profile of his psychosocial competences, effective management of the change process (Nasir, Ali & Noordin, 2011; Andreev, 2021).

From the point of view of time management, he should control the planning of available time, determine the priorities of tasks, recognize situations when it is possible to delegate tasks and reject tasks that cannot be completed on time. According to the most important technical competences, we include: Collect, analyze and organize information, Communicate ideas and information, Plan and organize activities, Work with others and in teams, Use mathematical ideas and techniques, Solve problems and Use technology (Nasir, Ali & Noordin, 2011; Andreev, 2021; Santos, 2024; Calero-Plaza, González-García & Fernández-Piqueras, 2025).

Technical competences also include digital competences. Teachers' digital competences are very important for effective teaching and learning in today's digital society. However, there is alimited number of comprehensive and reliable scales to measure teachers' digital competences. Regarding this, the study from Aydin, Yildirim & Kus (2024) aimed to develop and validate a comprehensive scale to assess teachers' digital competences.

Study from Yuan, Suwandej & Khan (2024) explores the relationship between teacher competence and digital literacy, professional identity, learning engagement, and learning efficacy among teacher trainees, and examines the mediating role of learning engagement and learning efficacy in the relationship between professional identity and learning. This is beneficial for us to gain a deeper understanding of the formation of teacher competence among teacher trainees in the context of smart education.

Relational and interpersonal competences (social maturity)

Relational competences refer to the way of communicating, establishing contacts and establishing relationships with others. The goal is to set up positive and effective communication. Their essence is work with people inside and outside the educational

institution. Leading others means giving meaning to their work (Birch, 2005). They are competences that create the prerequisites for a proper relationship between those who possess them and the environment. They are an instrument of synergy, harmony and mutual understanding between people. Relational competences should be based mainly on respect and cooperation (Zelený, 2006).

Therefore, they determine behaviour and ways of interacting with other people. Having these relational competences means being able to identify with others and understand them. The personal communication talent of individual people is enhanced in their interplay (Voda, 2023). Knowing how to communicate effectively and understand the needs of others is one of the most necessary (most useful) skills in both professional and personal life. Interpersonal competences should be set positively, empathetically, assertively and at the same time persuasively. It is necessary to remember that different types of people are suitable for different jobs and different people behave differently at work (Čakrt, 2009). Having appropriate relational competences makes it easier to achieve important goals, strengthens team spirit, thereby creating greater personal and collective growth.

These competences relate to the leadership, their motivation, conflict resolution, resistance to stress, support of teamwork, the way of communication, establishing contacts and relationships. The most important relational competences include: verbal and non-verbal communication, the ability to clearly and effectively express one's thoughts, teamwork, constructive cooperation with others, empathy, assertiveness, the ability to listen and persuasion (Valente et al., 2023; Yalap & Gencay, 2023; Satka & Garneva, 2024; Perdana, Ishak & Mansor, 2025).

The goal is to positively influence the working atmosphere, which subsequently significantly affects work performance. It is important for the peace and clarity of mind of the educator-manager that he does not waste even a moment's time worrying or getting angry about something he cannot change (Tracy, 2010).

According to Zbihlejová and Birknerová (2022), it is possible to measure relational competences (social maturity) using the methodology of measuring social intelligence (MESI). Managers and teachers who have a higher level of social intelligence are also better able to fight stress factors (coping strategies). These competences are important for the work of educators-managers at all levels of management. Campanella (2024) also suggests the importance of emotion regulation and prevention of distress.

Conceptual competences

Conceptual competences mean the ability of pedagogues-managers to see the educational institution as a system that needs to be guided to achieve the set goals. They represent the competence to understand the organization as a whole with regard to its relations with the external environment. This includes the competence to distinguish relative priorities, to identify the most important issues, to identify relative tendencies and probabilities of development and to understand things in relation to each other. The most important conceptual competences include: thinking in broader contexts, the ability to plan, organize, creativity, diagnostic ability, analytical imagination, and the

ability to make logical decisions. The success of conceptual competences in the work of a teacher-manager is conditioned by his abilities: to see the true essence of the phenomenon, to see connections between different facts and ideas; identify the causes of what is happening; anticipate consequences; analyze cause and effect, search for solutions and predict possible outcomes. Furthermore, it is the ability to systematize, organize and structure information around a concept or idea; think conceptually, understand general trends; identify common concepts and principles (Habbal et al., 2023).

