https://doi.org/ 10.7251/EMC2402541J

UDK: 005.322:316.46(497.11)

Datum prijema rada: 4. novembar 2024.
Submission Date: November 4, 2024
Datum prihvatanja rada: 15. decembar 2024.
Acceptance Date: December 15, 2024

Časopis za ekonomiju i tržišne komunikacije
Economy and Market Communication Review

Godina/Vol. **XIV** • Br./No. **II**
str./pp. 541-563

ORIGINALNI NAUČNI RAD / ORIGINAL SCIENTIFIC PAPER

LEADERSHIP STYLES, ESGS, AND EXTERNAL SOCIAL CAPITAL: IMPACT ON ORGANIZATIONAL COMMITMENT AND INNOVATION IN SERBIA

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Abstract: *Leadership, Environmental, Social, and Governance (ESG) practices and External Social Capital (ESC) are critical elements in contemporary organizations, frequently discussed in scientific literature. However, their influence on organizational commitment and innovation, particularly in the Serbian context, is underexplored. This study aims to investigate the relationships between leadership styles, ESG dimensions (Environmental Protection, Corporate Social Responsibility, Corporate Governance), and ESC on organizational commitment and innovation in Serbian enterprises in order to provide valuable insights for managers. All three hypotheses were confirmed. According to the results, environmental protection is the strongest predictor of innovation, explaining 28% of its variance. While leadership significantly affects both organizational commitment and organizational innovation, ESC has a less direct or even negative impact on commitment and a positive one on innovation. These results from Serbian organizations contribute to the understanding of how contemporary leadership and sustainability practices drive success in the context of the national business environment.*

Keywords: *Leadership; Commitment; ESG; ESC; Innovation.*

JEL Classification: *M10, L20, O30*

INTRODUCTION

In today's highly dynamic and complex business environment, leadership styles, environmental, social, and governance (ESG) factors, and external social capital (ESC) have been gaining recognition as important drivers of organizational success.

The study presented in this paper aims to explore the synergistic influence of transformational and transactional leadership aspects, ESG practices, and ESC on organizational commitment and innovation, focusing on organizations in Serbia.

Leadership has long been identified as a significant factor influencing organizational outcomes, with transformational leadership emphasizing motivation, inspiration, and intellectual stimulation, encouraging employees to transcend self-interest for collective goals (Bass & Avolio, 1994). In contrast, transactional leadership relies on structured expectations, rewards, and penalties to align employee performance with organizational objectives (Burns, 1978). The dynamics between these leadership styles, ESG factors, and ESC may lead to an improved contemporary understanding of commitment, and innovation, and overall business sustainability.

Organizational commitment, defined as an employee's emotional attachment and loyalty to their organization (Meyer&Allen, 1991), plays a crucial role in establishing a stable and productive workforce. Employee commitment is highly represented in research due to its importance for organizations, because the organization should make efforts that influence the strengthening of employee commitment and loyalty. This is particularly important because the higher the level of employee commitment, the lower the employee's intention to leave (Porter, Steers, Mowday, & Boulian, 1974). Leadership styles directly influence this commitment, yet the integration of ESG principles—covering environmental responsibility, social responsibility, and ethical governance with integrity—has emerged as a new factor contributing to both employee commitment and organizational innovation. For that reason, ESG practices are no longer merely a matter of corporate reputation; they are essential to creating long-term value and fostering an innovative culture (Eccles, Ioannou, & Serafeim, 2014). In response to increasingly serious sustainable development issues in the environment, society, and financial markets, international organizations and countries worldwide have proposed action plans for sustainable development, such as ESG, to build a sustainable and comprehensive development framework for human society (Li, Wang, Sueyoshi, & Wang, 2021). Similarly, ESC, which refers to the external networks, partnerships, and relationships an organization maintains, can provide access to new resources, ideas, and opportunities that support innovation, and strategic growth (Nahapiet & Ghoshal, 1998).

In particular, the study examines how transformational leadership, through its emphasis on vision and employee engagement, may be more conducive to fostering innovative cultures and commitment. At the same time, transactional leadership's structured approach could provide the necessary stability for executing innovative ideas. ESG practices and external social capital enhance this interplay by creating a sustainable environment in which employees and external stakeholders feel engaged in the organization's mission.

Given Serbia's evolving economy and its transitional status, understanding these dynamics is especially relevant. Serbian organizations face unique challenges as they adapt to global trends in leadership and sustainability while struggling with traditional management practices. This study provides valuable insights into how leadership styles, along with ESG and ESC factors, contribute to organizational commitment and innovation, offering a roadmap for organizations in Serbia aiming to boost their resilience and competitive edge.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The relationships between leadership styles, environmental, social, and governance (ESG) practices, and external social capital (ESC) on organizational commitment and innovation have been highlighted as critical areas of research in organizational studies. Each of these variables—leadership, ESGs, ESC, organizational commitment, and innovation, are intertwined according to the authors referenced below and for this reason, this study was designed to explore the complex connections and dependencies among them, focusing on organizations in Serbia.

Leadership and Organizational Commitment

Transformational and transactional leadership styles have been widely studied for their effects on organizational commitment. According to some authors (Meyer & Allen, 1991), organizational commitment is defined as the emotional attachment, identification, and involvement an employee has with their organization. Other authors (Ghasabeh, Soosay, & Reaiche, 2015) state that transformational leaders motivate employees by promoting a sense of purpose and vision that aligns with personal values, thereby enhancing employee engagement and organizational commitment. This style of leadership has been shown to increase loyalty, reduce turnover, and create a supportive work environment that builds long-term commitment (Hoch, Bommer, Dulebohn, & Wu, 2018).

Transactional leadership, while more pragmatic and task-focused, also contributes to organizational commitment, especially in environments that require clear structures and rules. By establishing a system of rewards and penalties based on performance, transactional leaders provide stability and clarity, which can enhance employees' sense of security and attachment to the organization (Breevaart, Bakker, Demerouti, & Derks, 2014).

Leadership and Innovation

When it comes to fostering innovation, transformational leadership is often seen as a key driver. Leaders who encourage creativity, risk-taking, and intellectual stimulation create a culture that supports innovation at all levels (Bass & Avolio, 1994). Transformational leadership enhances employees' willingness to explore new ideas, collaborate across teams, and seek innovative solutions, all of which are vital for maintaining a competitive edge (Ghasabeh, Soosay, & Reaiche, 2015). Transactional leadership, while less directly related to innovation, plays a supportive role by establishing a structured environment where innovations can be systematically implemented and monitored (Breevaart, Bakker, Demerouti, & Derks, 2014). The combination of visionary thinking and structured execution is essential for organizations seeking to balance creative exploration with practical application.

