

THE ROLE OF ORGANIZATIONAL CULTURE ON EMPLOYEE ENGAGEMENT

Pakize BILALLI ABDURAIMI¹, Mahije MUSTAFI^{2*}, Xhavit ISLAMI³

¹*Faculty of Economics, “Ss. Cyril and Methodius” University in Skopje, Skopje, Republic of North Macedonia*

²*Faculty of Customs and Freight Forwarding, “Pjeter Budi” College in Pristina, St. “Gazmend Zajmi”,
no. 33 (Aktash-I), Prishtinë, Republic of Kosova*

³*Department of Management, Faculty of Economics, “AAB” College in Pristina, Republic of Kosova*

Received 30 June 2022; accepted 20 January 2023

Abstract. Despite the recognized importance of organizational culture (OC) for favorable organizational effects, empirically is relatively little known about its impact on employee engagement (EE), in Balkan countries, especially in the Republic of North Macedonia. To address this gap the purpose of this study is to explore the relationship between OC components and three dimensions of EE (vigor, dedication and absorption). To conduct this study a survey of 152 public secondary education employees who operate in the Republic of North Macedonia was done. The gathered data was analyzed using SPSS program. Results indicated that several components of the OC are significantly related to EE dimensions, such as employee vigor, dedication, and absorption. As a result, the study concludes that OC has a significant positive effect on EE dimensions both in and out of school. The outcomes of this study significantly contribute to a better understanding of the OC-EE relationship in the non-profit organizations.

Keywords: organizational culture, employee engagement, employee vigor, employee dedication, employee absorption.

JEL Classification: M14, O15, E24, J21, M51.

Introduction

There is a wide range of literature that strongly supports the idea that employees have a positive influence on the function and sustainability of the organization (Perrin-ISR, 2006). In order for an organization to thrive, its employees must develop their confidence, dignity, self-esteem, and prosper (Batool & Batool, 2012). Employees who feel they belong to the organization will try their best to show excellent performance for its benefit. Therefore, is essential for an organization to create an OC to maintain its position in the market. Where a flexible OC provides employees with such a work environment in which they can work easily and independently without feeling any burden (Mac-Ozigbo & Daniel, 2021).

The literature provides enough evidence that there is a close linkage between EE and organizational performance (e.g., see Akanpaadgi & Binpimbu, 2021; Kazimoto, 2016; Motyka, 2018; Truss et al., 2013), where EE may influence significantly the performance. According to Schaufeli et al. (2002) three EE dimensions, vigor, absorption, and dedication contributes significantly to organizational

performance. The importance of EE is evidenced by several authors (Avey et al., 2008; Bakker & Schaufeli, 2008; Luthans & Avolio, 2009; Luthans & Youssef, 2007; Seligman et al., 2005), who in their studies indicate that the focus of organizations in EE is more important than the focus on following the strategy of competitors. Therefore, scholars are focused on defining factors which may increase the EE in an organization (e.g., see Al-dalahmeh et al., 2018; Narayanamma et al., 2022; Saks & Gruman, 2014; Sun & Bunchapattanasakda, 2019). EE is defined as a positive mentality and attitude towards work, which is characterized by high levels of vigor, dedication and absorption (Schaufeli et al., 2002).

On the other side, OC has become more important because human capital, compared to the material, is the main source of value in an organization (Islami & Mulolli, 2021). Where, maximizing employees' intellectual wealth involves creating a culture that fosters their participation in intellectual activities, facilitates individual and/or organizational learning, generates new knowledge, and shares it with others. According to Demerouti et al. (2012) organizations with the best cultures and communication

*Corresponding author. E-mail: mahijemustafi@hotmail.com

practices engage their workers more, as do organizations with strategies that allow employees to voice their concerns and find opportunities to grow and develop. Therefore, the interrelationship between motivation, organizational culture, and engagement can be explained psychologically and economically (Laniado, 2017). According to him, the psychological reasons include work individualization, increasing interest in positive psychology, and the role of human resources, perceived as a key resource in enhancing business competitive advantage. While, the economic reason is “engagement deficit” resulting from low employee engagement rates in organizations. The cost of unengaged and uncommitted employees is high for corporations around the world (Laniado, 2017). In this vein, to gain a competitive edge in today’s global marketplace, organizations must concentrate on attracting, engaging, developing, and building loyalty among their employees, based on their OC. In light of this, the importance of testing the relationship between OC and EE is indisputable.

