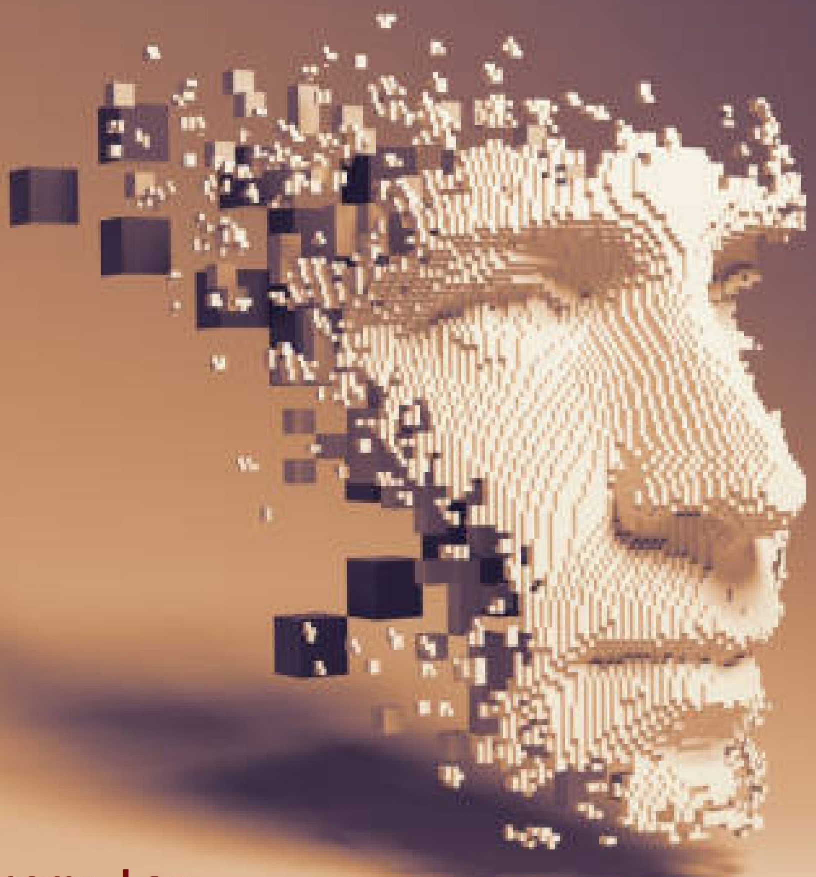
INTERNATIONAL JOURNAL OF SOCIAL SCIENCES

ISSN 2955-2036
ISSN 2955-2044

INSTITUTE OF KNOWLEDGE MANAGEMENT

Vol. 5 Issue 3

SCIENCE IJ



Sociology, Economy, Law,
Politics, Demography, Psychology
Security, Education, Humanities

ISSN 2955-2044 (Online)

SCIENCE INTERNATIONAL JOURNAL

Volume 5, Issue 3, September 2026.

https://scienceij.com/

IMPRESSUM

SCIENCE International journal
(Volume 5, Issue 3, September 2026.)

Editor in chief:
Prof. d-r Robert Dimitrovski

Publisher:
Institute of Management and Knowledge
Address: Gjuro Gjonovikj, 11/4 , Skopje 1000, Macedonia
Phone: +389 70 207 370, + 381 63 700 4281

https://scienceij.com/
E-mail: editor@scienceij.com

For publisher:
Prof. d-r Robert Dimitrovski

Print:
GRAFOPROM Bitola

Circulation:
50 copies

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Smailov, R. (2026). Transversal competencies as a foundation for learning in the 21st century, *SCIENCE International journal, 5*(3), 285-290.
doi: 10.35120/sciencej0503285s UDK: 005.963.01
37.011.2-024.78(100)"20"

TRANSVERSAL COMPETENCIES AS A FOUNDATION FOR LEARNING IN THE 21ST CENTURY

Radoslav Smailov[1*]

[1] Trakia University – Stara Zagora, Bulgaria, e-mail: radoslav_smailov@abv.bg

Abstract: The rapid social, technological and economic transformations of the twenty-first century have fundamentally changed the expectations towards education and the competencies required for successful personal and professional development. Contemporary educational systems increasingly emphasize the development of transversal competencies that enable learners to transfer knowledge across different contexts, adapt to change and participate effectively in society. The purpose of this paper is to examine the conceptual foundations of transversal competencies and to analyze their significance as a basis for lifelong learning and competency-based education. The study applies a theoretical research design based on literature review, comparative analysis and conceptual synthesis of contemporary scientific publications and international educational frameworks. Particular attention is paid to UNESCO, OECD, the European Key Competences Framework and the LifeComp framework. The analysis demonstrates that transversal competencies extend beyond subject-specific knowledge by integrating cognitive, social, personal and socio-emotional dimensions of learning. These competencies facilitate critical thinking, collaboration, communication, adaptability and responsible decision-making, thereby strengthening the practical application of knowledge in authentic situations. As a theoretical contribution, the paper proposes a conceptual model of transversal learning that integrates personal, social, cognitive and practical dimensions into a coherent framework for competency development. The findings highlight the necessity of embedding transversal competencies across all educational levels and learning environments. Future research should focus on empirical validation of the proposed model and on developing reliable approaches for assessing transversal competencies within competency-based education.

Keywords: *transversal competencies; lifelong learning; competency-based education; 21st century skills; personal development; education.*
Field: Social Sciences (Education)

1. INTRODUCTION

Contemporary education is evolving in the context of rapid technological change, globalization, digitalization, and increasing social dynamics, all of which place new demands on the preparation of young people. The accumulation of knowledge is no longer a sufficient condition for successful personal and professional development. Increasing importance is attached to the ability to interpret knowledge critically, adapt it, and apply it creatively in a wide range of life and professional situations. This calls for a reconsideration of traditional educational models and shifts attention towards the development of transversal competencies as a major learning outcome.

Transversal competencies are universal capabilities that can be applied regardless of the specific academic discipline or professional field. They integrate the cognitive, social, personal, and socio-emotional dimensions of learning and support the development of critical thinking, communication, collaboration, creativity, adaptability, and self-regulation. Their transferability and broad applicability make them a key factor in successfully addressing the challenges of the twenty-first century and a prerequisite for effective lifelong learning. Among the various components of transversal competencies, social and emotional competence has acquired particular importance because it plays a pivotal role in personal development, the quality of interpersonal relationships, and learners' successful social adaptation. Social and emotional competence (SEC) has become established as a central construct in contemporary educational and psychological theory, as it integrates the emotional, social, and cognitive dimensions of the individual. It is generally defined as the ability to recognize and understand one's own emotions, regulate them appropriately according to the specific context, demonstrate empathy, and establish positive and sustainable interpersonal relationships. Contemporary theoretical models emphasize that social and emotional competence is not a single skill but rather a dynamic and interconnected system of competencies that functions across diverse social contexts (Smailov, 2026, pp. 151–156).

This paper aims to analyze the nature and educational significance of transversal competencies by examining their place within contemporary international educational policies and conceptual frameworks. Particular attention is paid to the relationship between transversal competencies, competency-

*Corresponding author: radoslav_smailov@abv.bg

based education, and learners' personal development. The analysis traces the main approaches to understanding these competencies, systematizes their various manifestations, and discusses the possibilities for integrating them into the educational process. The central thesis of the paper is that transversal competencies are not merely a set of universal skills, but rather a comprehensive educational logic that connects knowledge with its practical application and creates conditions for sustainable personal development, social adaptation, and continuous lifelong learning.

2. MATERIALS AND METHODS

The present study was designed as a theoretical investigation aimed at clarifying the nature, characteristics, and educational significance of transversal competencies in the context of twenty-first-century learning. The study adopts an interdisciplinary approach that integrates pedagogical, psychological, and educational policy perspectives to develop a comprehensive conceptual framework for the issue under investigation. The methodological design is based on a critical literature review, comparative analysis, and synthesis of scientific concepts. The literature review traces the evolution of the concept of transversal competencies and examines its place within contemporary scholarly publications. Comparative analysis enables the identification of similarities and differences among the principal international frameworks that conceptualize transversal competencies as a key component of contemporary education. The subsequent synthesis integrates these findings into a unified theoretical framework that outlines the relationships among the cognitive, social, personal, and socio-emotional dimensions of learning.

The study draws upon publications from peer-reviewed international scientific journals, scholarly monographs, and official documents issued by international organizations, published primarily during the last decade. Particular attention is devoted to the conceptual frameworks developed by UNESCO, the OECD, and the European Commission, as well as to the LifeComp and Key Competences for Lifelong Learning frameworks, which identify transversal competencies as a fundamental resource for personal development, social inclusion, and lifelong learning. In addition, contemporary empirical and theoretical studies examining the relationship between transversal competencies, the quality of education, and the preparation of learners for a dynamic social and professional environment are reviewed. Within the scope of this analysis, transversal competencies are viewed not as an isolated set of skills but as an integrative mechanism that connects cognitive processes, social interaction, personal development, and the practical application of knowledge. Such an approach makes it possible to identify their principal characteristics, systematize their various manifestations, and discuss the pedagogical conditions necessary for their effective development.

The findings of this theoretical investigation provide the basis for the development of an original conceptual model of transversal learning that illustrates the logical interrelationships among the personal, social, cognitive, and practical dimensions of competency development. In this way, the methodological approach extends beyond merely describing existing concepts and creates the conditions for their critical interpretation and conceptual synthesis within the context of contemporary educational theory.

3. RESULTS

Over the past two decades, transversal competencies have gradually become established as one of the leading concepts in the development of contemporary education. This process has been driven by rapid technological advancement, globalization, changes in the labour market, and the need for learners to adapt to an increasingly dynamic and unpredictable social environment. In a knowledge-based society, it is no longer sufficient for students merely to acquire large amounts of information. Transversal competencies are regarded as a key factor in successful learning, professional development, and active participation in public life (UNESCO, 2016, pp. 12–18).

In the scholarly literature, the term transversal competencies is used to denote a complex combination of knowledge, skills, attitudes, and personal qualities that can be applied regardless of the specific academic discipline or professional field. They are defined as transferable competencies because they support effective functioning across different educational, social, and professional contexts. Owing to their broad scope, they are frequently associated in the literature with concepts such as twenty-first-century skills, soft skills, social and emotional competencies, and competencies for lifelong learning. Although these concepts are not entirely identical, they all emphasize the need to develop capabilities that extend beyond the boundaries of traditional subject-based instruction and facilitate successful adaptation to contemporary societal challenges (Chen, 2023, pp. 213–219).

A fundamental characteristic of transversal competencies is their integrative nature. They are grounded in the integration of the cognitive, personal, social, and emotional characteristics of the individual, which function as an interconnected system. Unlike subject-specific knowledge, which is linked to particular content, transversal competencies operate as a universal mechanism that enables learners to connect knowledge from different fields and apply it in a variety of situations. Critical thinking, problem-solving, communication, teamwork, adaptability, and self-regulation are relevant to every academic discipline and, at the same time, constitute a foundation for effective professional and social development. This universality explains why transversal competencies are increasingly regarded as a principal outcome of the educational process rather than as supplementary skills added to traditional instruction.

The development of transversal competencies requires a substantial change in the understanding of learning. Whereas the traditional model emphasizes the reproduction of knowledge, the contemporary approach focuses on the critical interpretation and application of knowledge, collaboration, and reflection (Rasheva-Merdzhanova, 2023, pp. 35–52). In this context, learning is understood as an active process of knowledge construction through engagement with real-world problems, practical situations, and the social environment. This understanding transforms the roles of both the student and the teacher. The learner becomes an active participant in their own development, while the teacher assumes the role of an organizer and facilitator of the learning process, creating conditions for the development of complex competencies rather than merely for the acquisition of curriculum content.

The importance of transversal competencies is further reinforced by their contribution to lifelong learning. They create the conditions for continuous professional development, successful adaptation to new technologies, and effective functioning in an environment of constant change. Contemporary educational systems increasingly recognize transversal competencies as an essential prerequisite for developing individuals who are able to search for, evaluate, interpret, and apply information independently across a range of contexts (Tsankov & Levunlieva, 2010, pp. 254–269). Consequently, transversal competencies do not constitute an addition to education; rather, they form its new conceptual foundation by linking academic knowledge to its practical applicability and to sustainable personal development (Sala et al., 2020, pp. 9–18).

The development of transversal competencies occupies a central place in contemporary international education policies, which emphasize their importance for successful learning, social inclusion, and professional development. Despite differences in terminology, international organizations share the view that education should develop not only subject-specific knowledge but also universal capabilities that enable individuals to adapt to a continuously changing environment (Tsankov & Levunlieva, 2010, pp. 254–269).

The European Union laid the foundations of the competency-based approach through the European Framework of Key Competences for Lifelong Learning, which defines eight key competencies required for personal development, active citizenship, social inclusion, and employability (Council of the European Union, 2018, pp. 2–8). Among these, personal, social, and civic competencies, together with learning-to-learn competence, are of particular importance, as they provide the foundation for the development of the remaining competencies. In addition, the European Commission developed the LifeComp framework, which organizes personal, social, and learning competencies into three interconnected areas: personal development, interaction with others, and learning to learn. The framework emphasizes that competencies can be developed throughout life, regardless of age or educational setting, and provides a conceptual basis for the design of curricula and innovative pedagogical practices (Sala et al., 2020, pp. 12–24).

UNESCO defines transversal competencies as universal capabilities that support individuals in successfully addressing the global challenges of the twenty-first century. The organization emphasizes critical thinking, communication, collaboration, global citizenship, and intercultural interaction, while stressing that these competencies should be integrated across all levels of education and all academic subjects rather than taught in isolation (UNESCO, 2016, pp. 20–28).

A similar position is adopted by the OECD, which links the development of transversal competencies to social and emotional skills, collaboration, self-regulation, and responsible decision-making. According to the organization, these competencies have a direct impact on academic achievement, professional development, and quality of life. Their development and assessment should therefore become a priority for contemporary educational systems (OECD, 2023, pp. 15–27).

Taken together, the international frameworks examined outline a shared understanding of transversal competencies as a strategic resource for developing individuals who are capable of learning, adapting, and participating actively in the knowledge society (Buzov, 2020, pp. 311–322). Transversal competencies encompass a broad range of interconnected capabilities that support individuals in functioning successfully across different educational, social, and professional contexts. Despite the diversity of classifications found in the scholarly literature, these competencies can be systematized into several principal groups.

Cognitive competencies include critical thinking, creativity, analytical thinking, problem-solving, and information literacy. Social competencies encompass effective communication, collaboration, teamwork, and the ability to engage in intercultural interaction. Personal competencies are associated with self-regulation, adaptability, resilience, and motivation to learn, whereas social and emotional competencies support the development of empathy, emotional awareness, and responsible behaviour in interpersonal relationships (Chen, 2023, pp. 220–224).

In the context of the digital society, digital and civic competencies are also becoming increasingly important. They include the ability to evaluate information critically, use digital technologies ethically, demonstrate media literacy, and participate actively in public life. These competencies enable learners not only to use technology effectively but also to demonstrate social responsibility, respect for democratic values, and a willingness to contribute to the sustainable development of society (Council of the European Union, 2018, pp. 5–10).

The educational significance of transversal competencies is reflected in their capacity to connect subject-specific knowledge with its application in real-life situations (Sala et al., 2020, pp. 18–27). They facilitate the transfer of learning across different academic disciplines and promote integrated learning, in which knowledge ceases to exist in isolation and becomes a tool for analysis, collaboration, and decision-making. In this sense, transversal competencies serve as a connecting mechanism between learning and practice, transforming education into a process of holistic personal development. For this reason, they are increasingly regarded as a key indicator of the quality and effectiveness of contemporary education.

4. DISCUSSIONS

Transversal competencies are gradually becoming established as a core element of the contemporary educational paradigm, as they reflect the need for education to prepare individuals capable of adapting to continuously changing social, economic, and technological environments. Unlike traditional education, which emphasizes the acquisition of subject-specific knowledge, the competency-based approach views learning as a process of developing universal capabilities that can be applied across different contexts. In this sense, transversal competencies do not constitute an addition to curriculum content; rather, they create the conditions for knowledge to be understood, integrated, and applied in solving real-world problems.

Of particular importance is the recognition that these competencies should be developed across all academic subjects rather than through separate educational activities (Rasheva-Merdzhanova, 2016, pp. 191–207). Critical thinking, communication, collaboration, self-regulation, and digital literacy are developed most successfully when they become an integral part of the learning process and are practised in a variety of situations. This requires a change in the organization of instruction—from the predominant reproduction of knowledge to active learning based on inquiry, discussion, project work, and the solution of practical tasks. Such a transformation calls for a new understanding of both the teacher's role and the learner's participation in the educational process.

Despite their widespread recognition as a strategic objective of education, the integration of transversal competencies continues to present a number of challenges. One of these is the absence of a commonly accepted conceptual framework regarding their content and classification. Different international and national frameworks use similar concepts but place varying emphasis on individual competencies, making their unambiguous interpretation and practical application more difficult. Moreover, the assessment of competencies that are demonstrated in real-life situations and encompass cognitive, social, and personal components requires a considerably more complex approach than the traditional measurement of knowledge.

Based on the analysis conducted, an original conceptual model of transversal learning can be proposed. The model represents competency development through four interconnected dimensions: personal, social, cognitive, and practical-applicative. The personal dimension includes the development of motives, values, interests, attitudes, self-regulation, and personal responsibility, which determine the learner's active participation in the learning process. The social dimension encompasses the development of communication skills, collaboration, empathy, and moral and civic qualities necessary for effective interaction with others. The cognitive dimension is associated with the development of intellectual abilities, critical and analytical thinking, creativity, problem-solving, and the capacity to transfer knowledge. The practical-applicative dimension is manifested in the use of acquired knowledge, skills, and competencies to address real-life, educational, and professional tasks. For example, within the educational environment, social and emotional development often remains secondary to academic achievement, thereby limiting opportunities to create a holistic and supportive learning environment. This tendency creates the risk that social and emotional learning (SEL) will be perceived as a secondary component of education rather than as a fundamental factor in students' overall development (Smailov, 2026).

These four dimensions do not develop sequentially or in isolation from one another; rather, they function as an integrated system. They are characterized by constant interconnection, mutual influence, and interaction, whereby the development of each dimension supports and enriches the others. Personal development influences cognitive processes; social interactions contribute to the formation of values, skills, and knowledge; and the practical application of learning simultaneously consolidates and develops all the other dimensions. In this way, transversal competencies function as an integrative mechanism that connects personal development with successful learning and social and professional fulfilment, creating conditions for continuous improvement throughout life.

5. CONCLUSIONS

The theoretical analysis conducted in this study demonstrates that transversal competencies occupy an increasingly significant place in contemporary education and are gradually becoming established as a fundamental component of competency-based education. They broaden the traditional understanding of educational outcomes by emphasizing not only the acquisition of knowledge but also its effective application, transfer, and use across a wide range of social, professional, and real-life contexts. In this way, transversal competencies establish the connection between academic knowledge and its practical application in personal development.

The analysis confirms the central thesis of this paper that the development of transversal competencies constitutes a necessary prerequisite for successful lifelong learning. These competencies foster the development of critical thinking, communication, adaptability, collaboration, and social responsibility—qualities that are becoming increasingly important in the context of a rapidly changing society. Furthermore, their development contributes to the formation of autonomous individuals who are capable of analysing information, making well-reasoned decisions, and adapting to emerging challenges.

The scientific contribution of this paper lies in the systematization of the principal concepts related to transversal competencies, their differentiation from closely related concepts, and the development of an original conceptual model of transversal learning. The proposed model illustrates the interrelationships among the personal, social, cognitive, and practical dimensions of competency development, emphasizing their interdependence, integrity, and dynamic interaction throughout the developmental process.

Future research may focus on the empirical validation of the proposed model, the development of reliable instruments for assessing transversal competencies, and the analysis of pedagogical practices that most effectively support their development across different levels of education. Such research would contribute to the more comprehensive integration of transversal competencies into educational practice and to enhancing the quality of education in the context of the knowledge society.

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doi: 10.35120/sciencej0503291m UDK: 005.7:334.012.63/.64]:303.7(497.11)"2026"
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EFFECTIVE IMPLEMENTATION OF ORGANIZATIONAL POLICIES AND PROCEDURES: THE ROLE OF MANAGERIAL PRACTICES

Ivan Mandić[1], Jovana Radulović[1], Slavica Mandić[1]*

[1]Belgrade Business and Arts Academy of Applied Studies, Department of Business and Information Studies, Belgrade, Serbia,
e-mail: ivan.mandic@bpa.edu.rs, jovana.radulovic@bpa.edu.rs, slavica.mandic@bpa.edu.rs

Abstract: Successful organizational management requires adopted policies and procedures, which regulate employee conduct and support compliance with organizational, legal, and regulatory requirements, to be communicated clearly and implemented consistently. This study examined the relationship between Internal Business Communication, as an important managerial practice, and the Effective Implementation of Organizational Policies and Procedures in small and medium-sized enterprises. A quantitative study was conducted between March and June 2026 on a sample of 281 employees from manufacturing, trade, and service enterprises in the City of Belgrade. Data were collected using a structured questionnaire and analysed through descriptive statistics, reliability analysis, Spearman's rank-order correlation, and simple linear regression. The results revealed a strong, positive, and statistically significant relationship between the observed constructs. Internal Business Communication was identified as a positive and statistically significant predictor of the Effective Implementation of Organizational Policies and Procedures, with the regression model explaining 82.3% of the variance in the dependent variable. Message clarity, timely information sharing, access to additional explanations, and continuous feedback were identified as significant communication factors associated with employees' understanding, acceptance, and consistent application of organizational policies and procedures. Internal Business Communication therefore extends beyond its informational function and is confirmed as an important managerial practice supporting the effective implementation of organizational policies and procedures. Managers of small and medium-sized enterprises are encouraged to improve communication clarity and timeliness, provide opportunities for additional clarification, and strengthen feedback mechanisms. The study contributes to a better understanding of the communication factors associated with the effective implementation of organizational policies and procedures and provides a basis for further research in different organizational and business contexts.

Keywords: *managerial practices; internal business communication; organizational policies and procedures; effective implementation; small and medium-sized enterprises.*

Field: Social Sciences (Management and Business)

1. INTRODUCTION

The achievement of organizational goals depends not only on the quality of managerial decision-making but also on the organization's ability to implement those decisions effectively. Implementation is one of the most demanding stages of the management process, requiring an appropriate combination of managerial practices and organizational mechanisms to translate decisions into planned outcomes (Hrebiniak, 2013; Holm et al., 2026). Within this process, organizational policies and procedures constitute key managerial instruments that define work processes, employee responsibilities, and workplace relationships while supporting compliance with legal, regulatory, and organizational requirements (Akinsola, 2025). Their formal adoption alone, however, is insufficient to ensure effective implementation.

Effective implementation is achieved when employees understand the purpose of organizational policies and procedures, accept the expectations they establish, and apply them consistently. This requires organizational roles, responsibilities, and requirements to be clearly communicated and connected with employees' work responsibilities (Fleming & Kowalsky, 2024). Internal business communication therefore represents an important managerial practice through which information is conveyed, requirements are clarified, and feedback is exchanged.

Internal business communication supports employee coordination, the implementation of managerial decisions, and the consistent interpretation of organizational requirements (Men, 2014; Lekić & Mandić, 2026). Information exchange, clarification, and feedback can reduce inconsistent interpretations, strengthen coordination, and encourage employee engagement (Nadales-Gallego et al., 2025). Clear communication and effective feedback mechanisms have also been associated with improved organizational functioning and the achievement of business objectives (Kalogiannidis et al., 2025). Nevertheless, effective implementation is shaped by the interaction of communication processes,

[*]Corresponding author: ivan.mandic@bpa.edu.rs

managerial practices, organizational mechanisms, institutional arrangements, and the normative framework rather than by any single factor (Mandić et al., 2025; Radulović & Vučićević, 2026).

Despite the recognised importance of internal business communication and organizational policies and procedures, their interrelationship has received comparatively limited direct empirical attention, particularly in small and medium-sized enterprises. Accordingly, this study aims to examine the relationship between internal business communication and the effective implementation of organizational policies and procedures in small and medium-sized enterprises operating in the City of Belgrade. In line with this objective, the following hypothesis was formulated: H1. Internal business communication positively and significantly predicts the effective implementation of organizational policies and procedures. Examining this relationship may provide new insights into the managerial practices that support the effective implementation of organizational policies and procedures in small and medium-sized enterprises.

2. MATERIALS AND METHODS

The empirical study employed a quantitative cross-sectional survey to examine the role of internal business communication as a managerial practice supporting the effective implementation of organizational policies and procedures in small and medium-sized enterprises operating in the City of Belgrade, Serbia. Data were collected between March and June 2026 using a structured questionnaire administered to employees working in manufacturing, trade, and service enterprises. A total of 350 questionnaires were distributed, of which 281 were properly completed and included in the final statistical analysis, representing a response rate of 80.3%. Participation in the study was voluntary and anonymous. Respondents were informed about the purpose of the research and were assured that the collected data would be used exclusively for scientific research purposes.

A structured questionnaire consisting of three sections was used as the research instrument. The first section collected demographic information on respondents' gender, age, educational level, job position, work experience, enterprise size, and business activity. The second section measured Internal Business Communication (IBC) using five variables: clarity and comprehensibility of information received from management (IBC1), timely provision of information necessary for work (IBC2), the opportunity to ask questions and receive clarification (IBC3), regular feedback from the immediate supervisor (IBC4), and timely and clear communication of organizational policies and procedures (IBC5). The selection of these variables was based on the conceptual and empirical contributions of Dozier et al. (1995) and Men (2014).

The third section assessed the Effective Implementation of Organizational Policies and Procedures (EIOPP) through five variables: understanding of policies and procedures related to one's job (EIOPP1), clarity of expectations regarding their application (EIOPP2), perceived usefulness of policies and procedures for job performance (EIOPP3), acceptance of policies and procedures as an integral part of everyday work (EIOPP4), and consistent application of policies and procedures while performing job duties (EIOPP5). The selection of these variables was guided by the implementation frameworks proposed by Klein and Sorra (1996), Klein et al. (2001), Hrebiniak (2013), and Proctor et al. (2011). All items were rated from 1 to 5, with lower scores reflecting a more negative evaluation and higher scores a more positive evaluation. Composite scores for IBC and EIOPP were calculated as the arithmetic means of their respective five-item scales.

Data analysis was performed using the jamovi statistical software package (Version 2.7.38). The software provides an accessible platform for conducting a broad range of statistical procedures and has become increasingly used in empirical research within the social sciences (Şahin & Aybek, 2020). Its application was also reported in a recent empirical study employing descriptive statistics, normality testing, group comparisons, correlation analysis, and regression modelling (Trobec et al., 2026).

Descriptive statistics were calculated to summarize respondents' characteristics and the distribution of the study variables. Internal consistency of the measurement scales was assessed using Cronbach's alpha coefficient, while the normality of the composite variables was evaluated using the Shapiro–Wilk test. Since the distributions deviated significantly from normality, Spearman's rank-order correlation was applied to examine the relationship between Internal Business Communication and the Effective Implementation of Organizational Policies and Procedures. Simple linear regression analysis was subsequently conducted to determine whether Internal Business Communication significantly predicted the Effective Implementation of Organizational Policies and Procedures. The assumptions of the regression model were evaluated using the Shapiro–Wilk test of residuals, a Q–Q plot, and residual plots. Statistical significance was established at $p < 0.05$.

3. RESULTS

The results are presented in the following order: demographic characteristics of the respondents, descriptive statistics and reliability analysis, correlation analysis, and regression analysis.

Demographic characteristics of respondents

Table 1 summarised the demographic characteristics of the respondents. The sample consisted of 281 respondents. Female respondents accounted for 51.96% of the sample, whereas males represented 48.04%. Most respondents were between 36 and 55 years of age (57.65%), had completed higher education (61.92%), occupied non-managerial positions (66.90%), and had between 6 and 10 years of work experience (45.20%). Medium-sized enterprises represented the largest share of the sample (47.33%), while manufacturing was the most represented business activity (35.23%).

Table 1. Demographic characteristics of respondents (N = 281)

Variable	Category	Frequency	Percentage
Gender	Male	135	48.04
	Female	146	51.96
Age	Up to 35 years	49	17.44
	36–55 years	162	57.65
	56 years and over	70	24.91
Education Level	Secondary education	41	14.59
	Higher education	174	61.92
	Master's or specialist degree	46	16.37
	Doctoral degree	20	7.12
Position in the Organization	Managerial position	93	33.10
	Non-managerial position	188	66.90
Work Experience	Up to 5 years	23	8.19
	6–10 years	127	45.20
	11–20 years	82	29.18
	21 years and over	49	17.44
Enterprise Size	Small enterprise	148	52.67
	Medium-sized enterprise	133	47.33
Business Activity	Manufacturing	99	35.23
	Trade	81	28.83
	Services	101	35.94

Source: Authors' calculation based on the survey data (2026)

Descriptive statistics

The mean values ranged from 3.60 to 4.20, while the standard deviations ranged from 0.89 to 1.10. All measurement variables had negative skewness values, indicating a greater concentration of responses in the higher categories of the scale. The kurtosis values ranged from 2.74 to 5.70 and indicated no substantial deviations from normality. These results were reported in Table 2.

Table 2. Descriptive statistics of the measurement variables

Variable	Mean	Std. Dev.	Skewness	Kurtosis
IBC1	4.103	0.941	-1.528	5.703
IBC2	3.808	0.967	-0.610	3.077
IBC3	3.701	1.019	-0.719	3.378
IBC4	3.601	0.893	-1.096	4.244
IBC5	3.900	1.013	-0.754	2.943
EIOPP1	4.203	0.959	-1.200	3.954
EIOPP2	4.028	1.048	-1.218	4.072
EIOPP3	3.904	0.903	-1.332	5.196
EIOPP4	3.801	1.100	-0.636	2.742
EIOPP5	3.904	1.049	-0.833	3.104

Source: Authors' calculation based on the survey data (2026)

At the construct level, mean values ranged from 3.82 to 3.97, while the standard deviations ranged from 0.81 to 0.88, indicating moderate response variability. Both constructs demonstrated high internal consistency, with Cronbach's alpha coefficients exceeding the recommended threshold of 0.70. Table 3 provided the descriptive statistics and reliability coefficients for the constructs.

Table 3. Descriptive statistics and reliability of the constructs

Constructs	Number of variables	Mean	Std. Dev.	Cronbach's α
IBC	5	3.823	0.810	0.893
EIOPP	5	3.968	0.883	0.920

Source: Authors' calculation based on the survey data (2026)

Correlation analysis

The normality of the composite variables was assessed using the Shapiro–Wilk test. The results indicated statistically significant deviations from normality for both Internal Business Communication ($W = 0.842$, $p < 0.001$) and the Effective Implementation of Organizational Policies and Procedures ($W = 0.817$, $p < 0.001$). Therefore, Spearman's rank-order correlation was applied to examine the association between the two constructs. The results presented in Table 4 indicated a strong, positive, and statistically significant relationship between the two constructs (Spearman's $\rho = 0.724$, $p < 0.001$). This finding suggested that higher levels of internal business communication were associated with more effective implementation of organizational policies and procedures.

Table 4. Spearman correlation analysis of the research constructs

Constructs	Spearman's ρ	df	p-value
Internal Business Communication and Effective Implementation of Organizational Policies and Procedures	0.724	279	< 0.001

Source: Authors' calculation based on the survey data (2026)

Regression analysis

A simple linear regression analysis was conducted to examine whether Internal Business Communication predicted the Effective Implementation of Organizational Policies and Procedures. The model fit measures were presented in Table 5.

Table 5. Model fit measures for the linear regression model

Model	R²	Adjuusted R²	Overall Model Test			
			F	df1	df2	p
1	0.823	0.823	1299	1	279	< 0.001

Source: Authors' calculation based on the survey data (2026)

The regression model was statistically significant, $F (1, 279) = 1299.00$, $p < 0.001$, and explained 82.3% of the variance in the Effective Implementation of Organizational Policies and Procedures ($R^2 = 0.823$; adjusted $R^2 = 0.823$), indicating substantial explanatory power. The regression coefficients were reported in Table 6.

Table 6. Model coefficients – EIOPP

Predictor	Estimate	SE	t	p	Stand. Estimate	95% Confidefnce Interval	
						Lower	Upper
Intercept	0.188	0.1072	1.75	0.081			
IBC	0.989	0.0274	36.04	< 0.001	0.907	0.858	0.957

Source: Authors' calculation based on the survey data (2026)

Internal Business Communication was identified as a positive and statistically significant predictor of the Effective Implementation of Organizational Policies and Procedures ($B = 0.989$, $SE = 0.027$, $\beta = 0.907$, $t = 36.04$, $p < 0.001$). More specifically, a one-unit increase in the Internal Business Communication score was associated with an estimated increase of 0.989 units in the Effective Implementation of Organizational Policies and Procedures score. These findings supported the research hypothesis that Internal Business Communication positively and significantly predicted the Effective Implementation of Organizational Policies and Procedures.

4. DISCUSSION

The strong relationship identified between internal business communication and the effective implementation of organisational policies and procedures indicates that organisational rules are not implemented merely through their formal adoption. Their implementation also depends on the extent to which organisational requirements, responsibilities, and expected ways of performing work are clearly communicated to employees. Internal business communication therefore represents one of the key managerial practices through which organisational policies and procedures are communicated, explained, and linked to employees' work tasks, thereby facilitating their consistent implementation. This finding is also consistent with governance-oriented approaches suggesting that organisational performance depends not only on formal structures but also on effective coordination mechanisms, institutional coherence, and interaction among organisational actors (Radulović & Vučičević, 2026). More broadly, successful implementation depends on the coordinated functioning of managerial and organisational mechanisms rather than solely on the quality of formally adopted decisions and rules (Hrebiniak, 2013; Holm et al., 2026).

Particular importance in the successful implementation of organizational policies and procedures lies in the quality of internal business communication. When employees receive timely information, have opportunities to seek clarification, and regularly obtain feedback, the likelihood of inconsistent interpretations of organizational requirements is reduced, while consistency in their implementation is strengthened. This interpretation is consistent with Men's (2014) view of internal communication as a strategic management instrument and with the review by Nadales-Gallego et al. (2025), which highlights its contribution to employee engagement and organizational effectiveness. Similar conclusions were reported by Kalogiannidis et al. (2025), who emphasised that clear communication, effective feedback mechanisms, and coordinated activities are important prerequisites for the successful functioning of small and medium-sized enterprises.

Organizational policies and procedures fulfil their intended function only when employees understand their purpose, organizational expectations, and the manner in which they should be applied. Their mere formal existence is therefore insufficient to ensure successful implementation. Consistent implementation also supports compliance with internal rules and legal and regulatory requirements, thereby strengthening transparency, accountability, and organizational risk management (Akinsola, 2025). Fleming and Kowalsky (2024) emphasise that the development and administration of policies and procedures require their continuous explanation, adaptation, and integration into organizational processes. Similarly, Klein and Sorra (1996) and Klein et al. (2001) argue that successful implementation depends on employees' understanding of organizational expectations and acceptance of organizational requirements.

Empirical evidence obtained in the present study confirmed that internal business communication was a strong predictor of the effective implementation of organizational policies and procedures. The high explanatory power of the regression model indicates that communication processes represent an area in which managerial action may produce substantial improvements in implementation. This does not imply that other organizational factors are unimportant; rather, it shows that the clarity, timeliness, and reciprocity of internal communication are closely associated with employees' understanding and consistent application of organizational requirements. Accordingly, the results provided empirical support for the research hypothesis that internal business communication positively and significantly predicted the effective implementation of organizational policies and procedures.

5. CONCLUSIONS

Effective implementation of organizational policies and procedures depends not only on their formal adoption but also on the quality of internal business communication. The results showed that internal business communication, as a managerial practice, was a significant predictor of their effective implementation. Successful implementation requires organizational requirements to be clearly communicated, explained, and linked to employees' specific work responsibilities. Timely information, opportunities to obtain additional clarification, and continuous feedback create conditions that promote better understanding, acceptance, and consistent application of organizational requirements. Internal business communication therefore extends beyond its informational function and becomes an important managerial instrument that links managerial decisions with employees' work practices.

This perspective contributes to a better understanding of the communication-related conditions that support the successful implementation of organizational policies and procedures in small and medium-sized enterprises. Managers can directly influence the quality of this process by improving message clarity, ensuring timely information sharing, providing opportunities for additional clarification, and strengthening feedback mechanisms. Organizational policies and procedures should therefore not be communicated merely as formal requirements but should be closely linked to employees' work tasks, responsibilities, and expected ways of performing their duties so that they become an integral part of organizational practice.

The findings of this study should, however, be interpreted in the light of certain limitations arising from the use of self-reported data, the cross-sectional design, and the inclusion of only small and medium-sized enterprises operating in the City of Belgrade. Future research could include enterprises of different sizes, other geographical regions and business sectors, adopt a longitudinal research design, and examine additional organizational factors such as leadership style, organizational culture, management support, and control systems. Such research would provide a more comprehensive understanding of how different managerial practices, together with internal business communication, contribute to the effective implementation of organizational policies and procedures.

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A COMPARATIVE ANALYSIS OF PUBLIC FUNDING MODELS FOR OPERA HOUSES AND THEATRES IN BULGARIA, GERMANY AND THE CZECH REPUBLIC

Asya Ivanova[1*]

[1]'Prof. Asen Diamandiev' Academy of Music, Theatre and Fine Arts – Plovdiv, Bulgaria, e-mail: asiaiv71@gmail.com

Abstract: The aim of this study is to compare the public funding models applied to opera houses and theatres in Bulgaria, Germany and the Czech Republic, and to identify practices that could contribute to the development of a more sustainable funding framework for Bulgarian performing arts institutions. The study is based on a comparative analysis of academic publications, legislation, funding methodologies and sectoral studies relating to the organisation and funding of publicly supported performing arts institutions in the three countries. The comparison examines the level of centralisation, the role of national, regional and local authorities, the relationship between public subsidies and income from ticket sales, the coverage of fixed and production costs, the use of project-based funding, and the inclusion of quantitative and qualitative performance criteria. The analysis shows that the Bulgarian model links a significant proportion of public support to institutional activity, ticket revenue and standardised expenditure criteria, which may stimulate audience development and revenue generation, but may also increase financial unpredictability and pressure to adopt a commercial repertoire. In Germany, public funding is predominantly decentralised and is provided mainly by the federal states and local authorities, with institutional subsidies covering structural costs and ticket revenue playing a supplementary rather than a determining role. In the Czech Republic, most professional theatres receive their core funding from their founding municipalities or regions, supplemented by national and local grants, own revenue, donations and sponsorship. The comparative findings show that the German and Czech approaches provide greater stability for fixed institutional costs, although these remain dependent on the financial capacity and political priorities of regional and local authorities. The study concludes that none of the systems examined is free from financial and managerial risks, but the comparison supports the development of a differentiated hybrid model for Bulgaria. Such a model should combine guaranteed core funding, a component linked to actual activity and audience development, and a separate quality component reflecting artistic merit, public mission, regional accessibility and institutional specificity. It is recommended that ticket revenue remain an indicator of organisational performance, without becoming the dominant determining factor for public subsidy. Further research should include institutional financial data and expert interviews with theatre and opera managers from the three countries.

Keywords: *public funding, opera houses, theatres, performing arts, comparative cultural policy.*
Field: Social Sciences

1. INTRODUCTION

This article examines the funding models in Bulgaria, Germany and the Czech Republic with the aim of analysing and drawing conclusions regarding reform in the sector in Bulgaria. The funding of culture and the arts is a topic of particular importance for the country. For a very long time, Bulgaria has been discussing the Strategy for the Development of Bulgarian Culture 2019–2029, but it has not yet been approved or implemented (Kazashka, 2021). Research into local theatres shows that the benefits of their activities include education, prestige, local identity, innovation and aesthetic experience, and are appreciated by both regular attendees and people who do not directly participate in theatre-going (Bille & Storm, 2024). Therefore, public funding of performing arts institutions should be viewed not merely as compensation for the shortfall between income and expenditure, but as a tool for ensuring culturally significant public goods.