ESG Practices and Organizational Commitment

Organizational commitment is a concept that is often researched, but is rarely considered in relation to ESG (Choi, Jeong, & Park , 2024). Environmental, social, and governance (ESG) practices have emerged as powerful factors influencing organizational commitment, particularly in industries where sustainability and ethical governance are increasingly prioritized. ESG initiatives contribute to a sense of pride

and purpose among employees, which enhances their commitment to the organization (Eccles, Ioannou, & Serafeim, 2014). Studies show that employees are more likely to remain committed to organizations that prioritize social and environmental responsibility, as these practices align with their personal values (Cheng, Ioannou, & Serafeim, 2014). The authors Choi et al. (Choi, Jeong, & Park , 2024) investigated the recognition of ESG activities by employees. Their results indicate that recognition of ESG is vital because it affects the increase of OC, which is an important predictor of employee satisfaction and negative turnover rate. For this reason, the authors indicate that managers should invest efforts in order to better recognize ESG practices by employees, which would be reflected in increasing the level of OC.

Additionally, companies that are perceived as leaders in ESG are often seen as more ethical and stable, further reinforcing employee loyalty and commitment (Raimo, Caragnano, Zito, Vitolla, & Mariani, 2021). By incorporating ESG principles into their strategic framework, organizations not only foster internal loyalty but also attract talent that is deeply aligned with their sustainability goals. The results of some research (Kim, Park, Kim, & Lee, 2024) indicate that the application of ESG practices contributes to the self-esteem and commitment of employees, and in this way ESG also affects the increase of employee retention. The authors believe that such results indicate that ESG is an important means of support in organizations, which is why it is particularly significant.

ESG practices and innovation

ESG practices have been increasingly linked to organizational innovation, as companies that prioritize sustainability are often pushed to rethink traditional business models and processes. According to Luo & Du (Luo & Du, 2015), the integration of ESG factors creates opportunities for organizations to innovate in areas such as product development, resource efficiency, and ethical governance. Similarly, Hawn & Ioannou (Hawn & Ioannou, 2016) suggest that organizations that adopt ESG frameworks tend to encourage innovative solutions to address environmental and social challenges, positioning themselves as leaders in sustainable innovation.

Additionally, ESG initiatives can serve as a catalyst for cross-functional collaboration, as employees from different departments work together to implement sustainability goals, thus promoting a culture of innovation (Eccles, Ioannou, & Serafeim, 2014). Ong et al. (Ong, Lee, Teh, & Magsi, 2019) emphasize that the implementation of active environmental protection strategies and routines can promote innovation within organizations. This implies that ESG practices not only contribute to a more engaged and committed workforce but also foster an environment that encourages continuous innovation.

External Social Capital and Organizational Commitment

External social capital (ESC), defined as the relationships and networks an organization maintains with external stakeholders, plays a crucial role in influencing organizational commitment. ESC provides organizations with access to external resources, ideas, and legitimacy, all of which can strengthen employees' belief in the organization's mission and future opportunities (Nahapiet & Ghoshal, 1998). When organizations effectively utilize their external networks, they demonstrate stability and

a strong reputation, which can increase employees' commitment by providing a sense of security and long-term viability (Mina, Bascavusoglu-Moreau, & Hughes, 2014).

Barroso-Castro et al. (Barroso-Castro, Villegas-Perinan, & Casillas-Bueno, 2015) believe that greater internal capital has a greater and positive impact of external social capital on organizational performance. Additionally, the authors explain that when the internal social capital is greater, the degree of improvement in the organization's performance increases, and in a situation where the external social capital is greater, the organization's performance may decline. The research results of Rababah et al. (Rababah, Javed, & Malik, 2022) show that the internal social capital of an organization affects the improvement of financial and non-financial performance. On the other hand, the external social capital of the organization has a positive effect on the financial performance of the organization, but no impact on non-financial performance has been determined. Some authors find that ESC fosters organizational commitment by enhancing trust between the organization and external partners, reinforcing a sense of belonging and shared purpose among employees who see their organization as part of a broader, supportive community (Leal-Rodríguez, Eldridge, Roldan, Leal-Millan, & Ortega-Gutierrez, 2015).

External Social Capital and Innovation

ESC is a critical enabler of organizational innovation, as external networks provide access to new knowledge, resources, and opportunities. Organizations that actively engage with external partners, such as suppliers, customers, or research institutions, are better positioned to leverage external insights and expertise for innovation (Inkpen AC & Tsang, 2016). Organizations can gain access to sources of knowledge and experience through external social capital. In this way, organizations can come up with innovative solutions and combine different perspectives and approaches, which increases the possibilities for achieving better financial performance (Barroso-Castro, Villegas-Perinan, & Casillas-Bueno, 2015). Studies indicate that firms with high levels of ESC are more innovative, as they are able to tap into diverse sources of information and ideas, fostering creativity and adaptability (Leal-Rodríguez, Eldridge, Roldan, Leal-Millan, & Ortega-Gutierrez, 2015).

In transitional economies like Serbia, where internal resources may be limited, ESC becomes even more valuable. By building strong external relationships, Serbian organizations can overcome resource constraints and drive innovation, allowing them to compete on a global scale.

The literature reviewed indicates that transformational and transactional leadership styles, ESG practices, and external social capital have a profound influence on organizational commitment and innovation. Transformational leadership, ESG engagement, and strong external social capital are especially important in fostering a committed workforce and cultivating an innovative organizational culture. These findings are highly relevant for organizations in Serbia, which are navigating a rapidly changing business landscape and seeking to balance tradition with innovation. There are no research studies exploring these factors and their impact on organizations in Serbia.

Based on these findings, three hypotheses were developed:

Hypothesis 1: Transformational leadership has a statistically significant impact on organizational commitment in Serbia.

Hypothesis 2: ESGs and ESC influence organizational innovation in organizations in Serbia.

Hypothesis 3: There is a statistically significant difference in organizational loyalty between employees in small and medium-sized enterprises in Serbia.

METHODOLOGY

For the purpose of this research, an online questionnaire was set up on the Google Forms platform, and the link to the Questionnaire was distributed online, by email, and through social networks. The research was conducted from February 1st to May 1st, 2024. Respondents who participated in this research were employed in organizations in Serbia. In order to protect the confidentiality of the data, the personal data of the respondents have been omitted. A total of 204 responses were collected, out of which 132 respondents were women and 72 respondents were men. 186 respondents were under 45 years of age, 175 respondents had a university education, and 155 respondents were employed in an executive level position. 144 respondents were employed in domestic companies. 145 respondents were employed in the service sector and 112 respondents were employed in medium size enterprises in Serbia.

Measures

In the research conducted, the Transformational Leadership Behavior Inventory, TLI (Podsakoff P. , MacKenzie, Moorman, & Fetter, 1990) was used to measure Transformational leadership behavior. The consistency, reliability, and validity of the instrument have been confirmed in research (Podsakoff, MacKenzie, & Bommer, 1996); (Podsakoff P. , MacKenzie, Moorman, & Fetter, 1990)). The scale in this questionnaire measures six dimensions of transformational leadership behavior: articulating a vision, providing an appropriate model, fostering the acceptance of group goals, having high performance expectations, providing individualized support, and providing intellectual stimulation (Podsakoff P. , MacKenzie, Moorman, & Fetter, 1990). The first three dimensions: articulating a vision, providing an appropriate model, and fostering the acceptance of group goals, have high intercorrelations, due to which they are combined into one construct, called core transformational leader behavior (Podsakoff P. , MacKenzie, Moorman, & Fetter, 1990); (MacKenzie, Podsakoff, & Rich, 2001).

