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Employee characteristics as a determinant of the development of entrepreneurial organization

Karakteristike zaposlenih kao determinanta razvoja preduzetničke organizacije

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Article info

Original scientific paper

Received:
22 June, 2026
Revised:
11 September, 2026
Accepted:
3 November, 2026
Published online: 28 November, 2026

DOI:
https://doi.org/10.71159/bizinfo260032E

UDC/ UDK:

Abstract

In the contemporary business environment, characterized by uncertainty and intense competition, entrepreneurial behavior has become an important determinant of organizational success and adaptability. This paper analyzes employee characteristics as a key determinant of entrepreneurial organizations. The aim is to examine, through theoretical analysis and empirical research, whether employee characteristics are associated with the characteristics of entrepreneurial organizations. The theoretical framework discusses the concept and significance of entrepreneurial orientation, entrepreneurial organizations, entrepreneurial organizational culture, as well as employee characteristics as determinants of the development of an entrepreneurial organization. An empirical study was conducted to examine the relationship between employees' cognitive, psychological, and social characteristics and the characteristics of an entrepreneurial organization. Data were collected through an online questionnaire completed by 76 employees in the Republic of Serbia and analyzed using correlation analysis. Research results show the relationship between employee characteristics and the development of an entrepreneurial organization.
Keywords*: *entrepreneurial organizational culture, characteristics of employees, entrepreneurial organization

Sažetak

U savremenom poslovnom okruženju, koje karakterišu neizvesnost i intenzivna konkurencija, preduzetničko ponašanje postalo je važna determinanta organizacionog uspeha i prilagodljivosti. U radu su analizirane karakteristike zaposlenih kao karakteristike povezane sa preduzetničkim organizacijama. Cilj rada je da se teorijskom analizom i empirijskim istraživanjem ispita povezanost karakteristika zaposlenih sa karakteristikama preduzetničke organizacije. U teorijskom delu razmatraju se pojam i značaj preduzetničke orijentacije, preduzetničke organizacije, preduzetničke organizacione kulture, kao i uloga karakteristika zaposlenih u razvoju preduzetničke organizacije. Empirijsko istraživanje sprovedeno je radi ispitivanja povezanosti kognitivnih, psiholoških i socijalnih karakteristika zaposlenih sa karakteristikama preduzetničke organizacije. Podaci su prikupljeni upitnikom koji je popunilo 76 zaposlenih u Republici Srbiji i ispitani primenom korelacione analize. Rezultati istraživanja ukazuju na povezanost između karakteristika zaposlenih i razvoja preduzetničke organizacije.
Ključne reči*: *preduzetnička organizaciona kultura, karakteristike zaposlenih, preduzetnička organizacija

1. Introduction

The contemporary business environment is characterized by rapid change and intensive technological development (Dobričanin & Aleksić, 2025), requiring organizations to demonstrate a high level of adaptability, innovativeness, and continuous improvement. In such an environment, entrepreneurship in organizations represents a fundamental instrument for achieving sustainable growth and competitive advantage. It refers to the application of entrepreneurial thinking and behavior within existing organizations, where employees play a central role in initiating innovation, identifying business opportunities, and creating new value. Given that the success of

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entrepreneurial organizations largely depends on human resources, understanding the characteristics of employees that foster entrepreneurial behavior is of particular importance. In addition to professional knowledge and competencies, employees' cognitive, psychological, and social characteristics significantly influence their willingness to embrace change, solve problems creatively, and develop innovative ideas (Zahra, 2015).

This study examines the relationships between employees' cognitive, psychological, and social characteristics and the characteristics of an entrepreneurial organization. The aim is to establish whether the three groups of employees' characteristics are associated with entrepreneurial characteristics of the organizations in which respondents work. The study considers cognitive, psychological, and social employees characteristics within a single empirical framework and provides evidence from employees in the Republic of Serbia.

In the following, the paper provides a literature review on entrepreneurial organizations and cognitive, psychological, and social characteristics of employees, based on which the research hypotheses are defined and the research model is presented. After that, the research methodology is explained, followed by the presentation and discussion of the research results. Finally, the theoretical contributions, practical implications, and limitations of the study are explained, followed by the overall conclusion and future research.