Conceptual thinking is necessary in cases where the teacher-manager creates new projects where the procedure from the past cannot be copied. The quality of conceptual thinking is influenced by the ability to think using relevant concepts. Concepts not only reflect, but also organize thinking, making it more abstract, logical and creative. These competences are especially necessary for teachers-managers at the top level (Madzík, 2017; Vrábliková, 2018).

Systematic problem solving based on conceptual competence is present in several sciences in the 21st century: in performance management, e.g. in the application of the Balanced Scorecard concept, in human management in the gradual replacement of mentoring with a more effective coaching method, in pedagogy in the in-depth study of students' learning styles, in psychosomatic medicine in the application of knowledge that a person is a bio-psycho-social being (Madzík, 2017; Vrábliková, 2018; Mohrle, 2023; Santos, 2024).

The study from Blachnicka (2024) discovered that mentoring female managers can be analyzed in three dimensions. Psychosocial, cognitive and patronage mentoring were distinguished. All mentor activities indicated in the questionnaire were included and allocated to the relevant dimensions of mentoring.

Project and innovative competences

Educators-managers are also distinguished by the fact that they have the competence to start, change, stop processes and solve problems. Problem solving is a field that is multidisciplinary – it includes knowledge from mathematics, technology, management, psychology, statistics, marketing and many others (Madzík, 2017). The basis of innovative competence is the creativity of the manager - teacher. Nowadays, it is known that creativity is not only the prerogative of geniuses, but it is an ability that each of us has, it is just developed in a different way and at a different level in each individual ("the little c" theory - little creativity, or creativity, which we use in everyday life, may not be about art and innovation) (Amabile, 2012). Ali Taha and Sirková (2011) found that even a rigid and uncreative individual can follow a process that can be considered creative.

The output of human creativity is the innovation. Innovation itself was found to be an essential aspect of growing a country's economy, as emphasized by Joseph Schumpeter in the 1930s. An innovation can be the launch of new products, methods, markets, sources of supply, and organizations (Denning et al., 2014, Hatammimi et al., 2024). According to Loučanová, Kaputa & Olšiaková (2023) innovations positively affect the

environmental, economic, and social development of society, they also tend to increase competitiveness of regions and lead to sustainability, development, and the knowledge economy.

Innovative competences include original ideas, emotional intelligence, visionary thinking and the full use of strong personality traits - if possible - of all employees (Muhlfeit, Costi, 2022). At the same time, it is necessary to take into account that the requirements for individual competences will change, in most fields the requirements for new employee competences will grow exponentially. Even if it is possible to obtain a candidate on the labor market who possesses the required general competences, it is usually necessary to teach him specific competences only after starting a job (Barták, 2023).

Therefore, it is necessary to think prognostically and look for relevant answers to questions, e.g. what competences will teachers-managers have to acquire in the horizon of 7-10 years. For example evaluate to what extent the corresponding competences will influence these probable shifts - from the position of a senior worker to the position of a leader, coach, teacher, mentor; from authoritarian management to participative; from an expectation of loyalty to a passion for a cause; from analytical thinking to intuition; from delegating communication to direct communication; from status derived from position to status derived from results; from focusing on opportunities to focusing on priorities; building the institution's good reputation, pride in belonging to it and its exemplary representation (Seková, 2006; Vrábliková, 2018; Gallo, Mihalčová & Balogová, 2021).

Project and innovative competences of managers and educators are the basis of the concept known as "creative economy" and can also contribute to the development of the region. Partnerships between businesses, schools and public administration, so-called creative clusters in which innovations and know-how are quickly spread and implemented. Developed and creative regions contribute to employment and sustainability, attract investment and human capital and eliminate brain drain (Howkins, 2002; Heaton, Siegel & Teece, 2019; Miranda & Borges, 2019; Vrábliková, 2024). These competences are essential especially for educators-managers at the middle and top management level.