In the same questionnaire, transactional leadership behavior was measured using two dimensions: contingent reward behavior and contingent punishment behavior. The four-item contingent reward behavior scale was used to measure contingent reward behavior (Podsakoff, Todor, Grover, & Huber, 1984); (Podsakoff & Organ, 1986); (MacKenzie, Podsakoff, & Rich, 2001). To measure contingent punishment behavior in this work, a three-item contingent punishment behavior scale (Podsakoff, Todor, Grover, & Huber, 1984); (MacKenzie, Podsakoff, & Rich, 2001) was used. The consistency, reliability and validity of these constructs have been confirmed in research by other authors (Podsakoff, Todor, Grover, & Huber, 1984); (Podsakoff, MacKenzie, S. B., & Fetter, 1993).

For ratings of leadership items (transformational and transactional leadership behavior), a seven-point Likert scale ranking from 1 (strongly disagree) to 7 (strongly agree) was used, in accordance with the research of MacKenzie et al. (MacKenzie, Podsakoff, & Rich, 2001).

In this research, ESG performance was measured by the scale developed by De Roeck and Lee (De Roeck & Farooq, 2018); (Lee, Zhang, & Xie, 2019); (Zhu & Huang, 2023). The instrument has 24 items and three scales: environmental performance is measured with six items, corporate social responsibility is measured with twelve items and corporate governance is measured with six items. A five-point Likert scale was used ranking from 1 (strongly disagree) to 5 (strongly agree), in accordance with the author's research Zhu and Huang (Zhu & Huang, 2023).

This research also measured Organizational Commitment by an instrument developed by Cook and Wall (Cook & Wall, 1980). The instrument has 3 dimensions that are measured on the basis of 9 items, and the dimensions are: organizational identification, organizational involvement, and organizational loyalty of employees. To evaluate the answers, it was used as a five-point Likert scale ranking from 1 (strongly disagree) to 5 (strongly agree).

External social capital was measured using six items, a scale developed by Peng and Luo (Peng & Luo, 2000). The scale measures how often, in the opinion of employees, members of top management had contact with key stakeholders during the past three years, similar to the survey (Chen, Zheng, Yang, & Bai, 2016). In accordance with the research of Peng and Luo (Peng & Luo, 2000), seven-point Likert scales were used ranking from 1 (strongly disagree) to 7 (strongly agree).

Organizational innovation was measured by the scale used in the research by Chen, et al. (Chen, Zheng, Yang, & Bai, 2016). The scale was developed in 1982 (Miller & Friesen, 1982), and later modified by the authors Hoffman and Hegarty (Hoffman & Hegarty, 1993), and it contains six items that measure the degree of technological and managerial innovation in the past three years, according to the respondents. The respondents evaluated the items based on seven-point Likert scales, ranking from 1 (strongly disagree) to 7 (strongly agree).

RESULTS

The collected data were processed in accordance with the applied instruments in the program IBM SPSS Statistics 22. Descriptive statistics and correlation analysis of the relationship of independent variables, leadership dimensions, ESG dimensions, External social capital, Corporate social responsibility and dependent variables, Organizational Commitment, and the Organizational innovation scale. Regression analysis was used to regression analysis is used to determine the predictive influence of independent variables on dependent variables. Additionally, the relationship between independent and dependent variables was observed with moderators Origin, Sector, and Size of the companies.

Descriptive statistics

Table 1 presents descriptive statistics showing the names of dimensions, abbreviations used in the paper for all dimensions, mean value, standard deviation of all dimensions, as well as Cronbach's alpha. The Cronbach's alpha values vary in the range from $\alpha = 0.655$ (OC3) to $\alpha = 0.955$ (ESG).

Table 1. Descriptive statistics

Name	Abbrev.	N	Min.	Max.	Mean	Std. Dev.	α
Core transformational leader behavior	L_1	204	1.00	7.00	4.7402	1.60920	0.908
High performance expectations	L_2	204	1.00	7.00	4.9886	1.47052	0.796
Supportive leader behavior	L_3	204	1.00	7.00	3.9473	1.84280	0.950
Intellectual stimulation	L_4	204	1.00	7.00	4.2635	1.75048	0.935
Contingent reward behaviour	L_5	204	1.00	7.00	4.3260	1.88421	0.930
Contingent punishment behavior	L_6	204	1.00	7.00	4.6454	1.57779	0.892
Environmental, Social, & Governance	ESG	204	1.25	5.00	3.2839	.86384	0.955
Environmental performance	ESG_EP	204	1.00	5.00	2.6528	1.17570	0.936
Corporate social responsibility	ESG_CSR	204	1.17	5.00	3.4673	.93933	0.935
Corporate governance	ESG_CG	204	1.17	5.00	3.5482	.85176	0.860
Organizational commitment	OC	204	1.00	5.00	3.4521	.91116	0.895
Organizational identification	OC1	204	1.00	5.00	3.5637	1.11406	0.862
Organizational involvement	OC2	204	1.00	5.00	3.9510	.91380	0.794
Organizational loyalty	OC3	204	1.00	5.00	2.8415	1.03916	0.655
External social capital	ESC	204	1.00	7.00	3.7884	1.54011	0.927
Organizational innovation	OI	204	1.00	7.00	4.2639	1.43808	0.938
	Valid N (listwise)	204					

Source: Authors

Correlations

Table 2 shows the correlation coefficients between independents: Leadership dimensions (L_1 to L_6), ECS, ESG dimensions, and dependents, OC dimensions, and OI. Correlation analysis confirmed the interdependencies of all independent dimensions with dependent OC, OC1, OC2, and OC3, except for L_6 and ESC. L_6 has significant correlations only with OI, and correlations with dimensions OC, OC1, and OC3 are negative and not significant. These results confirm H1. ESC has a statistically significant correlation only with OI, and the correlations with OC1 and OC3 are negative but not significant. All correlations of variables ESG, ESG_EP, ESG_CSR, and ESG_CG, with dependent variables OC, OC1, OC2, OC3, and OI are relatively high and statistically significant. The above results confirm H2.