2. Literature review

2.1. Entrepreneurial organizational culture and the development of an entrepreneurial organization

In the contemporary business environment, corporate entrepreneurship has become essential for achieving and sustaining competitive advantage, as organizational success depends on the ability to transform existing knowledge into new products, processes, services, and solutions (Jovkić et al., 2017). Corporate entrepreneurship refers to entrepreneurial activities undertaken within established organizations and encompasses innovation, new business venturing, strategic renewal, and organizational transformation (Ireland et al., 2009). It provides a framework for understanding how entrepreneurial initiatives can emerge and develop within established organizations, with employees playing an important role in identifying opportunities and initiating innovative activities (Erić Nielsen, 2020).

Such activities contribute to the development and maintenance of competitive advantage (Janićijević, 2024). An entrepreneurial organization is not necessarily a newly established or small firm, but a large and well-established company can also be entrepreneurial when it creates internal conditions that encourage employees' initiative, creativity, autonomy, and proactive behavior.

Entrepreneurial orientation describes an organization's strategic posture toward entrepreneurial action. Entrepreneurial orientation is based on strategic processes that foster entrepreneurial initiatives and is most commonly conceptualized through the dimensions of innovativeness, risk-taking, and proactiveness (Covin & Slevin, 1989; Miller, 1983). The concept was later extended to include autonomy and competitive aggressiveness (Lumpkin & Dess, 1996). It can manifest at both individual and organizational levels. Köhn et al. (2025) found that individual entrepreneurial orientation was positively related to employee intrapreneurship. Individual entrepreneurial orientation concerns the dispositions and behaviors of a person, whereas organizational entrepreneurial orientation concerns the strategic posture of the whole organization (Clark et al., 2025). An entrepreneurial organization, compared to entrepreneurial orientation, is a broader organizational setting in which entrepreneurial priorities and supportive conditions are reflected in activities such as innovation and strategic renewal. These concepts are related but not interchangeable (D'Angelo et al., 2024; McGuire, 2026). Entrepreneurial organizations can therefore be viewed as organizational systems shaped by the interaction of multiple factors, including structure, strategy, leadership, and resources, with organizational culture playing a particularly important role in directing entrepreneurial behavior within the organization (Shiferaw et al., 2023).

Schein (1984) defined organizational culture as a set of basic assumptions and values shared by members of an organization, which emerge through the process of solving problems of external adaptation and internal integration. It does not refer only to visible symbols, rules, or behavioral norms but also to a deeper system of shared beliefs that directs the way employees understand organizational reality and respond to challenges from the environment (Schein & Schein, 2017). Organizational culture is one of the key internal factors that shape employee behavior, decision-making processes, readiness for change, and the organization's attitude toward innovation and corporate entrepreneurship (Denison & Mishra, 1995).

In the literature on organizational culture, a distinction is often made between clan, bureaucratic, market, and entrepreneurial cultures (Cameron & Quinn, 2011). The difference between traditional cultures and entrepreneurial culture has become increasingly important. Cultures that support openness, trust, learning, experimentation, and tolerance of mistakes, like the entrepreneurial one, create conditions for developing corporate entrepreneurship. In contrast, traditional cultures oriented toward stability, strict control, formalized procedures, and avoidance of uncertainty may limit creativity and entrepreneurial behavior among employees (Kuratko, 2007). This contrast can also be explained by the exploration-exploitation distinction in organizational ambidexterity, which reflects the ability of an organization to pursue both exploration and exploitation simultaneously or in a balanced manner in order to support adaptation and sustained performance. Exploitation concerns the refinement and effective use of existing knowledge and practices, whereas exploration

concerns experimentation and the pursuit of new possibilities. An entrepreneurial organization may need both but emphasizes the exploration dimension more because new opportunities enable employees to develop and test new ideas (Gupta et al., 2006; March, 1991; Tushman & O'Reilly, 1996; Wabnegg, 2024).