Most future entrepreneurs are attending school today (university or special business courses). Therefore, universities need to supply necessary education to encourage students to cope with future conditions and development and to understand basic principles of financial and economic literacy (Liu, Hongyi, Zhuang & Xiong, 2023). Increasing financial and economic literacy in the population of youth and adults is a prerequisite for preventing financial problems of individuals and companies. The larger part of the population will have the opportunity to learn about personal finance already during schooling, the higher the assumption that they will avoid complications related to money and property management in the future (Gončárová, Piteková & Ďurajdová, 2023).

METHOD

The main goal of the conducted research was to find out what managerial skills managers (line, middle, senior) perceive as more important when performing their managerial activities. As a tool for data collection, we used a questionnaire of our own design, which consisted of two parts.

In the first part, the respondents commented on what managerial qualities and skills they think are necessary for the successful performance of their managerial function. The second part, the results of which we processed in this article, was focused on assigning importance to managerial skills from the point of view of the respondents. Research is focused on verifying three hypotheses:

H1: There is a difference in the perception of the importance of managerial competences with regard to gender.

H2: There is a difference in the evaluation of the importance of managerial competences with respect to the managerial position.

H3: Respondents with more years of experience consider interpersonal competences more important.

The hypotheses were established due to the existence of differences in the perception of managerial competences with regard to gender and managerial position. Our effort was to confirm or refute that men view the mentioned competences differently than women. In addition to the above is necessary to find out whether interpersonal competences are still important in the work activities of managers, at a time when relationships are being replaced by technology and artificial intelligence.

Data were collected using a two-part questionnaire developed by the authors. The first section assessed general managerial traits, while the second evaluated the perceived importance of specific competencies. The research sample comprised 436 educational professionals across Slovakia. Statistical analysis was conducted using IBM SPSS, employing Mann-Whitney U, Kruskal-Wallis, and Spearman correlation tests to test three hypotheses.

FINDINGS

T-1-1- 1

The first-level of research is the data classification - description of the variables gender (Table 1), age and managerial function (Table 2).

Table I			
Gender of resp	oondents		
Gender	Frequency	Percent	
Man	76	17,4	
Woman	360	82,6	
Total	436	100,0	

Source: Own processing, IBM SPSS, 2024.

It follows from the above that 76 men (17.4% of all respondents) and 360 women (82.6% of all respondents) participated in the research. This gender distribution is typical in the education sector The average age of our respondents is 39.17 years.

Managerial position of respondents				
Managerial position	Frequency	Percent		
Line	121	27,8		
Employee (non-manager)	217	49,8		
Middle	67	15,4		
Тор	31	7,1		
Total	436	100,0		

Source: Own processing, IBM SPSS, 2024.

Table 2

People who are not yet managers were most represented in the research, which represented 49.8% of all respondents. This is followed by line managers in the number of 121 respondents (27.8%), then middle managers in the number of 67 persons (15.4%), and top managers were represented in the smallest number, namely in the number of 31 (7.1%). The respondents included those who are still preparing for a leadership position in education but currently hold the position of a line or middle manager. The next research step is the verification of hypotheses.

H1: There is a difference in the perception of the importance of managerial competences with regard to gender.

Test Statisticsa				
	Technical competences	Interpersonal competences	Conceptual competences	Project and innovative competences
Mann-Whitney U	11341,500	13086,500	13285,500	10908,500
Wilcoxon W	76321,500	16012,500	78265,500	13834,500
Ζ	-2,467	-0,627	-0,413	-2,925
Asymp. Sig. (2-tailed)	0,014	0,531	0,679	0,003
a. Grouping Var	riable: Gender			

Table 3 Importance of managerial competences with regard to gender

Source: Own processing, IBM SPSS, 2024.

To verify the hypothesis H1 was used the statistical Mann-Whitney U-test, which showed that the value of p < 0.05 for technical skills and project and innovation skills, which means that there is a significant difference, but for interpersonal and there is no significant difference in conceptual skills. Our sample was predominantly women. It is obvious that women who are occupied in a managerial position prefer interpersonal skills, in some cases conceptual ones, in their management. Therefore, these skills came

out without a significant difference. This may be due to the realization of the importance of these inimitable competencies in the age of artificial intelligence.

H2: There is a difference in the evaluation of the importance of managerial competences with respect to the managerial position.