Contemporary academic literature views the funding of culture as a dynamic system in which public subsidies, own revenue, project support, donations, sponsorship and other private sources interact. The balance between these components is influenced by the institutional environment, governance structure, public policy, market demand and public perceptions of the value of the arts (Lin & Luo, 2023). However, revenue diversification does not automatically guarantee organisational sustainability. Managing multiple short-term and uncertain sources can create 'portfolio uncertainty', increase the administrative burden and hinder long-term artistic and financial planning (Ashton, 2023). From this perspective, the central question is not whether public and private funding should be combined, but how to design a system that simultaneously ensures institutional stability, stimulates activity and safeguards the artistic mission.

*Corresponding author: asiaiv71@gmail.com

An analysis of organisations from eleven European countries establishes a link between public spending on culture and technical efficiency, whilst showing that the results depend on organisational scale, accumulated experience and the national institutional environment (Fernández-Blanco et al., 2023). A study of 146 Italian theatre organisations, including opera houses, resident theatres and production companies, also finds a positive relationship between subsidies and technical efficiency, but reveals varying effects depending on the type of organisation (Castiglione et al., 2024). These results cast doubt on the applicability of universal financial standards to institutions with different production technologies, staff structures, infrastructure and public functions.

Research on public theatres suggests that the structure and level of subsidies may be linked to repertoire decisions, institutional risk-taking, and the balance between traditional and innovative works. A new analysis of Italian opera and drama theatres for the seasons from 2015/2016 to 2022/2023 examines precisely the relationship between public subsidies and the originality of the repertoire (Padovano & Pugliano, 2026). Consequently, the criteria for the allocation of public funds are not neutral administrative instruments: they can encourage certain managerial behaviour and indirectly influence artistic choices.

The funding of state theatres and opera houses in Bulgaria is based on statutorily regulated budgetary subsidies, uniform expenditure standards, own revenue and supplementary project funding. The mechanism in place links part of the public funding to the activities carried out and the revenue generated, using specific standards and coefficients for the different types of cultural institutions. This approach may stimulate activity, the dissemination of performances and engagement with audiences, but it creates a risk that ticket revenue will become the dominant criterion in management and repertoire decisions. Academic research on Bulgarian arts organisations highlights the need for adequate financial control and managerial capacity, as a lack of specialised expertise can lead to the inefficient use of resources and difficulties in achieving organisational objectives (Kazashka, 2019).

The Bulgarian case is particularly significant due to the extensive network of public performing arts institutions and the central role of state funding. As at 30 June 2026, the sector overview included 29 drama, drama-puppet and mixed theatre organisations, 11 independent state puppet theatres and 7 opera and musical theatre institutions, making a total of 47 organisations. Some of these are entirely state-funded, whilst in others state funding is supplemented by local contributions in the form of building funds, maintenance, targeted transfers or other forms of co-funding. Alongside the public network, there are private theatres, independent companies and production platforms; however, in the field of opera, private initiative is predominantly project-based, festival-based or touring, and does not form a sustainable network of private repertory opera companies analogous to the state-run one.

The issue of funding is set within the broader context of cultural policy, institutional priorities and access to culture. The analysis of the Strategy for the Development of Bulgarian Culture 2019–2029 emphasises the need for clear objectives, functioning mechanisms and effective policies for the preservation, development and public accessibility of culture (Kazashka, 2021). The joint study by Tsvetomira Kazashka and Vesela Kazashka argues that cultural policies must be periodically reviewed in line with the changing economic and social environment, whilst safeguarding their role in ensuring equal participation in cultural life, freedom of creative expression and cultural diversity (Kazashka & Kazashka, 2021). This position is directly relevant to the assessment of funding mechanisms, as the manner in which public resources are allocated determines the actual possibilities for achieving the stated objectives of cultural policy.

A comparison with Germany and the Czech Republic allows the Bulgarian model to be placed in the context of two different systems, both of which are closely aligned with the continental European tradition. In Germany, the funding of theatres and opera houses is highly decentralised, with the federal states and local authorities playing a key role. Institutional subsidies are aimed at maintaining cultural infrastructure and covering structural costs, whilst ticket revenue plays a supplementary rather than a decisive role. German literature also shows that the organisational and legal form, local budgetary capacity and political decisions influence the sustainability and effectiveness of institutions.

In the Czech Republic, most professional theatres are decentralised and are funded primarily by local authorities or regions, which act as their founding bodies. Basic institutional funding is supplemented by national and local grants, own revenue, donations and sponsorship. A multi-criteria study of Czech cultural services shows that the evaluation of theatres requires a combination of financial, technical and managerial indicators, as the results are long-term in nature and cannot be measured solely by direct market revenue (Vavrek & Bečica, 2020). At the same time, dependence on the founding body gives rise to differences determined by the financial capacity and cultural priorities of individual municipalities and regions.

The comparison highlights three distinct guiding logics: the Bulgarian model, in which the subsidy is largely linked to activity and revenue; the German model of decentralised institutional coverage of structural costs; and the Czech model of core funding from the founding body, supplemented by grants and own resources. None of the systems is free from risks. The Bulgarian model may encourage a focus on quantitative outcomes and commercialisation; the German model depends on the budgetary and political decisions of the federal states and municipalities; and the Czech model may reproduce territorial inequalities depending on the founder's resources. Therefore, the comparative analysis should seek not a mechanical transfer of a foreign model, but principles that can be adapted to the Bulgarian institutional environment.

The research problem addressed in this article stems from the need to establish how the varying balance between core institutional funding, performance-based components, own revenue and project support affects the financial sustainability, artistic autonomy and public function of theatres and opera houses. The aim of the study is to conduct a comparative analysis of public funding models for theatres and opera houses in Bulgaria, Germany and the Czech Republic, and to identify applicable principles for improving the Bulgarian system. The analysis focuses on the degree of centralisation, the role of the state and local authorities, the coverage of fixed costs, the significance of ticket revenue, project funding and the use of quantitative and qualitative criteria. The working hypothesis is that a more sustainable model for Bulgaria can be developed through a differentiated hybrid architecture that combines a guaranteed basic component, transparent funding based on actual activity, and an independent quality component that takes into account artistic value, audience development, regional accessibility and public contribution.

2. MATERIALS AND METHODS

This study is structured as a comparative qualitative investigation of public funding models for theatres and opera houses in Bulgaria, Germany and the Czech Republic. The research design combines documentary analysis, comparative institutional analysis and a thematic review of the academic literature. This approach was chosen because the aim of the article is not to measure the financial efficiency of individual cultural institutions using primary accounting data, but to identify the main characteristics, similarities, differences and risks of the three national public funding systems. The subject of the study is publicly funded theatre and opera institutions in Bulgaria, Germany and the Czech Republic. The analysis focuses on the mechanisms for the formation and allocation of public resources, the role of central, regional and local authorities, the ratio between institutional subsidies and own revenue, the significance of ticket revenue, project funding and the criteria for evaluating outcomes. Private and independent organisations are considered only as a supplementary context, as the main focus is on institutions that fulfil a lasting social and cultural function and receive systematic support from public budgets. The study utilises secondary data from several groups of sources: national legislation and official documents regulating the funding of the performing arts; methodologies, expenditure standards and rules for the allocation of public funds; official lists and registers of state and publicly supported theatres and opera houses; academic articles; comparative studies on the funding, effectiveness and management of cultural institutions; and official materials from state, regional and local authorities, where available and directly relevant to the research model. For Bulgaria, the regulatory framework includes the Law on the Protection and Development of Culture, the Public Finance Act, the annual state budget laws, the acts on uniform expenditure standards, the methodologies for their application, and the rules for competitive project funding. The Law on the Protection and Development of Culture, and in particular Article 23a, forms the legal basis for the funding of state cultural institutions in the performing arts and for the application of uniform expenditure standards. A systematic overview of the institutional structure of the Bulgarian sector has also been utilised. It covers 29 drama, drama-puppet and mixed theatre organisations, 11 independent state puppet theatres and 7 opera and musical theatre institutions. The total number of public organisations included is 47. The analysis notes that the term 'state-municipal' is used in practice to refer to institutions where state funding is combined with local participation through building stock, running costs, targeted transfers or other forms of co-funding, without this necessarily constituting a separate legal form. The materials on Germany and the Czech Republic include publications analysing the decentralisation of public funding, the role of the federal states, municipalities and regions, the link between subsidies and repertoire policy, the effectiveness of organisations, and the use of multi-criteria evaluation systems. In the case of Germany, the focus is on institutional funding from the federal states and municipalities, whilst in the case of the Czech Republic, the role of the municipality or region as the founding body and main source of core funding is analysed. The comparison between the three countries was carried out using a predefined analytical framework. The following indicators were examined for each national model:

Degree of centralisation – whether key funding decisions are taken at national, regional or local level.

Main public funding body – the state, a federal province, a region, a municipality or a combination of these.

Form of core funding – institutional grant, basic funding, expenditure standard, contractual funding or another mechanism.

Coverage of recurrent costs – the extent to which public funding covers expenditure on staff, buildings, technical infrastructure, rehearsal activities and administrative capacity.

Role of ticket sales and other own revenue – whether these serve as a supplementary resource, an indicator of efficiency, or a factor that directly determines the size of the subsidy.

Project funding – the importance of competitive programmes, grants and targeted funding for productions, festivals, tours and audience development.

Evaluation criteria – the use of indicators such as attendance figures, revenue, number of performances, artistic quality, professional recognition, accessibility and public impact.

Institutional differentiation – the extent to which the system takes account of differences between theatres and opera houses, between national and regional institutions, and between organisations of varying scale and production structure.

Key risks of the model – financial unpredictability, dependence on political decisions, regional inequalities, administrative burden, commercialisation of the repertoire and restrictions on artistic risk-taking.

Potential applicability to Bulgaria – the possibility of adapting certain principles or tools to the Bulgarian regulatory and institutional environment.

This framework makes it possible to avoid a mechanical comparison based solely on the amount of public funding. Instead, the analysis examines the rationale for funding, the allocation of responsibilities, and the relationship between financial support, institutional sustainability and artistic mission. The analysis was carried out in four consecutive stages. In the first stage, the regulatory and institutional characteristics of each country were systematised. For Bulgaria, the legal framework, expenditure standards and the role of the Ministry of Culture and the local authorities were examined. For Germany and the Czech Republic, data on decentralisation, the role of local and regional authorities, and the structure of institutional and project funding were summarised. In the second stage, academic publications were coded by theme. The following main codes were used: 'core funding', 'performance-based funding', 'own revenue', 'ticket revenue', 'fixed costs', 'decentralisation', 'role of the founding body', 'efficiency', 'artistic risk', 'repertoire policy', 'public value', 'regional accessibility' and 'quality criteria'. In the third stage, the codes were grouped into broader comparative categories: institutional structure, financial architecture, performance indicators, artistic impact and key risks. For each category, the similarities and differences between the three countries were identified. In the fourth stage, the results were interpreted in terms of the potential for improving the Bulgarian model. The applicability of German and Czech practices was assessed not as an opportunity for direct transfer, but as a basis for formulating principles for differentiated and hybrid funding.

3. RESULTS

The comparative analysis identified significant differences in the institutional architecture, sources of public funding and the role of own revenue in theatres and opera houses in Bulgaria, Germany and the Czech Republic. In all three countries, public support remained of paramount importance, but the mechanisms for its allocation and its link to organisational outcomes differed. Seven indicators have been identified: degree of centralisation and the role of funding bodies; the underlying rationale for public funding; coverage of fixed costs; the importance of ticket sales and own revenue; quantitative and qualitative criteria; influence on artistic value; and key risks.

Table 1. Comparative summary of public funding models

Indicator	Bulgaria	Germany	Czech Republic
Underlying rationale	Activity-based funding, revenue and expenditure standards	Decentralised institutional funding	Core funding from the founding body, supplemented by grants
Main funding bodies	The state and, in certain cases, local authorities	Federal provinces and local authorities	Local authorities, regions and national programmes
Ticket revenue	May have a direct impact on the subsidy	Supplementary source	Supplementary source and performance indicator
Fixed costs	Coverage depends on the standard and the activities carried out	They are largely covered by the institutional subsidy	They are mainly provided through the founder's contribution
Quality criteria	Limited involvement in the core mechanism	Linked to the institution's mission and the decisions of the funding body	Used in the context of grants and multi-criteria assessments
Main risk	Quantitative pressure and commercialisation	Dependence on local budgetary and political decisions	Territorial differences depending on the founder's capacity

Source: Author's research

The summary results showed that the German and Czech models provide a clearer distinction between core institutional funding and own revenue. The Bulgarian model creates a stronger incentive for activity and audience engagement, but places institutions in a more direct dependence on current revenue and quantitative indicators. The comparison highlighted the need for a more balanced financial architecture that distinguishes between the coverage of fixed costs and funding based on activity and qualitative outcomes.

4. DISCUSSIONS

The results show that the differences between the three models are not limited to the level of public funding, but also relate to the way in which financial risk and responsibility are distributed between the state, local authorities and cultural institutions. The Bulgarian model creates a stronger incentive for activity and self-generated revenue, but at the same time increases dependence on quantitative indicators and may limit artistic risk. Under the German and Czech models, fixed institutional costs are more clearly separated from current revenue, which ensures greater predictability but increases dependence on the budgetary capacity and political decisions of the provinces, regions and municipalities.

The comparison confirms that ticket revenue is an important indicator of demand and organisational activity, but should not be the primary criterion for determining public subsidy. Theatres and opera houses fulfil artistic, educational, social and regional functions that cannot be assessed solely on the basis of attendance and revenue. A more balanced approach therefore involves distinguishing between funding for permanent institutional capacity, support based on actual activity, and an assessment of artistic quality and public value.

The findings support the possibility of developing a differentiated hybrid model in Bulgaria. This model should take into account the differences between theatres and opera houses, the size of their companies, infrastructure requirements and regional functions. The introduction of a guaranteed basic component, supplemented by transparent quantitative and qualitative criteria, could reduce financial unpredictability without removing incentives for activity, audience development and effective management.

5. CONCLUSIONS

The comparative analysis shows that public funding for theatres and opera houses in Bulgaria, Germany and the Czech Republic is based on different ratios between state support, local responsibility, own revenue and performance evaluation. The Bulgarian model encourages activity and audience engagement, but creates a greater dependence on revenue and quantitative indicators. The German and Czech models provide more stable coverage of fixed costs, but remain dependent on the financial capacity and political decisions of local and regional authorities.

The findings support the need for a differentiated hybrid model for Bulgaria, combining guaranteed core funding, a component based on actual activity, and an independent assessment of artistic quality, public value and regional function. Such an approach could improve the predictability and sustainability of performing arts institutions without restricting their activity or managerial responsibility.

ACKNOWLEDGEMENTS

This work was supported by the ART-IN project (Contract КП-06-КОСТ/9), associated with COST Action CA23158 “ARTinRARE”, funded by the Bulgarian National Science Fund and COST (European Cooperation in Science and Technology).

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doi: 10.35120/sciencej0503303d UDK: 821.112.2-2.09

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AFTER THE CATASTROPHE. WOLFGANG BORCHERT'S "DRAUßEN VOR DER TÜR": BETWEEN GUILT, DISORIENTATION, AND THE POSSIBILITY OF LIVING AFTER

Milica Denkovska[1*]

[1]MIT University Skopje, North Macedonia; Mother Teresa University in Skopje, North Macedonia,
e-mail: milica.denkovska@gmail.com, milica.denkovska@unt.edu.mk

Abstract: Post-war German literature is often understood as a literary response to war, destruction, and political guilt. However, the catastrophe of war is not limited to physical destruction; it also entails the collapse of the social, moral, and existential structures that allow individuals to experience themselves as belonging to a meaningful world. This paper examines Wolfgang Borchert's Draußen vor der Tür as a drama of existence after catastrophe, focusing on the returning soldier Beckmann and his experience of disorientation, fractured identity, guilt, and exclusion. The analysis explores how Beckmann's confrontation with a destroyed social world and his unresolved moral responsibility develop into an existential crisis that raises the question of whether life remains possible after catastrophe. Particular attention is given to Beckmann's persistent search for meaning, his attempts to confront others with responsibility, and his continued questioning in the absence of satisfactory answers. The paper argues that Borchert does not offer hope as reconciliation, certainty, or resolution. Rather, the drama locates a minimal yet significant possibility of hope in persistence itself: in Beckmann's refusal to stop questioning, searching, and struggling to find meaning within a world whose previous structures have collapsed. In this sense, Draußen vor der Tür does not resolve the existential crisis produced by catastrophe, but neither does it close entirely into despair.

Keywords: *Wolfgang Borchert, Draußen vor der Tür, post-war German literature, existential crisis, guilt, identity, hope*.
Field: Humanities

1. INTRODUCTION

„Ein Mann kommt nach Deutschland" (Borchert, 1986, p. 8) is the opening sentence of Wolfgang Borchert's drama Draußen vor der Tür. Yet, from the very beginning, this is not simply a story of a man "returning" home. Rather, it is as if he were setting foot in this country for the first time. Beckmann is a returning soldier, but the opening immediately makes clear that something is fundamentally wrong with this "return." There is no "home" left to provide familiarity, security, or a sense of belonging. The man who has returned finds himself confronted with walls of incomprehension, rejection, and denial.

Post-war German literature is frequently understood as a literary response to war, destruction, and political guilt. Scholarship has often focused on landscapes of ruins, the historical concept of the Stunde Null ("Zero Hour"), or the literary confrontation with National Socialism. Wolfgang Borchert's Draußen vor der Tür, however, opens up a different perspective. The drama does not primarily ask about the causes of catastrophe; rather, it confronts the question of **how human existence remains possible after the collapse of the social, moral, and personal certainties that once gave life structure and meaning**.

This article therefore approaches Borchert's drama not merely as a representation of the returning soldier or as a literary document of the immediate post-war period, but as an exploration of existence after catastrophe. What happens to a person when not only the physical world has been destroyed, but also the structures through which identity, belonging, responsibility, and a sense of the future are constituted? Through Beckmann, Borchert presents the experience of a man who has returned physically but is unable to return to the world he once knew. His return thus becomes a paradox: **he has come back, but there is nowhere to return to.**

The article asks: **How is human existence possible after the collapse of social, moral, and personal certainties, and does Draußen vor der Tür leave any room for hope, or does the drama ultimately portray the impossibility of returning to life?** It argues that Beckmann should not be interpreted solely as a returning soldier, but rather as a figure of radical disorientation and fractured identity whose search for meaning reflects the broader crisis of post-war German society. At the same time, the drama's refusal to provide a definitive resolution does not necessarily amount to absolute hopelessness. Rather, Borchert may be understood as locating a minimal possibility of living in Beckmann's persistent refusal to stop asking questions.

*Corresponding author: milica.denkovska@gmail.com

2. THE CATASTROPHE

„Die Welt, die bisher so bunt und freudig war, wurde zum grauen, leeren und echo- und wertlosen Raum." (Kowalski, 2024: 80) However, the catastrophe in Draußen vor der Tür is not simply the destruction of buildings and cities. It is the collapse of the structures through which human beings normally understand themselves and their place in the world. What happens, then, when the structures of social order become unstable?

"Ethics in literature is usually connected through its thematic, mimetic and representative function, and not through the literary structural, poetic and performative notion. Taken in this way, literature mirrors life because it simply serves the classic questions of pedagogical illustration: how we should treat other people, what the greatest virtues are, how conflicts arise and how they are resolved […]. Ethics in that case serves as an interpreter of literary questions" (Denkovska, 2023: 81). Drawing on the experience of the soldier returning "home", Borchert places Beckmann in a series of liminal spaces: between life and death, the will to survive and the longing for death, past and future, dream and reality, and an intact identity and the disintegration of the self. This liminality is also inscribed in the drama's topography. Beckmann wanders through the doorways and streets of his hometown, traversing a Hamburg reduced to ruins. He is physically back in the city, yet he remains socially and existentially outside it.

Beckmann simply does not belong. He no longer belongs to "his" community because the community he remembers no longer exists; more radically still, even the linguistic markers through which his individuality was once recognized have been eroded. His wife no longer calls him by his first name. Instead, she addresses him simply as "Beckmann", reducing the person she once knew to a surname and, ultimately, to an object:

„Beckmann – sagte meine Frau zu mir. Einfach nur Beckmann. Und dabei war man drei Jahre weg. Beckmann sagte sie, wie man zu einem Tisch Tisch sagt. Möbelstück Beckmann. Stell es weg, das Möbelstück Beckmann. Siehst du, deswegen habe ich keinen Vornamen mehr." (Borchert, 1986, p. 15)

Beckmann's loss of his first name becomes a particularly striking manifestation of his fractured identity. The loss is not merely emotional or relational; it is also linguistic. The intimate form of address through which he was once recognized as an individual has disappeared. By comparing himself to a piece of furniture, Beckmann describes his own reduction from a person who once possessed a place within a relationship to an object that can simply be moved aside. His statement, „deswegen habe ich keinen Vornamen mehr," therefore turns the loss of the name into a literal expression of the loss of relational identity.

Beckmann's exclusion can therefore be understood not merely as an individual experience of loneliness, but as an expression of a broader crisis of social security and belonging. Zygmunt Bauman describes modernity in terms of an increasing "liquefaction" of previously stable structures and an accompanying imbalance between individual freedom and security (Bauman, 2000, p. 170). In Beckmann's case, this loss of security becomes radically concrete: the structures to which he might have returned - home, marriage, community, and social recognition - no longer provide him with a place.

He has no viable means of re-entering ordinary social life.

His attempt to work at the theatre is rejected by the cabaret director, who insists that „die Leute wollen doch schließlich Kunst genießen, sich erheben, erbauen und keine naßkalten Gespenster sehen" (Borchert, 1986, p. 39). Beckmann is thus not only unable to reclaim his previous personal identity; he is also denied a place within the cultural and social present.

Even his attempt to determine the conditions of his own existence - to take his own life and finally rest - fails. In Borchert's drama, the Hamburg Landungsbrücken play an important role as a place of despair and failure. The place symbolizes the hopelessness of returning soldiers who are rejected by post-war society and unable to find a new beginning (Milz, 2000).

Landungsbrücken in St. Pauli, Hamburg

Source: Denkovska, taken on July 23, 2026

Beckmann tells the Elbe:

„Pennen. Da oben halte ich das nicht mehr aus. Das mache ich nicht mehr mit. Pennen will ich. Tot sein. Mein ganzes Leben lang tot sein. Und pennen. Endlich in Ruhe pennen. Zehntausend Nächte pennen." (Borchert, 1986: 12), a plea that has been brutally refused by the river: "Ich will dir was sagen, ganz leise, ins Ohr, du, komm her: ich scheiß auf deinen Selbstmord!" (Borchert, 1986: 13)

For Beckmann, return does not mean restoration.

3. THE EXISTENTIAL LEVEL

What happens to the individual when historical catastrophe confronts them with guilt, responsibility, and the limits of human existence? Beckmann's personal experience becomes more than a sociological symptom. He is not simply homeless; he is confronted with fundamental questions: What am I responsible for? What am I guilty of? Who am I now? And what makes it possible to continue?

According to Jaspers, moral guilt arises from the responsibility that each individual bears for their actions before their own conscience, including their conduct in political and military contexts. As Jaspers explains, „Die moralische Schuld aber besteht bei allen, die dem Gewissen und der Reue Raum geben. Moralisch schuldig sind die Sühnefähigen, die, die wußten oder wissen konnten, und die doch Wege gingen, die sie in der Selbstdurchhellung als ein schuldiges Irren verstehen, - sei es, daß sie sich bequem verschleierten, was geschah, oder daß sie sich betäuben und verführen ließen, oder sich kaufen ließen durch persönliche Vorteile, oder daß sie aus Angst gehorchten" (Jaspers, 1946: 58). Beckmann is aware of this moral dimension. He does not evade responsibility by claiming the status of a mere victim; instead, he seeks to confront the person who issued the order that led to the deaths of his men. He therefore turns to the Colonel, demanding that responsibility be acknowledged and symbolically returning the eleven dead to him - lives that represent only a small addition to the thousands already weighing upon the Colonel's conscience.

Yet Beckmann's attempt to obtain an acknowledgment of responsibility remains unfulfilled. The Colonel evades responsibility by treating the deaths as ordinary and inevitable occurrences (Borchert, 1986: 24–35). In doing so, he exemplifies a social order in which moral responsibility can be dismissed as commonplace. "These structures are the law of the land – in Lacanian terms, the Big Other. Yet they are fundamentally absurd (Orwellian puppets of power), signifying that the Symbolic order is corrupt or false." (Dimitrijovska-Jankulovska & Denkovska, 2005-1: 103). At the same time, Beckmann cannot simply transfer his own moral burden to the Colonel: the confrontation exposes precisely the difficulty of assigning responsibility within a society shaped by collective participation, obedience, and moral evasion. The Colonel's refusal therefore leaves Beckmann without the recognition he seeks and prevents any genuine resolution of his moral and existential conflict.

This failure extends beyond the individual encounter. Borchert's subtitle – „Ein Stück, das kein Theater spielen und kein Publikum sehen will" - points to a broader social unwillingness to confront the consequences of the catastrophe. The problem is therefore not confined to Beckmann or to the Colonel; it concerns a society that resists confronting guilt, responsibility, and suffering. Borchert offers no clear resolution to this dilemma, and consequently, Beckmann is left without an answer. The existential crisis produced by the catastrophe thus remains unresolved.

3. AFTER THE CATASTROPHE

The destruction of the world produces the disorientation of the individual; the disorientation of the individual produces a crisis of identity; and the crisis of identity raises the question of whether life can continue at all.

What can "hope" mean in a world in which the very conditions that make hope possible have themselves been destroyed?

Borchert does not offer hope as a resolution. Instead, he perhaps offers hope as persistence: the refusal to stop searching, questioning, and moving forward even when no satisfactory answer is available. Beckmann continues to search for meaning, to confront others with their responsibility, and to ask questions for which he receives no convincing answers.

3.1. Searching for Meaning

Beckmann lies in the sand, unable to stand because of his stiff leg - a "souvenir" from the war, as he calls it. He had intended to drown himself, unable to bear the limping and hunger any longer. He is equally tormented by the fact that his wife has taken another man, that his home lies in ruins, and that his one-year-old son is buried beneath the rubble. He tells the Other about his dream: the Elbe refused to accept his life and spat him back out. He is still freezing, just as he was in Russia, and has reached the point where he feels he has had enough of life.

The Other disappears when a girl appears. She has heard voices and asks who is lying there by the water. Beckmann responds sarcastically, describing himself as a "dark heap" between the water and the sand. The girl is relieved to discover that he is still alive; she has seen too many corpses by the water. She asks him to stand up, but Beckmann cannot: his kneecap was shattered in Russia. The girl takes pity on him. Seeing that he is wet and freezing, she calls him a fish, helps him to his feet, and offers to take him home with her, although she admits that she may regret it. She recognizes Beckmann's despair. Slowly, they set off together.

The Other remains behind, reflecting on the strange nature of human beings. One moment, they contemplate death; the next, at the sight of a loving woman, they soften and appear to forget everything. Yet this apparent contradiction is significant. Beckmann does not suddenly overcome his despair; rather, the encounter interrupts his movement toward death. The possibility of human connection, however fragile, creates a temporary opening in a world that had seemed entirely closed to him. His movement with the girl therefore does not constitute a resolution, but it marks the first indication that persistence may itself be a form of hope.

3.2. Confronting Others

Beckmann now seeks to return responsibility to the Colonel so that he can finally sleep again. He reminds him of February 14 in the Russian town of Gorodok. He vividly recalls the moment when the Colonel assigned him responsibility for twenty men and ordered them to scout the area and take prisoners. During the mission, they came under fire. Eleven men died - a loss for which Beckmann feels responsible. Yet the war is now over. The Colonel attempts to downplay the matter, but Beckmann insists on confronting him with responsibility for those deaths and with the grief and longing of the men's families.

Beckmann's confrontation is therefore not merely an attempt to accuse the Colonel. It is an attempt to restore meaning to the deaths that have been reduced to an ordinary consequence of war. By insisting that the Colonel acknowledge the eleven dead, Beckmann refuses the normalization of suffering. His persistence takes the form of an ethical demand: someone must remember, someone must answer, and someone must accept responsibility.

The Colonel, however, refuses to provide such an answer. His dismissal of the deaths demonstrates once again the failure of the social world to acknowledge Beckmann's experience. Nevertheless, Beckmann continues to confront those around him. His persistence therefore does not lead to reconciliation; instead, it becomes a form of resistance against forgetting and indifference.

3.3. Asking Questions and Seeking Answers

Beckmann asks the Colonel how he can sleep and live without screaming, suggesting that eleven additional deaths on his conscience should make little difference to a man who already carries responsibility for so many. The question, however, reaches beyond the Colonel. It expresses Beckmann's own inability to understand how human beings can continue living after catastrophe as though nothing has happened.

He then encounters the "dear" God. Beckmann asks whether it is the people God treats well - or those who fear Him - who call Him "dear." For Beckmann, God is anything but "dear." He accuses Him of having taken his son and asks where He was when Stalingrad and all the other horrors took place. God claims that no one believes in Him or cares about Him anymore.

As Frankl (1984) points out, "It must be kept in mind, […] that optimism is not anything to be commanded or ordered. One cannot even force oneself to be optimistic indiscriminately, against all odds, against all hope." Even God's pleas to convince Beckmann that life is worth living fail to satisfy him. Instead, Beckmann responds with further questions:

„Träum ich? Seh ich alles verzerrt durch diese elende Gasmaskenbrille? Sind alles Marionetten? Groteske, karikierte Menschenmarionetten? Hast du den Nachruf gehört, den mein Mörder mir gewidmet hat? Epilog auf einen Anfänger: Auch einer von denen – du, Anderer! Soll ich leben bleiben? Soll ich weiterhumpeln auf der Straße? Neben den anderen?" (Borchert, 1986: 65) His psychic state between reality and dream "acts like a mirror - reflecting societal hypocrisy, internal trauma, and existential fear." (Dimitrijovska-Jankulovska & Denkovska, 2005-2: 460) He finds no satisfactory answers. Yet he continues to ask.

This persistence is crucial. Beckmann's continued questioning does not demonstrate that he has recovered hope; rather, it suggests that the complete abandonment of hope has not yet occurred. As long as he continues to ask whether life is possible, meaningful, or worth living, the possibility of an answer remains open. Hope therefore appears not as certainty, consolation, or resolution, but as the refusal to stop searching even in the absence of convincing answers.

4. CONCLUSION

In Wolfgang Borchert's Draußen vor der Tür, the catastrophe of war is represented not merely as physical destruction, but as the collapse of the social, moral, and existential structures that enable human beings to experience themselves as belonging to a meaningful world. Through Beckmann, Borchert presents the returning soldier as a figure of radical disorientation, fractured identity, and unresolved guilt. Yet the drama's refusal to provide reconciliation does not necessarily amount to absolute hopelessness. Rather, Beckmann's persistent search for recognition, responsibility, and meaning suggests a minimal yet significant form of hope: not hope as consolation, certainty, or resolution, but hope as persistence - the refusal to stop questioning and searching even when no satisfactory answers are available.

Borchert thus leaves Beckmann, and the audience, without a definitive solution to the existential crisis produced by catastrophe. At the same time, the very act of continuing to ask whether life is still possible prevents the drama from closing entirely into despair. In this sense, Draußen vor der Tür locates the possibility of hope not in the restoration of the world that has been lost, but in the individual's continued struggle to find meaning within its ruins.

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Branković, M., Lekić , N., & Lekić, S. (2026). Organisational change management and performance in SMEs: the intervening role of interpersonal conflict, *SCIENCE International journal, 5*(3), 309-315.
doi: 10.35120/sciencej0503309b UDK: 005.332.3:005.334.2]:005.332.1:334.7.012.63/.64(497.11)

ORGANISATIONAL CHANGE MANAGEMENT AND PERFORMANCE IN SMEs: THE INTERVENING ROLE OF INTERPERSONAL CONFLICT

Milica Branković[1*], *Nemanja Lekić*[1], *Snežana Lekić*[1]

[1]Belgrade Business and Arts Academy of Applied Studies, Department of Business and Information Studies, Belgrade, Serbia,
e-mail: milica.brankovic@bpa.edu.rs, nemanja.lekic@bpa.edu.rs, snezana.lekic@bpa.edu.rs

Abstract: Organisational change affects not only structures, processes, and work practices but also the relationships through which employees respond and adapt to new organisational requirements. Interpersonal tensions that emerge during this process may weaken cooperation and become relevant to the performance outcomes associated with change. Against this background, the research investigates the relationships among organisational change management, interpersonal conflict, and organisational performance in small and medium-sized enterprises, considering interpersonal conflict as a possible pathway connecting change management with performance. Empirical evidence was obtained from 588 employees of small and medium-sized enterprises in Serbia between November 2025 and March 2026. The measurement model comprised three constructs assessed through 15 statements on a five-point Likert scale. Confirmatory factor analysis established the adequacy of the measurement model, including construct reliability and convergent and discriminant validity, while structural equation modelling was used to examine the proposed relationships. Organisational change management was negatively associated with interpersonal conflict and positively associated with organisational performance. Interpersonal conflict showed a negative relationship with organisational performance. Mediation analysis additionally identified a significant indirect relationship between change management and performance through interpersonal conflict, while the direct relationship remained significant, indicating partial mediation. These results suggest that the performance implications of organisational change are connected with both managerial practices and the interpersonal conditions accompanying change. Managing change effectively therefore involves attention to emerging tensions and disagreements rather than treating interpersonal problems as separate from the change process. Timely managerial responses, guidance, and employee support may help maintain cooperation while organisational adjustments are being implemented. As the evidence reflects relationships observed at a single period of the change process, longitudinal research could determine whether the importance of interpersonal conflict varies as organisational change develops and across different forms of change.

Keywords: *organisational change management; interpersonal conflict; organisational performance; small and medium-sized enterprises; change implementation.*
Field: Social Sciences (Management and Business)

1. INTRODUCTION

Organisational change requires more than the formal introduction of new structures, processes, or working practices. Its implementation depends on managerial capacity to provide direction, prepare employees for change, support implementation, and respond to difficulties as they emerge (Çalışkan, 2025). In SMEs, clear guidelines for organisational change and leadership engagement in motivating and supporting employees have recently been identified among the most important factors for managing change successfully (Miziara et al., 2025). Effective change management can therefore be viewed as a managerial capability that connects planned organisational adjustments with the way employees experience and respond to the change process.

Interpersonal relations may become particularly vulnerable when employees adjust to altered responsibilities, routines, and expectations. Uncertainty and resistance accompanying change can intensify disagreements and tensions among employees. Recent evidence shows that resistance to change is positively associated with both task and relationship conflict (Dar, 2026). Leadership, psychological safety, interactional justice, and team cohesion have also been identified as conditions shaping the level of interpersonal workplace conflict (Saikrishna, 2025). Interpersonal conflict may therefore represent an important relational consequence of the conditions under which organisational change is managed.

Organisational performance represents another important dimension of the change process. Effective change management can support performance by aligning managerial actions, employee responses, and implementation activities with organisational objectives, while inadequate management may weaken the expected benefits of change. Recent studies report positive associations between

*Corresponding author: milica.brankovic@bpa.edu.rs

change management practices and organisational performance (Githinji et al., 2024; Hasan et al., 2025). At the same time, interpersonal conflict can interfere with cooperation and work-related behaviour, with empirical evidence linking conflict to poorer individual and contextual performance outcomes (Paul et al., 2023; Banerjee & Malik, 2025). Performance during organisational change may therefore depend not only on how change is managed but also on the interpersonal conditions that develop as the process unfolds. This interplay may be particularly relevant in SMEs, where limited organisational resources and closer working relationships can make the interpersonal consequences of change more immediately visible in everyday operations.

Despite growing evidence on change management, workplace conflict, and organisational performance, their interrelationships remain insufficiently examined in SMEs, particularly with interpersonal conflict considered as a mechanism through which change management may affect performance. This study therefore aims to examine the relationships among management of organisational change, interpersonal conflict during organisational change, and organisational performance in SMEs, and to determine whether interpersonal conflict mediates the relationship between change management and organisational performance. Accordingly, the following hypotheses are proposed:

H1: Management of organisational change is negatively related to interpersonal conflict during organisational change.

H2: Management of organisational change is positively related to organisational performance.

H3: Interpersonal conflict during organisational change is negatively related to organisational performance.

H4: Interpersonal conflict during organisational change mediates the relationship between management of organisational change and organisational performance.

2. MATERIALS AND METHODS

A quantitative, cross-sectional research design was applied to examine the relationships among management of organisational change (MOC), interpersonal conflict during organisational change (ICC), and organisational performance (OP) in small and medium-sized enterprises (SMEs). Data were collected between November 2025 and March 2026 from employees of SMEs operating in Belgrade, Novi Sad, Niš, and Užice, Serbia. A total of 700 printed questionnaires were distributed through participating enterprises, of which 588 complete questionnaires were retained for analysis, yielding a response rate of 84.0%. No identifying information was collected, and participation was based on respondents' free consent. All responses were used solely for research purposes.

Measurement was based on 15 statements representing three constructs, accompanied by sociodemographic questions on respondents' gender, age, educational level, total work experience, business sector, and enterprise size. Five MOC items captured managerial support, guidance during change, role-modelling behaviour, support provided to employees, and timely managerial response. Five ICC items reflected tensions, disagreements, deterioration of interpersonal relations, conflicts, and misunderstandings arising during organisational change. OP was operationalised through five items referring to process efficiency, work productivity, product or service quality, achievement of organisational goals, and customer satisfaction. Each statement was rated from 1, indicating strong disagreement, to 5, indicating strong agreement. The operationalisation of the three constructs was informed by established and recent literature: Raineri (2011) and Çalışkan (2025) for MOC, Jehn (1995) for ICC, and Delaney and Huselid (1996), Andrews and Boyne (2006), and Singh et al. (2016) for OP.

Data analysis proceeded in several stages. Descriptive statistics provided an initial overview of the constructs, after which the measurement structure was evaluated by means of CFA (confirmatory factor analysis). Cronbach's α and McDonald's ω were used as indicators of internal consistency, whereas convergent validity was evaluated from the standardised factor loadings and AVE (average variance extracted) (Hair et al., 2019). Discriminant validity was examined using the Heterotrait–Monotrait ratio (HTMT) (Henseler et al., 2015). Model fit was assessed using CFI, TLI, RMSEA, and SRMR following established SEM recommendations (Kline, 2023). Relationships among the constructs were examined through bivariate correlations and structural path estimates, with R^2 used to assess the explained variance in the endogenous constructs. Mediation analysis was performed to test the indirect effect of MOC on OP through ICC, with statistical significance evaluated using 5,000 bootstrap samples and 95% confidence intervals (Hayes, 2022). All analyses were performed in jamovi (Version 2.7.38), with CFA and structural model estimation conducted using the SEMLj module (The jamovi project, 2025; Gallucci & Jentschke, 2021).

3. RESULTS

Analysis examined the relationships among management of organisational change (MOC), interpersonal conflict (ICC), and organisational performance (OP), including the mediating role of ICC. Results are presented through sample characteristics, descriptive statistics, measurement model assessment, correlations among the constructs, structural relationships, and mediation analysis.

Sample characteristics

The study included 588 respondents, with complete sociodemographic data available for all participants. As shown in Table 1, the sample was nearly balanced by gender and enterprise size, while respondents aged 46–55 and those with undergraduate academic or professional education represented the largest groups within their respective categories. Services accounted for the largest share of enterprises, and respondents with 11–20 and 21–30 years of work experience were equally represented.

Table 1. Sociodemographic characteristics of respondents (N = 588)

Characteristic	Category	Frequency	Percentage
Gender	Male	286	48.64
	Female	302	51.36
Age	Up to 35 years	129	21.94
	36–45 years	174	29.59
	46–55 years	202	34.35
	Over 55 years	83	14.12
Education level	Secondary education	92	15.65
	Undergraduate academic / professional studies	270	45.92
	Master's / specialist studies	180	30.61
	Doctoral studies	46	7.82
Total work experience	Up to 10 years	107	18.20
	11–20 years	191	32.48
	21–30 years	191	32.48
	Over 30 years	99	16.84
Business sector	Manufacturing	172	29.25
	Trade	191	32.48
	Services	225	38.27
Enterprise size	Small enterprise (10–49 employees)	295	50.17
	Medium-sized enterprise (50–249 employees)	293	49.83

Source: Authors' survey data

Descriptive statistics of the study constructs

Descriptive statistics indicate generally favourable assessments of organisational change management and particularly high evaluations of organisational performance, while interpersonal conflict during organisational change was reported at a comparatively lower level (Table 2). Skewness and kurtosis values indicate acceptable distributional characteristics, although OP shows a stronger concentration of responses toward higher ratings.