Table 2. Correlation coefficients

	OC	OC1	OC2	OC3	OI
L_1	.642**	.678**	.516**	.508**	.379**
L_2	.191**	.147*	.171*	.194**	.230**
L_3	.611**	.633**	.484**	.503**	.297**
L_4	.602**	.635**	.487**	.475**	.377**
L_5	.570**	.627**	.430**	.449**	.284**
L_6	-.043	-.041	.000	-.069	.164*

ESC	.003	-.038	.071	-.015	.229**
ESG_EP	.445**	.455**	.315**	.407**	.567**
ESG_CSR	.730**	.781**	.566**	.585**	.552**
ESG_CG	.606**	.663**	.497**	.447**	.519**
ESG	.698**	.743**	.538**	.567**	.621**

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Authors

Regression analysis

The regression method was used to examine the contribution of all independent variables to the total R square of the regression with dependent variables. In this way, a better insight and understanding of the influence of leadership decisions on organizational commitment in organizations in Serbia and on organizational innovations is achieved. The predictive effect of independent dimensions on dependent OC1, OC2, OC3, and OI in organizations in Serbia is presented in Table 3 and Figure 1. Independent variables are the best predictors of OC1 (R^2=0.714) in organizations in Serbia. Accordingly, 74% of organizational identification of employees in organizations in Serbia can be predicted by leadership decisions. Prediction for each dependent dimension separately: OC1 (R^2=0.714, F change-48.216, p<0.001), OC2 (R^2=0.405, F change-13.117, p<0.001), OC3 (R^2=0.439, F change- 15.091, p<0.001) and OI (R^2=0.456, F change-16.175, p<0.001).

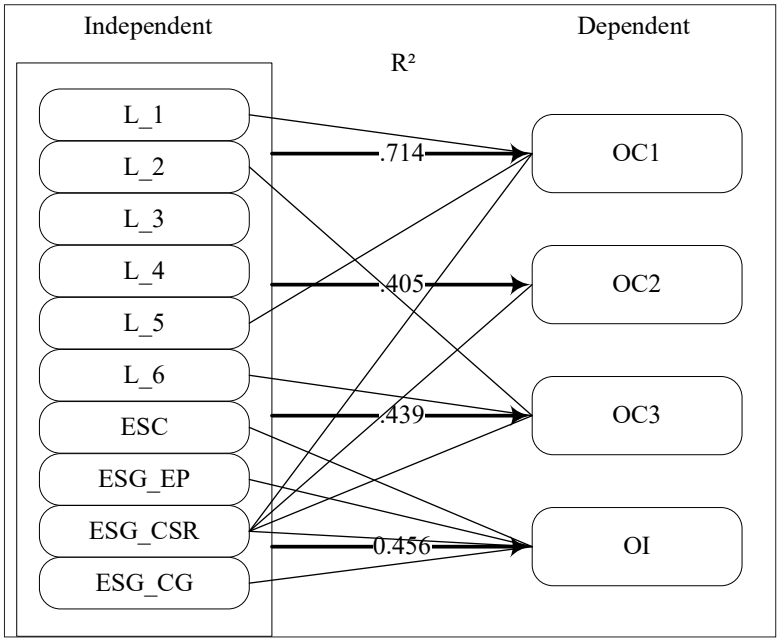
Table 3. Regression analysis

Dependent	Independent	β	t	Sig.	R^2	F
OC1	L_1	,246	3,773	,000	.714	.000
	L_2	,062	1,201	,231		
	L_3	,034	,479	,632		
	L_4	-,028	-,398	,691		
	L_5	,154	2,597	,010		
	L_6	-,057	-1,175	,241		
	ESC	-,012	-,300	,765		
	ESG_EP	-,053	-1,053	,294		
	ESG_CSR	,530	7,013	,000		
	ESG_CG	,068	1,020	,309		
OC2	L_1	,168	1,785	,076	.405	.000
	L_2	,102	1,385	,168		
	L_3	,116	1,143	,254		
	L_4	,014	,132	,895		
	L_5	,018	,205	,838		
	L_6	-,043	-,603	,547		
	ESC	,099	1,708	,089		
	ESG_EP	-,105	-1,432	,154		
	ESG_CSR	,346	3,167	,002		
	ESG_CG	,121	1,261	,209		

OC3	L_1	,120	1,317	,189	.439	.000
	L_2	,233	3,237	,001		
	L_3	,151	1,528	,128		
	L_4	-,082	-,822	,412		
	L_5	,056	,674	,501		
	L_6	-,166	-2,425	,016		
	ESC	-,033	-,581	,562		
	ESG_EP	,079	1,113	,267		
	ESG_CSR	,482	4,549	,000		
	ESG_CG	-,125	-1,341	,182		
OI	L_1	,076	,842	,401	.456	.000
	L_2	,043	,603	,547		
	L_3	,007	,071	,944		
	L_4	-,022	-,224	,823		
	L_5	-,041	-,504	,615		
	L_6	,078	1,154	,250		
	ESC	,195	3,515	,001		
	ESG_EP	,281	4,016	,000		
	ESG_CSR	,226	2,169	,031		
	ESG_CG	,181	1,976	,050		

Source: Authors

Figure 1. Regression analysis



Source: Authors

Independent T-Test

In this study, we investigate whether there were statistically significant differences in the impact of strategic decisions on the organizational commitment of employees and organizational innovation in domestic and foreign companies, the manufacturing and service sectors, and small and medium-sized companies in Serbia. The mean values for the subsamples and correlation coefficients are shown, which allows a better insight into the differences between the subsamples. In order to determine statistically significant differences, The Independent Samples T-Test was performed.

Origin

In this research, there are 144 respondents from domestic companies and 60 respondents from foreign companies. The largest difference in mean values among sub-samples is observed at OC3 (D:3.0069, F:2.4444), and the smallest difference is observed at ESG_CSR (D:3.4647, F:3.6917). The results of Descriptive statistics according to Origin are shown in Table 4.

Table 4. Origin: Descriptive statistics

Origin Domestic (N=144) Foreign (N=60)	Minimum		Maximum		Mean		Std. Deviation	
	D	F	D	F	D	F	D	F
L_1	1.00	1.00	7.00	7.00	4.7060	4.8222	1.63513	1.55558
L_2	1.00	1.00	7.00	7.00	5.0417	4.8611	1.52517	1.33375
L_3	1.00	1.00	7.00	7.00	3.9566	3.9250	1.83124	1.88566
L_4	1.00	1.00	7.00	7.00	4.2066	4.4000	1.81638	1.58729
L_5	1.00	1.00	7.00	7.00	4.3559	4.2542	1.87166	1.92799
L_6	1.00	1.00	7.00	7.00	4.6505	4.6333	1.62552	1.46998
ESC	1.00	1.00	7.00	7.00	3.8750	3.5806	1.47900	1.67245
ESG_EP	1.00	1.00	5.00	5.00	2.5972	2.7861	1.13835	1.26077
ESG_CSR	1.33	1.17	5.00	5.00	3.4647	3.4736	.91921	.99392
ESG_CG	1.17	1.67	5.00	5.00	3.4884	3.6917	.86043	.81985
ESG	1.25	1.38	5.00	5.00	3.2538	3.3563	.83246	.93829
OC	1.44	1.00	5.00	5.00	3.5340	3.2556	.89530	.92631
OC1	1.00	1.00	5.00	5.00	3.5741	3.5389	1.11600	1.11840
OC2	1.00	1.00	5.00	5.00	4.0208	3.7833	.84200	1.05557
OC3	1.00	1.00	5.00	5.00	3.0069	2.4444	1.01616	.99275
OI	1.00	2.17	7.00	7.00	4.2002	4.4167	1.44527	1.42102

Source: Authors

Table 5 shows the correlation coefficients of sub-samples of domestic and foreign companies in Serbia. L_2 has no statistical significance in foreign companies in Serbia, while in domestic companies it has a statistically significant influence on the variables of organizational commitment and organizational innovation. In addition, ESC and L_6 have statistically significant correlations with OI in the sub-sample of domestic companies in Serbia, and in foreign companies, they have no statistically significant influence on OI. Except for the mentioned relationships, all other relationships are in accordance with the general sample.