Table 4

Importance of managerial competences with respect to the managerial position Test Statisticsa.b

	Technical	Interpersonal	Conceptual	Project and innovative	
	competences	competences	competences	competences	
Chi-Square	0,338	1,595	1,867	2,826	
df	3	3	3	3	
Asymp. Sig.	0,953	0,661	0,600	0,419	
a. Kruskal Wallis Test					
b. Grouping V	ariable: Manago	erial position			

Source: Own processing, IBM SPSS, 2024.

Hypothesis H2 was tested through the statistical test Kruskal Wallis Test, from which the result of p > 0.05 for all managerial skills came out, which means that there is no significant difference in the perception of the importance of managerial skills with regard to managerial classification. Our defined hypothesis was not confirmed, which can be explained by the fact that each manager, who is in the selected type of management, perceives the justification of the selected management skills in the management activity.

H3: Respondents with more years of experience consider interpersonal competences more important.

Table 5

Correlation between managerial competences and years of experience

		Technical	Interpersonal	Conceptual	Project and innovative
		competences	competences	competences	competences
Spearman's	Years	-0,068	-0,011	0,049	0,035
rho	of	0,157	0,818	0,311	0,465
	experience	436	436	436	436
Source: Own processing, IBM SPSS, 2024.					

Hypothesis H3 was not confirmed because no significant relationship was demonstrated, i.e. the number of years of experience does not affect the importance of managerial competences. When verifying the given hypothesis was used Spearman's coefficient. This result of the hypothesis verification is the most unexpected. At the first sight it seems that respondents with longer experience would perceive at least interpersonal and conceptual competences as more important.

DISCUSSION

Within the research sample, there was 82.6% representation of women. Interpersonal and conceptual competences were evaluated by them as more important. Based on the partial confirmation of hypothesis H1, could that female managers in education increase the development of technical, project and innovative competences. Next recommendation is using the systematic-analytical and intuitive methods of creativity development in their teaching, which are detailed in Table 6.

Systematic-analytical methods use convergent and logical thinking, which is necessary for building technical and innovative competences and intuitive methods (e.g. brainstorming and mind maps) they use divergent thinking, which is part of innovative competences. By using these methods could be supported self-development within the framework of career growth, but also the development of students and their preparation for their future profession, since creative and innovative skills cannot be imitated even by artificial intelligence (Mulyoto., Rugaiyah., & Susanto, 2024; Vrábliková, 2024).

Table 6

Overview of systematic-analytical and intuitive methods in education

Overview of systematic-analytical and intuitive me	
Systematic-analytical methods	Intuitive methods
Zelina's DITOR heuristic (Define the problem, Find	brainstorming, inverse brainstorming,
out about the problem, Create a solution, Evaluate the	brainwriting,
idea, Implement ideas in practice)	method 635 (6 participants, 3 ideas, 5
morphological analysis (choosing the right	minutes)
combination of properties of the innovative product	lotus flower (further development of
according to market requirements, cost, technology,	proposed ideas)
etc.)	Delphi method,
method of analogy (e.g. human brain - computer)	Ishikawa diagram, or "fishbone" (cause
method of aggregation (combination of several	and effect analysis)
properties into one unit - e.g. multi-pen)	simulation methods, case studies
disaggregation method (diversification into sub-	mind maps
functions – e.g. layout of an apartment on two floors)	memory palaces (creating stories based
dimensioning method (miniaturization, gigantization)	on keywords)
kinematic inversion method (changing kinematic	lateral thinking in the form of 6
functions such as a stationary bicycle or moving stairs)	thinking hats "Six thinking hats"
Theory of Constraints (TOC) – looking for a	(Edward de Bono)
constraint (weak spot) in the value chain that causes	Osborn's list and its structured form
inefficiency	SCAMPER/SCAMMPERR (Substitute
IDEO tool used in Silicon Valley (Discovery,	- combine, Combine - adapt, Modify -
Brainstorming, Rapid Prototyping, Fine-tuning,	modify, Magnify - increase, Put to
Implementation)	another use - eliminate, Reverse -
TRIZ (from the Russian theory of inventive problem	reverse, Rearrange - rearrange)
solving – problem specification, generalization,	bionics (searching for inspiration in
solution of a general problem, solution of a specific	nature and in living organisms – e.g.
problem	airplane wings vs. bird wings)
Samean Madeila 2017, Virthlibarri 2024	