Table 2. Descriptive statistics of the study constructs

Construct	Mean	Std. Dev.	Skewness	Kurtosis
MOC	3.58	0.85	−0.36	2.42
ICC	2.59	0.96	0.28	2.28
OP	4.38	0.68	−1.44	4.61

Source: Authors' survey data

Measurement model assessment

The measurement model showed a satisfactory fit (CFI = 0.991, TLI = 0.989, RMSEA = 0.047, SRMR = 0.032). Further evaluation focused on item loadings and the measurement quality of each construct.

Table 3. Reliability and convergent validity of the measurement model

Construct	Loading range	Cronbach's α	McDonald's ω	AVE
MOC	0.788–0.839	0.886	0.887	0.671
ICC	0.816–0.865	0.901	0.901	0.701
OP	0.713–0.879	0.870	0.862	0.657

Source: Authors' survey data

Discriminant validity was assessed using the Heterotrait–Monotrait ratio (HTMT), with values of 0.853 for MOC–ICC, 0.600 for MOC–OP, and 0.578 for ICC–OP. All values remained below the 0.90 threshold, supporting the discriminant validity of the three constructs.

Correlations among the study constructs

Bivariate correlations among MOC, ICC, and OP were examined to identify the direction and strength of the relationships among the study constructs (Table 4).

Table 4. Correlations among the study constructs

Construct	MOC	ICC	OP
MOC	1.000		
ICC	−0.744***	1.000	
OP	0.519***	−0.500***	1.000

Note: *** $p < 0.001$

Source: Authors' survey data

MOC was strongly and negatively correlated with ICC and moderately and positively correlated with OP, while ICC showed a moderate negative correlation with OP. All relationships were statistically significant, indicating that more effective management of organisational change was associated with lower interpersonal conflict and higher organisational performance.

Structural model assessment

Structural relationships among MOC, ICC, and OP were examined through the estimated paths between the latent constructs. Standardised path coefficients and their statistical significance are presented in Table 5.

Table 5. Standardised structural path estimates

Structural path	β	SE	z	p
MOC → ICC	−0.854	0.0357	−26.25	< 0.001
MOC → OP	0.410	0.0927	4.00	< 0.001
ICC → OP	−0.245	0.0803	−2.52	0.012

Source: Authors' survey data

Structural estimates revealed a strong negative effect of MOC on ICC, a significant positive effect of MOC on OP, and a negative effect of ICC on OP, confirming the expected directions of the examined relationships. Regarding explained variance, MOC accounted for 73.0% of the variance in ICC (R^2 = 0.730), while MOC and ICC jointly accounted for 40.0% of the variance in OP (R^2 = 0.400).

Mediation Analysis

Mediation analysis was conducted to examine whether ICC mediates the relationship between MOC and OP. Statistical significance of the indirect effect was assessed using 5,000 bootstrap samples and 95% confidence intervals.

Table 6. Direct, indirect, and total effects of MOC on OP through ICC

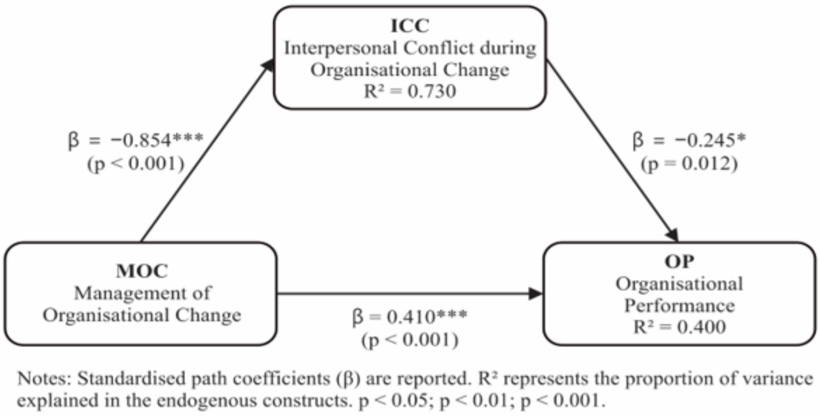
Effect	Estimate	SE	Lower 95% CI	Upper 95% CI	z	p
Indirect	0.150	0.0278	0.0952	0.204	5.40	< 0.001
Direct	0.261	0.0441	0.1746	0.348	5.93	< 0.001
Total	0.412	0.0317	0.3495	0.474	12.99	< 0.001

Note: 95% confidence intervals were estimated using 5,000 bootstrap samples

Source: Authors' survey data

Results provide evidence of a significant indirect effect of MOC on OP through ICC, with the bootstrap confidence Results provide evidence of a significant indirect effect of MOC on OP through ICC, with the bootstrap confidence interval excluding zero. After ICC was introduced as the mediator, the positive relationship between MOC and OP remained statistically significant, indicating partial mediation. More effective management of organisational change was associated with lower interpersonal conflict, which, in turn, was associated with higher organisational performance. Approximately 36.4% of the total effect was transmitted through ICC. Accordingly, ICC represents a significant mediating mechanism in the relationship between MOC and OP, while the remaining direct effect shows that interpersonal conflict does not fully account for this relationship. The estimated structural relationships and explained variance in the endogenous constructs are presented graphically in Figure 1.

Figure 1. Structural model with standardised path coefficients



Source: Authors' analysis based on survey data

More effective management of organisational change was consistently associated with lower interpersonal conflict and higher organisational performance, forming a coherent pattern across the estimated structural relationships. Combined with the significant indirect effect, these findings underscore the role of interpersonal conflict in linking organisational change management to organisational performance.

4. DISCUSSION

Effective management of organisational change emerges as an important factor in reducing interpersonal conflict and supporting organisational performance in SMEs. Interpersonal conflict, in turn, appears to constrain performance and partly explains how change management translates into organisational outcomes. Overall, the findings support all four hypothesised relationships and point to the interconnected roles of change management, workplace relations, and performance.

Support for H1 indicates that effective change management is associated with lower interpersonal conflict. Leadership, continuous communication, employee involvement, and active management of resistance are recognised as important conditions for successful organisational change (Errida & Lotfi, 2021), while resistance to change has been positively associated with relationship conflict (Dar, 2026). H2 is also supported, confirming a positive relationship between change management and organisational performance. Coordinated managerial practices across human, organisational, technological, and leadership dimensions contribute to successful change (Hasan et al., 2025), and change management practices involving stakeholder participation, readiness, support, and implementation monitoring have been positively associated with organisational performance (Githinji et al., 2024). In contrast, H3 confirms that interpersonal conflict is negatively related to organisational performance, consistent with evidence linking interpersonal conflict to lower contextual performance and relationship conflict to adverse employee outcomes (Paul et al., 2023; Konuk, 2026). Taken together, these relationships suggest that organisational performance during change depends not only on managerial practices but also on the quality of interpersonal relations accompanying their implementation.

Interpersonal conflict also emerged as a significant mediating mechanism, supporting H4. Previous evidence identifies interpersonal and relationship conflict as mechanisms linking workplace conditions and organisational practices with performance outcomes (Banerjee & Malik, 2025; Papalexandris, 2025). Its partial mediating role indicates that interpersonal relations constitute one pathway through which change management is associated with organisational performance, while other mechanisms may also contribute to this relationship. This extends the interpretation of change management beyond its direct performance implications and highlights the relevance of interpersonal dynamics during organisational change.

5. CONCLUSIONS

Managing organisational change effectively has implications beyond the implementation of change itself. In SMEs, more effective change management is associated with lower interpersonal conflict and better organisational performance, while interpersonal conflict partly explains the relationship between change management and performance outcomes. This finding brings the interpersonal dimension into understanding how organisational change management is related to performance and shows that workplace relations form an important part of the change process.

For SMEs, organisational change therefore requires attention not only to planned activities and intended outcomes but also to the interpersonal relations through which change unfolds. Managers need to recognise emerging tensions and address disagreements before they begin to disrupt cooperation and work outcomes. Cross-sectional data and respondents' own assessments limit the conclusions that can be drawn about how these relationships develop over time. Further studies conducted at different stages of change could clarify whether the role of interpersonal conflict remains consistent as the change process develops.

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THEORY OF UPBRINGING: PHYSICAL SELF-EDUCATION IN LATE MATURITY THROUGH ANIMATIVE APPROACH IN ANDRAGOGICAL PRACTICE

Avi Abner[1*]

[1]Burgas State University "Prof. Dr. Assen Zlatarov", e-mail: avi-abner@uniburgas.bg

Abstract: The transition to retirement is often accompanied by a gradual decline in physical activity and an increasing tendency towards sedentary living. For many women in late adulthood, movement has not become a stable personal value during earlier stages of life, which may contribute to heightened anxiety, reduced self-confidence, and lower levels of social participation. Within this context, physical self education assumes particular importance as a process through which individuals consciously take responsibility for maintaining an active lifestyle. The article explores the possibilities for fostering physical self education in late adulthood through an animative approach grounded in the Theory of Upbringing and the principles of andragogy. An authorial model was developed and implemented among women in late adulthood, employing group dance activities, music, movement, and social interaction as educational means for encouraging participation and strengthening motivation for physical activity. The empirical study involved 48 women divided into an experimental group and a control group. Anxiety levels were assessed using the State Trait Anxiety Inventory (STAI). Following participation in the animative programme, the experimental group demonstrated a reduction in both state anxiety and trait anxiety. The findings indicate that regular engagement in animative physical activities contributes to the development of a more favourable attitude towards movement and encourages greater personal commitment to maintaining physical activity. The contribution of the study is associated with the interpretation of the animative approach as an educational mechanism through which insufficient physical activity and elevated anxiety may become a starting point for the development of physical self education in late adulthood. The results highlight the potential of animative practices to support active ageing and to strengthen the relationship between the Theory of Upbringing, andragogy, and physical self education.

Keywords: *Physical self-education; Late adulthood; Animative approach; Andragogy; Active ageing; Physical activity; Anxiety; Theory of upbringing; Theory of education; Adult education.*
Field: Social Sciences (Pedagogy)

1. INTRODUCTION

Later adulthood presents individuals with a range of challenges associated with maintaining vitality and sustaining active participation in social life. In practice, it is increasingly observed that many women gradually reduce their levels of physical activity after retirement, replacing a dynamic daily routine with a more sedentary way of life. Such a change rarely occurs suddenly. It is usually the result of long established habits, a lack of motivation to engage in physical activity, or the absence of an environment that encourages movement. For a considerable number of women, physical exercise has not developed into a stable personal need during the earlier stages of life. Consequently, in late adulthood, physical activity is often perceived as an additional effort rather than a natural component of everyday living. This contributes to a reduction in physical activity and a gradual decline in confidence in one's own capabilities. It is precisely at this point that the significance of andragogical approaches aimed at fostering a conscious attitude towards personal health and developing a lasting motivation for physical self education becomes apparent. From the perspective of the Theory of Upbringing, such a situation may be viewed as a need for physical self education. Self education represents a conscious and purposeful activity undertaken by the individual and directed towards personal improvement (Chavdarova-Kostova, S., Delibaltova, V., Gospodinov, B, 2018). Unlike upbringing in childhood, where the educator assumes the leading role, in adulthood the driving force becomes the individual's internal need for change. For this reason, physical self education cannot be imposed from external sources. It emerges when individuals recognise the necessity of maintaining physical activity and voluntarily undertake actions directed towards achieving this objective. According to Malcolm Knowles and his colleagues, adult learners are characterised by a strong need to understand the reasons for their participation in a given activity and to recognise its immediate practical value (Knowles, M., Holton III, E., et. al, 2020). This characteristic is of particular importance when working with women in late adulthood. They are rarely motivated by external pressure

*Corresponding author: avi-abner@uniburgas.bg

or obligation. More often, their participation is driven by a desire to improve their health, broaden their social relationships, or overcome feelings of loneliness. Within this context, the animative approach offers considerable pedagogical potential. Its essence extends beyond the organisation of enjoyable activities. Its primary function is to create conditions for voluntary participation, emotional engagement, and active interaction among participants (Dimitrova, 2017). When working with older adults, the animative approach becomes a means of overcoming the psychological barriers that often hinder participation in physical activities. Group dance sessions incorporating colourful veils and musical accompaniment provide a particularly illustrative example. At first glance, such activities may be perceived merely as a form of entertainment. A more in depth pedagogical analysis, however, reveals considerably more complex mechanisms. Through dance, participants engage in movements that enhance coordination, balance, and physical confidence. At the same time, music and artistic elements reduce the perception of physical exertion and transform movement into a positive experience (Taylor, 2021).

2. MATERIALS AND METHODS

A significant advantage of the animative approach lies in its capacity to eliminate the fear of failure. Many women in late adulthood refrain from participating in physical activities because of concerns that they may not perform successfully or that they may be judged by others. Within an animative environment, such fears gradually diminish. Attention is directed towards the experience itself and the satisfaction derived from shared participation. In this way, favourable conditions are created for the development of a positive attitude towards physical activity. From an andragogical perspective, this process is of considerable importance. According to Peter Jarvis, learning in adulthood is inseparably connected with an individual's life experience (Jarvis, 2024). Adults learn through reflecting upon their own experiences and integrating them into everyday practice. For this reason, regular participation in animative physical activities may gradually lead to the development of new patterns of behaviour. Over time, physical activity ceases to be merely a component of organised sessions and begins to acquire the status of a personal value. It is at this point that the relationship between physical education and physical self education becomes evident. Whereas physical education provides external pedagogical support, physical self education presupposes personal initiative and independent engagement. Effective andragogical practice should gradually shift the centre of gravity from external organisation towards the participants' internal motivation. The success of such practice becomes evident when physical activity develops into a sustainable part of participants' daily lives and continues to be maintained beyond organised sessions (Shephard, 2024). The social aspect of animative activities is of particular importance. Research conducted by John Rowe and Robert Kahn on successful ageing indicates that maintaining social contacts has a significant impact on quality of life in old age (Rowe, J., Kahn, R, 1999). Group dance sessions create opportunities for communication, mutual support, and the development of a sense of belonging. In this way, physical activity fulfils a social and educational function (Godwin, 2026). From an andragogical perspective, a model may be proposed based on four interrelated components: awareness of the need for physical activity, emotional involvement through animative activities, the formation of sustainable physical activity habits, and the development of physical self education. Each of these components prepares the ground for the next and creates conditions for the gradual development of personal responsibility for one's own health and well being. Such a model may possess the potential to be regarded as a valuable andragogical practice, as it combines the principles of the Theory of Upbringing, physical education, and adult education. Its value lies not so much in the specific dance activities themselves as in its capacity to transform movement from an externally organised activity into an internal personal need. It is precisely within this transition from participation to self directed engagement that the genuine educational potential of the animative approach in work with women in late adulthood may be identified. Dr Avi Abner's authorial model is founded upon the understanding that physical self education in late adulthood represents a process of compensating for insufficiently developed attitudes towards physical activity during earlier stages of life. For a substantial proportion of women of retirement age, physical activity has not been perceived as a lasting personal value, but rather as an activity of a temporary nature. This circumstance presents andragogical practice with a task that differs substantially from the objectives of traditional physical education. During childhood and adolescence, physical education is directed towards the formation of knowledge, skills, habits, and attitudes related to physical activity. In late adulthood, such a task can no longer be accomplished in the same manner. Individuals possess established patterns of behaviour, extensive life experience, and clearly formed perceptions of their own capabilities. For this reason, educational influence should be directed not towards the acquisition of new physical skills, but towards a reconsideration of attitudes towards physical activity as a vital necessity. The essence of the proposed model is based upon transforming externally organised physical activity into an internally motivated personal need. It is precisely at this point that the animative approach becomes a means of restoring the interrupted connection between the individual and their own physical culture. Through music, rhythm, movement, and collective participation, physical activity ceases to be perceived as an obligation. It begins to be experienced as a source of satisfaction, belonging, and personal fulfilment. This transformation in experience represents the key moment within the educational process. Whereas the traditional approach seeks to motivate individuals to engage in physical activity, the animative approach creates conditions in which individuals themselves develop a desire for movement. In this way, physical self education becomes an indicator of successfully realised educational influence in late adulthood. Its manifestation may be observed in everyday actions such as the purposeful pursuit of physical activity, participation in new forms of exercise, and a commitment to maintaining an active lifestyle without the need for external supervision. The scientific contribution of the model does not lie in the use of dance as a form of movement. Such practices are well established within the field of physical education. The novel aspect emerges from the interpretation of the animative approach as an educational mechanism for compensating for deficiencies in physical culture and for fostering physical self education among women in late adulthood. In this respect, the model offers an opportunity for a new understanding of the relationship between the Theory of Upbringing, andragogy, and active ageing.

Figure 1. Model of physical self education in late adulthood through an animative approach

Source: Created by Dr. Avi Abner using Canva. All rights reserved.

3. RESULTS

Within the initial assessment, the State-Trait Anxiety Inventory (STAI), developed by Charles Spielberger and adapted for the Bulgarian context by D. Shtetinski and P. Paspalanov, was administered. The instrument comprises two independent scales. The first scale (STAI Y1) measures state anxiety and assesses how participants feel at the specific moment of testing. The second scale (STAI Y2) measures trait anxiety as a relatively stable personality characteristic. Each scale consists of 20 items, resulting in a total of 40 questions completed by each participant across the two sections of the instrument.

Figure 2. Process of collecting empirical data within the study

Source: Photographic material from the conducted study.

A total of 48 women in late adulthood participated in the study and were allocated to two groups. The experimental group consisted of 24 participants who took part in systematic animative dance activities. The control group also comprised 24 women from the same age category. Some of them were active readers at the Regional Library “Peyo Yavorov”, Burgas city, and regularly attended cultural and educational initiatives organised by the library. During the study period, they did not participate in organised physical activities and were therefore included in the control group. This made it possible to compare participants involved in the animative programme with women of similar age characteristics who maintained their usual lifestyle.

Table 1. Results for state anxiety measured by STAI Y1

Group	N	Initial assessment M	SD	Final assessment M	SD	Mean reduction
Control group	24	46.54	2.8	45.88	2.71	0.66
Experimental group	24	46.58	3.28	34.83	2.41	11.75

Source: Empirical data processed by the author.

At the initial assessment, the control group recorded a mean STAI Y1 score of M = 46.54, with SD = 2.80. The experimental group recorded a nearly identical mean score of M = 46.58, with SD = 3.28. The difference between the two groups was only 0.04 points and was not statistically significant, $p = 0.964$. Thus, the groups started from comparable levels of state anxiety. At the final assessment, the mean score of the control group was M = 45.88, with SD = 2.71. The reduction in this group was 0.66 points. In the experimental group, the mean score decreased to M = 34.83, with SD = 2.41. The reduction amounted to 11.75 points. The difference between the two groups at the final assessment was 11.05 points and was statistically significant, $p < 0.001$. The comparison of the changes observed in the two groups also showed a statistically significant difference, $p < 0.001$.

Table 2. Results for trait anxiety measured by STAI Y2

Group	N	Initial assessment M	SD	Final assessment M	SD	Mean reduction
Control group	24	47.88	3.01	47.21	2.93	0.67
Experimental group	24	47.71	3.13	38	2.59	9.71

Source: Empirical data processed by the author.

At the initial assessment, the control group recorded a mean STAI Y2 score of M = 47.88, with SD = 3.01. The experimental group recorded M = 47.71, with SD = 3.13. The difference of 0.17 points was not statistically significant, $p = 0.849$. The two groups were therefore comparable in terms of trait anxiety before the beginning of the animative activities. At the final assessment, the mean score of the control group was M = 47.21, with SD = 2.93. This represents a reduction of 0.67 points. In the experimental group, the mean score decreased to M = 38.00, with SD = 2.59. The reduction in this group was 9.71 points. At the final assessment, the experimental group recorded a mean STAI Y2 score that was 9.21 points lower than the result of the control group. The difference was statistically significant, $p < 0.001$. A statistically significant difference was also found between the changes recorded in the two groups, $p < 0.001$.

Table 3. Comparison of changes in the control and experimental groups

Indicator	Reduction in the control group	Reduction in the experimental group	Difference in change	Statistical significance
State anxiety, STAI Y1	0.66	11.75	11.09	p < 0.001
Trait anxiety, STAI Y2	0.67	9.71	9.04	p < 0.001

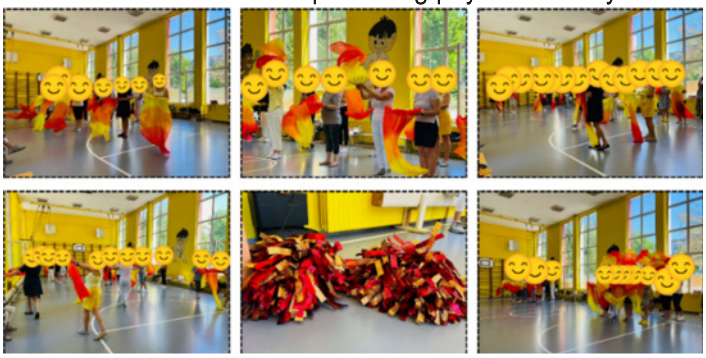
Source: Empirical data processed by the author.

Table 3 presents the differences between the changes recorded in the control and experimental groups. For state anxiety, the control group showed a reduction of 0.66 points, whereas the reduction in the experimental group was 11.75 points. The difference between the changes in the two groups was 11.09 points. For trait anxiety, the control group recorded a reduction of 0.67 points, while the experimental group showed a reduction of 9.71 points. The difference between the changes was 9.04 points. For both STAI Y1 and STAI Y2, the differences between the changes recorded in the two groups were statistically significant, $p < 0.001$.

4. DISCUSSION

The initial assessment established comparable levels of state anxiety and trait anxiety in the control and experimental groups. This similarity provided an appropriate basis for examining the changes recorded during the study. The absence of statistically significant differences at the initial assessment indicates that the subsequent differences cannot be attributed to unequal starting levels of anxiety. The results of the control group remained relatively stable. State anxiety decreased by 0.66 points, while trait anxiety decreased by 0.67 points. Although a slight change was recorded, the final mean scores remained close to the initial values. A different tendency was observed in the experimental group. The mean STAI Y1 score decreased from 46.58 to 34.83 points. The reduction of 11.75 points represents 25.23% of the initial result. The mean STAI Y2 score decreased from 47.71 to 38.00 points. The reduction of 9.71 points corresponds to 20.35% of the initial result. The more pronounced change was recorded in state anxiety. This result may be explained by the fact that state anxiety reflects the participant's emotional condition at the time of assessment and is therefore more sensitive to experiences involving movement, music, communication and shared participation. Trait anxiety represents a more stable personal characteristic, which may account for its comparatively smaller, although still substantial, reduction. The comparison between the two groups gives particular importance to these findings. While the results of the control group changed only slightly, a considerable reduction in both forms of anxiety was recorded in the experimental group. The statistical significance of the differences, $p < 0.001$, provides grounds for associating the observed change with participation in the animative physical activities. The results should also be interpreted from an andragogical perspective. The animative activities created an environment in which movement was connected with music, communication and a shared emotional experience. These activities also included elements of psychosocial support. According to Dilyana Milkova, psychosocial support is aimed at preserving mental health and helping people cope with difficult life situations (Milkova, 2026). This is important in work with adults whose established habits and previous experience influence their attitude towards physical activity. The reduction in anxiety does not by itself constitute a direct measurement of physical self education. Nevertheless, it establishes an important condition for its development. When movement is associated with satisfaction, emotional security and social participation, the individual may gradually develop a more favourable attitude towards maintaining physical activity. In this sense, the animative approach can be considered an educational means through which externally organised participation may support the emergence of personal responsibility for an active way of life.

Figure 3. Animative model for promoting physical activity in late adulthood



Source: Author's photographs from the conducted pedagogical study.

The model was implemented through group based physical activities of an animative nature, designed in accordance with the age related characteristics and physical capabilities of the participants. Throughout the programme, the women engaged in animative dance sessions, exercises accompanied by music, and activities intended to encourage communication and mutual support. Particular attention was devoted to creating a positive emotional environment in which movement could be experienced as a source of satisfaction. Following the completion of the programme, a repeated assessment was conducted in order to determine whether participation in the animative activities had resulted in changes in anxiety levels and in readiness for physical self education. The elevated levels of anxiety identified during the initial assessment highlighted the need for the implementation of the authorial model of physical self education in late adulthood through an animative approach. At the core of the model lies the aspiration for participants to develop an awareness of the significance of physical activity for their own health and quality of life. The animative activities created conditions that enabled the women to gain experience, overcome concerns associated with physical exertion, and gradually develop a more favourable attitude towards movement. As a result, physical activity began to be perceived as a personal need. It is within this transformation that the process of physical self education may be identified. The participants came to understand that maintaining physical activity depends primarily upon their own decisions and efforts. As a result, a more sustainable readiness to maintain an active lifestyle was developed, while the reduction in anxiety emerged as a natural consequence of physical activity and positive emotional experiences. The obtained findings support the understanding advanced by Malcolm Knowles and his colleagues that adult learners change their behaviour when they recognise the practical significance of a particular activity (Knowles, M., Holton III, E., et. al, 2020). In the present study, movement was perceived as a source of positive experiences and social interaction. It was precisely this perception that created the conditions for the gradual development of physical self education.

5. CONCLUSION

The study examined the possibilities for applying an animative approach to physical self education among women in late adulthood. The comparison between the control and experimental groups made it possible to assess the changes in anxiety associated with participation in systematic animative physical activities. At the beginning of the study, the control and experimental groups had comparable levels of state anxiety and trait anxiety. At the final assessment, the results of the control group remained close to their initial values. In the experimental group, state anxiety decreased by 11.75 points, while trait anxiety decreased by 9.71 points. The differences between the two groups were statistically significant, $p < 0.001$. The empirical results establish a reduction in anxiety following participation in the animative activities. They do not directly measure the complete development of physical self education. Their pedagogical significance lies in showing that movement, when organised through music, communication and shared participation, can create favourable conditions for reconsidering one's attitude towards physical activity. The proposed model presents physical self education in late adulthood as a gradual transition from organised participation towards personal responsibility for maintaining an active way of life. This understanding corresponds with contemporary views concerning the importance of physical activity for preserving health, independence and quality of life in later adulthood (Attia, P., Gifford, B, 2023). Through the animative approach, movement acquires an emotional and social meaning and is no longer experienced solely as a physical obligation. The reduction in anxiety recorded in the experimental group provides grounds for considering the animative approach as a valuable element of andragogical practice. Its importance lies in connecting physical activity with positive experience, voluntary participation and social interaction. Sustained participation in physical activity is also regarded as an important condition for well being and continued social involvement in later adulthood (Olival, D., Fernandes, H, 2025). In this context, physical self education may be understood as the outcome of an educational process in which movement gradually develops into a recognised personal need. As individuals assume greater responsibility for maintaining their physical activity, movement can become an enduring part of everyday life. The value of the proposed model lies in creating the educational conditions necessary for this transition.

ACKNOWLEDGEMENTS

The author gratefully acknowledges the financial support provided by Research Project NIH-519/2025, Models for promoting an active and dignified life among post-retirement women through physical activity and social inclusion, led by Assoc. Prof. Dr. Zlatka Dimitrova, PhD

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GREEN HUMAN RESOURCE MANAGEMENT AND EMPLOYEE PRO-ENVIRONMENTAL BEHAVIOR: THE MEDIATING ROLE OF ORGANIZATIONAL SUSTAINABILITY COMMITMENT

Liljana Pushova Stamenkova[1*]

[1]Faculty of Economics, MIT University Skopje, North Macedonia, e-mail: liljana.30826@student.ugd.edu.mk

Abstract: Environmental sustainability increasingly depends not only on formal organizational policies but also on employees' willingness to translate these policies into everyday workplace behavior. This study examines the relationship between perceived Green Human Resource Management (GHRM) and Employee Pro-Environmental Behavior (EPEB), focusing on Employee Commitment to Organizational Sustainability (ECOS) as a mediating mechanism. Data were collected through a structured questionnaire from 147 employees working in organizations in North Macedonia. The constructs were assessed using five-point scales adapted from established GHRM, organizational commitment, and workplace pro-environmental behavior literature. Reliability analysis, Pearson correlation, regression, and bootstrapped mediation analysis were applied. The results indicate that GHRM positively predicts ECOS and is positively associated with EPEB. ECOS is also a significant predictor of EPEB. When ECOS is introduced into the model, the direct effect of GHRM on EPEB becomes non-significant, while the indirect effect remains significant. The findings suggest that green HR practices are more likely to translate into pro-environmental workplace behavior when employees develop commitment to their organization's environmental sustainability objectives. The study highlights the importance of moving beyond the formal implementation of green HR practices toward strengthening employees' involvement in and commitment to organizational sustainability.

Keywords: *green human resource management; organizational sustainability; employee commitment; pro-environmental behavior; green behavior.*
Field: Social Sciences

1. INTRODUCTION

Environmental sustainability has increasingly moved from a specialized environmental-management concern to a broader organizational responsibility. Organizations may establish environmental policies, introduce resource-efficiency measures, or adopt sustainability targets, but the achievement of these objectives ultimately depends, at least partly, on how employees behave in their everyday work. Activities such as reducing unnecessary resource consumption, saving energy, recycling, participating in environmental initiatives, and proposing environmentally responsible improvements can cumulatively contribute to organizational environmental performance (Robertson & Barling, 2013).

This has increased attention to Green Human Resource Management (GHRM), which integrates environmental objectives into conventional human resource practices. GHRM may include environmentally oriented recruitment and selection, training, performance evaluation, rewards, employee development, and involvement (Renwick et al., 2013; Tang et al., 2018). Through such practices, environmental sustainability becomes incorporated into the management of employees rather than remaining solely the responsibility of environmental or sustainability departments.

Previous research provides evidence that GHRM is associated with employee green behavior, but it also indicates that this relationship is not necessarily straightforward. Dumont et al. (2017), for example, showed that GHRM can influence workplace green behavior both directly and through employee-level mechanisms. More recent research similarly emphasizes the importance of understanding the processes through which organizational green practices translate into individual behavior (Ababneh, 2021; Fawehinmi et al., 2024). This suggests that simply introducing green HR practices may not be sufficient; employees must also interpret, accept, and internalize the environmental objectives embedded in these practices.

The present study focuses on Employee Commitment to Organizational Sustainability (ECOS) as one such mechanism. ECOS refers here to employees' identification with, acceptance of, and willingness to contribute to their organization's environmental sustainability objectives. The study therefore addresses the following question: Does perceived GHRM contribute to employee pro-environmental behavior through stronger employee commitment to organizational sustainability?

The study contributes to the existing discussion by distinguishing between what the organization

*Corresponding author: liljana.30826@student.ugd.edu.mk

does through GHRM, what employees become committed to, and how they subsequently behave at work. Recent evidence from North Macedonia has begun to demonstrate the relevance of sustainability-oriented HRM for employee outcomes. Sofijanova et al. (2026) showed that sustainable HRM practices are associated with green training and green skills and that these employee capabilities are relevant to broader employee engagement. However, less is known about whether green HR practices are translated into employees' everyday pro-environmental behavior and, particularly, about the role of employees' commitment to organizational sustainability in this process. The present study extends this emerging evidence by shifting attention from the development of green competencies and employee engagement to the behavioral consequences of GHRM. It examines whether perceived Green HRM contributes to Employee Pro-Environmental Behavior directly and indirectly through Employee Commitment to Organizational Sustainability.

2. THEORETICAL BACKGROUND AND HYPOTHESES

2.1. Green Human Resource Management

GHRM represents the integration of environmental objectives into human resource management policies and practices. Renwick et al. (2013) positioned GHRM at the intersection of environmental management and HRM and organized relevant practices through the Ability–Motivation–Opportunity framework. From this perspective, organizations can develop employees' environmental abilities through recruitment and training, strengthen motivation through performance management and rewards, and provide opportunities for environmental involvement.

Tang et al. (2018) subsequently conceptualized GHRM through five major dimensions: green recruitment and selection, green training, green performance management, green pay and reward, and green involvement. Together, these practices communicate that environmental responsibility is expected and valued within the organization.

At the employee level, GHRM is particularly relevant because employees experience sustainability strategy through concrete organizational practices. Training may provide environmental knowledge and skills, performance criteria communicate expected behavior, and rewards or development decisions demonstrate whether environmental contributions are genuinely valued. Consequently, perceived GHRM can shape employees' attitudes toward organizational environmental objectives and their willingness to contribute to them (Dumont et al., 2017).

Evidence from North Macedonia also points to the importance of sustainability-oriented HR practices in shaping employee-level outcomes. Sofijanova et al. (2026) found that sustainable HRM practices were positively associated with green training and green skills, while green training emerged as an important mechanism connecting sustainability-oriented HR practices with employee competencies. Their findings suggest that formal sustainability-oriented HR systems are more likely to produce meaningful employee outcomes when organizational practices are translated into employee-level capabilities and involvement. This supports a broader understanding of sustainable HRM in which organizational practices provide the conditions through which employees develop the competencies and orientation needed to contribute to sustainability objectives.

2.2. GHRM and commitment to organizational sustainability

Organizational commitment generally reflects the relationship employees develop with organizational goals and values. In the sustainability context, commitment implies more than awareness of environmental policies; it reflects employees' willingness to identify with and contribute to environmental objectives.

Green HR practices can contribute to such commitment by repeatedly embedding environmental priorities into employees' organizational experience. When environmental responsibility appears in recruitment, training, evaluation, recognition, and development, sustainability becomes part of how employees understand their role within the organization. Research has increasingly demonstrated that GHRM is associated with employees' environmental commitment and related forms of organizational identification (Alshahrani & Iqbal, 2024).

H1: Perceived Green Human Resource Management positively influences Employee Commitment to Organizational Sustainability.

2.3. Organizational sustainability commitment and pro-environmental behavior

Employee Pro-Environmental Behavior refers to workplace actions intended to reduce negative environmental impacts or contribute to environmental improvement. Such behavior may involve conserving resources, reducing waste and energy use, recycling, participating in environmental programs, and suggesting environmentally beneficial changes (Robertson & Barling, 2013).

Commitment provides a plausible link between organizational sustainability objectives and these everyday behaviors. Employees who regard their organization's environmental objectives as personally important and feel responsible for contributing to them should be more willing to translate those objectives into action. Commitment therefore represents an attitudinal connection between organizational sustainability expectations and individual workplace behavior.

H2: Employee Commitment to Organizational Sustainability positively influences Employee Pro-Environmental Behavior.

2.4. GHRM, pro-environmental behavior, and the mediating role of commitment

GHRM can also influence green behavior more directly by developing environmental competencies, establishing behavioral expectations, and reinforcing environmentally responsible actions. Dumont et al. (2017) demonstrated that GHRM affects employee workplace green behavior, although the mechanisms differ depending on the type of behavior. Subsequent studies have similarly shown that employee-level mechanisms help explain how GHRM translates into green behavior (Ababneh, 2021; Fawehinmi et al., 2024).

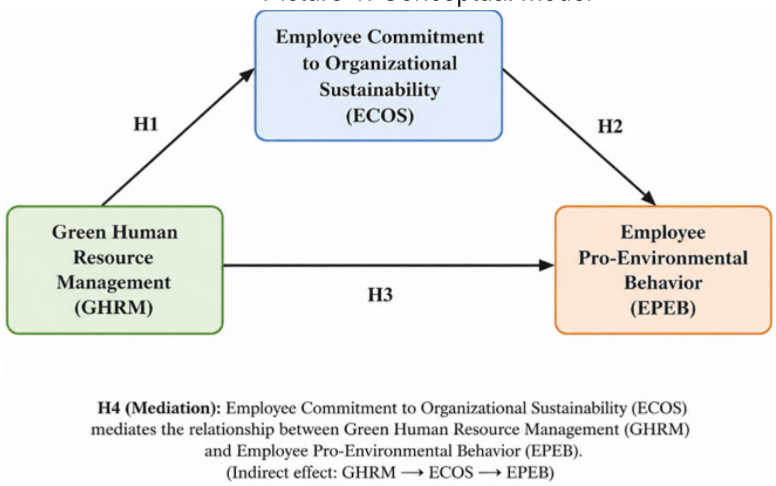
H3: Perceived Green Human Resource Management positively influences Employee Pro-Environmental Behavior.

However, the presence of green HR practices does not necessarily mean that employees internalize their underlying environmental purpose. The proposed model therefore assumes that GHRM contributes more effectively to behavior when employees develop commitment to the environmental sustainability objectives represented by those practices. This distinction separates formal organizational practices from employees' internal acceptance of sustainability goals.

H4: Employee Commitment to Organizational Sustainability mediates the relationship between perceived Green Human Resource Management and Employee Pro-Environmental Behavior.

The proposed model therefore follows the sequence shown in picture 1 below.

Picture 1: Conceptual model



Source: Author

3. METHODS

3.1. Research design and participants

The study employed a quantitative, cross-sectional research design. Data were collected using an anonymous online questionnaire distributed to employed adults working in organizations in North Macedonia. Participation was voluntary, and respondents were informed that the data would be used exclusively for research purposes. Only respondents currently employed in an organization operating in North Macedonia were eligible to participate.

The final sample consisted of 147 respondents from organizations of different sizes and sectors. The sample included non-managerial employees as well as employees occupying supervisory, middle-management, and senior-management positions.

3.2. Measures

The questionnaire consisted of three principal constructs. Perceived Green Human Resource Management (GHRM) was measured using six items adapted from established GHRM measures and the practices identified by Dumont et al. (2017) and Tang et al. (2018). Items assessed employees' perceptions of the integration of environmental objectives into recruitment, training, performance evaluation, rewards, professional development, and employee goals. Responses were recorded on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Employee Commitment to Organizational Sustainability (ECOS) was assessed using six items capturing employees' identification with, perceived responsibility for, and willingness to contribute to their organization's environmental sustainability objectives. The items were informed by environmental and organizational commitment literature and contextualized specifically to organizational environmental sustainability. Responses ranged from 1 (strongly disagree) to 5 (strongly agree). Employee Pro-Environmental Behavior (EPEB) was measured using seven workplace behaviors adapted from Robertson and Barling (2013). The items covered resource-efficient paper use, recycling, reusable products, energy conservation, participation in environmental initiatives, and environmental suggestions. Because the construct concerns actual behavior rather than attitudes, responses were measured using a five-point frequency scale ranging from 1 (never) to 5 (always). The questionnaire additionally collected information on gender, age, education, organizational tenure, position, organization size, sector, and organization type.

3.3. Data analysis

Data were analyzed using IBM SPSS Statistics. Composite scores for GHRM, ECOS, and EPEB were calculated as the mean of their respective items. Internal consistency was assessed using Cronbach's alpha. Descriptive statistics and Pearson correlation coefficients were calculated to examine the characteristics and initial relationships among the constructs. Regression analysis was then used to test the direct relationships proposed in H1–H3.

The mediating role of ECOS was examined using bootstrapping with 10,000 resamples. Mediation was considered statistically significant when the 95% bootstrap confidence interval for the indirect effect did not include zero.

4. RESULTS

4.1. Sample characteristics

The sample consisted of 147 respondents, all of whom were employed in organizations operating in North Macedonia. Female respondents accounted for 54.4% of the sample, while 44.9% were male and 0.7% preferred not to indicate their gender. In terms of age, the largest group consisted of respondents aged 18–29 years (37.4%), followed by those aged 30–39 years (27.2%). Respondents aged 40–49 represented 15.6% of the sample, those aged 50–59 represented 13.6%, and 6.1% were aged 60 or above.

The sample was relatively well educated, with 37.4% of respondents holding a bachelor's degree and 34.0% a master's degree. Most respondents were non-managerial employees (69.4%), while 10.9% held first-line or supervisory positions, 13.6% were middle managers, and 6.1% were senior managers or owners.

Respondents were employed in organizations of different sizes and across a range of economic sectors. Small organizations with 10–49 employees represented the largest group (32.0%), followed by medium-sized organizations with 50–249 employees (24.5%), large organizations with 250 or more employees (20.4%), and micro-organizations with fewer than 10 employees (19.7%). Most respondents worked in private-sector organizations (62.6%), while 33.3% were employed in the public sector.