Entrepreneurial culture combines external orientation with organizational flexibility, making it one of the cultural types most strongly associated with innovation. It encourages employees to search for new ideas, identify opportunities, propose solutions, experiment, and contribute to creative problem solving. Managers act as visionaries and innovators whose role is to inspire employees, support the open exchange of ideas, and create conditions for experimentation. This culture is characterized by decentralized decision-making, a high tolerance for failure, and a strong emphasis on rapid responses to changes in the external environment. As a result, it enhances organizational adaptability and motivates employees to participate actively in key processes, innovation, and value creation (Hisrich & Kearney, 2011).

The development of an entrepreneurial organization is based on adopting and implementing entrepreneurial organizational culture and employees' ability to identify opportunities, propose new ideas, initiate changes, and participate in the improvement and innovation of organizational processes. In order for employees to demonstrate entrepreneurial behavior, they must possess certain cognitive, psychological, and social characteristics. Together, these characteristics shape employees' entrepreneurial predispositions and represent an important basis for understanding employees' behavior that contributes to the development of entrepreneurial organizations. Cognitive, psychological, and social characteristics of employees can be observed as important determinants in the transformation of a traditional organization into an entrepreneurial organization, while organizational culture influences employees' behavior and willingness to develop entrepreneurial potential within the organization.

2.2. Cognitive, psychological, and social characteristics of employees

Employees can be viewed as active initiators of entrepreneurial behavior within an existing organization. Personal capabilities and psychological resources, together with employees' relationships and interactions, may support entrepreneurial behavior. These factors provide a basis for considering cognitive, psychological, and social characteristics together (Pelica et al., 2026).

Cognitive characteristics of employees refer to the knowledge structures, mental models, and information processing abilities that individuals use when evaluating opportunities, forming judgments, and making decisions related to entrepreneurial activities. These characteristics include cognitive flexibility, innovative thinking, learning orientation, and analytical thinking (Baron, 1998; Mitchell et al., 2002).

Cognitive flexibility is the ability to recognize different alternatives in thinking and behavior, adapt to changing situational demands, and believe in own capacity to respond flexibly (Martin & Rubin, 1995). Cognitive flexibility contributes to employees' creativity and innovative performance, which are often linked to the entrepreneurial characteristics of an organization (Kwon & Kim, 2025).

Innovative thinking is the ability to generate new, useful, and applicable ideas in the workplace. Employees who think innovatively are oriented toward acquiring new knowledge and developing their competencies, as well as questioning existing ways of working, searching for alternative solutions, and proposing new ideas. Innovative thinking enables them to recognize opportunities for improvement and contributes to innovative behavior within the organization (Gong et al., 2009).

Individuals with a strong learning orientation do not perceive challenging situations as threats but rather as opportunities for personal development, improvement of abilities, and acquisition of new experiences. Learning orientation is also associated with employee's creativity, as it encourages openness to new ideas, experimentation, and the development of innovative approaches to work. Employees who are oriented toward learning are more likely to generate new ideas, promote them, and implement them in the workplace (Hirst et al., 2009).

Employees with developed analytical thinking are more capable of breaking down complex work situations into relevant elements, evaluating possible solutions, and selecting the most appropriate course of action. Analytical thinking contributes to the quality of decision-making, problem solving, and the development of employees' innovative behavior. Previous studies indicate that critical or analytical thinking skills may be related to job outcomes and can positively influence employees' innovative behavior (Elson et al., 2018).

Some individuals recognize or create opportunities and attempt to transform their ideas into business ventures, while others do not, solely based on their cognitive skills. Based on that, the first research hypothesis is proposed:
H1 Cognitive characteristics of employees have a statistically significant relationship with the characteristics of an entrepreneurial organization.

Psychological characteristics of employees represent employees' internal predispositions that influence their motivation, behavior, and emotional response to uncertainty. The most important psychological characteristics of employees include self-efficacy, tolerance of uncertainty, internal locus of control, and motivation (Begley & Boyd, 1987).

Entrepreneurial self-efficacy refers to an individual's belief in their ability to successfully perform entrepreneurial tasks and roles, such as identifying opportunities, developing new ideas, mobilizing resources, and initiating new ventures (Chen et al., 1998). Higher levels of self-efficacy are associated with greater

initiative-taking, persistence, and willingness to engage in challenging tasks, which are essential for innovative and entrepreneurial behavior. Self-efficacy is strongly linked to employees' propensity to engage in proactive and opportunity-seeking behavior (Sahin et al., 2019).