Source: Madzík, 2017; Vrábliková, 2024

As part of the development of interpersonal and conceptual competences could be used e.g. coaching. This can be done either by applying coaching to the management of human resources in education or by outsourcing, i.e. by using the professional services of professional coaches registered in SAKo (Slovak Association of Coaches) and ICF (International Coach Federation). Compared to consulting or mentoring, coaching tries to get to the essence of the problems of employees and managers so that they come up with possible solutions on their own and thus increase their potential. The coach is a kind of guide who helps the coachee get from point A to point B. He uses different methods to capture the problem, e.g. scaling (On a scale from 1 to 10, where 10 means reaching your goal and 1 the complete opposite, where do you stand now? What makes the difference that you are already on the scale at ... and not just at 1?/ still at ... and not to 10?) As an example, the most famous coaching model, Whitmore's GROW model, which consists of the following 4 steps:

- G (goal) the need to express goals in measurable requirements (e.g. SMART specific, measurable, acceptable, realistic, time-bound), which represent a step towards development,
- R (reality = reality) specification of the current state,
- O (options = options) opening of options, resources, in this phase it is also possible to apply various auxiliary methods of solving the problem, e.g. creativity development methods regarding the problem of introducing a new product to the market or an engaging advertising campaign (e.g. mind maps, brainstorming, brainwriting, lotus flower, morphological analysis, SCAMPER, etc.),
- W (will = will, or wrapping up = summary, packaging) defining specific SMART steps, during which the coach finds out that the coachee is ready for action (Whitmore 2005; Vrábliková, 2024).

Just as in a company, so too in education, the right manager and employee should be in the right place. Only then can he fully develop his potential. Our recommendation is the "Wealth Dynamics" personality test for educational conditions. The methodology was created by Rogers James Hamilton (Vrábliková, 2024). This analysis may lead to organizational changes (e.g. changes to job descriptions and specifications). In general, everyone is creative in their own way, but there are employees who focus more on ideas (predominance of divergent thinking) and those who focus more on implementation (predominance of convergent thinking). There are also employees who focus more on business and new contacts (eg arranging school excursions, organization of open days) and those who focus more on technology and systems (management of school information systems). Based on that it is necessary to find out the structure of managers and employees and their job classification. I could be proceed in the same way during job interviews. When employees do what they have the prerequisites for and what they enjoy, they are more motivated and satisfied, which increases the performance of the entire company. These are the following types:

- Creator creates innovative products (e.g. new teaching methods),
- Star builds an influential brand (e.g. school advertising on social networks),
- Supporter builds efficient teams (e.g. project activity),

- Connector supports business opportunities (e.g. partnership with other schools),
- Merchant buys and sells advantageously (e.g. assessment of teaching effectiveness),
- Accumulator buys and evaluates assets (e.g. cooperation with labor market),
- Lord has control over assets that earn (e.g. learning feedback),
- Mechanic creates systems (e.g. administration of school information systems).

CONCLUSION

This study reveals that while gender influences perceptions of certain managerial competencies, position and tenure do not significantly alter perceived importance. The main goal of the research was to find out what competences are considered important by managers (line, middle, top, gender and years of experience) and employees in education when performing their managerial activities. The research sample consisted of 436 respondents. They were managers and employees in education. As part of the first-level data classification, research was focused on gender, functional classification and years of experience. Subsequently were formulated 3 hypotheses.

Hypothesis H1: "There is a difference in the perception of the importance of managerial competences with regard to gender." was rejected as a whole, but there were partial significant differences in the perception of technical, project and innovative competences. Hypothesis H2: "There is a difference in the evaluation of the importance of managerial competences with respect to the managerial position." was rejected. Hypothesis H3: "Respondents with more years of experience consider interpersonal competences more important." was rejected. These findings suggest the need for gender-responsive professional development, emphasizing technical and innovation skills. Practical tools such as coaching (e.g., Whitmore's GROW model) and psychometric assessments (e.g., Wealth Dynamics) can enhance competence-building in educational leadership.