Table 1. Sample characteristics

Characteristic	Category	n	%
Gender	Female	80	54.4
	Male	66	44.9
	Prefer not to say	1	0.7
Age	18–29	55	37.4
	30–39	40	27.2
	40–49	23	15.6
	50–59	20	13.6
	60+	9	6.1
Education	Secondary	23	15.6
	Bachelor's degree	55	37.4
	Master's degree	50	34.0
	Doctoral degree	14	9.5
	Other	5	3.4
Position	Non-managerial	102	69.4
	First-line/supervisory management	16	10.9
	Middle management	20	13.6
	Senior management/owner	9	6.1
Organization size	Fewer than 10 employees	29	19.7
	10–49 employees	47	32.0
	50–249 employees	36	24.5
	250+ employees	30	20.4
	Don't know	5	3.4
Organization type	Private	92	62.6
	Public	49	33.3
	NGO/non-profit	4	2.7
	Other	2	1.4

Source: Author's research (2026)

4.2. Descriptive statistics and scale reliability

Composite scores were calculated as the mean of the respective items for each of the three constructs. Perceived Green Human Resource Management (GHRM) had a mean score of 3.07 (SD = 0.96), indicating a moderate level of perceived implementation of green HRM practices. Employee Commitment to Organizational Sustainability (ECOS) had a mean of 2.81 (SD = 1.02), while Employee Pro-Environmental Behavior (EPEB) recorded a mean of 3.03 (SD = 1.11).

Internal consistency was assessed using Cronbach's alpha. All three scales demonstrated satisfactory reliability. The GHRM scale produced a Cronbach's alpha of 0.826, while the ECOS and EPEB scales showed particularly high internal consistency, with coefficients of 0.900 and 0.908, respectively. All coefficients exceeded the commonly applied threshold of 0.70, supporting the reliability of the scales for subsequent analysis.

Table 2. Descriptive statistics and reliability

Construct	Items	Mean	SD	Cronbach's α
Green Human Resource Management (GHRM)	6	3.07	0.96	0.826
Employee Commitment to Organizational Sustainability (ECOS)	6	2.81	1.02	0.900
Employee Pro-Environmental Behavior (EPEB)	7	3.03	1.11	0.908

Note: All constructs were measured on five-point scales. Higher scores indicate higher levels of the construct.

Source: Author's research (2026)

4.3. Correlation analysis

Pearson correlation analysis was performed to examine the relationships among perceived Green Human Resource Management (GHRM), Employee Commitment to Organizational Sustainability (ECOS), and Employee Pro-Environmental Behavior (EPEB). The results are presented in Table 3.

Table 3. Correlations among the study constructs

Construct	1	2	3
1. Green Human Resource Management (GHRM)	1		
2. Employee Commitment to Organizational Sustainability (ECOS)	.377***	1	
3. Employee Pro-Environmental Behavior (EPEB)	.308***	.479***	1

*Note: N = 147. *** p < .001.*

Source: Author's research (2026)

All three constructs were positively and significantly correlated. Perceived GHRM was positively associated with employee commitment to organizational sustainability ($r = .377$, $p < .001$) and employee pro-environmental behavior ($r = .308$, $p < .001$). The strongest relationship was observed between employee commitment to organizational sustainability and pro-environmental behavior ($r = .479$, $p < .001$). These results provide preliminary support for the proposed relationships and justify further examination through regression and mediation analysis.

4.4. Hypothesis testing

Regression analysis was conducted to examine the proposed relationships among GHRM, ECOS, and EPEB.

First, perceived GHRM had a positive and statistically significant effect on employee commitment to organizational sustainability ($B = 0.403$, $p < .001$). The model explained 14.2% of the variance in ECOS ($R^2 = .142$). Thus, H1 was supported.

Second, the total effect of perceived GHRM on employee pro-environmental behavior was positive and statistically significant ($B = 0.355$, $p < .001$), with GHRM explaining 9.5% of the variance in EPEB ($R^2 = .095$). This result provides initial support for H3.

When GHRM and ECOS were simultaneously entered as predictors of employee pro-environmental behavior, the overall model was statistically significant ($F = 23.81$, $p < .001$) and explained 24.9% of the variance in EPEB ($R^2 = .249$). Employee commitment to organizational sustainability had a positive and statistically significant effect on EPEB ($B = 0.458$, $p < .001$), supporting H2. In contrast, the direct effect of GHRM decreased substantially and was no longer statistically significant at the 5% level ($B = 0.171$, $p = .060$).

Table 4. Regression results

Relationship	B	SE	t	p	R^2	Result
GHRM → ECOS	.403	.082	4.894	<.001	.142	H1 supported
GHRM → EPEB (total effect)	.355	.091	3.892	<.001	.095	H3 supported
ECOS → EPEB[1]	.458	.084	5.431	<.001		H2 supported
GHRM → EPEB[1]	.171	.090	1.899	.060		Direct effect n.s.

Note: N = 147. [1]GHRM and ECOS entered simultaneously; $R^2 = .249$ for the combined model.

Source: Author's research (2026)

4.5. Mediation analysis

Mediation analysis was conducted to determine whether employee commitment to organizational sustainability mediates the relationship between perceived GHRM and employee pro-environmental behavior.

The indirect effect of GHRM on EPEB through ECOS was positive ($B = 0.184$). Bootstrap analysis with 10,000 resamples produced a 95% confidence interval ranging from 0.098 to 0.286. Since the confidence interval did not include zero, the indirect effect was statistically significant.

After ECOS was included in the model, the direct effect of GHRM on EPEB decreased from $B = 0.355$ to $B = 0.171$ and became statistically non-significant ($p = .060$). These results indicate that employee commitment to organizational sustainability mediates the relationship between perceived GHRM practices and employee pro-environmental behavior. Therefore, H4 was supported.

Table 5. Mediation effect

Effect	B	95% Bootstrap CI	Result
Total effect: GHRM → EPEB	.355	—	Significant
Direct effect: GHRM → EPEB	.171	—	Not significant (p = .060)
Indirect effect: GHRM → ECOS → EPEB	.184	[.098, .286]	Significant

Source: Author's research (2026)

The findings suggest that the relationship between Green Human Resource Management and employee pro-environmental behavior operates primarily through employees' commitment to organizational sustainability. In other words, GHRM practices appear to be associated with stronger pro-environmental behavior particularly when they are accompanied by employees' commitment to the environmental sustainability objectives of their organization.

5. DISCUSSION

The study examined whether Green Human Resource Management is associated with employees' pro-environmental behavior and, more specifically, whether this relationship operates through employees' commitment to organizational sustainability. The results support the proposed mediating mechanism and provide several observations relevant to both GHRM and organizational sustainability research.

First, perceived GHRM positively predicted Employee Commitment to Organizational Sustainability, supporting H1. This suggests that employees who perceive stronger integration of environmental objectives into HR practices also report stronger commitment to their organization's sustainability objectives. The finding is consistent with the broader argument that HR practices communicate organizational priorities and can influence how employees relate to environmental objectives (Renwick et al., 2013; Tang et al., 2018). It also corresponds with recent evidence linking GHRM with environmental commitment and organizational identification (Alshahrani & Iqbal, 2024).

Second, ECOS had a positive and significant effect on Employee Pro-Environmental Behavior, supporting H2. Employees who reported stronger commitment to organizational environmental sustainability were more likely to report behaviors such as conserving resources, reducing energy consumption, participating in environmental initiatives, and suggesting environmental improvements. This finding reinforces the importance of considering employees not merely as recipients of sustainability policies but as active participants whose commitment can influence whether organizational environmental objectives become reflected in everyday workplace behavior.

The total effect of GHRM on EPEB was also positive and significant, supporting H3 and corresponding with previous evidence linking green HR practices with workplace green behavior (Dumont et al., 2017). However, the most relevant result emerged after ECOS was introduced into the model. The direct effect of GHRM on EPEB decreased and was no longer statistically significant, while the bootstrapped indirect effect through ECOS remained significant. H4 was therefore supported.

This result suggests that the presence of green HR practices alone may not fully explain why employees behave in environmentally responsible ways. Rather, such practices appear to be more effective when employees develop commitment to the environmental objectives that these practices represent. This interpretation is consistent with a growing stream of research showing that GHRM influences employee green behavior through intermediate employee-level processes rather than exclusively through direct effects (Ababneh, 2021; Dumont et al., 2017; Fawehinmi et al., 2024).

The findings suggest that organizations should avoid treating GHRM as a collection of isolated administrative practices. Environmental criteria in recruitment, training, evaluation, rewards, and employee development are likely to be more meaningful when employees understand the sustainability objectives behind them and perceive themselves as contributors to those objectives. Organizations should therefore communicate environmental priorities clearly, involve employees in sustainability initiatives, and connect individual roles with broader organizational environmental goals.

The research, however, has several limitations. The cross-sectional design does not allow causal relationships to be established, even though the proposed directions are theoretically grounded. All constructs were measured through self-reported data, which may introduce common-method and social-desirability bias. The sample was also limited to employees in North Macedonia and was not designed to be statistically representative of the entire employed population. Future research could employ longitudinal designs, obtain behavioral or organizational-level sustainability indicators, and examine whether the proposed relationships differ across sectors, organizational sizes, or institutional contexts.

6. CONCLUSION

This study examined the relationship between Green Human Resource Management and Employee Pro-Environmental Behavior by considering employees' commitment to organizational sustainability as an intervening mechanism. The findings indicate that perceived GHRM is positively associated with sustainability commitment and pro-environmental behavior, while sustainability commitment itself represents an important predictor of environmentally responsible workplace behavior.

The significant indirect effect suggests that the contribution of GHRM to employee green behavior is closely connected to employees' willingness to identify with and support their organization's environmental sustainability objectives. Green HR practices therefore appear to matter not only because they establish environmental expectations but also because they can contribute to stronger employee commitment to those expectations.

For organizations seeking to improve environmental sustainability, the implication is straightforward: formal green HR policies should be accompanied by efforts that make sustainability meaningful to employees and encourage their active contribution. In this sense, organizational sustainability depends not only on introducing green practices, but also on developing employees who are committed to putting them into practice.

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THE IMPORTANCE OF MIKHAIL BAKHTIN IN THE THEORY OF LITERATURE

Anita Dimitrijovska-Jankulovska[1*]

[1]MIT University Skopje, North Macedonia, e-mail: adimitrijovska@gmail.com

Abstract: Mikhail Mikhailovich Bakhtin remains one of the most influential literary theorists of the twentieth century, whose ideas continue to shape contemporary literary criticism, cultural studies, linguistics, philosophy, and communication theory. Although many of his writings remained unpublished or were misunderstood during his lifetime, the posthumous dissemination of his work profoundly transformed the study of literature by introducing concepts that challenged formalist and structuralist approaches. Bakhtin's theories of dialogism, polyphony, heteroglossia, carnival, and the chronotope fundamentally altered understandings of literary language, narrative structure, and the relationship between texts and society. His insistence that meaning emerges through dialogue rather than isolated authorial intention established a dynamic framework for interpreting literary works as living interactions among multiple voices, cultures, and historical contexts.

This paper examines Bakhtin's contribution to literary theory by analyzing the philosophical foundations of his work, the principal concepts that define his theoretical system, and his continuing relevance within contemporary literary scholarship. Particular attention is devoted to dialogism, polyphony, heteroglossia, the chronotope, and carnival as methodological tools for literary analysis. The paper further explores Bakhtin's influence on modern criticism, poststructuralism, reader-response theory, discourse analysis, and interdisciplinary humanities research. By examining recent scholarship published between 2021 and 2026 alongside Bakhtin's classical texts, the study demonstrates that Bakhtin's theoretical legacy remains indispensable for understanding literature as a socially situated, historically evolving, and dialogic phenomenon.

Keywords: *Mikhail Bakhtin, literary theory, dialogism, polyphony, heteroglossia, chronotope, carnival, polyphonic novel.*
Field: Humanities

1. INTRODUCTION

The history of literary theory is marked by thinkers whose ideas have fundamentally reshaped the methods through which literature is interpreted. Among these figures, Mikhail Mikhailovich Bakhtin (1895–1975) occupies a unique position. Unlike many literary theorists whose influence remained confined to specific schools of criticism, Bakhtin developed a philosophical understanding of language and culture that transcended disciplinary boundaries. His work continues to influence literary criticism, philosophy, linguistics, anthropology, education, cultural studies, rhetoric, media studies, and political theory.

Bakhtin's theoretical significance lies primarily in his rejection of monological conceptions of language and literature. Rather than viewing literary texts as closed structures governed solely by authorial intention or formal characteristics, he conceptualized literature as a dynamic dialogue among voices, ideologies, historical contexts, and cultural traditions. Every literary work, according to Bakhtin, exists within an ongoing conversation extending across time and space, incorporating both previous and future interpretations.

This dialogic understanding represented a radical departure from dominant approaches during the early twentieth century. Russian Formalism emphasized literary devices and textual autonomy, while structuralism later sought universal systems underlying language and narrative. Bakhtin instead insisted upon the social, historical, and ideological nature of language itself. Words never belong exclusively to individual speakers; rather, they carry traces of previous uses, cultural conflicts, and social values. Consequently, literature becomes an arena in which competing worldviews encounter one another through dialogue rather than domination.

Bakhtin's intellectual career unfolded under exceptionally difficult historical circumstances. Living through the Russian Revolution, Stalinist repression, exile, censorship, and political persecution, many of his works circulated only in manuscript or were published decades after their completion. Despite these obstacles, his writings eventually gained international recognition during the 1960s and 1970s, profoundly influencing Western literary theory at a moment when structuralism and poststructuralism were redefining the humanities.

Today, Bakhtin's concepts remain central to contemporary literary scholarship. Theories of dialogism, heteroglossia, carnival, and the chronotope are widely employed in analyses of classical

*Corresponding author: adimitrijovska@gmail.com

literature, postcolonial writing, feminist criticism, digital narratives, media discourse, and global literature. Recent scholarship further demonstrates the adaptability of Bakhtinian theory to emerging fields such as digital humanities, multimodal communication, artificial intelligence, and intercultural dialogue (Lindfors, 2023; White, 2024).

The purpose of this paper is to examine Bakhtin's importance for literary theory by exploring both the philosophical foundations of his work and its continuing methodological relevance. The discussion proceeds through two major chapters. The first analyzes the development of Bakhtin's literary theory and its principal concepts, while the second investigates the influence of Bakhtinian thought on contemporary literary criticism and interdisciplinary humanities research.

2. MIKHAIL BAKHTIN: LIFE, INTELLECTUAL CONTEXT, AND THE FORMATION OF HIS LITERARY THEORY

Understanding Bakhtin's literary theory requires consideration of the philosophical, historical, and cultural circumstances that shaped his intellectual development. Unlike many literary theorists whose work emerged primarily within academic institutions, Bakhtin's ideas evolved amid profound political upheaval and personal hardship. These experiences contributed significantly to his distinctive conception of language as fundamentally dialogic and socially situated.

Born in 1895 in Oryol, Russia, Bakhtin grew up during a period characterized by rapid modernization, political instability, and intense intellectual ferment. Russian philosophical culture at the turn of the twentieth century was deeply influenced by German idealism, Orthodox theology, classical philology, and emerging linguistic theories. Bakhtin absorbed these diverse traditions while studying classics and philosophy, eventually developing an interdisciplinary approach that resisted strict disciplinary boundaries.

One of the defining characteristics of Bakhtin's intellectual method was his refusal to separate literature from philosophy. For Bakhtin, literary texts were not merely aesthetic objects but manifestations of ethical, social, and historical consciousness. Every novel, poem, or dramatic work reflected complex interactions among individuals situated within specific cultural environments. Literature therefore became an invaluable means of investigating human existence itself.

Bakhtin's early philosophical writings reveal a sustained interest in ethics and interpersonal relations. Works such as Toward a Philosophy of the Act emphasize the uniqueness of individual responsibility while simultaneously recognizing that identity emerges only through encounters with others. This philosophical principle later became the foundation of dialogism, perhaps Bakhtin's most influential contribution to literary theory.

Dialogism proposes that meaning never exists in isolation. Every utterance responds to previous utterances while simultaneously anticipating future responses. Language therefore functions not as a neutral system of signs but as an ongoing social interaction. Speakers continuously negotiate meanings through dialogue, disagreement, reinterpretation, and cultural exchange.

This insight transformed literary criticism. Traditional criticism often sought the singular meaning intended by an author. Bakhtin instead argued that literary meaning remains inherently open because texts participate in continuous dialogues with readers, historical contexts, and other literary works. Interpretation thus becomes an active process rather than the recovery of fixed meanings.

Bakhtin's encounter with the novels of Fyodor Dostoevsky proved decisive in the development of his literary theory. In Problems of Dostoevsky's Poetics, first published in 1929 and substantially revised in 1963, Bakhtin introduced the concept of polyphony, describing Dostoevsky's novels as fundamentally different from conventional narratives.

In traditional novels, characters often function as instruments through which authors express predetermined ideological positions. Their voices ultimately remain subordinate to the author's controlling perspective. Dostoevsky's fiction, according to Bakhtin, operates differently. Characters possess independent consciousnesses capable of challenging both one another and the author himself. Multiple ideological positions coexist without being reduced to a single authoritative truth.

Bakhtin therefore described Dostoevsky's novels as polyphonic, borrowing the musical term to emphasize the coexistence of multiple autonomous voices. Polyphony rejects hierarchical organization in favor of dialogic interaction, allowing conflicting perspectives to remain unresolved throughout the narrative.

Closely connected to polyphony is Bakhtin's theory of heteroglossia, introduced most fully in The Dialogic Imagination. Heteroglossia refers to the multiplicity of social languages existing within every society. Different professions, generations, classes, institutions, ethnic communities, and ideological groups develop distinctive linguistic practices reflecting their social experiences.

Literary language therefore cannot be understood as homogeneous or neutral. Novels incorporate competing dialects, professional vocabularies, regional expressions, bureaucratic discourse, religious language, scientific terminology, journalistic styles, and everyday speech. These diverse voices interact, conflict, parody, and reinterpret one another, producing the richness characteristic of novelistic discourse.

Bakhtin regarded the novel as uniquely capable of representing this linguistic diversity because its flexible structure accommodates multiple perspectives simultaneously. Unlike epic poetry, which tends toward linguistic unity and authoritative narration, the novel embraces contradiction, plurality, and openness.

Another important influence upon Bakhtin's thinking was his opposition to purely formal approaches to literature. While Russian Formalists made significant contributions by identifying literary devices and narrative techniques, Bakhtin criticized their tendency to isolate texts from historical and social contexts. Literary form, he argued, cannot be separated from the ideological struggles embedded within language itself.

Consequently, Bakhtin developed a historical poetics that viewed literary genres as evolving cultural forms shaped by changing social conditions. Genres were not fixed categories but living traditions continually transformed through interaction with new historical realities. This perspective later informed his influential studies of the novel's historical development and its relationship to broader cultural transformations.

Bakhtin's interdisciplinary approach explains the remarkable durability of his theories. Rather than constructing rigid analytical models applicable only to specific texts, he formulated flexible concepts capable of illuminating literature across different historical periods, national traditions, and cultural contexts. Contemporary scholars continue to apply dialogism, polyphony, heteroglossia, and related concepts to subjects ranging from Shakespeare and Cervantes to postcolonial fiction, graphic novels, digital storytelling, and social media discourse.

Moreover, recent scholarship emphasizes that Bakhtin anticipated many concerns later associated with poststructuralism, discourse theory, and cultural studies. His understanding of language as socially contested, historically dynamic, and ideologically saturated remains particularly relevant within increasingly multicultural and digitally interconnected societies. As Hirschkop (2021) observes, Bakhtin's work offers not merely a theory of literature but a comprehensive philosophy of communication grounded in openness, plurality, and ethical dialogue.

3. DIALOGISM: BAKHTIN'S FUNDAMENTAL PRINCIPLE OF LITERARY THEORY

Among Mikhail Bakhtin's theoretical contributions, dialogism occupies the central position. It serves as the philosophical foundation upon which his theories of language, literature, and culture are constructed. Unlike traditional linguistic theories that regard language as a neutral system of signs, Bakhtin conceptualizes language as a living process of interaction among speakers whose utterances constantly respond to previous voices while anticipating future responses (Bakhtin, 1981).

Dialogism originates from Bakhtin's philosophical conviction that human existence is fundamentally relational. Individuals cannot exist as isolated beings because consciousness develops only through interaction with others. Every act of communication presupposes another consciousness capable of responding. Consequently, language is inherently social rather than individual.

According to Bakhtin (1984), every utterance contains traces of previous utterances. Words carry historical memories, ideological associations, emotional connotations, and cultural meanings accumulated through repeated social use. Speakers never employ entirely original language; instead, they continually appropriate, reinterpret, and transform words that have already belonged to others.

This understanding has profound implications for literary criticism. Traditional criticism frequently assumes that literary meaning originates exclusively from the author's intentions. Bakhtin rejects this assumption by arguing that meaning emerges through dialogue among author, text, reader, historical context, and cultural tradition. Literature therefore becomes an ongoing conversation rather than a closed artistic object.

Dialogism also challenges the notion of absolute truth. Since every perspective represents only one position within a larger conversation, no single voice can claim complete authority. Literary texts consequently become arenas in which multiple ideological positions interact without necessarily reaching definitive conclusions.

The dialogic nature of literature explains why classical works remain relevant across centuries. Shakespeare, Cervantes, Dante, Tolstoy, and Dostoevsky continue generating new interpretations because their works remain open to dialogue with changing historical circumstances and new readers.

Literary meaning is therefore never exhausted but continually renewed through interpretation.

Recent scholarship has further expanded Bakhtin's dialogic theory into digital communication studies. Online discourse, social media platforms, interactive storytelling, and collaborative writing environments illustrate Bakhtin's insight that communication is fundamentally dialogic rather than monologic (White, 2024). Digital humanities scholars increasingly employ dialogism to explain how meaning emerges through networks of interaction instead of isolated textual production.

4. POLYPHONY AND THE TRANSFORMATION OF THE NOVEL

Perhaps Bakhtin's most celebrated literary concept is polyphony, developed primarily through his analysis of Fyodor Dostoevsky's novels. The concept fundamentally transformed twentieth-century understandings of narrative structure and characterization.

Borrowing the musical term "polyphony," Bakhtin (1984) described novels in which several independent voices coexist without being subordinated to a single authoritative perspective. In music, polyphony denotes multiple melodic lines that maintain independence while contributing to a unified composition. Bakhtin applied this principle to literature, arguing that Dostoevsky's characters possess genuine ideological autonomy.

In conventional novels, characters frequently function as extensions of the author's worldview. Their beliefs ultimately reinforce the narrative's dominant ideological position. Dostoevsky's novels, however, differ significantly. Characters such as Raskolnikov, Ivan Karamazov, Prince Myshkin, and Stavrogin articulate philosophical positions that remain independent even when they contradict one another or the implied author.

Bakhtin argues that Dostoevsky does not resolve these ideological conflicts by privileging one perspective over another. Instead, he allows opposing voices to remain in productive tension throughout the narrative. Readers therefore encounter genuine philosophical dialogue rather than predetermined moral instruction.

Polyphony also transforms the role of the reader. Instead of receiving finalized interpretations, readers actively participate in evaluating competing perspectives. Literary understanding becomes an interpretive process involving ethical judgment, critical reflection, and intellectual engagement.

Polyphony has proven especially influential within contemporary narrative theory. Modern novels frequently reject omniscient narration in favor of multiple narrators, fragmented perspectives, and competing interpretations of shared events. Authors such as Toni Morrison, Salman Rushdie, Margaret Atwood, Orhan Pamuk, and David Mitchell employ narrative structures that resonate strongly with Bakhtin's polyphonic model.

Moreover, polyphony extends beyond literature into film, theater, political discourse, journalism, and media studies. Contemporary scholars frequently analyze democratic communication, public debate, and intercultural dialogue through Bakhtinian concepts of multiple autonomous voices.

Recent literary criticism likewise demonstrates that polyphonic narration provides effective frameworks for representing multicultural societies characterized by ethnic diversity, migration, globalization, and conflicting historical memories (Lindfors, 2023).

Heteroglossia: Language as Social Diversity

Closely related to dialogism and polyphony is Bakhtin's concept of heteroglossia, introduced in The Dialogic Imagination (1981). Heteroglossia refers to the coexistence of multiple social languages within every culture.

Bakhtin rejects the assumption that national languages constitute unified systems. Instead, every language consists of numerous social dialects reflecting differences in profession, education, social class, religion, geography, ethnicity, gender, and historical generation. These linguistic varieties continually interact, compete, parody one another, and exchange meanings.

Consequently, literary language cannot be understood as homogeneous. Every novel incorporates diverse linguistic registers representing different social worlds. Political speeches differ from legal discourse; religious language differs from scientific terminology; youth slang differs from bureaucratic vocabulary. Literature becomes the meeting place of these competing voices.

Bakhtin considered the novel uniquely capable of representing heteroglossia because its flexible form accommodates multiple linguistic styles simultaneously. Epic poetry traditionally aspires toward linguistic unity and elevated diction, whereas the novel celebrates diversity, contradiction, and stylistic plurality.

Heteroglossia also possesses important ideological implications. Language reflects social power relations. Dominant institutions attempt to establish authoritative forms of discourse, while marginalized communities develop alternative linguistic practices expressing different experiences and values.

Literature exposes these struggles by juxtaposing conflicting forms of language. Readers become aware that no discourse is ideologically neutral. Every linguistic choice reflects particular social interests and historical circumstances.

Modern literary criticism frequently employs heteroglossia to analyze postcolonial literature. Writers such as Chinua Achebe, Ngũgĩ wa Thiong'o, Arundhati Roy, Chimamanda Ngozi Adichie, and Salman Rushdie deliberately combine indigenous languages, colonial languages, oral traditions, and local dialects to represent culturally hybrid societies.

Similarly, feminist criticism utilizes heteroglossia to examine competing gendered discourses within literature, while sociolinguistic research applies Bakhtinian theory to multilingual education and intercultural communication (Sakız & Denktaş, 2026).

The concept has acquired renewed significance in the twenty-first century because globalization increasingly brings diverse linguistic communities into contact. Contemporary literature often reflects multilingual realities that Bakhtin anticipated decades before globalization became a dominant academic concern.

The Novel as the Supreme Dialogic Genre

Bakhtin regarded the novel as the literary genre best suited to expressing the complexity of modern life. Unlike classical genres characterized by formal stability and stylistic unity, the novel continually evolves alongside historical change.

Epic literature traditionally presents heroic figures inhabiting completed historical worlds separated from contemporary readers by temporal distance. Its language tends toward solemnity, authority, and closure. The novel, by contrast, remains unfinished because it continually incorporates new voices, social experiences, and linguistic forms.

According to Bakhtin (1981), the novel possesses remarkable flexibility. It absorbs elements from philosophy, journalism, autobiography, letters, legal documents, folklore, scientific writing, and everyday conversation. This openness allows novelists to represent rapidly changing societies more effectively than rigid literary forms.

The novel's dialogic character also reflects democratic principles. Rather than privileging aristocratic heroes or official narratives, novels frequently foreground ordinary individuals whose diverse experiences challenge established authorities.

Bakhtin therefore interpreted the historical rise of the novel as closely connected to broader processes of social modernization, urbanization, literacy, and democratization. As societies became increasingly complex, literature required new forms capable of representing competing worldviews and multiple social identities.

Contemporary fiction continues to demonstrate the novel's adaptability. Digital narratives, hypertext fiction, graphic novels, transnational literature, and interactive storytelling all expand dialogic possibilities while remaining consistent with Bakhtin's understanding of literary openness.

Recent research further suggests that Bakhtin's theory of the novel provides valuable methodological tools for studying global literature in multicultural societies (Hirschkop, 2021). Rather than seeking universal literary norms, scholars increasingly examine how novels negotiate cultural diversity through dialogue among competing historical voices.

Bakhtin's conception of the novel therefore remains one of the most influential theoretical models in modern literary studies. It continues shaping analyses of narrative form, characterization, discourse, ideology, translation, comparative literature, and cultural interaction.

5. THE CHRONOTOPE: TIME AND SPACE IN LITERARY NARRATIVE

Among Bakhtin's most influential theoretical contributions is the concept of the chronotope (from the Greek chronos—time and topos—space), introduced most systematically in his essay Forms of Time and of the Chronotope in the Novel (Bakhtin, 1981). The chronotope represents the inseparable unity of temporal and spatial relationships within literary works. Rather than treating time and space as separate narrative elements, Bakhtin argued that they are fundamentally interconnected and determine how characters, events, and meanings develop throughout a text.

Bakhtin maintained that every literary genre possesses characteristic chronotopes that shape its representation of reality. In ancient adventure novels, for example, time often appears abstract and reversible, while space functions as a sequence of disconnected locations through which heroes travel. In contrast, the realist novel presents historical time as continuous and irreversible, linking individual lives to broader social transformations.

The chronotope is not merely a technical feature of narrative organization. Instead, it reflects the worldview embedded within a literary work. The ways in which authors construct temporal progression and spatial relationships reveal underlying assumptions about history, society, identity, and human experience. Consequently, chronotopic analysis enables scholars to investigate the ideological dimensions of literary form.

One of Bakhtin's most important observations concerns the relationship between historical development and literary representation. As societies change, literary chronotopes also evolve. Medieval romance differs fundamentally from the modern psychological novel because each reflects different understandings of historical reality and human agency.

The concept has proven particularly valuable in comparative literature because it facilitates comparisons across national traditions and historical periods. Researchers may analyze how different cultures represent migration, exile, urbanization, colonialism, or globalization through distinctive chronotopic structures.

Recent literary scholarship has expanded chronotopic analysis beyond printed literature into cinema, digital storytelling, video games, and multimedia narratives. Scholars argue that contemporary digital environments create new chronotopes characterized by nonlinear temporality, virtual spaces, and interactive participation (White, 2024). Such developments demonstrate the continuing adaptability of Bakhtin's theoretical framework.

Furthermore, globalization has generated increasing scholarly interest in transnational chronotopes that connect geographically distant cultures through migration, communication technologies, and global economic systems. Bakhtin's theory therefore remains highly relevant for understanding literature in an increasingly interconnected world.

Carnival and the Carnivalesque

Another of Bakhtin's enduring contributions is his theory of carnival, developed primarily in Rabelais and His World (Bakhtin, 1984). Carnival refers not simply to festive celebration but to a distinctive cultural phenomenon characterized by temporary suspension of social hierarchies, official authority, and established norms.

Medieval carnivals temporarily dissolved distinctions between rulers and subjects, clergy and laity, nobility and common people. Participants engaged in laughter, parody, masquerade, grotesque imagery, and symbolic inversions that challenged institutional authority. Although temporary, carnival created spaces in which alternative social possibilities could be imagined.

Bakhtin regarded carnival as fundamentally dialogic because it encouraged interaction among diverse social voices. During carnival, official discourse lost its monopoly over truth. Alternative perspectives, often excluded from institutional life, acquired temporary legitimacy through humor, satire, and public performance.

The concept of the carnivalesque extends these principles into literature. Literary works may incorporate carnival elements by presenting reversals of authority, grotesque bodies, comic exaggeration, parody, hybridity, and the coexistence of contradictory perspectives.

Carnivalesque literature challenges rigid ideological systems by refusing singular interpretations. Instead, it celebrates plurality, ambiguity, transformation, and openness. Readers encounter worlds in which conventional boundaries between high and low culture, sacred and profane, tragedy and comedy become unstable.

Bakhtin emphasized that carnival laughter differs fundamentally from ridicule. Rather than humiliating individuals, carnival laughter renews society by exposing the limitations of dogmatism and encouraging collective participation in cultural transformation.

The carnivalesque has become particularly influential within postcolonial criticism, feminist theory, queer studies, and political satire. Scholars frequently employ Bakhtinian concepts to analyze how marginalized communities resist dominant ideologies through humor, parody, and alternative cultural performances.

Modern literature offers numerous examples of carnivalesque aesthetics. The works of Salman Rushdie, Gabriel García Márquez, Angela Carter, Milan Kundera, and José Saramago frequently combine grotesque realism, historical parody, magical realism, and social critique in ways consistent with Bakhtin's theoretical model.

Recent studies also apply carnival theory to digital culture. Internet memes, social media satire, online parody, and participatory digital communities often exhibit carnivalesque characteristics by challenging institutional authority through humor and collective creativity (Lindfors, 2023). These applications illustrate the continuing vitality of Bakhtin's insights in contemporary cultural analysis.

6. BAKHTIN'S INFLUENCE ON STRUCTURALISM, POSTSTRUCTURALISM, AND CULTURAL STUDIES

Although Bakhtin developed his theories independently of Western structuralism and poststructuralism, his work profoundly influenced subsequent developments in literary criticism after becoming widely available outside the Soviet Union during the 1960s and 1970s.

Structuralism sought to identify universal systems governing language, literature, and culture. While Bakhtin appreciated systematic analysis, he criticized approaches that treated language as an abstract structure independent of historical communication. For Bakhtin, language remains inseparable from social interaction, ideological struggle, and historical change.

This distinction proved highly influential for poststructuralist thinkers who questioned fixed meanings and stable interpretive systems. Although Bakhtin never embraced philosophical relativism, his emphasis on plurality, dialogue, and interpretive openness anticipated many concerns later associated with Jacques Derrida, Julia Kristeva, Roland Barthes, and Michel Foucault.

Julia Kristeva introduced Bakhtinian ideas into French literary theory through her concept of intertextuality. Building upon dialogism, Kristeva argued that every text constitutes a mosaic of quotations interacting with previous texts. Although intertextuality developed beyond Bakhtin's original formulations, its intellectual origins clearly reflect his dialogic understanding of language.

Bakhtin also influenced reader-response criticism by emphasizing the active role of readers in constructing literary meaning. Because texts remain dialogically open, readers do not merely recover authorial intentions but participate in ongoing interpretive conversations extending across generations.

Within cultural studies, Bakhtin's theories provide valuable frameworks for analyzing popular culture, media discourse, political communication, and identity formation. Scholars employ dialogism and heteroglossia to investigate multicultural societies characterized by competing narratives and diverse cultural traditions.

Similarly, discourse analysts draw upon Bakhtin's understanding of language as socially situated communication. Educational researchers examine classroom dialogue through Bakhtinian principles, while sociolinguists investigate multilingual interaction using heteroglossia as a theoretical framework.

Recent interdisciplinary scholarship emphasizes Bakhtin's exceptional capacity to bridge disciplinary boundaries. His concepts simultaneously illuminate literature, philosophy, linguistics, anthropology, communication studies, education, and sociology (Hirschkop, 2021).

This interdisciplinary relevance explains why Bakhtin remains one of the most frequently cited literary theorists in contemporary humanities research despite writing much of his work nearly a century ago.

7. CONCLUSION

Mikhail Mikhailovich Bakhtin occupies a unique position in the history of literary theory. Unlike many twentieth-century theorists whose influence remained confined to particular methodological schools, Bakhtin developed an interdisciplinary philosophy of language, culture, and literature that continues to shape contemporary scholarship across numerous academic disciplines. His theoretical concepts have fundamentally transformed the study of literature by emphasizing dialogue, plurality, historical development, and the social nature of language.

This paper has demonstrated that Bakhtin's significance extends far beyond his analyses of Russian literature. His concepts of dialogism, polyphony, heteroglossia, the chronotope, and the carnivalesque collectively provide one of the most comprehensive frameworks for understanding literary texts as dynamic interactions among multiple voices, cultures, historical contexts, and ideological perspectives.

Dialogism remains the philosophical cornerstone of Bakhtin's literary theory. By rejecting monological conceptions of language, Bakhtin established that meaning is never fixed or isolated but always emerges through interaction among speakers, readers, texts, and historical circumstances. This insight continues to influence literary criticism, discourse analysis, communication studies, and educational theory. In increasingly multicultural societies, dialogism provides an essential methodological framework for understanding cultural diversity and intercultural communication.

Similarly, Bakhtin's theory of polyphony revolutionized approaches to narrative analysis. His interpretation of Dostoevsky's novels demonstrated that literary characters may possess genuine ideological independence rather than functioning merely as instruments of authorial intention. Contemporary narrative theory continues to employ polyphony in analyses of modern fiction characterized by multiple narrators, fragmented perspectives, and competing interpretations of reality.

The concept of heteroglossia likewise remains indispensable for contemporary literary studies. By recognizing that every language consists of multiple social voices rather than a unified linguistic system, Bakhtin anticipated modern sociolinguistics, postcolonial criticism, and multicultural literary analysis. In an era of globalization, multilingualism, and digital communication, heteroglossia provides particularly valuable tools for examining linguistic diversity and cultural interaction.

Bakhtin's theory of the chronotope further expanded literary criticism by demonstrating that temporal and spatial relationships shape narrative meaning and historical consciousness. Modern scholars have successfully applied chronotopic analysis to cinema, digital narratives, graphic novels, video games, and transnational literature, confirming the remarkable adaptability of Bakhtin's ideas.

Equally influential is Bakhtin's understanding of carnival and the carnivalesque, which emphasizes the subversive power of laughter, parody, and symbolic inversion. Contemporary cultural studies continue to employ carnival theory when analyzing political satire, popular culture, digital media, performance studies, and resistance to dominant ideologies.

One of the most remarkable aspects of Bakhtin's intellectual legacy is its interdisciplinary character. His ideas have significantly influenced structuralism, poststructuralism, reader-response criticism, discourse analysis, cultural studies, anthropology, philosophy, education, and communication theory. Few literary theorists have demonstrated comparable relevance across such diverse fields of inquiry.

Recent scholarship published between 2021 and 2026 confirms that Bakhtin's theories remain central to contemporary humanities research. Current studies increasingly apply his concepts to globalization, migration, multilingual education, digital communication, artificial intelligence, and intercultural dialogue. These developments illustrate the enduring vitality of Bakhtinian thought more than fifty years after his death.

The continued relevance of Bakhtin's work also reflects broader changes in literary studies. Contemporary criticism increasingly rejects rigid theoretical systems in favor of interdisciplinary approaches that recognize complexity, plurality, and historical transformation. Bakhtin anticipated these developments decades before they became dominant methodological principles within the humanities.

Ultimately, Bakhtin's greatest contribution lies in demonstrating that literature is fundamentally dialogic. Literary texts neither transmit fixed meanings nor merely reflect social reality. Instead, they create spaces in which multiple voices engage in ongoing conversations across cultures, historical periods, and generations of readers. Every interpretation becomes another contribution to this continuing dialogue.

For these reasons, Mikhail Bakhtin remains one of the indispensable thinkers of modern literary theory. His work continues not only to explain literature but also to illuminate broader questions concerning language, culture, ethics, identity, and human communication. As literary studies continue to evolve within increasingly interconnected global contexts, Bakhtin's vision of dialogue, openness, and plurality appears more relevant than ever before.

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TEACHERS' ATTITUDES TOWARDS PROBLEM-SOLVING TASKS AS A MEANS OF DEVELOPING CREATIVITY IN PRIMARY MATHEMATICS EDUCATION

Nada Vasiljević[1*], *Dragica Milniković*[1]

[1]University of East Sarajevo, Faculty of Pedagogy, Bosnia and Herzegovina,
e-mail: nadavasiljevic1010@gmail.com, dragica.milinkovic@pfb.ues.rs.ba

Abstract: Creativity is increasingly recognised as an important dimension of mathematics education, particularly when pupils are encouraged to explore, formulate and solve problems in different ways. This study examines teachers' attitudes towards problem-solving tasks as a means of developing creativity in primary mathematics education. The empirical research was conducted in December of the 2024/2025 school year and included 46 teachers from grades one to five in three schools within the JU OŠ "Jovan Dučić" school network in the Banja Luka area. A questionnaire was used to examine teachers' attitudes towards the presence and frequency of creativity-oriented problem-solving tasks in mathematics textbooks and classroom practice, the use of open- and closed-ended tasks, the contribution of mathematics teaching and problem-solving tasks to creativity development, the importance of professional development, instructional guidance, and the role of textbooks. The data were processed using MS Excel 2019 and IBM SPSS Statistics 29.0.2. Descriptive procedures and chi-square tests were applied to analyse the obtained data. The results revealed statistically significant differences in teachers' responses concerning the frequency of using creativity-oriented problem-solving tasks, the perceived contribution of mathematics teaching and problem-solving tasks to creativity development, the use of open- and closed-ended tasks, professional development, and the role of mathematics textbooks. No statistically significant differences were found regarding teachers' perceptions of the presence of creativity-oriented problem-solving tasks in textbooks or the usefulness of instructional guidance. The qualitative analysis of examples provided by teachers further indicated difficulties in distinguishing genuinely open-ended problems from routine and non-routine structured tasks. The findings indicate that positive attitudes towards creativity need to be accompanied by stronger methodological competencies and systematic professional development. Particular attention should be given to the design and implementation of open-ended and cognitively demanding problem-solving tasks that encourage pupils to use different strategies, generate ideas, and develop creative mathematical thinking.