Tolerance of uncertainty refers to the ability to function effectively under ambiguous and unpredictable conditions. Individuals with a higher tolerance for uncertainty are more likely to perceive complex or insufficiently structured situations as manageable rather than threatening. Since individuals differ in their level of uncertainty tolerance, this characteristic may influence their willingness to act in different entrepreneurial contexts (Budner, 1962). It's important to highlight the significance of an agile mindset of employees for the process of learning and adapting in changing work contexts. An agile mindset of employees is often linked to innovative work behavior (Augner & Schermuly, 2025). These concepts are related, although the agile mindset is not measured separately in this study.

Rotter (1954) first defined the locus of control as an internal concept in which people believe that they can or cannot control their lives. Individuals who believe that their decisions and lives are controlled by them and cannot be influenced by environmental factors, chance, or fate have an internal locus of control. Employees with a strong internal locus of control are more likely to believe that their own activities shape the results they achieve, which makes them more proactive and more attentive to entrepreneurial opportunities. Internal locus of control enables managers to search for, recognize, and exploit valuable business opportunities more effectively (Hamzah & Othman, 2023).

Motivation, particularly intrinsic motivation, plays a central role in driving engagement and innovation, as described in self-determination and goal-setting theory (Gagné & Deci, 2005). The organizational behavior literature suggests that employees' motivation influences whether they will identify and pursue entrepreneurial opportunities (Marvel et al., 2007; Shane et al., 2003). Personality differences and intrinsic motivation may influence employees' persistence in developing and pursuing ideas or opportunities, as well as their willingness to explain and defend those ideas within a broader organizational and social context (Urban & Wood, 2015).

Employees' psychological characteristics can be viewed as predictors of behavior and may therefore explain their tendency to engage in entrepreneurial behavior within organizations (Ajzen, 1991). Psychological characteristics of employees, viewed as the psychological capital of an organization, have been linked to intrapreneurial behavior within organizations (Zhai & Wang, 2025). On this basis, the second research hypothesis is proposed:

H2 Psychological characteristics of employees have a statistically significant relationship with the characteristics of an entrepreneurial organization.

Social characteristics of employees refer to their interpersonal abilities, communication skills, relational networks, and capacity to operate both within and outside the organization. In contemporary organizations, the success of entrepreneurial initiatives largely depends on employees' ability to build trust and legitimacy among colleagues and superiors. The most important social characteristics of employees are communication skills, empathy, cooperativeness, and negotiation skills (Baron & Markman, 2003; Man et al., 2002).

Communication skills enable employees to effectively exchange information, coordinate activities, and share knowledge among themselves (Daft, 2015; Hargie, 2011). Effective communication enhances organizational efficiency and supports innovation by facilitating the flow of ideas across individuals and teams (Clampitt, 2017). Communication enables entrepreneurs to cope with uncertainty by developing a vision or mental model of how the environment works and communicating that vision to others to gain their support (Gossel, 2024). Employees' perceptions of social support within the organization also play an important role in fostering entrepreneurial behavior. Employees who perceive their organizational environment as supportive of innovation and initiative and the organizational culture as entrepreneurial demonstrate a greater willingness to engage in entrepreneurial behavior (Erić Nielsen et al., 2023). The development of such a supportive organizational environment is facilitated by effective internal communication and employees' communication skills, which enable the exchange of ideas, feedback, and support for entrepreneurial initiatives.

Empathy is the ability to understand other people, improve interpersonal relationships, foster inclusivity, and contribute to general well-being, which makes it an important social characteristic of employees (Hall et al., 2024). Entrepreneurs with higher levels of empathy may be more successful in motivating and leading employees, helping them cope with workplace stress, understanding customers' needs, increasing customer satisfaction, and encouraging innovation (Humphrey, 2013). Empathic imagination is central to the entrepreneurial process, since understanding what customers may want is essential for identifying entrepreneurial opportunities (Packard & Burnham, 2021).