Table 5: Origin: Correlation coefficients

Origin	OC		OC1		OC2		OC3		OI	
	D	F	D	F	D	F	D	F	D	F
L_1	.621**	.734**	.645**	.764**	.457**	.672**	.554**	.479**	.407**	.300*
L_2	.222**	.087	.173*	.071	.233**	.025	.204*	.136	.244**	.212
L_3	.575**	.710**	.576**	.766**	.437**	.586**	.524**	.500**	.303**	.285*
L_4	.590**	.691**	.594**	.758**	.462**	.597**	.525**	.446**	.383**	.354**
L_5	.543**	.639**	.583**	.732**	.405**	.485**	.461**	.449**	.270**	.324*
L_6	.013	-.193	.006	-.168	.085	-.184	-.042	-.156	.231**	-.017
ESC	.037	-.105	-.028	-.064	.093	.008	.050	-.230	.387**	-.092
ESG_EP	.428**	.532**	.393**	.598**	.275**	.420**	.473**	.370**	.544**	.613**
ESG_CSR	.760**	.690**	.792**	.761**	.567**	.582**	.670**	.456**	.541**	.581**
ESG_CG	.646**	.598**	.661**	.690**	.517**	.529**	.553**	.336**	.480**	.608**
ESG	.733**	.675**	.742**	.755**	.540**	.565**	.674**	.439**	.609**	.647**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Source: Authors

Based on the comparison of the mean values of independent sub-samples, significant statistical differences between the sub-samples in domestic and foreign companies at OC and OC3 were determined. Statistically significant differences are shown in Table 6.

Table 6. Origin: T-Test

Origin		Group Statistics			Independent Samples Test						
		Mean	Std. Dev.	Std. Error Mean	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.
OC	D	3.5340	.89530	.07461	.369	.544	2.003	202	.046	.27840	.13898
	F	3.2556	.92631	.11959			1.975	107.170	.051	.27840	.14095
OC3	D	3.0069	1.01616	.08468	.351	.554	3.627	202	.000	.56250	.15510
	F	2.4444	.99275	.12816			3.662	112.881	.000	.56250	.15361

Source: Authors

Sector

In this research, 59 respondents were employed in the manufacturing sector, and 145 respondents were employed in the service sector. One of the biggest differences in mean values is with subsample ESG_EP (P: 3.0593, S: 2.4874), and the smallest difference is observed with OC3 (Q:2.8305, S:2.8460). The results of Descriptive statistics by Sector are shown in Table 7.

Table 7. Sector: Descriptive statistics

Sector Productive (N=59) Service (N=145)	Minimum		Maximum		Mean		Std. Deviation	
	P	S	P	S	P	S	P	S
L_1	1.33	1.00	7.00	7.00	4,9322	4,6621	1.49812	1.65084
L_2	1.67	1.00	7.00	7.00	4.8814	5.0322	1.40574	1.49862
L_3	1.00	1.00	7.00	7.00	4.1144	3.8793	1.84199	1.84516
L_4	1.00	1.00	7.00	7.00	4.5042	4.1655	1.67993	1.77468
L_5	1.00	1.00	7.00	7.00	4.6059	4.2121	1.64015	1.96880
L_6	1.33	1.00	7.00	7.00	4.8305	4.5701	1.49248	1.61011
ESC	1.00	1.00	7.00	7.00	3.9520	3.7218	1.59593	1.51740
ESG_EP	1.00	1.00	5.00	5.00	3.0593	2.4874	1.15792	1.14599
ESG_CSR	1.58	1.17	5.00	5.00	3.6794	3.3810	.96214	.91928
ESG_CG	1.50	1.17	5.00	5.00	3.6412	3.5103	.86260	.84739
ESG	1.46	1.25	5.00	5.00	3.5148	3.1899	.87355	.84491
OC	1.11	1.00	5.00	5.00	3.5047	3.4307	.97201	.88782
OC1	1.00	1.00	5.00	5.00	3.6610	3.5241	1.16048	1.09625
OC2	1.33	1.00	5.00	5.00	4.0226	3.9218	.93642	.90610
OC3	1.00	1.00	5.00	5.00	2.8305	2.8460	1.13187	1.00310
OI	1.00	1.00	7.00	7.00	4.6695	4.0989	1.44022	1.40895

Source: Authors

The correlation coefficients of the sub-sample of the manufacturing and service sectors are shown in Table 8. Compared to the general sample, L_2 does not have a statistically significant influence in the service sector. Also, there is no statistically significant impact in the production sector with OC1 either. In both sub-samples, L_6 does not affect OI, and ECS affects OI only in the service subsample. Regarding the statistically significant influence of other strategic variables on some variables of organizational commitment and organizational innovation, all other relations are in accordance with the general pattern.

Table 8: Sector: Correlation coefficients

Sector	OC		OC1		OC2		OC3		OI	
	P	S	P	S	P	S	P	S	P	S
L_1	.632**	.648**	.659**	.686**	.505**	.519**	.535**	.503**	.458**	.340**
L_2	.303*	.148	.178	.139	.276*	.134	.371**	.119	.335**	.208*
L_3	.558**	.634**	.615**	.639**	.359**	.534**	.509**	.503**	.350**	.267**
L_4	.522**	.636**	.586**	.654**	.396**	.520**	.417**	.505**	.331*	.384**
L_5	.648**	.547**	.714**	.599**	.490**	.409**	.532**	.427**	.364**	.242**
L_6	.072	-.095	-.022	-.055	.197	-.082	.045	-.117	.201	.135
ESC	-.072	.034	-.158	.011	.065	.069	-.077	.016	.164	.245**
ESG_EP	.397**	.472**	.425**	.467**	.320*	.309**	.322*	.464**	.497**	.571**
ESG_CSR	.715**	.741**	.809**	.771**	.519**	.586**	.585**	.596**	.561**	.532**
ESG_CG	.588**	.614**	.683**	.653**	.464**	.508**	.429**	.459**	.491**	.526**
ESG	.671**	.717**	.755**	.742**	.507**	.551**	.535**	.597**	.595**	.615**

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Authors

Based on the comparison of the mean values of independent sub-samples, significant statistical differences between the sub-samples in the production and service sectors were determined in ESG_EP, ESG_CSR, ESG, and OI. Statistically significant differences are shown in Table 9.