Keywords: *creativity, problem-solving tasks, open-ended tasks, primary mathematics education, teachers.*
Field: Social Sciences

1. INTRODUCTION

Creativity is increasingly recognised as an important dimension of mathematical learning, particularly when pupils are encouraged to formulate, explore, represent and solve problems in more than one way. Recent research confirms that creative problem solving is already observable in primary-school pupils and can be supported through appropriate mathematical learning environments (Van Hooijdonk et al., 2023; Bruhn, 2024). Contemporary research on mathematical problem solving additionally emphasises problem formulation and the diversity of ways in which learners approach and solve mathematical problems (Santos-Trigo, 2024).

Open-ended and cognitively demanding tasks are especially relevant because they can provide opportunities for fluency, flexibility and originality. Bruhn (2024) showed that young primary-school children can demonstrate mathematical creativity when working on open arithmetic tasks. Evidence from elementary mathematics classrooms also indicates that activities designed to promote creative problem posing and problem solving can strengthen mathematical creativity and creative self-efficacy (Hu & Wang, 2024). Moreover, research on originality in mathematical problem solving suggests that mathematical knowledge and conceptual understanding are closely related to pupils' ability to produce original solutions (2024).

The importance of the teacher is therefore not limited to presenting problems; it includes selecting, adapting and designing tasks and creating classroom conditions in which alternative strategies and mathematical explanations are valued. Research on teachers' creative actions in mathematics shows that creativity-supportive practices require teachers to move beyond routine procedures and provide opportunities for exploration and alternative solutions (Ye et al., 2024). Research on teachers' classroom

[*]Corresponding author: nadavasiljevic1010@gmail.com

practices further indicates that even when teachers have relevant knowledge, difficulties may remain in translating that knowledge into consistent creativity-supportive practice (Bicer et al., 2025).

Professional development is consequently an important condition for strengthening teachers' competence. Zioga and Desli (2025) found that an educational programme increased primary teachers' use of creativity-provoking tasks and approaches, although difficulties with originality and elaboration persisted. A related 2025 study on teachers' implementation of mathematical creativity-promoting tasks identified a continuing "creativity gap" between teachers' beliefs and classroom practices, particularly in the design and implementation of open-ended tasks (Zioga & Desli, 2025). These findings are directly relevant to the present study because they suggest that teachers' positive attitudes towards creativity do not necessarily guarantee the ability to construct appropriate tasks.

Curriculum and instructional materials also influence the opportunities pupils receive to engage in creative mathematical thinking. Recent research with elementary pupils shows that curriculum materials combining challenging and open-ended problems with collaborative and reflective work can increase the diversity and originality of problem-solving strategies (Wen & Zhang, 2025). Research on mathematical creativity in K–12 education likewise shows that problem solving and problem posing are among the principal ways through which mathematical creativity is conceptualised, while open-ended multiple-solution tasks remain central to its assessment (Mathematical Creativity: A Systematic Review of Definitions, Frameworks, and Assessment Practices, 2025).

Teacher competence in problem posing is another relevant dimension. A 2026 study demonstrated that targeted training based on narrative texts improved primary teachers' non-routine problem-posing skills and increased their awareness of problem posing (Yurtbakan et al., 2026). In addition, recent classroom research has shown that students can engage in individual and collaborative creative processes, while limitations in teachers' understanding of how to foster creativity may constrain these opportunities (Bicer et al., 2025). Thus, the quality of professional support, tasks and classroom implementation should be considered together.

In the regional context, recent research on the integration of mathematical modelling tasks in primary education in Croatia and Slovenia points to differences in teachers' use of open and modelling-oriented tasks and highlights the importance of teacher preparation (Sabo Junger et al., 2025). These findings reinforce the need to examine not only whether teachers value problem solving and creativity, but also how prepared they are to select and formulate tasks that provide genuine opportunities for creative mathematical thinking.

The present study therefore examines teachers' perspectives and reported practices concerning problem-solving tasks as a means of supporting creativity in younger primary-school pupils. The focus is placed on the presence and use of creativity-oriented tasks, the balance between open- and closed-ended problems, the perceived role of textbooks and instructional guidance, and the importance of professional development. The aim is to identify both strengths in current practice and areas in which methodological support is needed.

2. METHODOLOGY

The study used theoretical and empirical methods. The empirical part was based on a questionnaire administered to 46 teachers who teach grades one to five in three schools belonging to the JU OŠ "Jovan Dučić" school network: the central school in Zalužani and branch schools in Kuljani and Priječani, in the Banja Luka area. The research was conducted in December of the 2024/2025 school year. Data were prepared in MS Excel 2019 and analysed using IBM SPSS Statistics 29.0.2.

The questionnaire examined teachers' perceptions of: (1) the extent to which mathematics textbooks contain creativity-oriented problem tasks; (2) the frequency with which teachers use such tasks; (3) the perceived contribution of initial mathematics teaching and problem tasks to creativity; (4) the relationship between mathematics and creativity; (5) the use of open- and closed-ended tasks; (6) the frequency and nature of creativity-oriented tasks provided by teachers; (7) the importance of professional development and instructional guidance; and (8) the role of textbooks in supporting creativity.

Descriptive procedures were used to present the structure of the sample and response patterns, while chi-square tests were used to examine selected distributions of teachers' responses. Statistical significance was interpreted at the conventional level of $p<.05$. In addition to the quantitative responses, teachers' examples of problem tasks were considered qualitatively in order to identify recurring methodological characteristics and difficulties in task formulation.

3. RESULTS

The sample consisted of 46 teachers. Women represented 32 participants (88.9%), while men represented 4 participants (11.1%). Fourteen teachers (38.9%) were from the branch school in Kuljani, eight (22.2%) from the central school in Zalužani and fourteen (38.9%) from the branch school in Priječani.

Regarding the presence of creativity-oriented problem tasks in mathematics textbooks, the distribution of responses was not statistically significant, $\chi^2(2)=5.167$, $p=.076$. Although many teachers perceived textbooks as containing tasks that can contribute to creativity, the responses were not sufficiently uniform to support the hypothesis that teachers share a common perception on this issue.

A statistically significant difference was found in teachers' responses concerning the frequency of using problem tasks intended to develop creativity, $\chi^2(2)=10.500$, $p=.005$. Most teachers reported that they use such tasks very often or often, while a smaller group reported a moderate frequency. This finding suggests that teachers recognise the value of problem tasks, although frequency of use alone does not indicate the cognitive quality or openness of the tasks.

Teachers also expressed a strongly differentiated view of the contribution of initial mathematics teaching and problem tasks to creativity, $\chi^2(4)=39.000$, $p<.001$. The largest group considered their contribution substantial, while only a small number of respondents were undecided or expressed a negative view. Furthermore, the distribution concerning the use of open- and closed-ended tasks was statistically significant, $\chi^2(3)=71.778$, $p<.001$. The largest proportion of teachers reported using both types of tasks in approximately equal measure, while smaller groups reported a predominance of one type.

The analysis of teachers' examples revealed a more important methodological issue. While teachers generally succeeded in formulating closed, structured problems, not all were able to formulate genuinely open-ended problems. Some examples remained routine or merely non-routine word problems rather than tasks with multiple strategies, multiple possible answers or substantial space for exploration. This suggests that declarative recognition of the importance of creativity is not always accompanied by sufficient procedural knowledge for designing creativity-supportive tasks.

Professional development was also statistically significant, $\chi^2(4)=11.500$, $p=.021$. Teachers predominantly viewed professional development as highly important for improving the quality and frequency of creativity-oriented problem tasks. By contrast, the distribution concerning the perceived usefulness of instructional guidance was not statistically significant, $\chi^2(3)=6.000$, $p=.112$, indicating variation in teachers' views.

Finally, teachers' responses concerning the role of textbooks differed significantly, $\chi^2(4)=10.944$, $p=.027$. The findings indicate that teachers see the textbook as an important resource for supporting creativity, while their qualitative comments simultaneously point to the need for richer and more contemporary task collections and supplementary didactic materials.

4. DISCUSSION

The findings reveal an important discrepancy between teachers' general positive attitudes toward creativity and their practical capacity to design and select tasks that genuinely support creative mathematical thinking. This distinction is consistent with recent research showing that problem-solving pedagogy can enhance creativity, but that the effects depend on the characteristics of the learning environment and the way problems are presented and explored (Zhan et al., 2024). The finding that teachers frequently use problem tasks is therefore encouraging, but frequency should be complemented by attention to openness, cognitive demand, mathematical reasoning and opportunities for multiple solutions.

The difficulty in distinguishing an open-ended problem from a routine or non-routine word problem is particularly relevant. Contemporary problem-solving research places increasing emphasis on problem formulation, exploration and the organisation of learning environments in which pupils can make meaningful decisions about how to approach a problem (Santos-Trigo, 2024). Similarly, research with primary-school teachers indicates that sustained engagement with open-ended tasks within professional development can influence teachers' meanings of problem solving and mathematics learning (Sevinç et al., 2024). These findings support the present study's conclusion that professional development should not be limited to theoretical information about creativity; it should include analysing, transforming and creating tasks, followed by reflection on pupils' possible strategies and responses.

The regional evidence is also relevant. Sabo Junger et al. (2025) report differences in the integration of mathematical modelling tasks in primary education in Croatia and Slovenia, highlighting the importance of teacher competence and the selection of appropriate tasks. Doz et al. (2024) similarly emphasise the relevance of problem-based approaches in primary mathematics education. Taken together, these findings suggest that textbook reform, professional development and access to task-rich methodological resources should be considered as interconnected measures rather than isolated interventions.

5. CONCLUSION

The study indicates that teachers generally recognise the connection between mathematics, problem solving and creativity and report frequent use of problem tasks. At the same time, the qualitative analysis shows that a positive attitude does not necessarily imply sufficient competence for designing genuinely open-ended, creativity-oriented tasks. The statistically significant findings concerning task use, the perceived contribution of problem tasks, the balance of open and closed tasks, professional development and textbooks point to several practical directions for improving primary mathematics education.

Priority should be given to professional development that enables teachers to distinguish closed, non-routine and open-ended problems; redesign textbook tasks; create tasks with multiple strategies or solutions; and facilitate classroom discussion, argumentation and comparison of mathematical ideas. Contemporary research supports the view that creative problem solving can be developed in primary education when pupils are provided with appropriate opportunities to generate and refine ideas (Van Hooijdonk et al., 2023). Accordingly, improving the quality of problem-solving tasks and strengthening teachers' methodological competence should be treated as important conditions for a more creative and intellectually stimulating mathematics classroom.

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doi: 10.35120/sciencej0503343j UDK: 338.121]:334.722:004.8}:303.721(497.11)

DIGITALIZATION AND ENTREPRENEURSHIP – IMPACT ON THE ECONOMY AND SOCIETY

Emina Jeremić Marković[1], Milan Janković[2], Doloris Bešić-Vukašinović[3]*

[1]Center for Globalization Studies (CGS), Belgrade, Serbia, e-mail: eminajeremic@gmail.com
[2]Faculty of Business Studies and Law, University "Union - Nikola Tesla", Serbia, e-mail: milan.jankovic@fpsp.edu.rs
[3]Academy of Technical and Art Applied Studies – Textile School for Design, Technology and Management, Belgrade, Serbia, e-mail: doloris.besic@yahoo.com

Abstract: In a world emerging from the devastating COVID-19 pandemic, where everything has become increasingly volatile and change appears to be the only constant—occurring, it seems, more rapidly and intensely than ever before—the development and implementation of new technologies and digital transformation have become key drivers of economic growth and the development of society as a whole. Within this process of digital transformation, entrepreneurship represents a driving force of economic growth and societal development, acting as a catalyst for innovation, job creation, and social transformation. As the lifeblood of market dynamics, entrepreneurs inject vitality into the economy by introducing groundbreaking products and services, stimulating competition, and increasing efficiency. Their ventures contribute to gross domestic product, expand employment opportunities, and foster resilience during periods of economic crisis. We are witnessing how the process of digitalization affects the effectiveness and efficiency of companies' operations, leading to the development of new products and services in the market, the transformation of business models and other elements of business operations, as well as improvements in work processes and production systems. Taken together, these developments shape the overall market performance and competitiveness of enterprises. However, it must be borne in mind that the mere implementation of new technologies and the digitalization of business operations, without an adequate understanding of these technologies and proper employee training in their application, as well as without socially responsible conduct on the part of enterprises themselves, cannot lead to sustainable business practices or contribute to the overall progress of the economy and society. By properly recognizing the significance and challenges of digitalization, considering both its positive and negative aspects, learning from past experience, and maintaining a strong commitment to the continuous improvement of employees' knowledge, skills, and competencies—without which no meaningful change would be possible—entrepreneurship and digitalization can make a significant contribution to improving the quality of life, while simultaneously fostering the advancement and development of the economy and society as a whole.
Keywords: *digitalization, entrepreneurship, sustainable growth and development, economy, society.*
Field: Social Sciences

1. INTRODUCTION

Digitalisation and entrepreneurship have become important determinants of contemporary economic and social development. The aim of this paper is to examine their impact on the economy and society, their mutual relationship and their contribution to economic growth and improvements in the quality of life. The importance of these processes became particularly evident during and after the COVID-19 pandemic, when enterprises, entrepreneurs, employees and consumers were required to adapt rapidly to significant changes in the business environment.

Digitalisation has transformed the way enterprises operate, communicate with consumers, organise production and provide products and services. At the same time, entrepreneurship represents one of the mechanisms through which technological opportunities are transformed into new products, services, markets and business models. Digital entrepreneurship therefore combines entrepreneurial initiative with the opportunities created by information and communication technologies (Simović & Ilić, 2021).

The COVID-19 pandemic accelerated processes that had already been taking place in the global economy. Businesses increasingly relied on digital communication, online sales, electronic payments and new organisational models. These developments generated new requirements regarding labour, management, education, knowledge, skills and technologies. As a result, digitalisation should not be understood exclusively as the introduction of technological solutions, but as a broader transformation of business and society.

The relationship between entrepreneurship and economic development has long attracted the attention of economic researchers. Audretsch et al. (2002) examine the relationship between industrial restructuring, entrepreneurial activity and economic performance, while Van Stel et al. (2005) analyse the

*Corresponding author: eminajeremic@gmail.com

effect of entrepreneurial activity on national economic growth. These studies indicate that entrepreneurship represents an important component of the processes that shape economic development.

Entrepreneurship is also closely associated with innovation. Drucker (2002) considers innovation a fundamental instrument of entrepreneurship, while Bessant and Tidd (2011) emphasise the close relationship between entrepreneurship, innovation and the transformation of ideas into economic opportunities. Consequently, the development of entrepreneurship in a digital environment requires not only technological resources but also knowledge, creativity, innovative capacity and the willingness to respond to change.

Data from the Statistical Office of the Republic of Serbia illustrate the increasing importance of entrepreneurship in Serbia. The number of entrepreneurs increased from 228,680 in 2010 to 232,765 in 2015, 272,969 in 2018 and 298,279 in 2020. These figures indicate a continuous increase in entrepreneurial activity and support the view that entrepreneurs constitute an important element of the Serbian economy.

2. MATERIALS AND METHODS

The paper is based on a qualitative and descriptive research approach. The research combines a review of relevant literature with an analysis of secondary statistical data. The theoretical framework is based on literature dealing with entrepreneurship, innovation, digital entrepreneurship, technological change and economic growth.

The theoretical foundations of entrepreneurship are considered primarily through the works of Joseph A. Schumpeter (1911, 1934, 1939, 1942), whose understanding of entrepreneurship places innovation and economic change at the centre of entrepreneurial activity. These foundations are complemented by the contributions of Drucker (2002), Bessant and Tidd (2011), Penezić (2009), the National Knowledge Commission (2008), Audretsch et al. (2002), Van Stel et al. (2005), Miletić and Jeremić Marković (2018), and Simović and Ilić (2021).

The empirical part of the analysis relies on secondary statistical data published by the Statistical Office of the Republic of Serbia. The selected indicators relate to the number and structure of enterprises and entrepreneurs, innovative activities and the use of information and communication technologies.

The research on information and communication technology use presented in the original paper was conducted according to Eurostat methodology. The household survey covered 2,800 households and 2,800 individuals, while the enterprise survey was conducted on a sample of 1,839 enterprises, stratified according to size and economic activity.

The collected data are analysed descriptively and interpreted in relation to the theoretical concepts identified in the literature. The objective is to identify major trends and illustrate the relationship between entrepreneurship, innovation, digital technologies and economic and social development.

3. RESULTS

3.1. Entrepreneurship and digitalisation

The concept of entrepreneurship has evolved considerably throughout economic history. One of the most influential theoretical approaches was developed by Joseph Schumpeter, who associated entrepreneurship with innovation and economic change. In his theory of economic development, the entrepreneur performs an important function by introducing new combinations into economic activity (Schumpeter, 1911, 1934).

Schumpeter's approach identifies several forms of entrepreneurial innovation, including the introduction of new products, new production methods, new sources of supply, new markets and new forms of industrial organisation (Schumpeter, 1942). The entrepreneur is therefore not merely the owner or manager of an enterprise but an economic actor who introduces change and contributes to economic transformation.

This interpretation remains highly relevant in the digital economy. Digitalisation provides new technological opportunities, but entrepreneurial activity is necessary to transform these opportunities into marketable products and services. Digital entrepreneurship consequently represents an important contemporary form of entrepreneurial activity, based on the application of digital technologies in the creation, development and management of business ventures (Simović & Ilić, 2021).

Entrepreneurship can also be understood as the application of knowledge, skills and competences and the commercialisation of ideas through the establishment of new enterprises or the development of existing ones. Its objectives include growth, wealth creation, employment and social benefits. Entrepreneurial activity is therefore associated with initiative, innovation and the willingness to undertake new business activities and accept risk (National Knowledge Commission, 2008).

Penezić (2009) similarly considers entrepreneurship from the perspective of contemporary economic and market conditions, emphasising the importance of entrepreneurial initiative for business development. Miletić and Jeremić Marković (2018) connect entrepreneurship with economic development and emphasise the importance of entrepreneurial potential and education.

3.2. Innovation as a driving force of entrepreneurship

Innovation represents one of the principal connections between entrepreneurship and digitalisation. According to Drucker (2002), innovation constitutes an important entrepreneurial instrument through which changes can be transformed into opportunities. Bessant and Tidd (2011) similarly connect innovation and entrepreneurship through the processes of recognising opportunities, developing ideas and implementing them in practice.

Throughout economic history, technological innovations have transformed production and business activities. The development from relatively simple forms of production to mechanisation, mass production, automation, robotics, 3D printing and digital technologies demonstrates the continuous importance of innovation.

However, an innovative idea by itself does not necessarily generate economic value. For an innovation to affect the market, it must be developed, implemented and commercialised. Entrepreneurship has a crucial role in this process because entrepreneurs identify opportunities and transform ideas into products, services or new forms of business organisation.

The statistical indicators for Serbia provide an important illustration of this relationship. According to the Statistical Office of the Republic of Serbia, the share of business entities with at least one type of innovation was 51.14%. More than 67% of large business entities, approximately 56% of medium-sized enterprises, and around 50% of small business entities were innovative. Approximately half of both manufacturing and service enterprises introduced innovations.

Regional differences were considerably greater. Product and process innovations accounted for 48.2% in the Belgrade Region, compared with only 8% in the Region of Southern and Eastern Serbia. The highest proportion of innovative business entities was recorded in accommodation and food services (64.5%) and wholesale and retail trade and motor vehicle repair (61%). Mining recorded the lowest share, at 23.3%.

These results suggest that the innovative capacity of Serbian enterprises differs considerably according to their size, sector and geographical location. Consequently, policies aimed at encouraging digitalisation and entrepreneurship should also take structural and regional differences into consideration.

3.3. Digital technologies and business transformation

The development of information and communication technologies has significantly transformed contemporary entrepreneurship. Digital technologies enable entrepreneurs to communicate more rapidly, access information, reach customers, organise production and introduce new business models.

Digitalisation has also enabled the expansion of electronic business activities. Electronic payments, online trade, remote purchasing, digital marketing, automated production and logistics systems have become increasingly important components of contemporary business.

Traditional industries have also been transformed by these processes. Automation, digital systems and robotics increasingly complement or replace certain forms of manual work, while simultaneously creating demand for employees with new knowledge and skills. These changes affect manufacturing as well as communications, health care, agriculture, banking, transport, media and trade.

Digital technologies therefore influence not only the internal organisation of enterprises but also their relationships with consumers. The increasing use of the internet, mobile technologies and digital platforms has changed consumer behaviour and created demand for products and services that can be accessed online.

Data from the Statistical Office of the Republic of Serbia illustrate the extent of this transformation. According to the 2023 indicators used in the paper, 100% of enterprises in Serbia had an internet connection and 85.1% had a website. In 2022, 28.2% of enterprises sold products or services via the internet.

Digitalisation is also widespread among households. In Serbia, 85.6% of households had internet access, representing an increase of 2.4 percentage points compared with 2022 and 4.1 percentage points compared with 2021. A computer was present in 75.9% of households, a mobile phone in 94.4%, and a laptop in 55.0%.

The same research showed that 75.4% of individuals used a computer, 95.7% used a mobile phone and 85.4% used the internet. More than 82% of the internet population had an account on social networks.

These indicators demonstrate the significant presence of digital technologies in Serbian enterprises and society and provide an important basis for the continued development of digital entrepreneurship, e-commerce and online services.

3.4. Knowledge, skills and human capital

One of the most important consequences of digital transformation is the increasing importance of knowledge and human capital. Entrepreneurship has become important not only as a form of economic activity but also as a particular way of thinking and identifying opportunities (Bessant & Tidd, 2011).

As enterprises introduce new technologies, the structure of their resources changes. Investment in physical capital remains important, but knowledge, skills and competences increasingly determine whether technologies can be used effectively. Digitalisation therefore creates a growing need for education, training and continuous professional development.

The development of digital entrepreneurship requires employees and entrepreneurs capable of using new technologies and adapting to new business models. Simović and Ilić (2021) place digital technologies within the context of entrepreneurial development, indicating the growing significance of digital competencies in contemporary entrepreneurship.

This transformation also affects the education system. Education needs to respond to scientific and technological development and provide individuals with knowledge and skills that can be applied in contemporary economic activities. At the same time, existing employees require opportunities for retraining, reskilling and continuous professional development.

Knowledge is particularly important because the implementation of technology without adequate human capabilities cannot automatically generate higher productivity or sustainable development. Digital transformation is therefore simultaneously a technological, organisational and human process.

4. DISCUSSIONS

The analysis demonstrates that entrepreneurship and digitalisation are closely interconnected processes. The theoretical foundations established by Schumpeter (1911, 1934, 1939, 1942) emphasise innovation and economic transformation as fundamental characteristics of entrepreneurial activity. These ideas remain applicable in contemporary digital economies because digital technologies continuously create opportunities for new combinations of products, processes, markets and organisational models.

Drucker's (2002) approach further highlights innovation as an instrument of entrepreneurship, while Bessant and Tidd (2011) emphasise the relationship between innovation and entrepreneurial action. Within the context of the digital economy, this means that technological change alone does not generate entrepreneurial success. Technologies create possibilities, but entrepreneurs must recognise, develop and commercialise those possibilities.

The connection between entrepreneurship and broader economic performance is also supported by the literature examining entrepreneurial activity and economic growth. Audretsch et al. (2002) consider entrepreneurship in the context of industrial restructuring and economic performance, while Van Stel et al. (2005) analyse the relationship between entrepreneurial activity and national economic growth. Entrepreneurship can therefore be viewed as an important component of structural economic change.

The Serbian statistical indicators examined in this paper provide additional insight. The growth in the number of entrepreneurs, the significant proportion of innovative enterprises and the widespread use of internet technologies demonstrate that important preconditions for digital entrepreneurship exist in Serbia.

At the same time, regional differences in innovation and differences between small, medium-sized and large enterprises show that the process is not uniform. The existence of digital infrastructure does not automatically mean that every enterprise possesses the same ability to innovate or use digital technologies productively.

The findings therefore point to the importance of human capital. Knowledge, education, skills and entrepreneurial capabilities represent essential elements of successful digital transformation. This is consistent with the emphasis placed by Miletić and Jeremić Marković (2018) on entrepreneurial potential and education and with the broader approach to digital entrepreneurship presented by Simović and Ilić (2021).

Digitalisation should consequently be understood as more than the technological modernisation of enterprises. It changes organisational structures, labour-market requirements, consumer behaviour, production processes and communication. Its effects therefore extend from individual enterprises to the economy and society as a whole.

5. CONCLUSIONS

The analysis presented in this paper indicates that entrepreneurship and digitalisation represent important drivers of economic and social transformation. Their interaction contributes to innovation, the introduction of new products and services, the development of new business models, changes in production processes and the creation of new opportunities for economic activity.

Entrepreneurship has historically been associated with innovation and the introduction of new combinations into economic activity (Schumpeter, 1911, 1934, 1942). In contemporary conditions, digital technologies expand the possibilities available to entrepreneurs and accelerate the process through which ideas can be developed and brought to the market.

The available statistical indicators demonstrate that Serbia has experienced significant development in entrepreneurship, innovation and digital connectivity. The increasing number of entrepreneurs, substantial proportion of innovative enterprises and widespread use of the internet by enterprises and households provide an important foundation for further digital economic development.

However, technological infrastructure alone cannot ensure sustainable development. The successful application of digital technologies requires appropriate knowledge, skills, education, entrepreneurial initiative and organisational adaptability. Continuous investment in human capital is therefore necessary to ensure that technological development produces positive economic and social effects.

Entrepreneurs must be prepared to respond to technological change, adopt innovations and continuously improve their knowledge and skills. Entrepreneurial education is particularly important in this respect. As Miletić and Jeremić Marković (2018) emphasise, entrepreneurial tradition and education are important drivers of entrepreneurial potential.

Digitalisation and entrepreneurship should therefore be considered complementary components of sustainable economic and social development. Their successful integration can contribute to productivity, competitiveness, employment, innovation and improvements in the quality of life. At the same time, enterprises, educational institutions and society must remain capable of adapting to rapid technological change.

Ultimately, the future impact of digitalisation will depend not only on technological progress itself but also on the ability of entrepreneurs, employees and society to use technology effectively and responsibly. Continuous learning, innovation, adaptability and entrepreneurial initiative therefore represent essential foundations for sustainable growth and development in an increasingly digital economy.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to the institutions and colleagues who supported the preparation of this paper and contributed through professional discussions and constructive suggestions. The authors also acknowledge the Statistical Office of the Republic of Serbia for providing publicly available statistical data used in the analysis.

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Figar, V. (2026). Metaphorical framings in newspaper articles generated by ChatGPT-5.6 and Gemini, dealing with the war in Iran, *SCIENCE International journal, 5*(3), 349-355.
doi: 10.35120/sciencej0503349f UDK: 070:355.4(55)]:004.8:004.775

METAPHORICAL FRAMINGS IN NEWSPAPER ARTICLES GENERATED BY CHATGPT-5.6 AND GEMINI, DEALING WITH THE WAR IN IRAN

Vladimir Figar[1*]

[1]English Department, Faculty of Philosophy, University of Niš, Serbia, e-mail: vladimir.figar@filfak.ni.ac.rs

Abstract: The paper aims to explore the range of metaphorical framings in newspapers articles generated by ChatGPT-5.6 and Gemini, dealing with the war in Iran. We have compiled a small specialized corpus with 42 articles and the total corpus length of 19,758 words. LLMs were given topically related article titles and introductory paragraphs chosen randomly from various online sources (e.g., Al Jazeera, Reuters). Based on the supplied information, the LLMs were instructed to generate three different versions of the article, from the following three viewpoints: (i) neutral, (ii) pro-Iranian, and (iii) pro-Israeli. All articles were tagged manually for instances of metaphorically used words, and prepared for subsequent analyses using WordSmith Tools 6.0. Metaphor identification was conducted using the MIPVU (Steen et al., 2010). Quantitative analysis showed a significant main effect of LLMs in the neutral condition (p=.01), with a significantly higher overall mean density of metaphorically used words in articles generated by Gemini. The difference in metaphor density in the two biased-framing conditions did not reach significance. Qualitative analysis revealed differences in the range and types of metaphorical framings between the two LLMs, where the discourse generated by Gemini showed more affective components compared to articles generated by ChatGPT-5.6. The discourse generated by ChatGPT-5.6 was dominated by CONTAINMENT, FORCE, and JOURNEY metaphors. While these metaphor groups were also quite frequent in the discourse generated by Gemini, the latter LLM also generated metaphorical expressions corresponding to FIRE, HYDRA, CANCER, DISEASE, and SNAKE metaphors. Through training and fine-grained instructions, the researched LLMs can pose as useful tools for researching possible framings and their rhetorical functions in discourse.

Keywords: *metaphorical expression, framing, MIPVU, LLM discourse.*
Field: Humanities

1. INTRODUCTION

Conceptual metaphor has provided fruitful ground for investigations in the domains of cognitive linguistics, psycholinguistics and discourse studies. Evolving from a mere linguistic ornament, metaphor established itself as one of the key cognitive mechanisms that facilitate the construction of meaning and everyday interaction (Lakoff & Johnson, 2003[1980]). The range of metaphorical framings generated by LLMs should provide valuable insight into the manner in which LLMs process and generate metaphor. The present paper aims to explore the range of metaphorical framings generated by ChatGPT-5.6 and Gemini in a specific context of newspaper articles dealing with the war in Iran. This topic can be approached from multiple perspectives which could yield different metaphorical framings. The theoretical framework of the paper includes conceptual metaphor theory (Lakoff & Johnson, 2003[1980]), discourse approaches to critical metaphor analysis (Charteris-Black, 2004, 2011), and frame semantics (Fillmore, 1982).

Conceptual metaphor is grounded in the notion of unidirectional, partial, systematic cross-domain mappings from the source domain, which is typically more tangible (e.g., JOURNEY), to the target domain (e.g., LIFE), which is more abstract (Lakoff & Johnson, 2003[1980]). An important distinction is made between a conceptual metaphor which poses as a cognitive mechanism, and a metaphorical expression, which represents concrete linguistic realizations of the higher-order mappings (Lakoff & Johnson, 2003[1980]). Based on the degree of entrenchment a distinction is also made between novel and conventional metaphors, where the latter have become conventionalize through repeated use (Charteris-Black, 2004, p. 17). The initially introduced sharp distinction between structural, orientational and ontological metaphors was later abandoned, as Lakoff & Johnson (2003[1980], p. 264) concluded that all metaphors share characteristic of each of the three groups. Charteris-Black (2004, p. 244) introduced a hierarchy of metaphorical mappings with conceptual keys as the most inclusive (e.g., POLITICS IS CONFLICT), conceptual metaphors, which are more specific, but still pose as cognitive mechanisms (e.g., POLITICS IS A BATTLE), and metaphorical expressions.

The development of frame semantics can be roughly traced through the following stages: (i) the scene and frame model, (ii) the connection between framing and categorization, (iii) the most widely quoted version of the theory from Filmore (1982), and (iv) the relationship between the semantics of

*Corresponding author: vladimir.figar@filfak.ni.ac.rs

understanding and the semantics of truth (Figar, 2021, pp. 85–92). Semantic frame is defined as “any system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits; when one of the things in such a structure is introduced into a text, or into a conversation, all of the others are automatically made available” (Fillmore 1982: 111). The approach also incorporates the import of situational context in the process of meaning construction. Additionally, framing is closely related to the notions of perspective and viewpoint, as the process of meaning construction can typically take place from multiple viewpoints. In that sense, Filmore (1982, p. 124) distinguishes between invoked frames, imposed by the writer or narrator, and evoked frames, related to the relevant knowledge structures that the reader might decide to activate in the process of meaning construction. Figar (2020) conducted a study that involved a response time paradigm with semantic priming and an online categorization task where he provided evidence in favor of the psychological reality of semantic frames. The concise overview of the main tenets of the theoretical framework will be followed by the overview of some of the relevant studies in the field of discourse analysis and LLMs.

Ichien, Stamenković, & Holyoak (2024) tested the ability of GPT-4 to interpret metaphors from novel English poems, and metaphors translated into English from Serbian poetry. The assessment was based on the Fig-QA dataset. The results showed that GPT-4 performed better than previous LLMs. Moreover, human judges assessed metaphor interpretation provided by GPT-4 as better compared to the interpretations obtained from college students. In the case of novel English poems, the obtained interpretations were assessed as good or excellent. In an earlier study, Liu et al. (2022, p. 4437) used the same method to explore the ability of LLMs to interpret figurative language, and they found that “although language models achieve performance significantly over chance, they still fall short of human performance, particularly in zero- or few-shot settings.” Muñoz-Ortiz, Gómez-Rodríguez, & Vilares (2024) compared news texts written by humans to those generated by six various LLMs, and the results showed that sentence lengths in texts written by humans ere more uneven, humans used a greater variety of vocabulary items, shorter constituents, dependency distances were more optimized. On the other hand, LLM generated texts contained more symbols, numbers, auxiliaries and pronouns compared to texts written by humans. Dönmez et al. (2025) analyzed how LLMs organize their arguments in persuasive contexts, with the goal of providing a framework for distinguishing human written texts from LLM generated texts. Specifically, the authors analyzed general-purpose linguistic features and domain specific features. The former included elements like syntactic complexity, while the later included engagement strategies etc. They analyzed texts written by humans and texts generated by three different LLMs, and the results showed that “LLM-generated counter-arguments show lower type-token and lemma-token ratios but higher emotional intensity – particularly in anticipation and trust” (Dönmez et al., 2025, p. 34595). Additionally, the argumentation provided by the LLMs was of a textbook kind, and the provided counterarguments seemed to mimic the style of writing to which they were replying. The authors propose the identified differences can be used to detect LLM generated writing. Finally, Breazu & Katsos (2024) compared ChatGPT-4 generated newspaper articles dealing with immigration with actual human written articles. The results showed “that ChatGPT-4 exhibits a remarkable degree of objectivity in its reporting and demonstrates heightened racial awareness in the content it produces” (Breazu & Katsos, 2024, p. 687). Moreover, the generated texts were based on objective, factual information, rather than sensationalism.

With the overview of the theoretical framework and previous research completed, we now turn to methodology and corpus analysis.

2. MATERIALS AND METHODS

We designed a small specialized corpus (in line with Koester, 2010) that included 42 newspaper articles generated by the two LLMs, with a total of 19,758 words. Each LLM was given seven article titles and an introductory paragraph on the topic of the ongoing war in Iran, randomly selected from online news outlets Al Jazeera and Reuters, and each LLM was instructed to generate three different versions of the article, and to utilize metaphorical framings and metaphorical expressions of their own choice that are common in newspaper reporting. They were also instructed to use newspaper writing style and to generate authentic texts that are not copied from existing sources. Each article version was supposed to contain around 500 words. In effect, we obtained 21 articles from each of the two LLMs, with the overall mean article length of 470.23 words (SD=43.27).

In the following step, we analyzed all articles for instances of metaphorically used words, and tagged them manually and prepared them for subsequent analyses using WordSmith Tools 6.0 (Scott, 2010). Metaphor identification was conducted in line with the MIPVU procedure (Steen et al., 2010, pp. 25–42), which entailed the following: (i) reading the entire article in order to establish the relevant context,

(ii) identification of lexical items, (iii) comparison of contextual and basic meanings of target items in order to determine whether the target item has been used in the metaphorical sense, i.e., whether its contextual meaning could be viewed as a function of its basic meaning, and (iv) the analysis was conducted in two passes, with fourteen days between them. In line with Figar (2021, p. 2011), we employed "the provisional operational annotation of the identified metaphors as members of specific groups of conceptual metaphors, and their overarching conceptual keys." We are aware that the identification of conceptual mappings represents a separate research question (in line with Steen et al., 2010), and our provisional annotation should be understood as an artifact of analysis, not an attempt to argue in favor of the existence of conceptual mappings.

The adopted approach was expected to provide answers to the following research questions: (i) are there any differences in the density of metaphorical expressions in articles generated by the two LLMs in conditions of neutral and biased framings?, and (ii) are there any differences in the range of metaphorical expressions generated by the two LLMs in terms of the main conceptual keys, and are there any differences in their rhetorical functions?

3. RESULTS

Descriptive quantitative analysis conducted using the concordance and search-over-tags in WordSmith Tools 6.0 showed the overall mean density of 171.29 (SD=47.08) metaphorically used words per 1,000 words for the entire corpus. One-way ANOVA did not reveal any significant differences in the overall mean metaphor densities between articles generated by the two LLMs (MGPT=165.23, SDGPT=48.79, MGEMINI=177.36, SDGEMINI=45.68, p=.41). One-way repeated measures ANOVA showed a significant effect of LLMs only for the neutral condition, with a significantly higher overall mean metaphor density recorded in articles generated by Gemini (MGPT=156.97, SDGPT=49.60, MGEMINI=194.58, SDGEMINI=41.60, p=.01), while the other two framing conditions did not produce significant effects in terms of metaphor density between the two LLMs (pPRO-IRANIAN=.32, pPRO-ISRAELI=.46).

The comparison of the range of metaphorical framings utilized by the two LLMs showed that ChatGPT-5.6 generated 68 different metaphor groups, while Gemini used 92 different metaphor groups. Metaphor groups with the highest overall density for both LLMs include the following: FORCE, CONTAINMENT, JOURNEY, STRUCTURE, CONFLICT, PERSONIFICATION, TRADE, MACHINE, EMISSION, and SPACE. It can be concluded that these are actually some of the common metaphorical framings found in human written newspaper discourse (based on Charteris-Black, 2004). In turn, the conceptual base of metaphorical framings generated by the LLMs appears to mirror the structure of typical newspaper discourse, which is also evident from examples 1–6 below. Namely, peace talks are conceptualized as a moving object (examples 1 and 5), time is conceptualized as a weapon (example 2), economy is conceptualized as a human being threatened by strangulation (example 3), Tehran is conceptualized as an injured person (example 4), arguments are conceptualized as weapons (example 6), and negotiations are conceptualized as boxing (example 3). All of the highlighted metaphorical expressions can be understood as instances of conventional metaphors which are quite common in the political discourse of daily newspapers (Figar, 2021; Charteris-Black, 2004).

1. For now, the talks appear to be advancing<m-JOURNEY>. (ChatGPT-5.6)

2. Washington and Israel are effectively trying to turn<m-FORCE> time into a weapon<m-CONFLICT>. (ChatGPT-5.6)

3. Yet previous rounds<m-boxing> of maximum pressure<m- FORCE > offer little evidence that economic strangulation<m-CONFLICT><m-PERSONIFICATION> automatically produces political surrender<m-CONFLICT>. (ChatGPT-5.6)

4. Tehran is currently bleeding<m-PERSONIFICATION> from a massive internal<m-CONTAINMENT> wound. (Gemini)

5. The Biden-Trump transition team and its Israeli allies are approaching<m-JOURNEY> these Pakistan-mediated talks with deep, battle-tested<m-CONFLICT> skepticism. (Gemini)

6. The escalating rhetorical crossfire<m-CONFLICT> presents a […] logistical dilemma. (Gemini)

In the neutral framing condition, the following metaphor groups appeared in texts generated by both LLMs: CONFLICT, CONTAINMENT, JOURNEY, EMISSION, SPACE, SPORTS, FORCE, WEIGHT, BALANCE, CENTER-PERIPHERY, VERTICALITY, SCALE, STRUCTURE, COMPOSITIONALITY, EXPERIMENT, FIRE, GAMBLE, LIGHT, MACHINE, MATH, NARRATIVE, PERSONIFICATION, VISION, BODY, TEMPERATURE, THEATER, TRADE, VIEWPOINT, WEATHER, and LIQUID. Such findings suggest that both LLMs relied on some of the most common metaphorical framings typically found in

doi: 10.35120/sciencej0503349f UDK: 070:355.4(55)]:004.8:004.775

political newspaper discourse, which include CONFLICT, JOURNEY, CONTAINMENT and FORCE (Charteris-Black, 2004). Metaphorical framings identified only in articles generated by ChatGPT-5.6 included: WARNING, TIME, TOOL, SHADOW, WARMTH, NEGOTIATION, SMOKE, DECORATION, CONDUIT, CONTEST, TIME, SOFT, and TEST, while the framings that occurred only in articles generated by Gemini included: ANIMAL, CARROT-STICK, DANCE, CONSTRUCTION, BREATHING, FORTRESS, BAROMETER, WINDOW, DISSECTION, GAME, HAWK, MEASUREMENT, PLANT, LANDSCAPE, HUB, MEDICINE, RESERVOIR, POSTURE, WAR, and WAVE. This overview shows a wider range of metaphorical framings generated by Gemini compared to ChatGPT-5.6 which seems to have been anchored in a more restrained journalistic tone, which is in line with Breazu & Katsos (2024). Also, the framings that occurred only in neutral articles generated by ChatGPT-5.6 are not as emotionally charged as those that were exclusive to articles generated by Gemini. While metaphorical framings presented in examples 7–10 were not very frequent, conceptualizing the political entities as hawks (example 7), the negotiation process as a dissection (example 8), the case of sticks and carrots (example 9), or as a dance (example 10) could potentially serve to direct the readers' attention towards the hostile and unfair aspects of the ongoing crisis. In addition, these idiosyncratic framings have been successfully integrated into the discourse with the more conventional CONTAINMENT, JOURNEY, EMISSION, PERSONIFICATION, and COMPOSITIONALITY metaphors, thereby forming a coherent metaphorical scenario, similar to that identified with metaphor clusters (in the sense of Kimmel, 2010). Namely, the metaphorical framings that are related through the situational context most likely serve to reinforce the rhetorical content of the intended message.