The biggest limitation of the paper is the small number of men in the sample and the possible subjectivity of the respondents when filling out the questionnaire, since it is a social research. It is mainly about the flexibility of the 4 basic types of competences and the fact that an individual can imagine different properties under one competence (e.g. logical thinking can be part of a technical competence, but also a conceptual one). The research of competence models in education and the combination of managerial, psychological and pedagogical sciences is interesting and beneficial for us, and therefore it would be interesting to continue in this research in the future - to find out what are the correlations between the mentioned competences (e.g. whether there is a correlation between interpersonal and innovative competences in the research sample).

Another research option is the diagnosis of the level of these competences within the research sample. Based on the detected level, authors would like to find out e.g. interrelationships between competences and the individual quality of life (well-being) of respondents, correlations between competences and risk of negative phenomena at the workplace (mobbing, bossing, staffing) and correlations between competences and

preferred coping strategies. Further research will also bring interesting results and will be beneficial for the development of the theory and practice of management, psychology and pedagogy.

REFERENCES

Abidemi, B. T., Halim, F. B., Alshuaibi, A. I. (2017). Service marketing mix, market orientation and organizational performance: A proposed conceptual model. *Asian Journal of Multidisciplinary Studies*, 5(7), 112-119.

Ali Taha, V., Sirková., M. (2011). Rozvoj kreativity ako dôležitá súčasť vzdelávania manažérov. *Sociálna inteligencia v manažmente školy a v pracovnom procese*. Prešov, FM PU v Prešove, 3-8.

Amabile, T. M. (2012). *Componential theory of creativity*. Boston, Harvard Business School, URL: https://www.hbs.edu/faculty/Publication%20Files/12-096.pdf.

Andreev, I. (2021). *Competency Model*. Valamis. URL: https://www.valamis.com/hub/competency-model

Armstrong, M. (2007). *Řízení lidských zdroju*. Praha, Grada Publishing. a. s.

Aydin, M. K., Yildirim, T. & Kus, M. (2024). Teachers' digital competences: a scale construction and validation study. *Frontiers in Psychology*, 15, doi: https://doi.org/10.3389/fpsyg.2024.1356573

Barták, J. (2023). *Řízení lidí v organizacích*. Vydání první. Praha, Grada Publishing.

Battini, D., Berti, N., Finco, S., Zennaro, I. & Das, A. (2022). Towards Industry 5.0: a multi-objective job rotation model for an inclusive workforce. *International Journal of Production Economics*. 250, 108619, doi: https://doi.org/10.1016/j.ijpe.2022.108619.

Birch, P. (2005) Leadership. Brno, CP Books, a.s.

Blachnicka, K. (2024). Dimensions of Mentoring Among Female Managers - an Explanatory Factor Analysis Based on the Global Measure of Mentoring Practices. *European Management Studies*, 22(1), 4-24, doi: https://doi.org/10.7172/2956-7602.103.1

Calero-Plaza, J., González-García, R. J., & Fernández-Piqueras, R. (2025). Validation of a scale to measure digital competence in the elderly population. *International Journal of Instruction*, *18*(1), 77-94, doi: https://doi.org/10.29333/iji.2025.1815a

Campanella, A. J. (2024). Emotional labour and affective skills in public service interpreting: expanding the competence models. *FITISPos-International Journal*, *11*(1), 44-64, doi: https://doi.org/10.37536/FITISPos-IJ.2024.11.1.379

Comunian, R., England, L., Faggian, A. & Mellander, C. (2021). Defining Talent: Between Human Capital and the Creative Economy. *The Economics of Talent*, 9-19, doi: https://doi.org/10.1007/978-3-319-95124-9_2

Coronado, E., Kiyokawa, T., Ricardez, G.A.G., Ramirez-Alpizar, I.G., Venture, G. & Yamanobe, N. (2022). Evaluating quality in human-robot interaction: a systematic search and classification of performance and human-centered factors, measures and metrics towards an industry 5.0. *Journal of Manufacturing Systems*, 63, 392-410, doi: https://doi.org/10.1016/j.jmsy.2022.04.007.

Čakrt, M. (2009). Typologie osobnosti pro manažery. Praha, Management Press.

Denning, S. (2014). Identifying the new opportunities and threats in the Creative Economy. *Strategy & Leadership*, 42(6), 3-9, doi: https://doi.org/10.1108/SL-10-2014-0075

Droppa, M. (2012). *Kompetenčné modely a rozvoj organizácie*. Prešov, Bookman s.r.o., 53-62.