Table 9. Sector: T-Test

Sector		Group Statistics			Independent Samples Test						
		Mean	Std. Dev.	Std. Error Mean	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.
ESG_EP	P	3.0593	1.15792	.15075	.333	.565	3.222	202	.001	.57197	.17750
	S	2.4874	1.14599	.09517			3.208	106.624	.002	.57197	.17828
ESG_CSR	P	3.6794	.96214	.12526	.090	.765	2.073	202	.039	.29834	.14389
	S	3.3810	.91928	.07634			2.034	103.347	.045	.29834	.14669
ESG	P	3.5148	.87355	.11373	.026	.871	2.466	202	.015	.32489	.13176
	S	3.1899	.84491	.07017			2.431	104.463	.017	.32489	.13363
OI	P	4.6695	1.44022	.18750	.103	.749	2.606	202	.010	.57064	.21897
	S	4.0989	1.40895	.11701			2.582	105.523	.011	.57064	.22101

Source: Authors

Size

In this research, there are 73 respondents who are employed in small enterprises in Serbia and 112 respondents who are employed in medium enterprises in Serbia. In the general sample, 19 respondents were employed in large companies, but due to the small sample, they were not taken into account to consider statistically significant differences in relation to the size of the company. The results of Descriptive statistics according to Size are shown in Table 10. One of the largest differences in mean values among subsamples is observed at L_4 (S: 4.7329, M: 3.9933), and the smallest difference is observed at ESG_EP (S:2.6301, M:2.6667).

Table 10. Size: Descriptive statistics

Size Small (N=73) Medium (N=112)	Minimum		Maximum		Mean		Std. Deviation	
	S	M	S	M	S	M	S	M
L_1	1.00	1.00	7.00	7.00	4.9772	4.6071	1.61238	1.59781
L_2	1.00	1.00	7.00	7.00	4.8995	5.0804	1.48831	1.43964
L_3	1.00	1.00	7.00	7.00	4.3733	3.6406	1.96944	1.66806
L_4	1.00	1.00	7.00	7.00	4.7329	3.9933	1.83491	1.60533
L_5	1.00	1.00	7.00	7.00	4.8082	4.0692	1.82075	1.87300
L_6	1.00	1.00	7.00	7.00	4.5936	4.6964	1.56174	1.61794
ESC	1.00	1.00	7.00	7.00	3.5297	3.9122	1.56848	1.52342
ESG_EP	1.00	1.00	5.00	5.00	2.6301	2.6667	1.15745	1.19181
ESG_CSR	1.58	1.17	5.00	5.00	3.5685	3.4062	.95988	.93174
ESG_CG	1.50	1.17	5.00	5.00	3.6324	3.5223	.83609	.84348
ESG	1.46	1.25	5.00	5.00	3.3499	3.2504	.87505	.86937

OC	1.44	1.00	5.00	5.00	3.6865	3.3185	.93685	.83088
OC1	1.00	1.00	5.00	5.00	3.7808	3.4464	1.14425	1.04221
OC2	2.33	1.00	5.00	5.00	4.0822	3.8720	.84580	.90626
OC3	1.00	1.00	5.00	5.00	3.1963	2.6369	1.11227	.92193
OI	1.00	1.00	7.00	7.00	4.0228	4.3780	1.50650	1.38813

Source: Authors

Table 11 shows the correlation coefficients of the sub-samples of small and medium-sized enterprises in Serbia. In relation to the general sample, L_2 has no statistical significance in medium-sized enterprises in Serbia, while in domestic enterprises it has a statistically significant influence on the variables of organizational commitment and organizational innovation in enterprises. In addition, L_6 has no statistically significant correlations in the sub-samples, and ESC has statistically significant correlations with OI in the sub-sample of small enterprises in Serbia. Except for the mentioned relationships, all other relationships are in accordance with the general sample.

Table 11: Size: Correlation coefficients

Size	OC		OC1		OC2		OC3		OI	
	S	M	S	M	S	M	S	M	S	M
L_1	.724**	.580**	.791**	.599**	.548**	.489**	.600**	.412**	.589**	.254**
L_2	.342**	.149	.263*	.109	.327**	.123	.346**	.158	.338**	.131
L_3	.639**	.523**	.692**	.531**	.441**	.453**	.567**	.367**	.454**	.204*
L_4	.642**	.568**	.677**	.606**	.461**	.504**	.575**	.355**	.520**	.309**
L_5	.578**	.538**	.639**	.599**	.439**	.387**	.469**	.396**	.423**	.242*
L_6	.079	-.100	.013	-.064	.210	-.092	.025	-.107	.218	.091
ESC	.097	.008	.084	-.062	.124	.084	.064	.010	.414**	.126
ESG_EP	.568**	.440**	.514**	.492**	.451**	.266**	.563**	.371**	.539**	.587**
ESG_CSR	.770**	.704**	.791**	.778**	.589**	.535**	.684**	.497**	.588**	.546**
ESG_CG	.691**	.506**	.715**	.593**	.553**	.410**	.591**	.295**	.520**	.501**
ESG	.775**	.650**	.774**	.729**	.604**	.477**	.702**	.465**	.625**	.615**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Source: Authors

Based on the comparison of the mean values of the independent sub-samples, significant statistical differences were found between the sub-samples in small and medium-sized enterprises in independent L_3, L_4, L_5, and in dependent OC, OC1 and OC3. These results confirmed H3. Statistically significant differences are shown in Table 12.

Table 12. Size: T-Test

Size		Group Statistics			Independent Samples Test						
		Mean	Std. Dev.	Std. Error Mean	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.
L_3	S	4.3733	1.96944	.23051	4.050	.046	2.717	183	.007	.73266	.26966
	M	3.6406	1.66806	.15762			2.624	135.811	.010	.73266	.27924
L_4	S	4.7329	1.83491	.21476	1.585	.210	2.893	183	.004	.73957	.25562
	M	3.9933	1.60533	.15169			2.813	139.275	.006	.73957	.26293
L_5	S	4.8082	1.82075	.21310	.366	.546	2.652	183	.009	.73902	.27868
	M	4.0692	1.87300	.17698			2.668	157.096	.008	.73902	.27701
OC	S	3.6865	.93685	.10965	3.509	.063	2.799	183	.006	.36800	.13149
	M	3.3185	.83088	.07851			2.729	140.752	.007	.36800	.13486
OC1	S	3.7808	1.14425	.13392	.596	.441	2.052	183	.042	.33439	.16298
	M	3.4464	1.04221	.09848			2.012	143.667	.046	.33439	.16623
OC3	S	3.1963	1.11227	.13018	3.597	.059	3.715	183	.000	.55944	.15060
	M	2.6369	.92193	.08711			3.572	133.550	.000	.55944	.15664