Cooperativeness refers to employees' orientation toward others and their willingness and ability to establish constructive relationships, coordinate their activities, and contribute to shared objectives (Abele & Wojciszke, 2007). In entrepreneurial settings, investors evaluate not only entrepreneurs' competence but also their cooperativeness, which includes traits and behaviors associated with "getting along" such as trustworthiness, openness to feedback, similarity, and interpersonal liking. Perceived untrustworthiness or opportunistic behavior may reduce the likelihood of investment, while perceived cooperativeness can contribute to investors' positive evaluations of entrepreneurs and their ventures (Svetek, 2023). A cooperative environment may consequently strengthen entrepreneurial self-efficacy, entrepreneurial

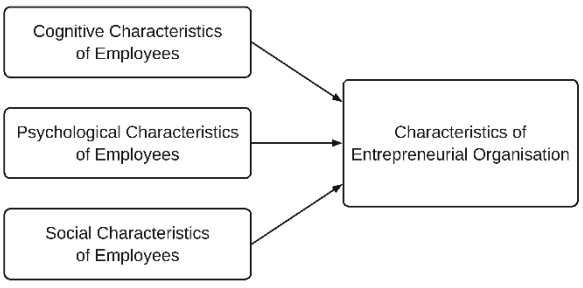
passion, and the intention to engage in entrepreneurial activities (Li & Wu, 2019).

Finally, negotiation skills are critical for resolving conflicts and reaching mutually beneficial agreements, particularly in complex organizational settings where competing interests must be aligned (Fisher et al., 2011). Successful entrepreneurship depends on entrepreneurs' ability to cultivate relationships and persuade others to support their ideas by investing time, money, resources, or expertise. In addition to negotiating with external stakeholders, entrepreneurs also need to negotiate internally with partners and organizational members regarding culture, routines, norms, and expectations, which makes negotiation skills essential for entrepreneurial success (Humphrey et al., 2022).

Social learning theory suggests that individuals acquire certain behaviors by observing and imitating others within their social environment. Entrepreneurial behavior in organizations may be developed through everyday social interactions. Communication skills, empathy, cooperativeness, and negotiation skills enable employees to understand others' perspectives, coordinate their activities, resolve disagreements, and mobilize support for new ideas. By supporting the adoption of entrepreneurial behaviors throughout the organization, the social characteristics of employees contribute to the development of an entrepreneurial organization (Blanka, 2019). Therefore, the third research hypothesis is proposed:
H3 Social characteristics of employees have a statistically significant relationship with the characteristics of an entrepreneurial organization.

Based on the literature review and the developed hypotheses, the following research model was developed and is presented below:

Figure 1. Research model



Source: Authors research

3. Methodology

3.1. The questionnaire

For the purposes of this study, a questionnaire was developed to measure employees' cognitive, psychological, and social characteristics, as well as their perceptions of the characteristics of an entrepreneurial organization. The questionnaire comprised six demographic questions (gender, years of age, years of work experience, education, income level, and position) and 15 items related to the study constructs. The construct items were organized into four sections measuring employees' Cognitive characteristics (4 items), Psychological characteristics (4 items), Social characteristics (4 items), and Characteristics of an entrepreneurial organization (3 items). The items were adapted from existing instruments based on the relevant literature. Items relating to Cognitive characteristics drew on Hornsby et al. (2002), Kuratko et al. (1990), Garnefski & Kraaij (2007), Judge et al. (2003), and Luthans et al. (2007). Items relating to psychological characteristics drew on Judge et al. (2003), Hornsby et al. (2002), and Luthans et al. (2007). Items relating to social characteristics drew on Tsounis & Sarafis (2023), and items relating to characteristics of an entrepreneurial organization drew on Covin & Slevin (1989). Responses were recorded on a five-point Likert-type scale ranging from one to five. For each construct, a composite score was calculated by averaging its item responses.

3.2. Sampling procedure and sample

An empirical study was conducted in the period from August to October 2025, in the Republic of Serbia. The online questionnaire was distributed via email to employees, and the survey link was also shared on the LinkedIn platform. Participation in the research was voluntary and anonymous, and the respondents were informed in advance about the research objectives.