Gallo, P, Mihalcova, B., & Balogova, B. (2023). Work motivation of social workers in the context of management innovations. *Marketing and management of innovations*, 14(1), 55-63, doi: https://doi.org/10.21272/mmi.2023.1-05

Gončárová, Z., Piteková, J. & Ďurajdová, Ľ. (2023). Vyučovanie finančnej gramotnosti v regionálnom školstve. *Reflexie: Kompendium teórie a praxe podnikania*, 7(2), 43-64, doi: https://doi.org/10.54937/refl.2023.7.2.43-64

Goncarova, Z., Pitekova, J., & Vrablikova, M. (2020). Assessment of the Impact of Selected Satisfaction Parameters on the Competitiveness of Family Tourism. *Marketing and Management of Innovations*, 11(4), 131-143, doi: http://doi.org/10.21272/mmi.2020.4-10

Habbal, F. Kolmos, A., Hadgraft, R. G., Holgaard, J. E. & Reda, K. (2023). New Competencies for Systems Thinking. *Reshaping Engineering Education*. URL: https://link.springer.com/book/10.1007/978-981-99-5873-3

Hatammini, J., Shariff, O. O., Prasetyo, F. A. & Djadjasudarma, A. D. (2024). Improving corporate innovation culture in a state-owned enterprise. *Polish Journal of Management Studies*, 29(1), 144-160, doi: https://doi.org/10.17512/pjms.2024.29.1.09

Heaton, S., Siegel, D. S., Teece, D. J. (2019). Universities and innovation ecosystems: A dynamic capabilities perspective. *Industrial and corporate change*, 28(4), 921-939, https://doi.org/10.1093/icc/dtz038

Horeháj, J. (2005). Svetová ekonomika. Banská Bystrica, Univerzita Mateja Bela, Ekonomická fakulta.

Howkins, J. 2002. *The Creative Economy: How People Make Money From Ideas*. London, Penguin Books.

ISO 9001:2015. Quality Management Systems.

Ivanička, K. et. al. (2014). *Trvalá udržateľnosť inovácií v rozvoji Slovenska*. Bratislava. Wolters Kluwer.

Janošková, M., & Ubrežiová, I. (2021). Leadership and Motivation as a necessary part of a Managers Competence. *The Poprad Economic and Management Forum: Conference Proceedings*, *3*, 182-189.

Kalyani, M. (2016). Competency mapping process in current scenario: A need for sustainable growth. *International Journal of Research in Humanities and Social Studies*. 3(3), 18-28.

Liu, S., Hongyi, S., Zhuang, J. & Xiong, R. (2023). The Impact of E-Learning Technologies on Entrepreneurial and Sustainability Performance. *Sustainability*, *15*(21), 15660; doi: https://doi.org/10.3390/su152115660

Loučanová[•], E., Kaputa, V., & Olšiaková[•], M. (2023). Perception of eco-innovation based on educational attainment. *European Management Studies*, 21(2), 103-121, doi: https://doi.org/10.7172/2956-7602.100.5

Lozoviy, V.O. (2007). Etika. Kyjiv; Jurinkom Inter.

Madzík, P. (2017) Nástroje systematického riešenia problémov. Ružomberok, VERBUM, Vydavateľstvo Katolíckej univerzity v Ružomberku.

Miranda, M. G., Borges, R. (2019). Technology- based business incubators: An exploratory analysis of intraorganizational social network. *Innovation & Management Review*, *16*(1), 36-54, doi: https://doi.org/10.1108/INMR-04-2018-0017

Möhrle, A. (2023). Competence - One Term, Various Definitions: A Scoping Review for Sports Coach Education and Research. *International Sport Coaching Journal*, 1, 1-21, doi: https://doi.org/10.1123/iscj.2023-0082

Muhlfeit, J. & Costi, M. (2022). *Pozitívny líder*. Slovak edition. Albatros Media Slovakia, s.r.o.

Mulyoto., Rugaiyah., & Susanto, T. T. J. (2024). Improving teacher creativity in teaching through career development. *Anatolian Journal of Education*, 9(2), 1-16, doi: https://doi.org/10.29333/aje.2024.921a

Nahavandi, S. (2019). Industry 5.0-a human-centric solution. *Sustainability*, *11* (16), 4371, doi: https://doi.org/10.3390/su11164371.