Source: Authors

DISCUSSION

In the general sample, the aspects of leadership observed in this research statistically significantly influence organizational commitment (OC), organizational identification (OC1), organizational involvement (OC2), and organizational loyalty (OC3) of employees in organizations in Serbia. An exception is Contingent punishment behavior (L_6, mean: 4.6454), because by increasing corrections, criticism, and other forms of punishment in organizations in Serbia, there is an increase in the accumulation of negative effects in almost all dimensions of organizational commitment. Authors Podsakoff et al. (Podsakoff, Todor, Grover, & Huber, 1984) state that when a leader uses contingent punishment behavior as the only form of influencing employees, it has few functional effects, but can be effective in organizations when used in conjunction with rewards. The results show that, in order to better understand such results, it is necessary to take a closer look at the impact of Contingent punishment behavior, but also Contingent reward behavior, primarily in terms of employee information, quality of communication and leader-member exchange. Thus, it would be clearer whether it is necessary for leaders in organizations in Serbia to improve the quality of feedback in order for Contingent Punishment Behavior to have an effect on employees, or if the problem is that leaders are not clear enough in identifying the desirable behavior of employees, which results in punishing employees (Podsakoff, Todor, Grover, & Huber, 1984) and can negatively affect employees' identification with the organization and their loyalty. In addition, this dimension of leadership has a statistically significant influence on organizational innovations in organizations in Serbia (OI, .164*). The results are similar with External social capital. An increase in this dimension leads to a lower organizational commitment of employees and a lower level of organizational loyalty of employees in organizations in Serbia. In addition, External social capital does not have a statistically significant influence on the organizational behavior of employees in organizations in Serbia. It is possible that the concept and purpose of

External social capital are not fully understood by employees in organizations in Serbia. When an organization allocates significant resources to building and maintaining external relationships, it might lead to an imbalance in how internal resources are distributed. External relationships often bring different perspectives, interests, and values into an organization, for which the organization needs to be ready. It is obvious that this will boost innovation, but it can also create conflicts if external values are very different from the organization's internal culture. It is possible that employees in Serbian organizations struggle to align with new strategies or initiatives driven by external stakeholders, which leads to the loss of their commitment.

In recent years, Serbia has gone through numerous changes that have had great consequences for Serbia (Nedeljković, Vukonjanski, Nikolić, Hadžić, & Šljukić, 2018). Although leaders in organizations in Serbia today work in a more stable environment than in previous years, it is possible that employees, on the one hand, block the positive influence of External social capital because, after Serbia's history, they do not understand or find it difficult to accept that connecting the organization's leaders with people of influence in society and access to resources benefit the leaders themselves, but it turns into the benefit of the employees (Chen, Zheng, Yang, & Bai, 2016). On the other hand, as research points out that External social capital can be significant for an organization, but also that the results of the relationship between External social capital and organizational performance are not consistent (Barroso-Castro, Villegas-Perinan, & Casillas-Bueno, 2015), we can conclude that neither leaders may be ready to clearly explain the benefits of External social capital to employees, which would impact this result. In addition, External social capital has a significant statistical impact on organizational innovation in organizations in Serbia.

Companies that today are moving towards sustainable business need to meet ESG requirements, as a prerequisite for competitiveness and positioning in the market. According to the results of this research, in the general sample, correlations between environmental, social, and governance (ESG), environmental performance (EGS_EP), corporate social responsibility (ESG_CSR), and corporate governance with organizational commitment (OC), organizational identification (OC1), organizational involvement (OC2), and organizational loyalty (OC3) are significantly positive. Hence, the increase of the activities that prioritize environmental issues, social issues, and corporate governance in organizations in Serbia, is accompanied by the increase of all aspects of commitment. This is the situation in all observed subsamples (Origin, Sector, Size).

In the general sample and in all observed sub-samples, External social capital (ESC) has no influence on the commitment of employees in organizations in Serbia. This result is not surprising, because the results of some research (Barroso-Castro, Villegas-Perinan, & Casillas-Bueno, 2015); (Rababah, Javed, & Malik, 2022) indicate that the degree of external social capital and the ratio of external social capital to internal social capital affect non-financial performance. In this sense, for a better understanding of the impact of external social capital, it is necessary to further investigate the results of this research, but for understanding, a research that would enable an overview of the relationship between external social capital and internal social capital would be especially important. In addition, in the general sample, external social capital significantly influences organizational innovation in organizations in Serbia. Although the T-Test results for all observed sub-samples did not show significant dif-

ferences, the correlation analysis indicates different influences of external social capital on innovation. Correlation analysis according to Origin shows that external social capital significantly influences innovations in the sub-sample domestic organizations, while in the sub-sample foreign organizations in Serbia, the relationship is not statistically significant. However, the results indicate that an increase in external social capital in foreign organizations leads to a decrease in organizational innovations. According to Sector, external social capital has a significant impact on innovation in sub-sample service organizations, while it has no significant impact on innovation in sub-sample manufacturing organizations. It is possible that these results are because service organizations are more dependent on external contacts and relationships with stakeholders compared to manufacturing companies. According to Size, external social capital has a significant impact on innovation in sub-sample small organizations, while in sub-sample medium organizations it has no significant impact on innovation.

In the general sample, all aspects of leadership, Environmental, Social, and Governance factors (ESG), and ESC have a statistically significant effect on organizational innovation. The impact of ESGs and ESC on organizational innovation can be explained by the fact that all organizations that are focused on meeting the requirements of ESGs and facing sustainability must constantly innovate within their business processes, and ESC contributes to innovation with new ideas, good contacts and constant knowledge exchanges with the external environment. According to the results, there is a significant statistical difference in innovation between the production and service sectors. The production sector is more innovative because innovation is largely focused on products and much less on services, as well as innovation in all parts of business processes.

In the general sample, all aspects of leadership significantly influence aspects of organizational commitment, except for contingent punishment behavior, which has no significant effect. Contingent punishment behavior has no significant effect in any of the observed subsamples. In addition, in the general sample, the negative influence of leadership on commitment occurs only in this aspect. Accordingly, we can conclude that the increase in fines in organizations in Serbia can lead to a decrease in commitment, to a weakening of organizational identification and loyalty. However, punishment behavior does not have a negative effect on involvement. This is the expected result because punishment is part of traditional management practices that no longer produce results. The commitment of employees in Serbia depends mostly on internal factors, and less on organizational factors, which is a significant difference compared to organizations operating in other European countries.

The influence of leadership in the subsamples is mostly consistent with the overall pattern. The exception is High performance expectations. This dimension has no significant impact on aspects of commitment in foreign companies in Serbia, in the service sector and in medium-sized enterprises. In foreign companies, expectations of high performance imply a high level of productivity and output, in which there is no room for innovation and new creative solutions. Expectations of high performance preclude time left for creativity and new ideas. It is possible that employees in Serbia are more creative under pressure and with high expectations, which is an aspect that needs further investigation. Leaders in Serbia recognize that expectations of high performance bring better results in terms of innovation, while it would be logical to

expect the opposite. In the same way, on the issue of fines, it can be seen in companies in Serbia, based on research, that fines have a positive impact on innovation. The traditional approach to management in Serbia still gives satisfactory results, as shown by the effects of High performance expectations and Contingent punishment behavior on Organizational innovation, which means that employees, both under pressure and in case of punishment, have the need to innovate.