A total of 76 employees completed the questionnaire, of whom 35 were men (46.1%) and 41 were women (53.9%). Regarding the age structure, 26 respondents were between 18 and 30 years old (34.2%), 28 respondents were between 30 and 50 years old (36.8%), and 22 respondents were older than 50 years (28.9%). In terms of educational attainment, 29 respondents had completed secondary education (38.2%), 34 respondents held a college or bachelor's degree (44.7%), and 13 respondents had completed a higher level of education, namely, a master's degree or above (17.1%). Regarding work experience, 33 respondents reported having up to seven years of work experience (43.4%), 20 respondents had between eight and 25 years of experience (26.3%), and 23 respondents reported more than 25 years of work experience (30.3%). Regarding monthly income, five respondents reported earnings below RSD 60,000 (6.6%), 48 respondents earned between RSD 60,000 and RSD 120,000 (63.2%), and 23 respondents reported monthly income above RSD 120,000 (30.3%). Regarding organizational position, the sample included 48 employees without managerial responsibilities (63.2%), 23 respondents holding team leader or middle-management positions (30.3%), and five respondents holding senior management positions (6.6%).

3.3. Operationalization of variables

After the sample was collected, the data were coded and analyzed using the IBM SPSS Statistics software. Statements related to both characteristics of employees and entrepreneurial organizations were operationalized as composite variables. The reliability analysis of the variables indicates that the values of Cronbach's alpha

coefficients for the examined variables are above 0.7, which further suggests that the criterion of internal consistency of the statements comprising the analyzed variables is satisfied (Nunnally, 1978). The results are presented in Table 1.

Table 1. Operationalization of variables

Variable/ Statement	Cronbach's alpha	Source
Cognitive characteristics	**0.872**	
1. I easily adapt to changes in the business environment and am ready to change the way I work when necessary. (*flexibility*)		Judge et al. (2003)
2. I often suggest new ideas and ways to improve existing processes or products in the company (*innovative thinking*)		Hornsby et al. (2002)
3. I always look for opportunities to learn something new to improve my work and skills (*learning orientation*)		Luthans et al. (2007)
4. I can look at complex problems from multiple perspectives and draw logical conclusions (*analytical thinking*)		Garnefski & Kraaij (2007)
Psychological characteristics	**0.865**	
1. I am confident in my ability to take responsibility for initiatives that can improve the business operations of the company in which I am employed. (*self-confidence*)		Judge et al. (2003)
2. I would be a good entrepreneur because I handle uncertainty well (*tolerance of uncertainty*)		Hornsby et al. (2002)
3. I believe that my personal effort and commitment can have a concrete impact on development and innovation within the company (*locus of control*)		Judge et al. (2003)
4. I always set ambitious but achievable goals for myself (*motivation*)		Luthans et al. (2007)
Social characteristics	**0.915**	
1. I communicate my ideas clearly and effectively to colleagues and supervisors, even when they concern complex topics (*communication skills*)		Tsounis & Sarafis (2023)
2. I try to understand other people's perspectives and emotions to build better relationships within the team (*empathy*)		Tsounis & Sarafis (2023)
3. I willingly participate in teamwork and am ready to adapt my ideas to shared goals. (*cooperativeness*)		Tsounis & Sarafis (2023)
4. I can agree in situations where there are different interests among team members or different departments within the company (*negotiating skills*)		Tsounis & Sarafis (2023)
Characteristics of entrepreneurial organization	**0.889**	
1. Our company places strong emphasis on research and development, technological advancement, and innovation.		Covin & Slevin (1989)
2. In situations of uncertainty, our company tends to take bold and decisive business actions.		Covin & Slevin (1989)
3. Our company strives to outperform competitors in identifying and exploiting new market opportunities.		Covin & Slevin (1989)

Source: Authors research

4. Research results

In order to examine the relationship between employees' cognitive, psychological, and employees' social characteristics and the characteristics of an entrepreneurial organization, a correlation analysis was conducted. The results, presented in Table 2, show that all three composite measures of employee characteristics were positively and statistically significantly associated with characteristics of an entrepreneurial organization. Their separate associations were not examined. The correlation was r=.81, p<.01, for cognitive characteristics; r=.83, p < .01, for psychological characteristics; and r=.64, p<.01, for social characteristics. The psychological characteristics had the highest observed correlation, followed closely by the cognitive characteristics. The difference between these two coefficients was only .02. Social characteristics showed the lowest correlation of the three measures, but their association with characteristics of an entrepreneurial organization remained positive and statistically significant. However, it is important to highlight that the correlation between psychological characteristics and characteristics of an entrepreneurial organization in this study was only marginally higher than the correlation between cognitive characteristics and characteristics of an entrepreneurial organization, and the difference was not tested for statistical significance.