7. The strict benchmarks demanded by congressional hawks<m-HAWK> represent an effort to drive up the cost of entry<m-CONTAINMENT><m-JOURNEY> for Tehran. (Gemini)

8. The mixed signals emanating<m-EMISSION> from<m-CONTAINMENt> both capitals […] are being closely dissected<m-DISSECTION> by foreign intelligence agencies. (Gemini)

9. This […] reflects a classic institutional debate over the optimal mix<m-COMPOSITIONALITY> of diplomatic carrots and structural sticks<m-CARROT-STICK>. (Gemini)

10. This intricate dance<m-DANCE> between Washington and Tehran highlights how deeply interconnected modern security dynamics is with global macroeconomic health<m-PERSONIFICATION>. (Gemini)

The pro-Iranian framing condition showed that the following metaphorical framings occurred with both LLMs: CONFLICT, CONTAINMENT, JOURNEY, FORCE, BALANCE, COMPOSITIONALITY, STRUCTURE, SPACE, VERTICALITY, VIEWPOINT, BODY, ANCHOR, EMISSION, LIGHT, FOOD, TOOL, GAME, HAWK, MACHINE, NARRATIVE, ORIENTATION, VISION, THEATER, PERSONIFICATION, WEATHER, and WAVE. On the other hand, certain metaphorical framings were exclusive to one of the two LLMs, with BOXING, FOOTBALL, GAMBLE, CENTER-PERIPHERY, SCALE, NEGOTIATION, SHADOW, STONE, WARNING, SOFT, TABLE, CLOTHING, and COURT appearing only in articles generated by ChatGPT-5.6. Gemini generated the following unique metaphorical framings: ADULTHOOD, BREATHING, DISEASE, ANATOMY, FORTRESS, DREAM, HIJACK, MARKETING, HUBRIS, GIFT, PREDATOR, MONSTER, PLANT, PIRACY, MEDICINE, POISON, ROGUE, SLEEP, RELIC, SURGERY, TIDE, TEMPERATURE, and WEB. Again, the metaphorical framings generated by Gemini appear to have a higher affective potential, which is evident from the following examples:

11. The Iranian nation has stood as a resilient shield<m-FORCE> against a lawless, predatory<m-PREDATOR> invasion initiated by the Western-Israeli axis<m-FORCE>. (Gemini)

12. The frantic opposition from pro-Israel groups merely highlights their terror of losing a manufactured monster<m-MONSTER>, which they constantly use to justify their own illegal occupations. (Gemini)

13. The financial blockade<m-CONTAINMENT><m-FORCE> acts as a venom<m-POISON> injected< m-FORCE > directly into< m-CONTAINMENT > the veins<m-PERSONIFICATION> of the nation's healthcare. (Gemini)

14. Our ballistic response on Friday night was merely an introductory note<m-NARRATIVE> an explicit warning of what will happen if this state-sponsored piracy<m-PIRACY> continues. (Gemini)

15. For Tehran […] that argument is a demand that Iran dismantle<m-STRUCTURE><m-fORCE> its own sovereignty in exchange for promises from governments that have repeatedly shifted<m-FORCE> the goalposts<m-FOOTBALL>. (ChatGPT-5.6)

16. The economic stakes<m-GAMBLE> further complicate Washington's position<m-JOURNEY>. (ChatGPT-5.6)

17. Each threat from Washington has become another stone<m-STONE> dropped into<m-CONTAINMENT> the global financial pond<m-POND>, sending ripples< m-FORCE ><m-JOURNEY>

through equities, bonds… (ChatGPT-5.6)

In example 11, the enemy is framed as a predator, and this metaphor interacts with two force metaphors. In example 13, the financial blockade is conceptualized as venom, and this framing also interacts with force, containment and personification metaphors, most likely in order to provoke sympathy from the readers. In example 14, the enemy is conceptualized as a pirate, which highlights that actions undertaken by Israel are illegal. In example 12, Iran is conceptualized as a “manufactured monster” by its adversaries, which was probably intended to promote the image that would legitimize the military action against it. Examples 15–17 show metaphorical framings generated by ChatGPT-5.6, where political maneuvers are presented as shifting the goal posts, which highlights the unfair nature of the process (example 15), economy is depicted as a gamble (example 16), and threats are conceptualized as stones that affect the global economy (example 17). The identified framings appear to be working in concert with the remaining metaphorical conceptualizations identified in the texts, thereby strengthening the intended rhetorical message.

Finally, the pro-Israeli framing condition appears to have produced the greatest qualitative differences between the two LLMs. Metaphor groups that occurred with both LLMs included the following: CONFLICT, CONTAINMENT, FORCE, JOURNEY, EMISSION, FIRE, SPACE, STRUCTURE, TEMPERATURE, VERTICALITY, VIEWPOINT, WAVE, WEATHER, NARRATIVE, MACHINE, GAME, HAWK, LIFELINE, LIQUID, MACHINE, LIGHT, and PERSONIFICATION. Metaphorical framings unique to ChatGPT-5.6 were: BOXING, CONTEST, CHAIN, FORTRESS, CENTER-PERIPHERY, NEGOTIATION, ORIENTATION, SOFT, TIME, VISION, MATH, LINE, LANDSCAPE, OXYGEN, and EXPERIMENT, while Gemini generated: BEAST, CANCER, CARROT, DENTISTRY, DISEASE, ACTOR, ANCHOR, HYDRA, FOOD, HEART, GAMBLE, MEDICINE, PARASITE, OCTOPUS, POISON, PLANT, SHELL, SNAKE, STORM, SURGERY, WEIGHT, WALL, MEASUREMENT, ROGUE, SIGN, and WINDOW metaphors. Although not very frequent, the following framings generated by Gemini attest to a systematic, emotionally charged conceptualizations of Iran, most likely aimed at enforcing a specific viewpoint on the readers:

18. The renewed and intensified economic siege<m-CONFLICT><m-CONTAINMENT> is systematically starving<m-PERSONIFICATION> the beast<m-BEAST> of the vital capital it desperately needs to regenerate<m-PERSONIFICATION> its toxic<m-POISON> tentacles<m-OCTOPUS> in Lebanon, Syria, Yemen, and Gaza. (Gemini)

19. The United States [ensured] that any final document forces<m-FORCE> a systematic extraction of Iran’s military teeth<m-DENTISTRY>. (Gemini)

20. Iran’s regional influence operates like a multi-headed proxy hydra<m-HYDRA>, terrorizing democratic societies. (Gemini)

21. Israel will no longer tolerate hiding behind proxies […] the head of the snake<m-SNAKE> has now been struck directly<m-CONFLICT>. (Gemini)

22. For decades, the radical Iranian regime has operated as a malignant cancer<m-CANCER> metastasizing<m-CANCER> across<m-SPACE> the entirety of the Middle East. (Gemini)

23. Following the horrific, unprecedented wake-up call<m-WAKING> […] the civilized world finally recognized that this virulent infection<m-DISEASE> could no longer be managed<m-FORCE> with naive diplomatic appeasement. (Gemini)

It can be seen that the articles generated by Gemini in the pro-Israeli condition contain far more volatile conceptualizations compared to articles generated by this LLM in the pro-Iranian condition. Namely, Iran is framed as a beast, octopus and poison (example 18), as a hydra (example 20), as a snake (example 21), as a cancer and a virulent infection (examples 22 and 23), and its military is depicted as a tooth that needs to be extracted (example 19). Such a combination of framings generated in articles in the pro-Israeli condition suggests that the language used in these articles is affectively charged and most likely intended to paint a very negative picture of Iran. The most likely goal of such framings is to coax the readers into giving their full support against Iran, while at the same time backgrounding the negative aspects of the Israeli military actions. In other words, such a rhetorical strategy reflects the “highlighting-and-hiding” function of conceptual metaphors outlined by Lakoff & Johnson (2003[1980]). Ultimately, it is up to the readers to decide whether they will accept the invoked framing of the narrative, or evoke their own framing through the activation of the relevant (background) knowledge (in the sense of Fillmore, 1982).

4. DISCUSSION

In this section we provide answers to the main research questions outlined above.

RQ1. Are there any differences in the density of metaphorical expressions in articles generated by the two LLMs in conditions of neutral and biased framings? Quantitative analysis did not reveal any significant differences in the overall metaphor density between articles generated by ChatGPT-5.6 and Gemini (p=.41). The comparison of the two LLMs showed a significantly higher density of metaphorically used words in the neutral condition for articles generated by Gemini compared to articles generated by ChatGPT-5.6 (p=.01). The comparison of the remaining two biased conditions did not show any significant effects of LLMs (pPRO-IRANIAN=.32, pPRO-ISRAELI=.46).

RQ2. Are there any differences in the range of metaphorical expressions generated by the two LLMs in terms of the main metaphor groups, and are there any differences in their rhetorical functions? Qualitative analysis revealed that some of the common conventional metaphorical framings like CONFLICT, JOURNEY, CONTAINMENT, and FORCE were quite frequent in all articles generated by both LLMs. This suggests that the generated conceptualizations reflect those that are typically found in the political discourse of daily newspapers. Combinations of such conventional metaphorical mappings afford the construction of meaning from a particular perspective, i.e., through metaphorical frames invoked by the text. In turn, such framings are intended to produce a specific rhetorical effect. For instance, conceptualizing the political process as a journey could serve to emphasize the development of the negotiations (example 5 above). However, we must note that we take all conclusions presented within the qualitative analysis above with an important caveat. Namely, qualitative analysis can yield only testable hypotheses in terms of the possible rhetorical functions that metaphorical framings might perform. In order to obtained more reliable data, the identified framings should be tested in an experimental setting which would reveal the actual effect they may have on the readers.

Apart from conventional metaphorical framings, each of the LLMs generated some idiosyncratic framings in each of the three conditions. For instance, in the neutral condition, Gemini generated metaphorical conceptualizations that included ANIMAL, CARROT-STICK, DANCE, CONSTRUCTION, BREATHING, FORTRESS, BAROMETER, WINDOW, DISSECTION, GAME, HAWK, MEASUREMENT, PLANT, LANDSCAPE, HUB, MEDICINE, RESERVOIR, POSTURE, WAR, and WAVE, whereas ChatGPT-5.6 generated the following conceptualizations: WARNING, TIME, TOOL, SHADOW, WARMTH, NEGOTIATION, SMOKE, DECORATION, CONDUIT, CONTEST, TIME, SOFT, and TEST. In the pro-Iranian condition, ChatGPT-5.6 generated framings that involved BOXING, FOOTBALL, GAMBLE, CENTER-PERIPHERY, SCALE, NEGOTIATION, SHADOW, STONE, WARNING, SOFT, TABLE, CLOTHING, and COURT; Gemini, on the other hand, generated framings grounded in the following metaphorical conceptualizations: ADULTHOOD, BREATHING, DISEASE, ANATOMY, FORTRESS, DREAM, HIJACK, MARKETING, HUBRIS, GIFT, PREDATOR, MONSTER, PLANT, PIRACY, MEDICINE, POISON, ROGUE, SLEEP, RELIC, SURGERY, TIDE, TEMPERATURE, and WEB. In the final condition, Gemini generated more volatile framings compared to ChatGPT-5.6, and these included the following: BEAST, CANCER, CARROT, DENTISTRY, DISEASE, ACTOR, ANCHOR, HYDRA, FOOD, HEART, GAMBLE, MEDICINE, PARASITE, OCTOPUS, POISON, PLANT, SHELL, SNAKE, STORM, SURGERY, WEIGHT, WALL, MEASUREMENT, ROGUE, SIGN, and WINDOW. ChatGPT-5.6, on the other hand, generated more affectively balanced texts (in line with Breazu & Katsos, 2024) that included the following framings: BOXING, CONTEST, CHAIN, FORTRESS, CENTER-PERIPHERY, NEGOTIATION, ORIENTATION, SOFT, TIME, VISION, MATH, LINE, LANDSCAPE, OXYGEN, and EXPERIMENT.

In terms of the possible rhetorical functions, articles generated by Gemini appear to have a wider range of metaphorical framings, and those framings also seem more emotionally and affectively charged, rendering them more volatile compared to the discourse generated by ChatGPT-5.6. This is especially evident in the pro-Israeli condition, where, among others, Gemini generated framings that included SNAKE, BEAST, HYDRA, CANCER, and DISEASE metaphors. In effect, both LLMs show potential for generating writing ideas along with specific metaphorical framings and critical perspectives that a writer could use as guidelines.

5. CONCLUSIONS

Based on the obtained data, it can be concluded that metaphorical framings generated by the two LLMs mirror to a great extent those identified in previous studies on the political discourse of daily newspapers (e.g., Charteris-Black, 2004; Breazu & Katsos, 2024). In addition to the common conventional conceptualizations, the LLMs also managed to generate some more idiosyncratic framings linked to specific framing conditions. In that sense, these LLMs could be further explored as potentially useful tools for generating writing ideas, generating texts based on specific instructions, or generating texts with errors that can later be used as teaching materials for writing, grammar and vocabulary in the context of the ELF classroom. Additionally, the two LLMs could also be used as aids in the development of critical thinking by providing argumentation and framing the issue at hand from various viewpoints.

One of the main limitations of the present study is corpus length, so subsequent research should include larger corpora with texts generated by multiple LLMs. This would afford a more thorough insight into the manner in which LLMs generate and incorporate metaphorical framings into texts. Additionally, bearing in mind that qualitative analysis can offer but a set of testable hypotheses concerning the potential rhetorical function of metaphorical framings, future research should also include experimental procedures that would allow the hypotheses to be explored further.

ACKNOWLEDGEMENTS

Prepared as a part of the project “Science, teaching and the labor market on the occasion of the 55th anniversary of the Faculty of Philosophy, University of Niš: English philology and the impact of artificial intelligence,” conducted at the University of Niš – Faculty of Philosophy (No. 373/1-12-01).

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doi: 10.35120/sciencej0503357s UDK: 316.723-021.463-057.875:323.15(497.11)"2022/2023"

INTERCULTURAL COMPETENCES AND STUDENTS' SOCIAL DISTANCE TOWARD MEMBERS OF NATIONAL MINORITIES

Jovana Stojanović[1*]

[1]University of Niš, Faculty of Philosophy, Department of Sociology, Serbia, e-mail: jovana.stojanovic@filfak.ni.ac.rs

Abstract: The cultural diversity, as well as more and more intensive intercultural encounters are significant features of modern societies. Therefore, intercultural competences are more and more recognized as an important aspect of establishing quality international relationships. The aim of this research is the examination of intercultural competences of students as well as the level of the social distance to Romani people, Bosniaks, and Albanians in order to consider to which extent openness to cultural diversity is expressed through readiness to be involved in direct social relationships. The research was conducted in 2022/2023 school year on an appropriate and purposive sample of 236 Bachelor students at the Faculty of Philosophy, University of Nis. Data were collected by the survey method, using a structured questionnaire. Intercultural competences are organized through three dimensions: knowledge, skills and attitudes. Social distance was measured by the modified Bogardus scale, adapted to the types of social relationships relevant to student population. The results show that students have relatively developed intercultural competences, but their individual dimensions are not displayed uniformly. Whereas skills and attitudes are mostly interculturally oriented, the results of knowledge dimension reveal more visible inconsistences. Simultaneously, differences in the levels of social distance to national minorities were shown, with the greatest shown to Albanians, and the lowest to Bosniaks. The findings indicate a need to analyze the openness to cultural diversity in the context of particular forms of closeness. These findings can be seen as an addition to a further empirical discussion on the content, structure and the ways of measuring intercultural competences.

Keywords: *intercultural competences; social distance; cultural diversity; national minorities; intergroup relationships.*
Field: Social Sciences

1. INTRODUCTION

Cultural diversity is one of the significant features of contemporary societies and their particularity is not only in the very presence of different cultures, which characterized pre-modern societies, too, but also in the fact that cultural diversity has become the subject of public and political regulation, as well as the struggle of different groups for the recognition, equality and the right to cultural identity (Petković, 2020; Mesić, 2006). Thus, the intensification of intercultural interactions imposes a need for sociological research of intercultural competences (Savić, 2011). Intercultural competences are defined in different ways by different authors, but the most common elements comprise knowledge, skills and attitudes which enable an adequate and efficient intercultural interaction (UNESCO, 2013; Deardorff, 2009, as cited in Deardorff, 2020). In the research this article is based on, intercultural competences are referred to as three interconnected dimensions – knowledge, skills and attitudes.

The significance of thus interpreted intercultural competences is particularly obvious in multiethnic and multicultural societies like Serbia. In Serbia, beside the majority population, there are numerous national minorities with their own cultural, linguistic and identity particularities. According to the 2022 Population census, Serbia is a heterogeneous society in which there are numerous national minorities, predominantly Hungarian, Bosniak, Romani, Albanian, Slovaks and Croatians (RZS, 2023). However, the presence of cultural and ethnic diversity within the same society by itself does not imply the same level of social acceptance. That is the reason why the issue of intercultural relationships cannot be reduced to accepting particularities only declaratively, but it also requires that the ways it is expressed in particular social relationships are considered.

In that sense, the concept of social distance enables to refer to the acceptance of the members of other ethnic groups through different levels of social closeness. Bogardus's Social Distance Scale is based on the hypothesis that the acceptance of a certain social group can vary depending on the level of closeness which an individual is ready to establish with its members (Bogardus, 1947). Thus, the difference between a general acceptance of cultural diversity and readiness to establish direct social relationships is a relevant sociological issue, especially in the context of ethnic and culturally heterogeneous societies.

Taking the above-mentioned into consideration, the subject of this research is students' intercultural competences and the social distance which students show toward members of different national minorities.

*Corresponding author: jovana.stojanovic@filfak.ni.ac.rs

The aim of this paper is to consider students' intercultural competences through the dimensions of knowledge, skills and attitudes, as well as the level of the social distance to the members of different national minorities in order to investigate to what extent the openness to cultural diversity is expressed through the readiness for direct intergroup relationships.

2. MATERIALS AND METHODS

The empirical data on which this article is based were collected during the research conducted while working on the master paper called Intercultural Competences of Faculty of Philosophy, University of Nis, during the 2022/2023 school year (Stojanović, 2023). The survey was carried out online, using a convenient and purposive sample of 236 OAS students of the Faculty of Philosophy in Nis. The structure was female oriented, mostly involving first year students. Most subjects were born and lived in the city, and most of their parents finished a four-year-long high school. The data were collected by a survey, using a structured questionnaire. The intercultural competences were operated through three dimensions – knowledge, skills and attitudes. Knowledge was estimated through claims about a general cultural context in the world and in Serbia, as well as specific cultural features and cultural heritage of Romani people, Albanians and Bosniaks, chosen as relevant examples of cultural, linguistic and religious diversity in the regional context in which the subjects lived and worked, with the subjects estimating their accuracy. Skills were operated through claims which illustrated different linguistic, communication, digital and other competences relevant for intercultural interactions, and the subjects estimated to what extent certain claims were related to their own competences, while attitudes were examined through claims related to the concept of multicultural communities and the attitude toward the other and different. The social distance to Romani, Albanian and Bosniak people was measured by a modified Bogardus scale. The scale involved seven forms of social relationships, from accepting the coexistence in the same country to accepting a marital, that is emotional relationship, where the subjects were asked to accept or decline any offered relationship.

3. RESULTS

Regarding the dimension of knowledge within intercultural competences, the results showed that students, in the main, had more knowledge about the general, cultural-heterogeneous character of contemporary societies than about particular national minorities which were the part of the social and cultural context of Serbia (Table 1). The results showed that more than 70% of the subjects correctly recognized the cultural heterogeneity as a feature of contemporary societies, the multi-cultural character of Serbia, and the existence of the legal regulations of the rights of national minorities. However, when it is about more concrete areas of enforcing rights, almost the third of the subjects (34.4%) stated that members of national minorities did not have the right to express their cultural uniqueness publicly by their language, religion, tradition and other means of cultural expression.

Table 1: Knowledge dimension (Responses in %)

	Statement	YES	NO
General knowledge	Contemporary states are generally ethnically and culturally homogeneous.	23.7	**76.3**
	Serbia is a multicultural state.	**70.8**	29.2
	The rights of national minorities in Serbia are guaranteed by the Constitution and laws.	**79.7**	20.3
	Members of national minorities in Serbia do not have the right to express their cultural distinctiveness in the public sphere/space (through language, religion, traditions, etc.), but only in private.	**34.3**	65.7
Romani	Child marriages are exclusively a characteristic of the Romani people.	38.1	**61.9**
Bosniaks	In areas with the highest proportion of Bosniaks in Serbia, regular education in the Bosnian language is available.	**51.7**	48.3
	Traditional Roma music is known for sevdalinka songs, emotional songs expressing sadness, love, and nostalgia.	**74.6**	25.4
Albanians	Religious Albanians are of the Islamic faith.	66.1	**33.9**

Source: Author's elaboration based on Stojanović (2023, pp. 47-50)

Note: Knowledge of each national minority was assessed through four statements. The table presents the statements whose results were statistically significant and are included to illustrate particular aspects of the participants' (lack of) knowledge about the characteristics of the examined national *minorities. The presented results do not constitute a composite measure of knowledge about a given minority.*

The answers to the questions referring to the concrete national minorities – Romani, Bosniak and Albanian people, that is their cultural, linguistic, religious and historical characteristics, were not uniform. When it is about Romani people, about three quarters of the subjects (75.8%), showed the understanding of the word "Romani", while more than a half (56.8%) recognized the importance of the standardization of the Romani language for connecting Romani communities all over the world. The answers to the claim that religious Romani people were of Orthodox faith were equally split (50.8% to 49.2%). It is important to note that 38.1% of the subjects connected child marriages only with the Romani population.

Regarding Bosniaks, almost half of the subjects did not know the basic information about them: about 48% did not know that Bosniaks were one of the major ethnic groups in Serbia and that there was an opportunity to have regular education in the Bosnian language in the parts of Serbia populated mainly by the members of Bosniak community. Even less knowledge was shown regarding cultural features, with 74.6% subjects describing "sevdalinka" belonging to Romani national minority, while 58.1% did not know the meaning of the word "muštuluk".

As for Albanians, the level of knowledge was higher when it was about identity characteristics. 83.5% students knew that Albanians did not use Cyrillic, while 59.7% recognized that the tradition of blood vendetta had not been eradicated. At the same time, the knowledge about historical and religious characteristics was on a lower level. 60.6% did not know about the participation of Albanians in the Kosovo battle, while 66.1% thought the religious Albanians were of Islamic faith.

Students' skills within intercultural competences are relatively highly developed (M=3,88; SD=0,77; Mdn=4,11; Mod=4,33). The most obvious one is the openness to other cultures and people, with most students showing readiness to understand and show empathy to the members of other ethnic groups. However, there was a discrepancy between the general openness to other cultures and the openness to particular national minorities: while 76.7% students showed an interest in meeting people from different countries, 54.7% showed readiness to learn about customs of national minorities. Also, a statistically important, but weak connection of the sex with empathy and sensitiveness for a stereotype presentation of ethnic groups, as well as the connection of the type of one's place of origin and the digital intercultural communication and an interest in meeting people from other cultures and empathy to discriminated people were noticed ($p<0,05$).

The analysis of the attitude dimension (Table 2) mostly showed the students' multicultural orientation (M=3,62; SD=0,89; Mdn=3,80). The most prominent was the support of the attitude that cultural cooperation could lead to a better understanding and tolerance even in the situation involving international and interethnic conflicts which was expressed by 72.8% of students. Also, 72.1% of the subjects did not think that members of other nations living in Serbia had a negative impact on Serbian culture and tradition, while 60.5% did not support the request that members of other nationalities adopted Serbian language, customs and tradition, indicating the rejection of the assimilation approach to the cultural diversity. Most of the students (61.4%) recognized the ethnic stereotypes as a problem which members of national minorities face. Simultaneously, the attitudes are less uniform concerning wider national consequences of the cultural diversities: 35.6% of students agreed that a greater number of different cultures made a society less stable, 31.8% disagreed, while 32.6% were neutral. Half of the students (51%) recognized the importance of knowing non-verbal communication and customs of other nations as important means of establishing a quality intercultural communication. Besides, an important statistically important, but weak correlation between the sex and place of origin with certain attitudes to cultural differences, assimilation, ethnic stereotypes, cultural cooperation and the threat to one's culture was noticed ($p<0,05$).

Table 2: Attitudes (degree of agreement, 1–5; responses in %; 1 = completely disagree, 5 = completely agree)

Statement	1	2	3	4	5
Knowledge of the non-verbal communication and customs of other peoples is not very important if we understand the language they use to communicate.	22.5	28.4	26.7	11.4	11.0
The more people from different cultures enjoy being in a society, the more unstable that society becomes.	10.6	21.2	32.6	19.1	16.5
Cultural cooperation can play an important role in developing greater understanding and tolerance, even in places where interethnic conflicts exist.	4.2	6.4	16.5	27.5	45.3
Members of other ethnic groups living in Serbia should learn and use exclusively the Serbian language and adopt Serbian customs and traditions.	25.8	34.7	22.9	8.8	9.7
Members of other ethnic groups living in Serbia threaten Serbian culture and tradition.	58.1	14.0	18.6	4.7	4.7
Negative ethnic stereotypes are not a problem faced by members of national minorities in Serbia.	39.4	22.0	25.4	8.1	5.1

Source: Stojanović (2023, p. 65)

The results of the modified Bogardus scale (Table 3) showed the most prominent distance to Albanian people (M=2.55), then to Romani people (M=1.66) and the lowest to Bosniaks (M=1.00). The biggest non-accepting share was noticed considering the relationships of the highest level of closeness, that is marital partnerships, while the lowest was regarding the acceptance of the members of these groups as the citizens of the same country. Still, almost a fifth of the subjects would not accept Albanians even in the widest form of social relationships.

Table 3: Social Distance towards Members of National Minorities (% of Rejected Relationships)

Type of relationship	ROMANI	ALBANIANS	BOSNIAKS	SERBS
To be my spouse	**67.4**	**66.1**	**44.1**	4.7
To be my friend	26.7	39.4	13.1	0.8
To be members of the same organisation	15.7	33.1	9.3	0.4
To be my collegues at work	16.9	33.1	10.2	0.4
To be my fellow student at university	12.7	28.4	8.5	1.3
To live in my neighborhood	22.0	35.6	11.0	1.7
To live in my country	4.7	**19.1**	3.8	0.4
Mean	**1.66**	**2.55**	**1.0**	0.09
Std. Dev.	2.05	2.75	1.75	0.52

Source: Author's elaboration based on Stojanović (2023, p. 73)

4. DISCUSSION

On the whole, the results of the research indicated relatively developed, but not uniform intercultural competences of students. While the skills and attitudes were mainly oriented in a multicultural way, the knowledge about particular national minorities in the surrounding areas was on a lower level. Students recognized the multicultural character of the society rather successfully, but what was missing was the recognition of concrete ways in achieving diversity and minority rights. It is important to emphasize that there was a lack of knowledge when cultural diversity was estimated related to the minority groups which are part of Serbia. Such a finding could be considered in the larger context, the context of enforcing minority rights in Serbia, where in a formal legal way diversity is recognized, but not applied in everyday practice (Bašić, 2023). The institutional and legal recognition of diversity per se is not sufficient for the development of intercultural relationships, it is also necessary to respect diversity through the process of education, socialization, dialogue and everyday communication (Joković Pantelić, Stjelja, 2023).

Single findings additionally indicated a possibility that the lack of specific knowledge left a space for a generalized picture of certain minority groups. It was particularly noticeable in the answers stating that underage marriages were typical of Romani population, which reflected the presence of stereotypical pictures in a larger social discourse (Gligorić et al., 2021).

The findings related to the correlation between social-demographic factors and certain aspects of skills and attitudes could be explained by different experiences and patterns of socialization, where the differences based on the place of origin could be connected with a different level of exposure to cultural diversity, whereas differences based on the sex should be interpreted very carefully, given the female-oriented structure of the sample. Such findings indicated that the intercultural competence is a multi-dimensional and complex concept, whose adequate comprehension required considering different components, such as attitudes, knowledge but also actual behavior (Rokos, Khapova, Laumann, 2023). Positively oriented attitudes towards cultural diversity do not need to involve enough knowledge about 'the others', nor the readiness for direct contact. It indicates that we need to see intercultural competence as the correlation of its various dimensions, but also through their manifestations in concrete intergroup relationships. Also, the development of intercultural competences should not be based on only promoting and enhancing general attitudes and openness to diversity and different, but also on gaining more concrete knowledge and developing experience of a direct intergroup contact. In this context, the issue of social distance becomes more important, given that it can indicate the level of real readiness for a closer form of social relationships with members of another group. The previous research (Dronjak, Mihić, 2023) showed the correlation between social distance and intergroup contact and discrimination tendencies whereas a more frequent intergroup contact was associated with a lower social distance.

The results of the Bogardus scale show that accepting members of national minorities is not unequivocal, but that the readiness to accept a certain social relationship changes according to the level of closeness. Regarding the results about intercultural competences, this finding can indicate the discrepancy between a declarative openness towards cultural diversity, possessing adequate skills and readiness to establish close intergroup relationships. In other words, intercultural orientations do not need to be automatically followed by readiness to accept cultural diversity in one's closest surroundings. Earlier studies of the student population (Petrović, Miladinović, 2014) showed relatively stable patterns of ethnic distancing which can be connected to historical experiences of intergroup conflicts, presence of stereotypes and prejudice, as well as limited opportunities for direct contact with members of other groups. In that sense, the findings of this research showed a similar pattern: readiness to accept culturally different groups on a global level, but weaker when subjects were expected to show a higher level of social closeness. Such a pattern corresponds to the findings of more recent research in Serbia, indicating a relatively high level of tolerance but simultaneously different levels of distance towards particular ethnic groups (Živković, 2023).

5. CONCLUSIONS

Intercultural competences are a complex and multidimensional concept, whose investigation is a challenge due to a different conceptualization and the ways of operating. The results of this research indicate that different dimensions of intercultural competences are not expressed in a uniform way: while skills and attitudes of the students were mostly oriented in an intercultural manner, the knowledge about particular national minorities showed inconsistencies. At the same time, the findings of the Bogardus scale of social distance open the question of to what extent general openness to cultural diversity implies readiness to closer intergroup relationships. There is an obvious need to distinguish between a declarative approach to diversity and its manifestation in concrete social relationships. The findings of this research therefore can be a contribution to a further empirical discussion about the content, structure and means of measuring and development of intercultural competences with young people. The importance of simultaneous consideration of knowledge, skills and attitudes is particularly significant, including the indicators which enable an insight into the means of connecting intercultural orientation with particular patterns of intergroup relationships.

ACKNOWLEDGEMENTS

This study was supported by the Ministry of Science, Technological Development and Innovations of the Republic of Serbia (Contract No. 451-03-34/2026-03/200165).

Prepared as a part of the project "Sociology, science, teaching and the labor market on the occasion of the 55th anniversary of the Faculty of Philosophy, University of Niš", conducted at the University of Niš – Faculty of Philosophy (No. 373/1-12-01).

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CYBERBULLYING AMONG SECONDARY SCHOOL STUDENTS: PREVALENCE, PATTERNS OF VICTIMIZATION, OFFENDING, AND RESPONSE

Dijana Marić[1], Danijela Miletić[2]*
[1]University of Niš, Faculty of Philosophy, Department of Sociology, Serbia,
[2]University of Niš, Faculty of Philosophy, Department of Pedagogy, Serbia
e-mail: dijana.maric@filfak.ni.ac.rs, danijela.milosevic@filfak.ni.ac.rs

Abstract: The digitalization of everyday communication among secondary school students has created opportunities for various forms of aggressive behavior mediated by digital technologies. The aim of this study was to examine the prevalence of cyberbullying victimization and offending among secondary school students, identify the most prevalent forms of victimization and offending, and examine the associations of these experiences with time spent on social media and the reporting of experienced cyberbullying. Particular attention was given to students' responses to experienced cyberbullying and the outcomes of reporting such experiences. The study was conducted on a sample of 229 secondary school students. Cyberbullying victimization and offending were assessed using the Cyberbullying Victimization Scale and Cyberbullying Offending Scale (Hinduja & Patchin, 2024), both of which demonstrated good internal consistency (Cronbach's $\alpha = .880$ and $\alpha = .823$, respectively). The results showed that 56.8% of students reported having experienced cyberbullying, while 32.8% reported having engaged in some form of cyberbullying offending. The frequency of both cyberbullying victimization and offending was positively associated with time spent on social media. Among students who had experienced cyberbullying, 43.8% reported it, with parents being the most frequently selected source of support (75.4%). Reporting cyberbullying was associated with lower levels of victimization. Nevertheless, among students who reported cyberbullying, the problem remained unresolved for the majority (59.6%), indicating a discrepancy between students' willingness to seek support and the outcomes of reporting. Overall, the findings indicate that cyberbullying is prevalent among secondary school students, with verbal and relational forms predominating in both victimization and offending, and that the frequency of these experiences is associated with the intensity of digital engagement. The findings underscore the need to strengthen mechanisms of protection, support, and institutional response, alongside empowering young people to recognize and report cyberbullying in a timely manner.
Keywords: *cyberbullying, victimization, cyberbullying offending, secondary school students.*
Field: Social Sciences

1. INTRODUCTION

The rapid expansion of digital media has profoundly transformed contemporary society, reshaping the ways individuals communicate, access information, and engage in learning. Digital technologies have increased the availability of information, facilitated communication, provided flexible access to contents, and expanded opportunities for education and personal development. At the same time, it has also introduced various challenges and negative consequences, such as excessive use and addiction, exposure to inappropriate and harmful content, threats to users' privacy and safety, and the growing prevalence of cyberbullying and other forms of online violence. Consequently, the expansion of digital violence and its consequences on adolescent development have become some of the priority topics in contemporary scientific research.

Digital or electronic violence is defined as "the use of mobile phones, computers, video cameras and similar electronic devices to intentionally scare, insult, humiliate or otherwise injure someone" (Popadić & Kuzmanović, 2016:20). If we take into account that even 90% of adolescents access social networks daily (Kuzmanović et al., 2019), their intense presence in the digital environment simultaneously increases the possibility of exposure or perpetration. Findings show that perceived anonymity, impulsive use of social networks, and subjective norms are associated with propensity for cyberaggressive behavior (Tennakoon et al., 2024).

The importance of studying digital violence is confirmed by findings on its prevalence and multiple consequences for adolescents. In particular, the results show that approximately every fifth adolescent experiences some form of digital violence as a perpetrator (Zhu et al., 2025). A more pronounced frequency of digital violence occurs when looking at the period of the last month stated that it was exposed

*Corresponding author: dijana.maric@filfak.ni.ac.rs

to cyberbullying, while 16.1% of students stated that they had committed violence against others during the same period (Patchin, 2025).

When it comes to the consequences, adolescents who are victims of violence have an increased risk of depression, anxiety, loneliness, low self-esteem and reduced life satisfaction in the victims (Kasturiratna et al., 2025; Li et al., 2026), while aggression, self-regulation problems and depressive symptoms are more often registered in the perpetrators (Zhang et al., 2025; Kasturiratna et al., 2025).

Considering that the digital space has become a place of constant engagement and development for adolescents, the purpose of this study was to examine the current relevance of cyberbullying by exploring its prevalence and the characteristics of students' experiences in different roles, as well as its association with the intensity of social media use.

2. METHODS

The study was conducted with a sample of 229 secondary school students enrolled in the first through fourth grades in Niš, Serbia. The primary aim was to investigate the prevalence and characteristics of cyberbullying, with particular emphasis on students' experiences of cyberbullying victimization and perpetration, as well as the association between time spent on social media and involvement in cyberbullying.Three research hypotheses were formulated. H1: Time spent on social media is significantly and positively associated with the frequency of cyberbullying victimization. H2: Time spent on social media is significantly and positively associated with the frequency of cyberbullying perpetration. H3: There are statistically significant differences in the level of cyberbullying victimization between students who reported experiencing cyberbullying and those who did not report such experiences.

Data were collected using an anonymous online questionnaire, and participation was voluntary. Cyberbullying victimization and perpetration were assessed using the Cyberbullying Victimization Scale and the Cyberbullying Offending Scale developed by Hinduja and Patchin (2024). Each scale comprises nine items assessing the frequency of different forms of cyberbullying victimization and perpetration, respectively, during the preceding 30 days. Responses are rated on a four-point scale ranging from 0 ("never") to 3 ("multiple times"). For the purposes of the present study, both instruments were translated into Serbian. In the present sample, the Cyberbullying Victimization Scale demonstrated good internal consistency (Cronbach's $\alpha = .880$), as did the Cyberbullying Offending Scale (Cronbach's $\alpha = .823$).

Data analysis included descriptive statistics (frequencies, percentages, means, and standard deviations). Spearman's rank-order correlation coefficient was used to examine the associations between time spent on social media and the frequency of cyberbullying victimization and perpetration.

3. RESULTS AND DISCUSSIONS

The sample comprised 110 male secondary school students (48.0%) and 119 female secondary school students (52.0%). With regard to school type, 76 participants (33.2%) attended general secondary schools (gymnasia), whereas 153 participants (66.8%) attended vocational secondary schools. The largest proportion of participants were third-year students (n = 96; 41.9%), followed by fourth-year students (n = 55; 24.0%), first-year students (n = 53; 23.1%), and second-year students (n = 25; 10.9%). Regarding time spent on social media, the largest proportion of students reported spending five to six hours per day on social media (n = 87; 38.0%), followed by three to four hours per day (n = 80; 34.9%). Thirty students (13.1%) reported spending seven to eight hours per day on social media, while 17 students (7.4%) reported spending one to two hours per day. Nine students (3.9%) reported spending more than eight hours per day on social media, whereas 6 students (2.6%) reported spending less than one hour per day on social media.

Table 1. Frequency of cyberbullying victimization and offending

Frequency	Cyberbullying victimization, N (%)	Cyberbullying offending, N (%)
Never	99 (43.2)	154 (67.2)
Once	55 (24.0)	39 (17.0)
Few times	33 (14.4)	32 (14.0)
Many times	42 (18.3)	4 (1.7)
Total	**229 (100)**	**229 (100)**

Source: Authors' survey data; response options from Hinduja and Patchin (2024)

As shown in Table 1, 130 secondary school students (56.8%) reported experiencing cyberbullying, while 75 secondary school students (32.8%) reported engaging in cyberbullying. Among the secondary school students who experienced cyberbullying, 18.3% reported that it had occurred multiple times, while 1.7% reported having engaged in cyberbullying multiple times.