When we look at the differences between the groups, there is a significant difference for Supportive leader behavior, Intellectual stimulation and Contingent reward behavior in small and medium-sized organizations. It is possible that the dynamics of interaction in small companies, both with leaders and between employees, is much more intense, because employees come into contact with their superiors more often, so with an adequate leadership style, they are also encouraged more often, and since the collective is smaller, the results that individuals achieve are easier to see. They achieve, and thus awards, which is already not possible in medium-sized organizations. The difference between groups in small and medium-sized enterprises also occurs in Organizational commitment, Organizational identification and Organizational loyalty. The previous explanation can also be applied to commitment. In small organizations, frequent contacts with the leader, as well as relationships between employees, influence employees to identify with the organization. Also, loyalty in small organizations is often associated with loyalty to people (leader and colleagues), which is less frequently found in medium-sized organizations compared to small organizations.

Using the regression method, in this research we examined the contribution of all independent variables (leadership variables, ESGs and ESC) to the total R-square in the regression with commitment variables and innovation as a dependent variable. The results show that 71% of the variation in identification (OC1) can be predicted by ESGs and ESC leadership. The most significant predictors of Organizational identification are independent Core transformational leader behavior (L_1, β=0.246), Contingent reward behavior (L_5, β=0.154) and Corporate social responsibility (ESG_CSR, β=0.530). We can conclude that leaders in companies in Serbia, among other things, should give feedback to employees and praise employees when they achieve good results. Also, they should carry out activities related to the development of the organization's vision and put the organization's interest above their personal interest, influence employees to accept the organization's vision and model of behavior, thereby contributing to the creation of employees who are loyal to the organization.

In predicting Organizational loyalty (OC3), High performance expectations (L_2, β=0.233), Contingent punishment behavior (L_6, β=-1.66) and Corporate social responsibility (ESG_CSR, β=0.482) have a significant influence. The regression model predicts 44% of the variation in loyalty. We can conclude that loyalty is conditioned to a certain extent by the application of punishments. On the other hand, it is conditioned by clearly set goals by the leader, whereby the leader insists on achieving the best results.

The regression model can predict 40% of Organizational involvement (OC2), and the most significant predictor is Corporate social responsibility (ESG_CSR, β=0.346), as is the case with Organizational identification (OC1) and Organizational loyalty (OC3). We can conclude that employees in organizations in Serbia feel more committed to organizations that enable employees to improve their knowledge and

skills, organizations that work to improve working conditions, paying special attention to the needs of employees, and behave responsibly towards customers and society.

In predicting Organizational innovation (OI), ESGs (Environmental performance, ESG_EP, β=0.281; Corporate social responsibility, ESG_CSR, β=0.226; Corporate governance, ESG_CG, β=0.181) and External social capital (ESC) have a statistically significant influence, β=0.195). The regression model predicts 46% of the variation in organizational innovation. The research results indicate that: In the context of Serbian enterprises, the influence of External Social Capital (ESC) in promoting innovation lies in the ability of these organizations to leverage external knowledge and engage in intense knowledge transfer for creative problem-solving and generating new solutions (similar to research 2.6). These research findings support other studies stating that the External Social Capital improves knowledge sharing, which enhances innovation capabilities in organizations by providing new perspectives and access to expertise beyond the organization's internal capacity.

The results of this study also show that Environmental Protection (EP) stands out as the strongest predictor of organizational innovation, explaining 28% of the variance in innovation outcomes. This significant impact suggests that companies that prioritize environmental sustainability are more likely to engage in innovative practices. This can be attributed to several factors. Firstly, the increasing pressure from regulatory bodies and consumers to adopt environmentally friendly practices forces organizations to innovate in order to reduce their environmental footprint. This often results in the development of new, greener technologies, processes, and products. Secondly, organizations that emphasize environmental sustainability also foster a culture of continuous improvement and experimentation, which is fundamental to innovation. In this context, environmental protection becomes a catalyst for innovation, as companies must continuously adapt their operations to achieve more sustainable outcomes.

According to this study's results, both Corporate social responsibility (ESG_CSR) and Corporate Governance (ESG_CG) also play significant roles as predictors of organizational innovation, although their effects are less impactful compared to Environmental performance (ESG_EP). Serbian organizations investing in CSR experience greater creativity leading to the rise in innovation. At the same time, strong corporate governance structures ensure accountability, transparency, and alignment of interests between shareholders and management, promoting strategic decision-making that can lead to innovation. Well-governed companies are more likely to invest in R&D and explore innovative solutions because of their long-term orientation and focus on sustainability.

CONCLUSION

The findings of this study confirm that leadership significantly impacts both organizational commitment and organizational innovation in Serbian enterprises, with transformational leadership playing a particularly crucial role. These results align with existing literature findings, linking leadership to these organizational elements. However, research results show remaining room for improvement, especially in the domain of supportive leader behavior (L_3, 3.95). Leaders in Serbia should focus on enhancing their leadership capacities to further promote organizational commitment and innovation.

Significant differences were observed between domestic and foreign organizations in terms of organizational commitment and loyalty. Employees in domestic organizations exhibit higher levels of both, most likely due to a stronger personal attachment to these enterprises and leadership styles that, while sometimes traditional, give results with the local workforce. This suggests that foreign organizations operating in Serbia should invest more effort in adapting their practices to align with the national culture, which may foster greater employee commitment and loyalty.

Environmental, Social, and Governance (ESG) factors, particularly Environmental Performance and Corporate Social Responsibility emerged as key drivers of innovation in Serbian organizations. The production sector, driven by regulatory pressures, tends to be more ESG-oriented, leading to higher innovative outputs. These findings highlight the importance for managers to recognize how adopting ESG requirements can foster innovation within their organizations.

For small and medium enterprises (SMEs), the study reveals that stronger internal interactions, communication, and leader-employee relationships are characteristic of smaller enterprises. As companies grow, maintaining these internal dynamics is crucial for sustaining organizational commitment and loyalty. Managers should carefully manage organizational growth to avoid diminishing these critical internal factors.

The research results also point to the importance of good governance practices in driving innovation. In Serbian enterprises, good governance practices likely contribute to innovation by ensuring that resources are allocated effectively and that there is a clear strategy for growth and competitive advantage.

Finally, the impact of External Social Capital on organizational innovation emphasizes the value of external partnerships and knowledge sharing. Strengthening external networks can significantly enhance innovative capabilities in Serbian enterprises. Overall, the results suggest that a balanced focus on leadership, ESG factors, and External Social Capital can effectively foster innovation, offering valuable insights for organizations in Serbia aiming to enhance their innovation potential.

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