Table 2. Results of the correlation analysis showing the relationship between employees' characteristics and characteristics of an entrepreneurial organization

Variable	1	2	3	4
1. Cognitive characteristics	1			
2. Psychological characteristics	0.83**	1		
3. Social characteristics	0.70**	0.68**	1	
4. Characteristics of an entrepreneurial organization	0.81**	0.83**	0.64**	1

Source: Authors research

5. Discussion

The results of this study indicate that employees' cognitive, psychological, and social characteristics are positively associated with the characteristics of an entrepreneurial organization, which confirms that the development of organizational entrepreneurship cannot be explained only through strategy, structure, leadership, or organizational culture but also through the individual characteristics of employees.

The first hypothesis (H1) examined whether employees' cognitive characteristics are related to the characteristics of an entrepreneurial organization. The results show that cognitive characteristics are significantly and positively associated with the development of an entrepreneurial organization. Employees who demonstrate these characteristics may be more capable of recognizing opportunities, interpreting changes in the environment, solving organizational problems, and transforming ideas into entrepreneurial initiatives. Therefore, the first hypothesis is supported. The measure of cognitive characteristics included adaptability, innovative thinking, learning orientation, and analytical thinking. The results are fully consistent with previous research on entrepreneurial cognition. Cognitive processes influence the way individuals recognize and evaluate opportunities, process information, solve problems, and engage in entrepreneurial action (Baron, 1998; Mitchell et al., 2002). Cognitive characteristics of employees, especially learning orientation, are associated with idea generation and realization (Gottfredson et al., 2025). The findings of the study extend this perspective to established organizations by indicating that entrepreneurial development depends not only on formal entrepreneurial activities but also on the ways in which employees think, learn, and respond to new and uncertain situations.

The second hypothesis (H2) examined whether employees' psychological characteristics are related to the characteristics of an entrepreneurial organization. The results show that psychological characteristics are positively associated with the characteristics of an entrepreneurial organization. Accordingly, the second hypothesis is supported. The measure of psychological characteristics included employees' self-efficacy, tolerance of uncertainty, internal locus of control, and motivation. The findings are fully consistent with previous research. They correspond with the theory of planned behavior, according to which attitudes, perceived behavioral control, and personal beliefs represent important predictors of individual intentions and behavior (Ajzen, 1991). Additionally, psychological characteristics of employees are significant for the relationship between entrepreneurship and employees' intrapreneurial behavior, within an organizational context shaped by an inclusive climate (Zhai & Wang, 2025). The results extend previous research by showing that psychological predispositions are relevant not only for independent entrepreneurs but also for employees participating in entrepreneurial processes within existing organizations.

The third hypothesis examined whether employees' social characteristics are related to the characteristics of an entrepreneurial organization. The results show a significant positive relationship between employees' social characteristics and the development of an entrepreneurial organization. Therefore, the third hypothesis is supported. Communication, cooperation, empathy, and negotiation are included in the dimension of social characteristics. The findings are fully consistent with previous research emphasizing the importance of interpersonal relationships, communication, cooperation, social support, and negotiation skills in entrepreneurial and organizational contexts. Blanka (2019) approaches intrapreneurship from an individual-level perspective and emphasizes that employees' behaviors and interactions contribute to the development of entrepreneurial initiatives. Also, social capital within organizations is associated with employees' intrapreneurial behavior. Workplace relationships, built on communication and cooperation, can help employees pursue entrepreneurial initiatives within existing organizations (Klein et al., 2026). The findings show that entrepreneurial organizations require employees capable of communicating their ideas, gaining support, cooperating across organizational units, and reaching agreements with managers, teams, and external stakeholders.