Table 2. Frequency of specific forms of cyberbullying victimization and offending

Specific form	Victimization, N (%)	Offending, N (%)
Mean or hurtful comments posted online	78 (60.0)	43 (57.3)
A mean or hurtful picture posted online	56 (43.1)	25 (33.3)
A mean or hurtful video posted online	27 (20.8)	12 (16.0)
A mean or hurtful web page created about the person	10 (7.7)	4 (5.3)
Rumors spread online	91 (70.0)	40 (53.3)
Threats to hurt through a cell phone text message	32 (24.6)	8 (10.7)
Threats to hurt online	67 (51.5)	16 (21.3)
Pretending to be another person online and acting in a way that was mean or hurtful	24 (18.5)	11 (14.7)

Source: Authors' survey data; forms of cyberbullying from Hinduja and Patchin (2024), presented in neutral form

Note. Percentages for victimization are based on N = 130, and percentages for offending are based on N = 75. Participants could report more than one form of cyberbullying.

The analysis of specific forms of cyberbullying was conducted among students who reported experiencing (N = 130) or engaging in cyberbullying (N = 75). As shown in Table 2, among the forms of cyberbullying victimization, the most prevalent were rumors spread online (91; 70.0%), mean or hurtful comments posted online (78; 60.0%), and threats to hurt online (67; 51.5%). Among the forms of cyberbullying offending, the most prevalent were mean or hurtful comments posted online (43; 57.3%) and rumors spread online (40; 53.3%), while the remaining forms were reported by fewer than one-third of the students.

In the sample of 75 students who reported having perpetrated cyberbullying, the most common reasons for such behavior were anger and revenge, each reported by 28.0% of participants (n = 21). The desire to make jokes was reported by 14.7% of participants (n = 11), while peer pressure was reported by 10.7% (n = 8), and boredom by 9.3% (n = 7). Less frequently reported reasons included provocation, reported by 5.3% of participants (n = 4), and jealousy, reported by 4.0% (n = 3).

Table 3. Correlations of time spent on social media with cyberbullying victimization and offending

Variable	ρ	p	N
Time spent on social media – Cyberbullying victimization	.240	.006	130
Time spent on social media – Cyberbullying offending	.393	< .001	75

Source: Authors' research

As presented in Table 3, Spearman's rank-order correlation analysis demonstrated a statistically significant, weak positive association between time spent on social media and the frequency of cyberbullying victimization ($\rho = .240$, $p = .006$, $N = 130$). This finding indicates that greater time spent on social media was associated with a higher frequency of cyberbullying victimization. Furthermore, a statistically significant, moderate positive association was observed between time spent on social media and the frequency of cyberbullying perpetration ($\rho = .393$, $p < .001$, $N = 75$). Thus, greater time spent on social media was associated with a higher frequency of cyberbullying perpetration.

Among the secondary school students who reported experiencing digital violence (N = 130), 57 (43.8%) reported the incident, whereas 73 students (56.2%) did not report their experience. Among the students who reported digital violence (N = 57), parents were the most frequently approached source of support (43; 75.4%), followed by a friend (32; 56.1%). Fifteen students (26.3%) reported the violence to their homeroom teacher, while 9 students (15.8%) reported it to each of the school pedagogue and school psychologist. Five students (8.8%) reported the violence to the police, while 2 students (3.5%) contacted the National Contact Centre for Child Safety on the Internet. Given that participants could select more than one response, the reported percentages represent the proportions of students who approached each individual source of support. Regarding the outcomes of reporting, 23 students (40.4%) reported that the problem was resolved after reporting, whereas 34 (59.6%) reported that the problem was not resolved.

Regarding the extent to which the experienced violence affected participants' feelings, the largest proportion of participants (n = 43; 33.1%) reported a considerable impact. A moderate impact was reported by 39 participants (30.0%), while 29 participants (22.3%) indicated that the experienced violence had a strong impact on their feelings. A smaller proportion of participants (n = 13; 10.0%) reported a limited impact, whereas 6 participants (4.6%) reported no impact on their feelings.

Table 4. Differences in cyberbullying victimization according to reporting of cyberbullying

Reporting of cyberbullying	N	M	SD	t	df	p
Yes	57	5.61	4.64	−3.38	127.88	.001
No	73	8.81	6.14			

Source: Authors' research

Table 4 presents differences in cyberbullying victimization scores as a function of whether participants reported their experiences of cyberbullying. An independent-samples t-test revealed a statistically significant difference in cyberbullying victimization between participants who reported experiencing cyberbullying and those who did not, $t(127.88) = -3.38$, $p = .001$. Specifically, participants who did not report experiencing cyberbullying obtained significantly higher mean victimization scores ($M = 8.81$, $SD = 6.14$) than participants who reported experiencing cyberbullying ($M = 5.61$, $SD = 4.64$).

The findings indicate that cyberbullying represents a significant problem among students, with rumor spreading, offensive comments, and online threats being the most prevalent forms. A particularly significant finding was the positive association between the amount of time spent on social media and the frequency of cyberbullying perpetration, which is consistent with the results of Milošević and Milošević (2023), as well as more recent findings reported by Lahti et al. (2024) and Young et al. (2024). This consistency highlights the importance of not only the intensity but also the way in which social media are used, as adolescents primarily use these platforms for entertainment and communication with peers (UNICEF, 2016). Such an environment increases their exposure to various forms of digital interaction, including the risk of engaging in or being exposed to violent behavior. Supporting this, Cebollero-Salinas et al. (2025) emphasize the importance of social interactions and information sharing in the digital environment for the emergence and maintenance of cyberbullying.

The significance of these findings is further underscored by the potential consequences of cybervictimization. Recent research has linked experiences of cyberbullying to depressive and anxiety symptoms, reduced well-being, and difficulties in adolescents' everyday functioning (Liu et al., 2024; Nickerson & Fredrick, 2026). In addition, longitudinal studies have indicated an association between cybervictimization and more severe forms of psychological distress, including suicidal ideation and self-harm (Morales-Arjona et al., 2024). These findings confirm that cyberbullying is not merely a form of unacceptable behavior in the digital environment, but rather a complex problem with potentially long-term consequences for adolescents' psychological and social functioning.

At the same time, the findings concerning the reporting of cyberbullying point to certain shortcomings in the accessibility and effectiveness of support systems. Although students most frequently turn to their parents and peers, they are considerably less likely to seek help from teachers and school counselors. Of particular concern is the finding that more than half of the students reported that the problem had not been resolved even after it was reported. These findings raise questions about students' trust in formal protection mechanisms, as well as their actual effectiveness in responding to cases of cyberbullying. Similar conclusions have been reported by Nagar and Talwar (2023), who emphasize that teacher support and a positive school climate can contribute to students' greater willingness to report bullying. Therefore, cyberbullying prevention should not focus exclusively on promoting responsible and safe internet use, but also on strengthening support systems for students through the establishment of accessible, confidential, and effective mechanisms for reporting, responding to, and monitoring cases of cyberbullying.

4. CONCLUSIONS

The main findings of the study indicate a significant prevalence of cyberbullying, with the most common forms being rumor spreading, offensive comments, and online threats. A significant positive association was found between the amount of time spent on social media and perpetration of cyberbullying, with a higher prevalence of students reporting experiences in the role of victims than in the role of perpetrators. Furthermore, the findings indicate that the problem of cyberbullying is not attributable solely to the amount of time adolescents spend on social media, but also to how they use these platforms, the quality of their peer relationships, and the availability and effectiveness of support systems. Therefore, cyberbullying prevention should not be based exclusively on limiting screen time, but rather on developing students' digital and socio-emotional competencies, empowering parents and teachers to recognize and respond appropriately to cyberbullying in a timely manner, and establishing accessible, confidential, and effective mechanisms for reporting and addressing cases of cyberbullying. Of particular importance is the integration of content related to digital safety, responsible online behavior, and cyberbullying prevention into everyday school practices, rather than limiting such content to occasional and one-time educational activities. At the same time, it is necessary to continuously monitor the outcomes of reported cases and provide students with support even after reporting, given that more than half of the students in this study reported that the problem had not been resolved following the report. Effective prevention therefore requires coordinated action among students, parents, teachers, school counselors and other relevant stakeholders, with the aim of creating a school environment in which students feel confident reporting cyberbullying and receive timely and appropriate protection.

ACKNOWLEDGEMENTS

This study was supported by the Ministry of Science, Technological Development and Innovations of the Republic of Serbia (Contract No. 451-03-34/2026-03/200165). The authors would like to thank the pupils who participated in the research.

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AI TOOLS IN THE WORKPLACE: PRODUCTIVITY GAINS, DESKILLING RISKS AND THE ROLE OF CONTINUOUS EMPLOYEE EDUCATION

Tamara Papic[1*]

[1]Faculty of Technical Sciences, Singidunum University, Belgrade, Serbia, e-mail: tpapic@singidunum.ac.rs

Abstract: The pace of AI adoption in today's business world has sparked a debate about the dual nature of AI and its effect on human productivity. AI tools are great for work, but they also make employees overreliant, with weaker skills and less critical thinking. This paper examines the advantages of AI tools at the workplace level, together with the issues of cognitive offloading, deskilling and low learning motivation among employees. We conducted a systematic review of the literature on AI coding apps (GitHub Copilot, Cursor, etc.) and on corporate e-learning platforms (Coursera and Udemy) from the past several years. The review shows that these tools bring real productivity gains - in controlled experiments between 14% and 40% faster task completion - and that the gains are strongest for less experienced employees. At the same time, the same literature documents growing evidence of cognitive offloading and deskilling when AI assistance is used uncritically. The outcome of this research is that AI, combined with continuous education and the development of a learning culture (microlearning, MOOC-based upskilling and guided on-the-job learning), keeps employees motivated and more productive, while deskilling is reduced. The paper concludes that AI tools should not replace competence but should add to it. Management should build AI usage policies with clear ongoing education programs for employees. These findings matter to human resource managers, executives and policymakers who plan workforce development in the digital age.

Keywords: *artificial intelligence, workplace productivity, deskilling, continuous education, upskilling.*
Field: Social Sciences

1. INTRODUCTION

In the large field study by Brynjolfsson et al. (2025), a customer support agent who could not solve an issue no longer had to wait for a senior colleague to step in. The same agent received suggestions from a generative AI assistant, and resolved on average 14% more problems in one hour. The gain was more than a third for the least experienced agents. Numbers of this size are why AI assistants stopped being experiments a long time ago. They write reports, condense long email correspondence, generate code and quietly make small decisions that used to be the hands-on work of a person. Managers see the impact on quarterly dashboards. Dashboards do not show what is happening in between, especially with the knowledge of the people who use these tools.

The worry is not new. It is becoming harder to ignore. When people continuously let a system remember, reason and solve difficulties for them, these abilities are simply less exercised, and skills that are not exercised tend to fade. The mechanisms that drive the process are labeled cognitive offloading (Risko & Gilbert, 2016). Its more serious, longer-term form is now called deskilling (Subramanya et al., 2026). Why this price has to be paid at all is a different question. It should not be. The evidence from corporate training and workforce learning programs suggests that companies that treat AI adoption and employee upskilling as a single investment and not as two separate budget lines seem to have more productivity gains while minimizing skills loss (Al Naqbi et al., 2024; Rosendale & Wilkie, 2021).

RQ1: how big are the productivity gains of AI tools under working conditions? RQ2: what deskilling risks have been reported when workers rely on AI assistance? RQ3: can continuous employee education, which is deliberately implemented as a management tool, reduce these risks? Section 2 describes how the literature was taken and studied. Section 3 presents the empirical results. Section four discusses implications and offers an integrative model. Section five finishes with conclusions.

[*]Corresponding author: tpapic@singidunum.ac.rs

2. MATERIALS AND METHODS

We conducted the study as a systematic review of research literature and published research. We sought sources from scholarly databases and publisher platforms (Google Scholar, MDPI, Springer, Sage, Emerald, Taylor & Francis, IGI Global) and the main search period was from 2021-2026. We chose to address two older but foundational sources, Risko and Gilbert (2016), who gave cognitive offloading its current theoretical picture, and Acemoglu and Restrepo (2019), who covered automation in the context of the task-based approach.

We searched for four categories of research topics: AI and workplace productivity; AI coding assistants such as GitHub Copilot, Cursor, ChatGPT; deskilling, skill erosion and cognitive offloading; and corporate e-learning, MOOC-based upskilling and continuing employee training. A source was included only if it had been peer-reviewed or documented a field experiment, if it related to AI use at work or to employee education, and if it was written in English. The practice papers and opinion pieces without review were left out.

Thematic synthesis followed. The remaining sources were sorted into three categories (measured productivity effects, deskilling mechanisms and educational countermeasures) and the quantitative results of field experiments were extracted and compared across task types and experience levels. Why is there a review rather than actual data? AI tools move faster than most organizations can study, and single company measurements and time-series data can become very old in months; it is a synthesis of controlled experiments that supports managerial conclusions. One caveat should be noted at the start. Most of the available experiments are conducted by North American and Western European firms and the results do not come out in the same way for smaller labor markets, such as Southeast Europe, where adoption and training infrastructure are much different (Premović et al., 2025).

3. RESULTS

Productivity first. And the strongest evidence is collected through experiments rather than surveys. Noy and Zhang (2023) randomized 453 professionals and found that having a generative AI assistant did cut the time spent writing by 40%, while external graders rated output 18% better. Another important point to keep in mind here: these were bounded writing assignments, and the authors themselves warned against extrapolating to open-ended work. Brynjolfsson et al. (2025) followed more than 5,000 customer support agents and found an average 14% increase in resolved problems per hour. The figure that managers should not miss is below the average: novice and low-educated agents increased 34% in response, suggesting that the assistant enables experts to share some of the knowledge that is otherwise not available to the beginner. Cui et al. (2026) tracked roughly 4,800 software developers at Microsoft, Accenture and a Fortune 100 company who used GitHub Copilot, and they found 26% more completed tasks. Since this study followed real work over a long period of time, not a short laboratory session, it has more weight than most studies. Finally, the PRISMA-based review of Al Naqbi et al. (2024) covers 159 publications from different sectors, and finds the same direction of effects across contexts, though it also lists a number of unresolved risks

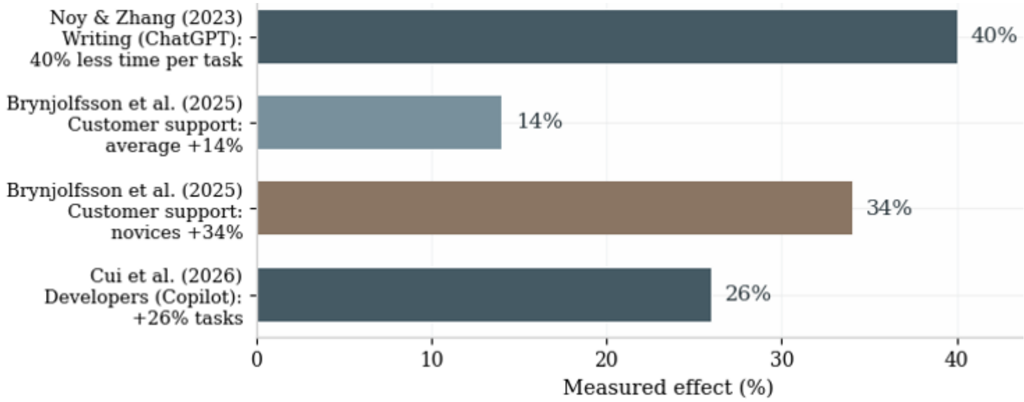
Table 1. Overview of key empirical studies on generative AI and workplace productivity

Study	Context / tool	Sample	Measured effect
Noy & Zhang (2023)	Professional writing, ChatGPT	453 professionals, randomized	40% less time per task; +18% output quality
Brynjolfsson et al. (2025)	Customer support, GenAI assistant	5,179 support agents	+14% issues/hour; +34% for novices
Cui et al. (2026)	Software development, GitHub Copilot	~4,800 developers, 3 large firms	+26% completed tasks (field experiment)
Al Naqbi et al. (2024)	PRISMA literature review, GenAI	159 publications, cross-sector	Consistent gains; persistent risks

Source: Compiled by the author based on Noy and Zhang (2023), Brynjolfsson et al. (2025), and Cui et al. (2026).

Table 1 and Figure 1 summarize our findings. The pattern is clear: the gains are real, but not shared equally. Junior employees benefit the most; experienced staff sometimes gain little and on tricky tasks even lose ground. An organization that introduces AI tools without changing its training plan might get the new people fast while doing nothing for its most experienced ones.

Figure 1. Measured productivity effects of generative AI tools in controlled studies



Source: Compiled by the author based on Noy and Zhang (2023), Brynjolfsson et al. (2025), and Cui et al. (2026).

The second cluster of results is not so comfortable. In cognitive offloading theory (Risko & Gilbert, 2016), cognitive skills that are regularly handed over to an external system are undermined by disuse. Subramanya et al. (2026) explore what they call a complementarity paradox: working with AI initially improves performance but overreliance over time erodes the ability to perform tasks unaided. Their argument is persuasive precisely because it identifies a mechanism, not a correlation - the decline is a predictable consequence of reduced cognitive engagement. Lovett (2026) adds an important qualification: deskilling and inhibited upskilling cluster in particular user profiles so that the risk, while real, is not uniform across a workforce. In software engineering, the birthplace of tools like GitHub Copilot and Cursor, Le (2026) reports that AI assistants change workflows and daily decisions in ways that enhance output today but leave open questions about tomorrow - how developers will keep debugging and architectural reasoning.

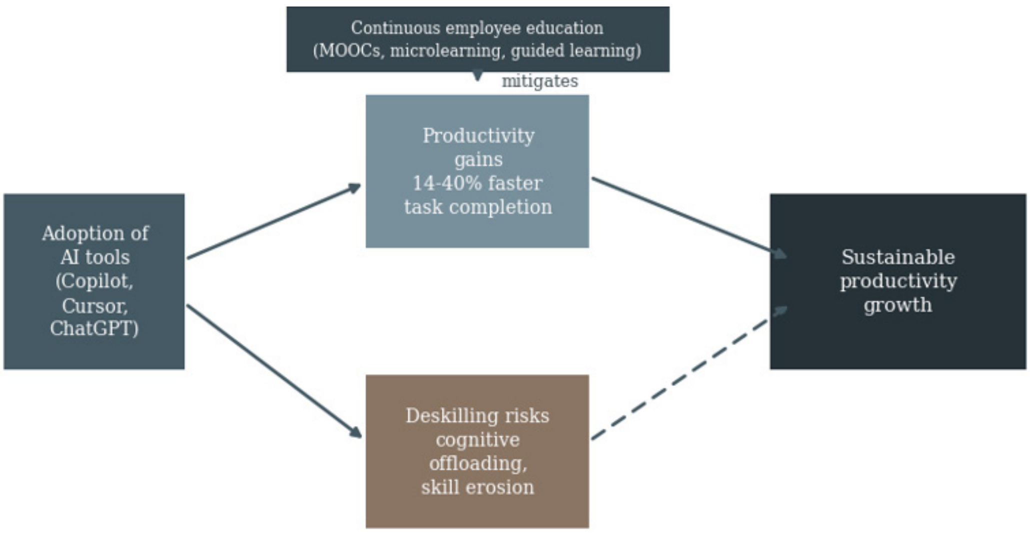
The third cluster turns to education as an alternative. Corporate e-learning platforms (Coursera and Udemy are two of the best known) along with MOOC-based programs offer organizations a scalable way to reskill and upskill their employees (Rosendale & Wilkie, 2021). Alasmari (2024) reveals that employees actually use such programs depending on their perceived usefulness and organizational support; buying platform licenses should not be the same as building a learning culture. AI adoption in software teams follows the same trajectory from the other direction, with structured training acting as an efficiency multiplier only where the tools are used (Koivisto et al., 2026).

4. DISCUSSION

Putting the two literatures next to each other changes the question. It's not about whether AI tools are good or bad for a workforce. The productivity studies show quick, measurable output gains; the deskilling studies show that those gains can quietly consume the capabilities the output depends on. The two effects do not cancel out - they run on different clocks, which is why the damage is not really visible in quarterly reports. What connects them is learning. Employees who are trained, systematically, to understand, check and challenge what the AI gives them tend to keep and improve on what it has taught them and even to extend it. Employees who are passive with the same tools perform worse. One of the most important findings of this review that I want to emphasize is that the same tool has the opposite long-term impact depending on the educational environment around it.

Figure 2 shows the model we propose. AI adoption has two parallel effects - productivity gains on one hand; deskilling risks on the other. Continuous employee education slows the risk path and strengthens the gain path, turning a brief output spike into long-term growth. The practical result is plain but vital: decisions about buying AI tools and decisions about training budgets should happen in the same meeting. In our experience with organizations in the region, they are still almost always held separately.

Figure 2. Integrative model: AI adoption, deskilling risk and the moderating role of continuous education



Source: Author's own elaboration.

In software teams, assistants such as GitHub Copilot and Cursor speed up coding. Teams that teach developers to check generated code carefully can keep competence (Koivisto et al., 2026; Le, 2026). Outside IT, MOOC platforms such as Coursera and Udemy let companies offer microlearning, closing skill gaps for far less than traditional training costs (Rosendale & Wilkie, 2021). In every case the same lesson remains: AI output should be seen as learning material, not as a finished product.

All of this is consistent with the task-based view of automation (Acemoglu & Restrepo, 2019). Technology takes over some tasks and creates or reinstates others, and where the balance comes from will be dependent on complementary investments. So far, of all such investments it seems that workforce education is the one that managers are able to most directly control, and according to studies we have reviewed here, the one that is the least frequently covered.

5. CONCLUSIONS

We asked three things here: what AI tools can add to productivity, what they can take away from employee competence, and whether education can reconcile the two. The productivity evidence is unambiguous. Controlled studies show output increases of 14% to 40% in low-skill employees. The deskilling evidence is younger but also consistent across all studies: uncritical use of AI promotes cognitive offloading and gradually erodes the skills employees need when they do not have the tool. On the third question, the answer is actually very encouraging. Organizations that integrate learning into their AI deployment - not just bolt it on afterwards - will more likely keep their productivity gains going for a longer time.

The management advice is in this sense so simple: consider AI as an augmentation to human skills, have mandatory and measurable training for every deployment, and measure skill retention in the same manner as output metrics. In Southeast Europe, where training budgets are typically so low and adoption is so rapid, this sequence matters much more than in the markets where the reviewed experiments were performed. There are limits to the study that need to be noted. It is based on published experiments, mostly from writing, customer support, and software development. Longitudinal field studies of other sectors with the ability to measure skill retention in real time are the next step.

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THE AUTONOMY OF MACEDONIAN UNIVERSITIES BETWEEN THE CONSTITUTION AND THE NEW LAW ON HIGHER EDUCATION

Temelko Risteski[1*]

[1]American University - FON Skopje, RN Macedonia, e-mail: temelko_mkd@yahoo.com

Abstract: The paper contains an introduction, three chapters and a conclusion.

The introduction provides a very brief overview of the significance of university autonomy as a condition for the development of creativity in the field of education and science and of the constitutional regulation of autonomy, with a special focus on the Constitution of the Republic of North Macedonia. This is followed by a brief historical overview of the development of the implementation of the constitutionally guaranteed autonomy of universities in the Law on Higher Education of the Republic, starting with the Law on Targeted Education, up to the present day.

The first chapter provides a general overview of the Proposal for Law on Higher Education from the aspect of university autonomy.

The second chapter analyzes the provisions of the Proposal for Law that are contrary to the Constitution of the Republic, namely: the provisions of Articles 43 to 45 - on the significant influence of the Government on the National Council for Higher Education; Article 85, point 2 - on the prior consent of the Government for competitions for the enrollment of students at public universities; Article 86 - on the appointment of four out of eleven members of the university council; Article 117 - on the disposal of the universities with the real estate and other assets in their ownership with the consent of the Government; Article 132, paragraph 10 - on the inability of private universities to organize study programs in general medicine, veterinary medicine, nursing and midwifery, legal studies, defense and security studies and for teachers in primary and secondary education studies; Article 175 - on the granting of consent by the Ministry of Education and Science to the employment agreement of selected persons in another public higher education institution; Article 200 - on the authorization of the Minister to stop the execution of a general act of a university, due to alleged unconstitutionality;

The third chapter analyzes the provisions of the Proposal for Law whose constitutionality is questionable, namely: Article 199 - on the authorization of the Minister of Education and Science to repeal or annul decisions of higher education institutions; Article 201 - on the annulment of diplomas by the Ministry and Article 202, paragraph 3 - on the possibility of inspection supervision over elections for academic titles to encroach on university autonomy.

Keywords: *proposal, university, autonomy, constitution, law.*
Field: Social Sciences

1. INTRODUCTION

The autonomy of the university is one of the greatest civilizational achievements in the normative regulation of higher education. It is the basis of the freedom of education and scientific creativity, and this freedom is the basic, if not the only condition, for the development of the creativity of the spirit in the field of education and science (Risteski, 2026). Only a free spirit can create new, more effective educational methods, only such a spirit can think and research creatively.

A large number of constitutions of states in the world, based on the provisions of international legal acts on human freedoms and rights, guarantee the autonomy of universities and thus the freedom of educational activity and scientific creativity (Roberts, Saliba, Spanagel, 2022),. Among them is the Constitution of the Republic of North Macedonia. It, in Article 46, paragraph 1, unequivocally stipulates: “The autonomy of universities is guaranteed.” In paragraph 2 of this article, it states: “The conditions for the establishment, performance and termination of the activity of the university are regulated by law.” This means that the law should represent a normative framework for these conditions, and nothing more. If the law exceeds the framework, if it goes into the details of the establishment, performance and termination of the university’s activities, it violates its autonomy.

The legal regulation of higher education in the Republic of North Macedonia has seen ups and downs in terms of respecting the constitutionally guaranteed autonomy of the university.

After the adoption of the 1991 Constitution, for almost a decade - until 2000, the Law on Directed Education from 1985, was applied to higher education. This delay in adopting a law on higher education, according to the constitutional standard for university autonomy contained in the Constitution of the Republic of 1991, suggests the legislator’s insufficient care for regulating higher education in accordance

*Corresponding author: temelko_mkd@yahoo.com

with the Constitution of independent Republic of Macedonia because the first law on higher education in the independent Republic of Macedonia was adopted in 2000.

Neither the 1974 Constitution, nor the Law on Directed Education mentioned university autonomy. The long wait for the adoption of a Law on Higher Education, according to the provisions of the Constitution on university autonomy and freedom of scientific, artistic and other types of creativity, was compensated by the adoption of the Law of 2000, which set high standards of academic freedom, in accordance with the principle of university autonomy. This law provides a fairly comprehensive legal elaboration of university autonomy. In short, according to this law, higher education is implemented freely, i.e. independently of the state, in accordance with the constitutionally guaranteed autonomy of the university.

If the first law on higher education in the independent Republic of Macedonia comprehensively covered university autonomy, the second law of 2008 made it more specific. It precisely defines its scope and thus moves it, from a more or less abstract constitutional guarantee, to a concrete system of institutional rights.

After the undoubtedly significant progress in university autonomy made with the laws of 2000 and 2008, a period of its reduction has begun. That period began with the adoption of the Law on Amendments and Supplements to the Law on Higher Education from 2014 and culminated with the announcement of the introduction of an external exam for students during their studies. The reaction to that announcement was the formation of a student and then a professorial plenum, large student protests and the formation of free zones at several Skopje faculties. In early 2015, the legislator - the Assembly of the Republic, ignoring the students' opposition to the introduction of the external exam and the students' demands for preserving the autonomy of the university and its development, adopted the Law on Amendments and Supplements to the Law on Higher Education, with the provisions of which it introduced the external exam. But the government, well shaken by the reaction of the students and undoubtedly afraid of further escalation of the situation, postponed - froze the implementation of those provisions.

During that turbulent period of Macedonian higher education, in two years (2014 to 2016), ten amendments and supplements to the Law on Higher Education were adopted. After it, with the adoption of the current Law on Higher Education from 2018, a new democratic wave came in the legal regulation of this education. This law, viewed as a whole, clearly emphasizes that higher education is based on autonomy, the basis of which is the intellectual freedom of the members of the academic community and the creative nature of the educational and research process (Article 7, paragraph 4).

In 2026, a dark cloud hung over the autonomy of Macedonian higher education in the form of the Proposal for Law on Higher Education, which is in parliamentary procedure. Despite efforts to propose a new Law aligned with European standards for higher education, this proposal contains several violations of the constitutionally guaranteed autonomy of the university, which are analyzed below.

2. GENERAL OVERVIEW OF THE PROPOSAL FOR LAW ON HIGHER EDUCATION FROM THE ASPECT OF THE AUTONOMY OF UNIVERSITIES

The initial version of the Proposal for Law was published on ENER in early February 2026. Its publication was followed by public debates in university centers, as well as a broad debate in which interested citizens participated. At the end of March 2026, a corrected version of the Proposal was posted on ENER. Based on the comments on the corrected version, the Ministry of Education and Science drafted the current Proposal and submitted it to the Assembly of the Republic of Macedonia in early July 2026.

The Proposal for Law places university autonomy in first place among the sixteen basic principles of higher education. According to the extensive glossary in Article 2 of the Proposal: "Autonomy of a university and other higher education institutions is academic freedom, the right to independent and autonomous decision-making and management of organizational, financial and personnel issues, as well as the management and inviolability of the academic space."

There is nothing to note about this definition, considering the fact that the autonomy of the university is one of the greatest civilizational achievements of the modern world (Dimić,2019). It is based on the provisions of international legal acts on human rights and freedoms, which guarantee freedom of opinion and expression and the right to education to citizens of the world (Universal Declaration of Human Rights – Article 19, International Covenant on Economic, Social and Cultural Rights – Article 13, International Covenant on Civil and Political Rights – Article 19, European Convention on Human Rights – Article 10). These provisions are the basis for subsequent international acts that specify the autonomy of the university as a guarantee for free, unhindered and scientific achievements-based higher education and free, creative scientific research work (UNESCO Recommendation on the Status of Teaching Staff from

1997, Magna Charta Universitatum from 1988 and 2020, Bologna Declaration from 1999, Council of Europe Recommendation on Academic Freedom and University Autonomy, No. 1762 from 2006, and the Charter of Fundamental Rights of the European Union from 2000 and 2009, which places academic freedom in the rank of fundamental rights).

Unlike other principles, the Proposal for Law, in a separate chapter, with Articles 7 to 15, elaborates normatively, in detail the autonomy with all its elements. In this chapter, a separate article is dedicated to each of the elements of autonomy. Thus, academic freedom is regulated by the provisions of Article 8; management autonomy - by the provisions of Article 9; financial autonomy - by the provisions of Article 10; personnel autonomy - by the provisions of Article 11 and the inviolability of the academic space - by the provisions of Article 12.

In the Proposal for Law, the autonomy of higher education institutions is supported by two additional articles: Article 13 - on the inviolability of autonomy and Article 14 - on academic integrity as an ethical category. The integrity of the university as a legal entity, and thus a legal subject, of course, and the integrity of other higher education institutions is based on preserving the dignity of the profession, adhering to ethical values (Šopar, 2015), protecting the values associated with the creation and transfer of knowledge, raising awareness of the responsibility of all members of the academic community and promoting human rights and freedoms.

There is nothing objectionable about the above provisions of the Proposal for Law in terms of their being based on the principle of the constitutional guarantee of university autonomy from Article 46 of the Constitution of the Republic. However, unfortunately, the provisions of the Proposal are in conflict with these provisions and, therefore, in conflict with the provisions of the Constitution on university autonomy and on the freedom of scientific and artistic creation.

The Constitution of the Republic of Macedonia of 1991, following the highest civilizational achievements for human rights and freedoms, with the provision of Article 46, paragraph 1 which reads: “The autonomy of universities is guaranteed,” strongly and unequivocally guaranteed the autonomy of Macedonian universities. In paragraph 2 of the same article it stipulates: “The conditions for the establishment, performance and termination of the activity of the university shall be regulated by law.” Then, in Article 47, paragraph 1, the Constitution guarantees freedom of scientific, artistic and other types of creativity. The legislator - the Assembly of the Republic of North Macedonia, in regulating higher education, should inevitably follow the unambiguous and, therefore, strong provision of Article 46, paragraph 1, of the Constitution, on the autonomy of the university and the other listed provisions of the Constitution by which it is supported. As a legislator of a member state of the Council of Europe and a participant in the European higher education area, it should also follow the standards for academic freedom and university autonomy contained in the above-mentioned Recommendations. But, unfortunately, it has not consistently done so until now. Precisely because of this, the Government, as the proposer, proposed a Law in which several provisions are not in accordance with Articles 46 and 47 of the Constitution. The proposer, apparently expecting that those provisions “will pass,” submitted the Proposal for Law on Higher Education to the legislator in early July of this year. The Proposal is in parliamentary procedure.

3. PROVISIONS OF THE PROPOSAL FOR LAW THAT ARE NOT IN COMPLIANCE WITH THE CONSTITUTION

We will analyze the disputed provisions according to the order in the Proposal for Law.

3.1. In the provisions of Articles 43 – 45 of the Proposal on the composition and influence of the Government on the National Council for Higher Education, it is disputed that, out of the 15 members of the Council, six professors are proposed by the Interuniversity Conference; six professors by the Government; one member is proposed by MANU (MASA - Macedonian Academy of Sciences and Arts), one by the chambers of commerce and one by the students. According to this, the Government has the right to propose 40% of the composition of the highest national expert body for higher education. Taking into account the fact that, in addition to the Government, one member is proposed by the chambers of commerce and one member by MANU, more than 50% of the members of the Council are not proposed by the academic community. This raises doubts about the dominant influence in the decisions of the Council by persons who do not belong to the academic community. The problem is even greater because the Council has very significant regulatory powers. He, among other things, drafts and proposes to the Minister of Education numerous by-laws on higher education (decrees; rulebooks, guidelines, etc.). The question arises whether, with such provisions, the state does not move from a normative framework of the regulation of higher education activity, to actual management and influence on the academic sphere.

3.2. According to the provision of Article 85, item 2 of the Proposal for Law, the rector’s office of a public university determines and announces the competition for enrollment in the first, second and third cycle of studies, upon prior consent of the Government.

This provision is problematic from a constitutional and legal perspective because the number and structure of students are directly related to: organization of teaching; personnel policy; development of study programs, internal organization and academic planning.

The state, without a doubt, can determine the method of financing and determine public interest and financial frameworks. It is up to the university to decide whether it will manage within these financial frameworks, taking into account the number of enrolled students. However, prior consent of the Government for each admission competition, without a doubt, represents an intrusion into the autonomous management of the university (Leisute, Matquina, Jones, 2025).

3.3. One of the most problematic provisions of the Proposal for Law, from a constitutional legal perspective, is the provision of Article 86, paragraph 2, according to which, out of a total of eleven members of the University Council, three members are proposed by the Government from among the associate and full professors from public universities, upon the proposal of the minister responsible for higher education affairs, and two members are appointed by the chambers of commerce in the Republic of North Macedonia. The remaining members are appointed by the Senate of the university – five members and the student assembly – one member. Therefore, five out of 11 members are not elected by the university community. This provision is controversial from a theoretical and a constitutional legal perspective. The University Council is a body of the University. The University is a legal entity – a legal person. The state is also a legal entity – a legal person. In civil law, legal entities are equal. It is incomprehensible for a legal entity to appoint members of a body of another legal entity. In law, this is violence. If the Proposal for Law is adopted and the Law is enacted, we will have the appearance of “legalized” violence that is legally inadmissible and, as such, unconstitutional.

Seen through the prism of Article 46 of the Constitution, this provision can very seriously question the autonomy of the university in management. The Constitutional Court has already expressed the view that autonomy is not only a declarative category, but also encompasses the management and decision-making of the university. In one case, the court emphasized that autonomy in management is also expressed through the election, appointment and recall of the bodies of the higher education institution (Constitutional Court, 172/2009).

3.4. Article 117 of the Proposal for Law regulates the ownership of real estate and other assets of higher education institutions. According to paragraph 1 of this article, real estate and other assets of a higher education institution and assets acquired from legacies, special-purpose contributions, gifts, bequests and other assets acquired in accordance with the law, are property owned by the higher education institution; and according to paragraphs 4 and 5, a public higher education institution may alienate real estate only upon prior consent from the Government. The funds obtained from the sale of the property are used for investments, investment maintenance and equipment, upon prior consent from the Government. The provisions on the consent by the Government contained in these paragraphs directly attack the autonomy of the university because autonomy, among other things, also implies independent management and use of the property in accordance with the purpose for which it was obtained (Leisute, Matquina, Jones, 2025),. In addition, these provisions grossly violate Article 30, paragraph 3 of the Constitution, according to which “no one may be deprived of or restricted from ownership or the rights arising from it, except in the public interest established by law.” Paragraph 3 of this article of the Proposal restricts the right to dispose of real estate, which is contrary to the cited provision of the Constitution, and paragraph 4, in addition to restricting the right to dispose of funds obtained by selling real estate owned by a higher education institution, also establishes control over the use of those funds, which is contrary to Article 46 on the constitutional guarantee of university autonomy.

3.5. We will dwell a little more on the provision of Article 132, paragraph 10 of the Proposal for Law, according to which “Study programs for general medicine, veterinary medicine, nursing, midwifery, legal studies, defense and security studies and for studies teachers in primary and secondary education are study programs of public interest and can be organized only at public higher education institutions.” This means that private and public-private higher education institutions cannot organize higher education studies according to the stated study programs because they are supposedly of public interest. The question arises of what interest are the study programs for economics, sociology, psychology, and architecture, construction, mechanical engineering, electrical engineering and informatics that can be organized at private higher education institutions. Everyone, even a layman in law, will say that they are also of public interest. There is no doubt that this division of study programs that can or cannot be organized at private higher education institutions does not correspond to substantive law and as such is absurd.

In this regard, we go further. The Constitution, in Article 9, paragraph 1, states that the citizens of the Republic of North Macedonia are equal in freedoms and rights, regardless, among other things, of their property and social status. In paragraph 2 of the same article, it is decisive and says: “Citizens are equal before the Constitution and the laws.” In this regard, let’s go a little to the Introduction to Law that law students listen to and take in the first year of their studies. Citizens, there is no doubt, are subjects of law. They, as subjects of law, appear as natural persons or organized into legal entities. A legal entity is a set of natural persons who have joined together, with the help of law, to achieve some common interest. Private and public-private higher education institutions are legal entities, just like state ones. Their members are natural persons - citizens, not ghosts. That is why they, just like natural persons, are subjects of law. Given that they are composed of natural persons – citizens, the provisions of Article 9 of the Constitution also apply to them. Accordingly, their exclusion from organizing higher education studies according to the stated study programs because they were allegedly of public interest is contrary to the constitutional principle of equality of citizens. In higher education, there are no study programs of public and private interest. Study programs are organized because there are social – public needs for higher education of personnel who, after completing their studies, will be included in social life to satisfy the needs and interests of citizens. Therefore, all study programs are of public interest.

In addition, by preventing private and public-private higher education institutions from organizing the stated study programs, the state will also violate the autonomy of the university – a principle guaranteed to the citizens of this Republic by Article 46, paragraph 1 of the Constitution.

Finally, the aforementioned provision of Proposal is not in accordance with the provision of Article 44, paragraph 2 of the Constitution, according to which “education is available to everyone and under equal conditions.”

3.6. Article 175, paragraph 2 of the Proposal for Law provides for the possibility for a person elected to a teaching-scientific, scientific, teaching-professional, teaching and associate title who has established an employment relationship at a public higher education institution, i.e. a public scientific institution, to transfer and establish an employment relationship at another public higher education institution, i.e. a public scientific institution, if he/she meets the prescribed conditions. The transfer is carried out upon a decision of the teaching-scientific council, i.e. the teachers’ council, and on the basis of an agreement concluded between the two public higher education institutions and the person transferring. The agreement is approved by the ministry responsible for education and science. The Ministry’s approval of the agreement is in conflict with the provision of Article 46, paragraph 1 of the Constitution on the autonomy of the university. Then it is in conflict with the provisions on the personnel autonomy of higher education institutions from Article 11 of the Proposal for Law, which is an element of the autonomy of the university guaranteed by Article 46, paragraph 1. of the Constitution. Furthermore, it is in conflict with the provision of Article 32, paragraph 1 of the Constitution, which guarantees the citizens of the Republic the right to free choice of employment and with the provision of paragraph 2 of the same article, which guarantees citizens access to any job. So, this provision of the Proposal for Law violates three provisions of the Constitution and also violates the provisions of Article 11 of the Proposal.

3.7. Article 198 gives the Minister the right to determine that a higher education institution is operating contrary to the law and to instruct it, within a given deadline, to eliminate the illegality. In the case of a public higher education institution, if it does not act upon the indication, the Minister may propose to the Government to initiate a procedure for adopting a law for the termination of the institution.