Nasir, A., Ali, D. F., Noordin, M.K. B. (2011). Technical skills and non-technical skills: predefinition concepts. *Proceedings of the IETEC'11 Conference*, Kuala Lumpur.

Perdana, I., Ishak, R. B. & Mansor, M. B. (2025). The Influence of Transformational School Leadership on Private School Teachers Intrinsic Motivation. *Anatolian Journal of Education*, *10*(1), 127-138, doi: https://doi.org/10.29333/aje.2025.10110a

Santos, L. M. (2024). Comparison of Complex Thinking Skills between Students from Public and Private Institutions in Mexico. *International Journal of Instruction*, *17*(1), 43-64, doi: https://doi.org/10.29333/iji.2024.1713a

Satka, F. & Garneva, E. (2024). Model of motivational competence: creation of students' motivation, assessment, and research. *Froniers in Education*, 9, doi: https://doi.org/10.3389/feduc.2024.1372142

Seková, M. (2006). Osobnostný manažment ako súčasť profesijného rastu zamestnanca. Zborník 6. Odborného seminára Osobnosť knižnično-informačného pracovníka v znalostnej společnosti.

Šajbidorová, M. Lušňáková, Z. & Hrdá, V. (2018). *Organizácia pedagóg-manažérskej práce*. Nitra, Slovenská poľnohospodárska univerzita v Nitre.

Štefko, R. &, Krajňák, J. (2013). *An analytical View on Fine Arts Marketing*. Katowice, Publishing House of the Jerzy Kukuczka Academy of Physical Education.

Tracy, B. (2010). Ako vedú úspešní lídri. Finidr, s.r.o. Český Tešín.

Valente, N., Lourenco, A. A., Dominguez-Lara, S., Mohoric, T. & Taksic, V. (2023). Psychometric Properties of the Emotional Skills and Competence Questionnaire for Teachers. *International Journal of Instruction*, *16*(4), 55-70, doi: https://doi.org/10.29333/iji.2023.1644a

Vágner, I. (2006) Systém managementu. Brno, Masarykova univerzita, Česká republika.

Voda, J. (2023). Jaký leader chcete být? Praha, Wolters Kluwer.

Vrábliková, M. (2018). Metódy merania výkonnosti podniku založené na systematickom riešení problémov *Proceedings form international on-line workshop Enterprise Performance Managment and Investments* 2018. Prešov: Bookman, 237-250.

Vrábliková, M. (2024). *Viacúrovňováý prístup k manažmentu kreatívneho potenciálu v podniku a v regióne*. Ružomberok, Verbum.

Wen, X. & Korsun, I. (2023). Competence and competency: foreign experience. *Cherkasy University Bulletin Pedagogical Sciences*, doi: https://doi.org/10.31651/2524-2660-2023-1-45-51

Whitmore, J. (2005). Koučování: Rozvoj osobnosti a zvyšování výkonnosti. Praha, Management Press.

Xu, X., Lu, Y., Vogel-Heuser, B. &Wang, L. (2021). Industry 4.0 and industry 5.0—inception, conception and perception. *Journal of Manufacturing Systems*, *61*, 530-535, doi: https://doi.org/10.1016/j.jmsy.2021.10.006.

Yalap, O., & Gencay, E. (2023). Does the Perceived Authentic Leadership Have a Mediating Role in the Relationship Between Employees Emotional Intelligence and Self-Compassion? *European Management Studies*, 21(1), 48-67, doi: https://doi.org/10.7172/1644-9584.99.3

Yuan, J., Suwandej, N. & Khan, M. S. (2024). A Teacher Competence Model and Measurement Based on Smart Education. Revista e06343, doi: de Gestão Social е Ambiental, 18(1), https://doi.org/10.3389/feduc.2024.137214210.24857/rgsa.v18n1-111

Zelený, M. (2016). Trvalé hodnoty soustavy Baťa. Čintámáni. URL: www.cintamani.cz.

Zbihlejová, L. & Birknerová, Z. (2022). Analysis of the Links between Social Intelligence and Coping Strategies of Business Managers in Terms of Development of Their Potential. *Societies*, *12*(6), 177. doi: https://doi.org/10.3390/soc12060177