Psychological characteristics showed the highest observed correlation with entrepreneurial organization characteristics followed closely by cognitive characteristics and then by social characteristics. Cognitive characteristics may help employees identify and develop opportunities, whereas psychological characteristics may be especially relevant when they decide to act on those opportunities despite uncertain outcomes. Social characteristics may then help employees communicate ideas and gain support from others. This finding is consistent with research linking psychological capital to intrapreneurial intentions and behavior (Berisha et al., 2025; Zhai & Wang, 2025).

6. Conclusion

This study examined the associations between employees' cognitive, psychological, and social characteristics and their perceptions of the characteristics of an entrepreneurial organization. In the sample of 76 employees in Serbia, all three groups of employee characteristics were significantly associated with these perceptions. The paper contributes to a better understanding of employees as key actors in the development of entrepreneurial organizations and highlights the importance of managerial practices aimed at strengthening employees' entrepreneurial potential, supporting initiative, and creating an organizational environment in which innovation, adaptability, and proactive behavior can develop.

From a theoretical perspective, this study contributes to the literature in several ways. First, it integrates cognitive, psychological, and social characteristics of employees into a single research framework, thereby offering a broader view of individual-level determinants of

entrepreneurial organizations. It also highlights the distinction between employees' individual characteristics and the organizational-level characteristics of an entrepreneurial organization (Clark et al., 2025; McGuire, 2026). It complements research on intrapreneurship as an employee-level phenomenon while recognizing the organizational context (Pelica et al., 2026). The study contributes to corporate entrepreneurship literature by emphasizing that employees are not only passive members of an organization but also active carriers of entrepreneurial orientation, innovation, and organizational change. Also, the study contributes to the reduction of the identified research gap in domestic literature by providing empirical evidence from the Republic of Serbia, where the relationship between employees' characteristics and the development of entrepreneurial organizations has not been sufficiently examined.

From a practical perspective, the results offer several implications for human resource managers, top managers, middle managers, and organizations as a whole. Organizations should pay special attention to developing employees' sense of responsibility, motivation, internal locus of control, and ability to act under uncertainty. This can be achieved through mentoring programs, coaching, empowerment practices, participation in decision making, and the creation of a work environment in which employees are encouraged to take initiative and propose improvements without fear of negative consequences. Human resource departments should also incorporate entrepreneurial characteristics into selection, training, and development practices. During recruitment and selection, organizations may assess not only formal qualifications and technical knowledge but also candidates' learning orientation, adaptability, creativity, communication skills, and readiness to solve problems independently. In employee development programs, HR managers should design training focused on creative problem solving, analytical thinking, communication, negotiation, and teamwork. These programs should not be reserved only for managers but should also include non-managerial employees since entrepreneurial behavior can emerge at all organizational levels.

Despite its contributions, the study has several limitations. The first limitation is the sample size. Although the research provides valuable empirical insight, the relatively small number of respondents limits the possibility of generalizing the findings to all organizations in the Republic of Serbia. The second limitation relates to the use of self-reported data, which may include subjective perceptions of respondents and may be influenced by personal attitudes or social desirability. The third limitation relates to the fact that the analysis did not include industry, organizational size, or ownership structure as control variables. Their possible influence therefore remains unknown. Finally, the analysis examined cognitive, psychological, and social characteristics as composite measures; it did not test the separate relationship of each individual characteristic with the characteristics of an entrepreneurial organization.

Future research should address these limitations by including a larger and more diverse sample of respondents from different industries, organizational sizes, and ownership types. Comparative studies between private and public sector organizations could provide additional insight into whether employees' entrepreneurial characteristics are expressed differently depending on the organizational context. Future studies could also examine the role of organizational culture, leadership style, HR practices, and organizational support as potential mediators or moderators in the relationship between employees' characteristics and entrepreneurial organization development. In addition, qualitative research, such as interviews with employees and managers, could provide a deeper understanding of how entrepreneurial characteristics are recognized, supported, or limited in everyday organizational practice.

Acknowledgements

This research was financially supported by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia, Contract No. 451-03-137/2025-03/200099.

Declaration of generative AI in the writing process

During the preparation of this manuscript, the author(s) did not use generative AI or AI-assisted technologies in the writing process.

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