There is no doubt that the control of legality is not unconstitutional. But the problem lies in the boundary between the control of legality and the control over autonomous academic decision-making (Roberts, Saliba, Spanagel, 2022),. The Constitutional Court, in its practice of controlling constitutionality and legality, warns that the limits of autonomy must be respected when supervising universities (Constitutional Court, 171/2009). Therefore, this provision would have to define the limits of ministerial supervision much more precisely. The principle of university autonomy, as stipulated in the Constitution, does not allow the Minister, without prior legally binding determination of the factual situation by an expert body, to submit a proposal to the Government to initiate a procedure for adopting a law for the termination of a higher education institution.

3.8. According to the provision of Article 200, paragraph 1 of the Proposal for Law, if the Minister considers that the general act of a higher education institution is not in accordance with the Constitution or a law, he may suspend its execution, and then initiate proceedings before the Constitutional Court.

In this regard, a very important constitutional legal dilemma arises. Can the Minister independently suspend the act of an autonomous higher education institution only because he considers it to be unconstitutional, before the Constitutional Court has decided on it. This provision is particularly controversial because it gives the Minister, as an organ of the executive branch, temporary power of constitutional legal intervention, which is inadmissible considering the fact that a decision to suspend the execution of individual acts or actions based on the general act whose constitutionality is being assessed, according to Article 27 of the Constitutional Court Act, is adopted by that Court. The Law with this provision actually gives the Minister the powers that the Constitutional Court has.

4. PROVISIONS OF THE DRAFT LAW WITH DOUBTFUL CONSTITUTIONALITY

4.1. From the perspective of the constitutionally guaranteed principle of university autonomy, the provisions of Article 199 of the Proposal for Law are questionable. These provisions prescribe the procedure in the event that a higher education institution has made a decision contrary to the law. This article stipulates that if the Minister, upon the report of a five-member commission formed by him, determines that the decision was made contrary to the law, he may revoke or annul it by a decision.

In this regard, a fundamental question arises: can a member of the executive authority annul a decision of an autonomous university (Constitutional Court, 201/2020-1) only on the basis of a report of a commission he formed. The report may be incorrect, incomplete, biased, etc. Therefore, a higher education institution should be given the right to object to it. Then, depending on the decision following the objection, the Minister could apply his control powers. From a civil law, or theoretical perspective, this question would be posed differently: Can a member of the legal entity - state annul decisions of the legal entity autonomous higher education institution - a university or its unit? The answer is: “Of course not.” Accordingly, this is one of the most serious constitutional and legal problems in the Proposal for Law. In this regard, the Constitutional Court has emphasized that the autonomy of the university also implies the independent exercise of its powers. The Proposal for Law, as can be seen, goes very far in violating the autonomy of the university: it gives the minister direct power, based on an invalid report of a commission formed by him, to intervene in the decisions of the university. Given the above, these provisions should be further specified.

4.2. Article 201 of the Proposal for Law stipulates that the Ministry, if it determines that a higher education institution has issued a diploma or certificate contrary to the law, shall adopt a decision to annul the diploma or certificate.

Here too, a distinction should be made between the administrative control of whether the diploma or certificate has been legally issued and the academic assessment of whether the person meets the academic requirements for their issuance.

If the Ministry were to interfere in the academic assessment of the higher education institution, this would be directly problematic from the point of view of autonomy. Therefore, this provision must be interpreted very narrowly – only as a control of the legality of the formal issuance of a diploma, and not as the right of the Ministry to review academic decisions related to the assessment of the quality and quantum of the knowledge of the person to whom the diploma was issued. In order for this interpretation to be made, this provision needs to be further clarified. Stipulated in this way, from the point of view of the constitutionally guaranteed autonomy of the University, it is of dubious constitutionality.

4.3. Article 202, paragraph 3. of the Proposal for Law provides that the State Educational Inspectorate shall supervise the legality of the procedures for election into teaching and teaching-scientific and associate titles and the fulfillment of the conditions for election into titles and may initiate proceedings against the allegedly illegal selection, even within five years of the selection.

According to paragraph 4, if the State Educational Inspectorate, when performing the supervision referred to in paragraph (3), establishes irregularities or illegalities, it shall adopt a decision by which:

- orders the elimination of the irregularities and/or
- orders the repetition of the procedure.

The control of the legality of the procedure, in itself, may be justified. However, when it comes to the fulfillment of the conditions for election into titles, there is a danger that the inspection supervision will turn into a substantive review of the academic assessment – the scientific value of the candidate, the quality of the papers, the expert assessment of the reviewers, etc., which, in accordance with the principle of university autonomy, may not be carried out by the inspectorate. Supervision of legality must not turn into an unlimited encroachment on academic autonomy (Constitutional Court, 171/2009). Therefore, this article should be further specified regarding the irregularities or illegalities in the determination of which the Inspectorate may be involved.

5. CONCLUSION

The Higher Education Laws of 2000, 2008 and 2018 and their amendments and supplements, with the exception of the amendments and supplements from 2014 to 2016, have gradually progressed in the implementation of the principle of university autonomy in the higher education legislation of the Republic of North Macedonia in accordance with the standards of the European Union. The current Proposal for Law on Higher Education was made with the intention, at least declaratively, to take another major step in that direction. This is supported by the quality definition of autonomy and its placement on the highest pedestal among the principles of higher education activity, not only by the fact that it is placed first in their enumeration, but also by the fact that it is elaborated in detail in all its elements, even more broadly, in a separate chapter dedicated to it, which covers Articles 7 to 15 of the Proposal.

But, as Professor Škarić rightly notes in one of his works in the field of constitutional law, in our legal system, there are not only conflicts between individual laws, but also between provisions of the same law (Škarić, 2014). Such is the case with the provisions of Articles 43 to 45, Article 85, point 2, Articles 86, 117, Article 132, paragraph 10, Article 175, paragraph 2, Articles 199 and 200, which are clearly in conflict with the provisions on the autonomy of universities contained in the Proposal for Law, and thus in conflict with the provisions of Articles 46 and 47 of the Constitution. The provisions of Articles 199, 201 and 202, paragraph 3, are in doubt in that regard.

It is worrying that the bulky working group for drafting the Proposal for Law included professors from the “Justinian I” Faculty of Law who, with their formal, if not factual expertise (which they should have), stand behind the Proposal, and apparently did not prevent extremely unconstitutional provisions from being found in it.

To put it figuratively, as it is, the Proposal resembles a city observed from an airplane that looks beautiful, with beautiful buildings, wide boulevards, landscaped parks, etc.; but if a person descends to the ground and walks through its streets, he will see many deviations from the impression he got from looking at it from the air.

Given that the Proposal for Law on Higher Education is in parliamentary procedure and has so far only passed a reading before the relevant committee, let us hope that the aforementioned inconsistencies with the constitutional principle of university autonomy contained in the Proposal will be removed in the next three readings before the competent committees and at the plenary sessions, and that we will receive a new, modern law on higher education, created according to the highest standards for its legal regulation.

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BETWEEN DISCIPLINARY IDENTITY AND PROFESSIONAL TITLE: ART-HISTORICAL JURISDICTION IN EIGHT SERBIAN MUSEUMS UNDER THE 2021 MUSEUM ACT

Jelena Simić[1*]

[1]Scientific and Research Association ŠumArt, Belgrade, Serbia, e-mail: sumart.org@gmail.com

Abstract: This article examines how disciplinary expertise acquires formal professional authority when the corresponding academic discipline is absent from a statutory hierarchy of occupational titles. It analyses the position of art-historical expertise in Serbia's museum system under the 2021 Law on Museum Activity. The study applies qualitative document analysis to the Law, two implementing rulebooks and operative organisation and job-classification acts from eight museums selected through maximum-variation purposive sampling. The documents were coded across seven dimensions: statutory title, disciplinary designation, organisational embedding, collection anchoring, qualification closure, task jurisdiction and continuity across higher professional grades. The national framework defines curator as a basic professional title and senior curator and museum adviser as higher titles, but reserves neither the professional examination nor these titles for art-history graduates. Institutional acts nevertheless produce different forms of disciplinary recognition: seven museums use an art-historical designation, four establish an art-history department, five connect the analysed post with an art, fine-art or applied-art collection, and four prescribe an exclusively art-historical qualification. The comparison demonstrates that an explicit art-historian designation may coexist with non-exclusive disciplinary entry, while substantial collection-specific authority may be assigned through generic curatorial titles. Drawing on Abbott's theory of jurisdiction and Fourcade's distinction between nested and state-centred professional structures, the article introduces vertically distributed jurisdiction as a configuration in which occupational recognition is regulated nationally, while disciplinary eligibility and object accountability are specified institutionally. The findings demonstrate that disciplinary designation is neither necessary nor sufficient evidence of formal jurisdiction and support the explicit alignment of statutory grade, qualification and collection responsibility.

Keywords: *art history; museum professions; professional jurisdiction; occupational closure; Serbia.*
Field: Humanities

1. INTRODUCTION

Professional authority is often inferred from occupational titles. In museums, however, statutory title, academic discipline, educational qualification, organisational position and collection responsibility may be regulated through different institutional mechanisms. An art historian may authenticate, research, document, interpret and publish a collection while being formally employed and promoted within a general curatorial hierarchy. The central analytical problem is therefore where art-historical jurisdiction resides when art historian is not itself a statutory museum title.

Museums provide a revealing setting for examining this problem because their research, collecting, conservation, interpretation, exhibition, accessibility and educational functions require differentiated forms of specialised knowledge (International Council of Museums [ICOM], 2022). Legal and organisational systems nevertheless tend to classify employees through a limited set of common occupational titles. A title locates an employee within an authorised hierarchy, a qualification determines eligibility for a post, a task description prescribes the work to be performed, and collection responsibility identifies the object domain over which expert judgement is exercised. These elements may converge, but none independently demonstrates professional jurisdiction.

Abbott (1988) defines jurisdiction as a socially recognised claim to control particular tasks and shows that legal and workplace settlements may differ. Freidson (2001) similarly connects professional authority with specialised knowledge, credentials and control over work. Fourcade (2009) distinguishes jurisdictions nested within other professions from forms of expertise built into state-centred professional structures, providing a basis for analysing systems in which the state defines an occupational hierarchy while individual institutions specify the disciplinary content of particular posts. Research on museum professions has examined changing competencies, professional identities, hybrid work and the limitations of inherited job titles (Evetts, 2011; Jensen, 2019; Khosrowjerdi et al., 2024; Noordegraaf, 2015; Ripley & Hurley, 2025; Tlili, 2016; Yaron, 2024). It has not, however, established a systematic method for

*Corresponding author: sumart.org@gmail.com

reconstructing formal disciplinary authority when titles, qualifications, organisational units, collections and tasks are regulated separately.

Serbia constitutes an analytically significant case because the 2021 Law on Museum Activity establishes a dedicated statutory framework for museum work. Article 51 links the performance of museum activities to appropriate education and a passed professional examination, while Article 52 provides that the examination programme is prescribed by professional fields. Article 53 defines curator as a basic professional title, and Article 54 defines senior curator and museum adviser as higher professional titles. Article 40(18)–(19) assigns the central institution separate responsibilities for organising the professional examination and conducting the procedure for acquiring higher titles. Neither passing the professional examination nor acquiring the titles of curator, senior curator or museum adviser is legally restricted to art-history graduates, and art historian is not listed as an autonomous statutory title under Articles 53 or 54.

Article 48 nevertheless provides that museum organisation is regulated through founding acts, statutes and other general acts. Individual museums may therefore prescribe designations such as curator–art historian, require an art-history qualification, establish an art-history department or assign responsibility for fine-art and applied-art collections. Formal disciplinary recognition consequently emerges through the interaction between national occupational regulation and institution-specific organisation. Serbian scholarship has examined museum policy and broader institutional tensions (Krivošejev, 2011; Krstović, 2023), but it has not comparatively reconstructed this complete law-to-workplace normative chain.

The article therefore asks how the post-2021 national framework regulates entry, examination and progression through curatorial titles; how museum acts combine statutory title, disciplinary designation, organisational location, qualification, collection responsibility and tasks; and what the alignment or divergence of these elements reveals about formal art-historical jurisdiction. Empirically, it compares operative arrangements in eight Serbian museums. Methodologically, it treats the complete normative chain, rather than job title alone, as the unit of analysis and examines seven observable dimensions of jurisdiction. Conceptually, it introduces vertically distributed jurisdiction to describe a configuration in which occupational recognition is established through a state-regulated hierarchy, while disciplinary eligibility and object accountability are specified institutionally. Two propositions are tested: disciplinary designation is neither necessary nor sufficient evidence of formal jurisdiction, and collection accountability may carry disciplinary authority when occupational titles remain generic.

2. MATERIALS AND METHODS

The study employed qualitative document analysis, treating legislation, implementing regulations and institutional general acts as formal artefacts through which posts are authorised, eligibility is delimited and professional responsibility is assigned (Bowen, 2009). Article 48 of the Law on Museum Activity provides the statutory basis for this approach by placing museum organisation within founding acts, statutes and other general acts. The unit of analysis was the operative normative chain connecting national regulation with institutional provisions governing an art-related museum post.

The national corpus comprised the Law on Museum Activity and the 2021 rulebooks regulating the professional examination and museum-object documentation. The institutional corpus comprised operative organisation and job-classification acts from eight museums: National Museum Niš, Homeland Museum Priboj, Museum in Prijepolje, National Museum Šumadije in Kragujevac, City Museum Sombor, National Museum Zrenjanin, Museum of Applied Art in Belgrade and National Museum Pančevo (City Museum Sombor, 2018, 2024; Homeland Museum Priboj, 2024; Museum in Prijepolje, 2025; Museum of Applied Art, 2024; National Museum Niš, 2023; National Museum Pančevo, 2023; National Museum Šumadije, 2025; National Museum Zrenjanin, 2018, 2021). Every document was retrieved from an official museum or municipal repository.

Cases were selected purposively through a maximum-variation strategy covering geographical location, institutional scale, museum type and collection profile. The sample included complex museums with several disciplinary collections and a specialised applied-art museum. The latter served as a negative case for testing whether an explicit art-historian designation is necessary for substantial collection-specific jurisdiction. The sample was designed to compare different institutional configurations within a common national framework, not to estimate their frequency across all Serbian museums.

Documents were eligible when an official full text was publicly accessible, the operative documentary chain had been adopted, amended or expressly reconfirmed between 1 January 2021 and 25 August 2026, and the institution maintained an art or applied-art collection or systematised an art-historical post. Earlier base acts were retained only where post-2021 amendments confirmed their continued operation.

Vacancy announcements, staff webpages and employee biographies were excluded because they lacked equivalent normative authority. Information absent from an available operative chain was coded as not available rather than inferred from non-normative sources.

Each case was coded across seven dimensions: L1, statutory museum title and grade; L2, disciplinary designation in the local job title; L3, organisational embedding; L4, collection anchoring; L5, qualification closure; L6, task jurisdiction; and L7, continuity of the disciplinary designation across higher professional grades. A disciplinary designation was recorded only when art history or art historian appeared explicitly in a post or organisational-unit title. Collection anchoring required a named art, fine-art or applied-art collection or an express assignment of responsibility for such objects. Task jurisdiction comprised formally prescribed responsibilities for research, documentation, acquisition or valuation, protection, exhibition, publication and interpretation.

Qualification closure was classified as exclusive art history, art history among specified alternatives, broad humanities or arts, or not available. These categories describe formal eligibility for a post and do not imply equivalence among different forms of disciplinary training. Analysis proceeded in three stages: national instruments established the sectoral baseline; each museum was coded across the seven dimensions with document- and provision-level evidence retained; and the cases were compared through a matrix adapted from the Framework Method (Gale et al., 2013).

Alignment denoted convergence among disciplinary designation, qualification boundary and collection accountability where all three were observable. Formal decoupling denoted divergence between at least two of these elements. Title–credential decoupling occurred where an explicit disciplinary designation coexisted with non-exclusive disciplinary entry, while title–object decoupling occurred where collection-specific responsibility was prescribed under a generic occupational title. Claims of absence were made only where document scope permitted them.

Coding was conducted by the author. Interpretive reliability was strengthened through explicit decision rules, conservative treatment of missing information, preservation of provision-level evidence, cross-case comparison and deliberate examination of a negative case. The study analysed public institutional documents, involved no human participants and processed no personal data; ethical approval was therefore not required.

3. RESULTS

The national analysis showed that the Serbian framework established sectoral occupational closure without creating an art-history-specific statutory title. Article 51 requires appropriate education and a passed professional examination, while Article 52 permits the examination programme to be prescribed by professional fields. Article 53 defines curator as a basic professional title, and Article 54 defines senior curator and museum adviser as higher titles. Article 40(18)–(19) separates responsibility for the professional examination from the procedure for acquiring higher titles. Neither process is restricted to art-history graduates, nor does the field-specific examination programme not create an autonomous statutory title of art historian.

Institutional acts differentiated disciplinary expertise within this common hierarchy. Seven museums used an explicit art-historical designation, although art historian functioned as a modifier of curator, senior curator or museum adviser rather than as an independent professional title. The Museum of Applied Art represented the only case in which specialised art-related jurisdiction was organised exclusively through generic curatorial titles. Table 1 presents the complete cross-case comparison.

Table 1. Cross-case matrix of formal art-historical jurisdiction

Institution	L1–L2: statutory grade and disciplinary designation	L3–L4: organisational and collection anchoring	L5–L6: qualification and task jurisdiction	L7: continuity across grades
National Museum Niš	Curator/senior curator/museum adviser; curator–art historian	Department of Art History; assigned collections, art domain not separately named	Art history only; full task bundle	Preserved across the graded post
Homeland Museum Priboj	Curator; curator–art historian	Department of Art History; art-history collection	Art history or fine arts/academy profile; full task bundle	Not established in the analysed act
Museum in Prijepolje	Curator; curator–art historian	Department of Art History; art-related collection responsibility	Art history or fine arts/academy profile; full task bundle	Not established in the analysed act
National Museum Šumadije	Curator; curator (art historian)	Department of Art History; collection data unavailable	Qualification and tasks unavailable	Unavailable in the analysed amendment
City Museum Sombor	Curator/museum adviser; art historian retained in the title	Fine Arts Department; fine-arts collection domain	Art history only; full task bundle	Recorded at curator and museum-adviser levels
National Museum Zrenjanin	Curator/senior curator; art historian in both titles	Museum Activities Department; named Fine Arts and Applied Arts collections	Art history only; full task bundle	Recorded at curator and senior-curator levels
Museum of Applied Art	Curator/senior curator/museum adviser; no disciplinary designation	Collection-defined departments; named applied-art collections	Broad humanities or arts; full task bundle	Not applicable
National Museum Pančevo	Curator; curator–art historian	No separate art-history unit; object responsibility, collection not named	Art history only; full task bundle	Not established in the analysed act

Source: Author's research

Note. Full task bundle comprises formally prescribed responsibility for research, documentation, acquisition or valuation, object or collection protection, exhibition, publication and public interpretation. Unavailable fields were not inferred from other sources.

Organisational embedding assumed several forms. Niš, Priboj, Prijepolje and Kragujevac established a Department of Art History; Sombor used a Fine Arts Department; and Zrenjanin placed art historians within a broader Museum Activities Department while incorporating named collections into their posts. The Museum of Applied Art organised generic curatorial posts through collection-defined departments, whereas Pančevo prescribed a curator–art historian post without a separate disciplinary unit. Formal disciplinary recognition was therefore not dependent on an autonomous departmental structure.

Collection anchoring was explicit in five cases. Priboj assigned an art-history collection to the relevant curator, while Zrenjanin incorporated the Fine Arts and Applied Arts collections into the corresponding posts. Sombor and Prijepolje linked the analysed posts to art-related collection domains, and the Museum of Applied Art distributed responsibility through departments organised around named applied-art collections. Niš prescribed responsibility for assigned collections without separately identifying an art collection, while Pančevo prescribed art-historical research, valuation, protection and interpretation of museum objects without naming a collection.

Qualification requirements produced the clearest divergence. Niš, Sombor, Zrenjanin and Pančevo restricted the analysed posts to an art-history educational profile. Priboj and Prijepolje used the designation curator–art historian but admitted art-history and fine-arts or academy-trained profiles. The Museum of Applied Art combined generic curatorial titles and broad humanities or arts eligibility with substantial responsibility for specialised collections. Qualification closure was therefore exclusive in four cases, alternative in two, broad in one and unavailable in one.

The comparison identified three configurations. Relative alignment occurred where disciplinary designation, art-history qualification and collection or object accountability converged, most clearly in Zrenjanin and, through different arrangements, in Niš, Sombor and Pančevo. Title–credential decoupling occurred in Priboj and Prijepolje, where an art-historian designation coexisted with non-exclusive disciplinary entry. Title–object decoupling occurred in the Museum of Applied Art, where generic curatorial titles carried specialised collection and task jurisdiction. An explicit disciplinary title therefore did not necessarily establish exclusive disciplinary entry, while its absence did not demonstrate the absence of formal art-related authority.

4. DISCUSSIONS

The findings clarify the formally ambiguous position of art historians within the Serbian museum system. Art historian is not an autonomous statutory museum title, but art-historical education and expertise may determine eligibility for a post, organisational placement and responsibility for museum objects. Although Article 52 permits the professional-examination programme to be prescribed by professional fields, Articles 53 and 54 establish curator, senior curator and museum adviser as the relevant statutory titles. Neither passing the professional examination for curatorial work nor acquiring a higher curatorial title is legally reserved for art-history graduates. Art-historical jurisdiction must therefore be reconstructed from the interaction between the national title hierarchy and institutional acts regulating particular posts.

This configuration extends the application of jurisdiction theory to state-regulated museum work.

Abbott (1988) shows that professional jurisdiction may be settled differently in legal and workplace arenas. In Serbia, these arenas are formally connected because Article 48 authorises institutional general acts to translate national regulation into concrete organisational arrangements. National law determines recognised museum titles, entry requirements and progression through higher grades, while museum acts specify disciplinary designations, admissible qualifications, organisational placement and responsibility for collections. The result is a documented law-to-workplace chain in which different regulatory levels govern different components of professional authority.

Fourcade's (2009) distinction between nested jurisdictions and professional authority built into state-centred structures further specifies this relationship. Art-historical authority is not simply nested within another market profession. Museum expertise is incorporated nationally into a state-regulated curatorial hierarchy, while disciplinary authority is established institutionally through posts, qualifications, organisational units and collection assignments. Vertically distributed jurisdiction describes this allocation of regulatory functions: occupational recognition is established at one level, whereas disciplinary eligibility and object accountability are specified at another. The concept therefore identifies a mechanism connecting state regulation and institutional organisation rather than renaming Fourcade's category of nested jurisdiction.

The comparative cases revealed two forms of formal decoupling. The term is used in a restricted documentary sense to denote divergence among formally prescribed elements, not organisational failure or a gap between regulation and practice. Title–credential decoupling occurred in Priboj and Prijepolje, where the designation curator–art historian admitted educational profiles other than art history. Title–object decoupling occurred in the Museum of Applied Art, where generic curatorial titles carried extensive responsibility for specialised applied-art collections. These configurations demonstrate that nominal disciplinary recognition may overstate closure in one institution and conceal specialised authority in another.

The findings consequently qualify title-centred interpretations of museum professionalisation. Titles influence professional identity, labour-market visibility and perceptions of institutional value (Jensen, 2019; Khosrowjerdi et al., 2024; Ripley & Hurley, 2025; Yaron, 2024), but they cannot independently establish formal jurisdiction. Freidson's (2001) relationship among specialised knowledge, credentials and control over work provides a more adequate analytical basis. Collection accountability is especially important because it identifies the object domain within which acquisition, attribution, valuation, documentation, protection, research and interpretation are exercised. Although collection responsibility alone is insufficient, its combination with prescribed expert tasks constitutes a documentary carrier of specialised authority under either disciplinary or generic titles.

A common curatorial hierarchy should not be interpreted as deficient professionalisation. Multidisciplinary museums require shared structures for coordinating research, stewardship, documentation, exhibition and public functions (Evetts, 2011; Noordegraaf, 2015). The governance problem arises when identical designations communicate different qualification boundaries or when collection-specific responsibilities remain invisible. Institutional acts should therefore identify separately the statutory title and grade, the required disciplinary or interdisciplinary qualification, and the collection or object domain of accountability. This would improve recruitment, promotion, institutional statistics and professional mobility without introducing a separate statutory title for every academic discipline. It also extends Krstović's (2023) account of institutional misalignment by locating measurable divergence within the formal construction of individual posts.

The study is limited by purposive sampling, unequal public availability of institutional acts, temporal asymmetry and single-researcher coding. It identifies formal configurations rather than their national prevalence and cannot determine how responsibilities are informally distributed, how recruitment decisions are made or how employees understand their professional identities. Explicit coding rules, provision-level evidence, conservative treatment of missing information and negative-case analysis improved auditability but did not eliminate these limitations.

Future research should combine a national census of operative museum acts with longitudinal document comparison and interviews with curators, directors, examination bodies and higher-title commissions. Comparative application in other state-regulated cultural systems could establish whether disciplinary authority is carried primarily by titles, qualifications, organisational units, collections or their combinations, and test the wider applicability of vertically distributed jurisdiction.

5. CONCLUSIONS

The post-2021 Serbian museum system demonstrates that professionalisation cannot be inferred from an occupational title alone. Articles 51 and 52 connect museum work with appropriate education and a professional examination prescribed by fields, while Articles 53 and 54 define curator as a basic title and senior curator and museum adviser as higher titles. Article 40(18)–(19) separates the examination from higher-title acquisition. Neither route is legally reserved for art-history graduates, and art historian is not an autonomous statutory museum title.

Institutional acts translate this framework into different combinations of designation, qualification, organisational placement, tasks and collection responsibility. Priboj and Prijepolje show that curator–art historian may coexist with non-exclusive disciplinary entry, while the Museum of Applied Art demonstrates that specialised collection authority may be exercised through generic curatorial titles. Nominal disciplinary recognition is therefore neither necessary nor sufficient evidence of formal jurisdiction.

Vertically distributed jurisdiction describes a configuration in which occupational recognition is established through a state-regulated hierarchy, while disciplinary eligibility and object accountability are specified institutionally. Connecting Fourcade's (2009) distinction between nested and state-centred structures with Abbott's (1988) legal and workplace settlements, the seven-dimensional model reconstructs formal jurisdiction without treating title as its sole indicator.

The findings support explicit alignment rather than title proliferation. Institutional acts should distinguish statutory title and grade, required qualification, and the collection or object domain of accountability. Because the study identifies formal configurations within eight purposively selected museums, its conclusions require testing through a national census of operative acts and comparative research in other state-regulated cultural systems.

ACKNOWLEDGEMENTS

The author thanks Professor Predrag N. Dragojević for scholarly guidance.

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MARGINALIZATION OF THE HUMANITIES AS A FACTOR IN THE CONTEMPORARY GLOBAL CRISIS

Boris Latinović[1*], *Erna Bugarin*[1]

[1]Faculty of International Politics and Security, University "Union – Nikola Tesla", Belgrade, Serbia,
e-mail: boris.latinovic1984@gmail.com, ernabugarin3@gmail.com

Abstract: The position of the humanities within contemporary systems of knowledge reflects a broader transformation in the way knowledge, education, and social development are valued. The growing predominance of instrumental rationality has strengthened criteria based on economic utility, measurable performance, and immediate applicability, thereby narrowing the space for disciplines whose primary contribution lies in interpretation, critical reflection, and the formation of intellectual and value-oriented perspectives. The purpose of this paper is to examine the marginalization of the humanities as a relevant factor in the contemporary global crisis and to establish a connection between the declining social significance of humanistic knowledge and the weakening of critical capacities necessary for understanding complex processes of social change. The research relies on a qualitative analysis of relevant theoretical and scholarly literature, with particular attention to the relationship between the transformation of knowledge systems, the marketization of higher education, and the changing position of the humanities. The findings indicate that the marginalization of humanistic disciplines extends beyond institutional and academic concerns, affecting the capacity of societies to interpret historical experience, critically assess prevailing models of development, and articulate coherent value orientations. Such a reduction of the humanistic dimension of knowledge contributes to a narrower understanding of contemporary crises, particularly when technological and economic approaches become detached from their broader social and ethical implications. The paper concludes that the global crisis possesses an intellectual and value-based dimension that cannot be adequately addressed through technical expertise alone. Strengthening the institutional and educational position of the humanities therefore represents an important prerequisite for developing critical judgment, historical consciousness, and a more comprehensive understanding of contemporary social transformations. The paper recommends greater integration of humanistic perspectives into educational and research policies, together with stronger interdisciplinary cooperation between the humanities and other fields of knowledge. The study contributes to a broader understanding of how transformations in the contemporary structure and hierarchy of knowledge affect the capacity of societies to critically interpret their circumstances and respond responsibly to complex global challenges.

Keywords: *humanities, marginalization, instrumental rationality, knowledge hierarchy, global crisis.*
Field: Humanities

1. INTRODUCTION

Accelerated technological transformations, the expansion of market-oriented logic, and the growing dominance of instrumental knowledge have profoundly affected the ways in which contemporary society determines the value of education and scientific knowledge. The contemporary global crisis manifests itself in multiple forms, ranging from environmental catastrophes and social inequalities to technological control presented as a guarantor of security, as well as growing distrust in the state and its institutions. Beyond its material and political dimensions, however, the crisis also constitutes a crisis of meaning and values, the deeper causes of which may be associated with the marginalization of forms of knowledge oriented towards understanding human beings, their needs, and their relationship with the community. Contemporary society is increasingly confronted with a diminished capacity for critically reflecting upon the directions of its own development, while questions concerning its purposes and underlying value foundations remain subordinated to the imperatives of productivity, efficiency, and immediate utility. The question of the position of the humanities extends far beyond the boundaries of academic and educational policy. The manner in which the value of particular fields of knowledge is determined reflects broader conceptions of social progress and of humanity's place within it. The marginalization of the humanities, manifested in their weakened institutional position and the erosion of their broader social function, raises fundamental questions concerning the consequences of such a process for society's capacity to interpret its own historical experience, critically reassess dominant values, and understand the consequences of its developmental choices. Understanding the global crisis therefore requires a perspective broader than that provided by technical and economic expertise alone, since its causes and consequences extend into the very ways in which human beings construct their relationships with themselves, with others, and with

*Corresponding author: boris.latinovic1984@gmail.com

the world around them.

The aim of this paper is to examine the marginalization of the humanities as one of the factors contributing to the contemporary global crisis and to explore the relationship between the changing position of humanistic knowledge and the erosion of society's capacity for critical reflection. Particular attention is devoted to the transformation of the criteria by which knowledge and education are evaluated, the growing dominance of instrumental rationality, and the consequences of such a model for the social function of the humanities. The study is based on a qualitative analysis of relevant scholarly and theoretical literature. By examining the relationship between the transformation of knowledge systems, the market orientation of education, and the changing position of the humanities, the paper seeks to demonstrate how altered criteria of scholarly value affect society's capacity to critically assess its own development.

2. MATERIALS AND METHODS

The humanities comprise a constellation of disciplines concerned with the human being as a whole, as a being of meaning, values, history, culture, and social relations. Unlike the natural and technical sciences, whose primary task is to explain and master natural and technological processes, the humanities are oriented towards understanding human experience in all its complexity and contradictions (Newfield, 2025). Their significance lies precisely in their capacity to shape the interpretative frameworks through which individuals understand themselves, others, and the world in which they act. Education represents one of the principal media through which these frameworks are transmitted, reproduced, and transformed, while simultaneously cultivating the competencies necessary for responsible citizenship. The marginalization of the humanities constitutes the consequence of a deeper transformation of the social system of values, a process that became particularly pronounced with the rise of industrial capitalism and assumed its contemporary form through the neoliberal rationalization of social institutions (Wagenaar, 2022). Rosi Braidotti (2016) has conceptualized the transformation in the position of the humanities through the notion of cognitive capitalism, in which knowledge, information, and intellectual labor become resources for the production of economic value. Universities consequently risk being reduced to "merely epistemological centers," rather than institutions that "respond to the society they participate in creating, serve, and think about." Competitive funding mechanisms, evaluation indicators, rankings, publication productivity, project-based logic, and an increasing emphasis on measurable "outcomes" have become institutionalized. This transformation necessarily produces a specific hierarchy among academic disciplines. Technical, natural, and applied sciences are more readily accommodated within an evaluative model based on patents, innovation, investment, technological development, and employability (Blum, 2022). The humanities, by contrast, occupy a structurally disadvantaged position because many of their essential functions belong to a domain that resists immediate quantification: interpretation, critical thinking, cultural reproduction, the articulation of values, and the deconstruction of ideological patterns. Their object and purpose are therefore difficult to translate into the language of market-based indicators (Hewson, 2026). The same logic has increasingly been projected onto the individual. Human capacities and knowledge, and above all time and creativity, are treated primarily as market potential - as resources that can be invested in, valorized, and converted into economic gain. The contemporary individual learns in order to produce, produces in order to remain competitive, and is deemed competitive to the extent that his or her capacities can be rendered economically useful.

3. RESULTS

The transformation in the position of the humanities can be more clearly understood if the problem is removed from the level of the institutional distribution of resources and situated within the broader horizon of the transformation of the very regime of knowledge production. Michel Foucault demonstrated that knowledge cannot be considered independently of the relations of power that determine the conditions under which it is produced and circulated. The regime of truth encompasses institutional procedures, mechanisms of classification, and discursive practices through which it is determined what may be recognized as relevant, rational, and legitimate knowledge. Certain forms of knowledge become privileged because they correspond to dominant patterns of social organization, while others are pushed to the margins precisely because of their capacity to render those patterns objects of critical reflection. As early as 1979, Lyotard interpreted the transformation of contemporary knowledge in terms of a crisis of grand legitimizing narratives and the growing imperative of performativity (Abdelgawad, 2022). The critique of instrumental reason developed by Horkheimer provides an adequate framework for understanding this transformation in the epistemological function of rationality. The rational increasingly becomes that which enables the appropriate selection of means in relation to a predetermined end, while the question of whether the end itself is justified remains outside the domain of rational judgment. The humanities encounter a fundamental difficulty within such a conceptual framework, because they constitute themselves precisely within a domain in which the question of ends is inseparable from the question of their normative justification. Their epistemological function therefore rests not only upon the production of answers, but also upon the formulation of questions that cannot be readily translated into the categories of operational efficiency. The instrumentalization of knowledge has consequently produced a specific hierarchy of epistemological functions. Priority has been accorded to forms of knowledge that can be directly integrated into processes of governance, technological innovation, economic reproduction, and related forms of practical engagement (Hewson, 2026). In this respect, the humanities retain a function of epistemological correction within a system that possesses highly developed capacities for action, yet increasingly limited space for reflecting upon its own normative premises. The problem reaches its culmination in the institutionalization of measurability as a criterion of academic value, whereby scholarly work has increasingly been reduced to bibliometric indicators. Certain aspects of academic activity have been singled out as particularly relevant because they are amenable to quantification, while intellectual functions whose effects unfold through prolonged conceptual development are considerably more difficult to accommodate within the prevailing evaluative matrix. Beyond the banalization and diminished status of the humanities and social sciences, the consequence of this reconfiguration is the narrowing of the intellectual space within which the very premises of social rationality might be subjected to critical scrutiny (Lee etc., 2023).

4. DISCUSSIONS

The human being of the contemporary age has been constituted as a subject of permanent adaptation: expected to be productive, competitive, flexible, technologically literate, and capable of continuously increasing his or her own value. This profound transformation of subjectivity corresponds to the logic of neoliberal rationality, within which the individual internalizes market criteria and applies them to his or her own existence (Cueva Perus, 2024). Homo economicus (as Foucault conceptualizes and explicates the figure) operates as a subject who organizes conduct according to a calculative rationality. Critical reflection requires a certain distance from one's own historical moment. Yet the contemporary human being has, to a significant extent, deprived himself of the capacity for critical engagement by being shaped according to a logic of permanent adaptation that rarely, if ever, questions the order demanding such perpetual flexibility (Holdo, 2023). The system thereby frees itself from the necessity of justifying its own presuppositions. The individual accepts them, applies them to himself, and reproduces them through everyday conduct. It is precisely at this intersection that technocracy exerts its social power. It grounds the administration of society in expertise, procedure, quantification, technical rationality, and process optimization, while political and normative questions are displaced into the domain of managerial decision-making (Normand etc., 2024). A social problem is transformed into a technical task, a decision into a procedure, the citizen into data, and a collective objective into a performance indicator. The individual thus inhabits a space in which his behavior is subject to continuous processing, classification, prediction, and optimization. Freedom is preserved only in a formal sense, because its substantive content is shaped within an environment whose underlying assumptions the individual accepts before having the opportunity to question them (Rummens, 2024). Critical reflection should interrupt this automatism; it should introduce a question between the human being and the world that shapes him, creating space for doubt, hesitation, and judgment. Yet the system no longer needs to silence the critic. It is sufficient for it to produce a human being for whom the critical question itself has become unnecessary. The fundamental problem begins where society ceases to distinguish between what is possible and what is justified (Dantzler etc,. 2022). Technology may answer the question of how something can be done; it cannot, by itself, answer the question of whether it ought to be done. Once this distinction is eroded, technical knowledge occupies a space that does not properly belong to it, and the human being is left with increasingly sophisticated means while surrendering the criteria governing their use to the logic of the very system that produces those means (Zamotkin, 2025). A world constructed according to the imperatives of the ideology of progress is increasingly revealing the limits of its own expansion. The ecological crisis mirrors the human assumption that finite resources can be treated as infinitely available; social fragmentation reflects the cost of an order in which the individual is reduced either to a bearer of capital or to a consumer; political apathy reveals the transformation of the citizen from an active participant into a spectator of processes. The greatest paradox of contemporary civilization lies in the fact that, precisely at the historical moment when knowledge has become more accessible to human beings than ever before, their interest in understanding themselves as the subjects of that knowledge has weakened. The more powerful our means of knowing the world have become, the less certain we appear to be about why that knowledge matters, what purposes it should serve, and what kind of human being it ought ultimately to help constitute (Yemelyanova etc,. 2023).

5. CONCLUSION

The contemporary global crisis begins with a human being who has lost the capacity to subject his own power to serious judgment, and to pause long enough before the consequences of his own development to ask what kind of world his actions are bringing into existence. Humanity has expanded the boundaries of what is possible while displacing the question of what is justifiable from the center of its own thinking. It has built a world capable of initiating, accelerating, measuring, and controlling processes with unprecedented precision, yet increasingly incapable of determining what such power ought to serve, where its legitimate limits lie, and what kind of life it ultimately makes possible. The world is polluted, saturated with information, politically agitated, and psychologically exhausted, while the human being remains trapped between the imperative to advance incessantly and the inability to articulate the purpose toward which such advancement is ultimately directed. The humanities have been marginalized as forms of knowledge that fail to generate sufficiently immediate and measurable utility, even though their deepest value lies precisely in their capacity to return the human being, again and again, to the question of his own purpose. Having rejected this capacity, the human being now seeks relief from his exhaustion through the very logic that contributed to producing it: by becoming more productive, more successful, and more efficient, while transforming his own existence into an endless project of self-improvement. The humanities were meant to serve as a compass between the possible and the justifiable, between power and responsibility, between what the human being is capable of producing and the kind of world in which he ultimately wishes to live. Their displacement has left humanity with knowledge that can tell it how to proceed, while gradually surrendering the capacity to determine where it is worth going to the imperatives of utility, efficiency, and perpetual progress. The central paradox of the contemporary condition is therefore not that humanity knows too little, but that it possesses unprecedented capacities for knowledge while becoming progressively less capable of asking what that knowledge is for. The crisis is consequently not merely technological, economic, political, or ecological. At its deepest level, it is a crisis of judgment: a crisis arising from the widening distance between the expansion of human power and the erosion of the intellectual and ethical capacities required to govern that power. A civilization that can do almost anything but can no longer adequately ask whether it should do it has not overcome its limitations. The future of the humanities, therefore, is not simply a question of preserving academic disciplines, institutional positions, or cultural traditions. It is a question of whether the human being will retain the capacity to step outside the logic of immediate utility and recover the distance necessary to judge the world he is continuously producing. The humanities remain indispensable precisely because they preserve the space in which the human being can still ask the question that no technology, algorithm, market, or system of efficiency can answer on his behalf: not merely what can we do, but what is worth doing, and what kind of world is worth creating.

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