Although the effect of various aspects of the OC on performance is evidenced in several studies (e.g., see Alvesson, 2012; Janičijević, 2020; Nikpour, 2017) yet there is a lack of evidence that illuminates how high competitiveness and the wish to succeed drive organizations to pay close attention to OC with the aim to improve their EE. Despite so much research and study, there are contradictions about the impact of OC on EE. Since there are many contradictions in results, the question is whether or not OC increases EE or not. Therefore, this study analyzes the extent to which employees are engaged in the organizational process and examines the influential role that OC components have on EE dimensions. Especially, examines whether there is a statistical relationship between OC in predicting the EE, who work in public high schools in the republic of North Macedonia. The fact that education generally has many advantages is the primary driving force behind this study. Education is seen as a key factor in a nation’s socioeconomic development because of its role in improving human capital. In this vein, the purpose of this study is to highlight the significance of employee engagement for both productivity and academic achievement. Employees freely express themselves physically, cognitively, and emotionally while working at the school.

To recapitulate, the objective of this study is that relying on contemporary literature, and analyzing and adapting the extant research, to conduct observe the impact of OC on the EE in the public education sector, in the following way. First, it defines the elements of the OC (such as, autonomy, external orientation, cooperation between departments, human resource orientation and orientation to improvement) and EE dimensions (vigor, dedication and absorption). Second, explores the relationship between OC and employee vigor, dedication and absorption. Third, specifically it answers in the following questions: What is the nature of the relationship between OC and vigor? What is the nature of the relationship between OC and dedication? and What is the nature of the relationship between OC and absorption?

By realizing its objective, the current study provides useful theoretical and practical implications regarding the concept of OC, as well as its impact on EE. The literature review is presented in the following section, following by a synthesis of the theoretical-conceptual models. Then the verification of research hypotheses was done, examining the links between existing variables. It continues with the discussion of the results, the main conclusions, the limitations of the study, and the possible directions for future research.

1. Theoretical framework

This section briefly explains the definitions of OC and EE, their importance, and their relationship. The primary goal of the study is to examine the impact of organizational culture on the involvement of employees in the public sector of education by drawing on contemporary literature, interpreting it, and applying it to the realities of a developing nation. Because the concept of employee engagement has received limited attention in academic literature and because a measurement model of this kind would be useful for the practices of human resources departments, this study is essential for the education sector. The education industry is the target audience for the study’s conclusions and suggestions. This report supports efforts made by schools to improve employee engagement. There are various definitions of OC being proposed by various researchers over the years, but as a matter of fact, there is not any commonly accepted definition (Øgaard et al., 2005). OC is the core, which keeps the organization united and encourages employees to be committed and increase performance (Wilderom & Van den Berg, 1999). According to him the culture in an organization is represented by the special ways that the organization uses during its normal course, in the realization of the main functions, the ways which change and develop over time. These methods of performing functions reflect the shared knowledge and competencies of an organization (Wilderom & Van den Berg, 1999). Most employees of the organization are perceived as more representative of the culture, what is emphasized and promoted in the organization (Macey, 2009). This is achieved through the orientation of employees’ efforts towards certain elements, tasks or philosophies related to work. Studies on OC have used multiple dimensions in their assessments of the organization. It is important that dimensions cover the wide range of the cultural construct, and should refer to the dynamics of the working groups. Measurements and elaboration related to OC were realized based on the escalation and dimensions proposed by Wilderom and Van den Berg (1999) and developed with the model of Van den Berg and Wilderom (2004). The model has been adapted taking into account the local context. Operationalization is realized through the respective dimensions.

The first dimension, autonomy, is task related. It pertains to the degree to which employees have decision latitude at the job level (Wilderom & Van den Berg, 1999).

The second dimension, external orientation, is included because all organizational units operate in an external environment (Wilderom & Van den Berg, 1999). The open-systems theory and many publications on culture emphasise that a group's external orientation is very much a part of its internal functioning (Hofstede, 2002). Third, we include perceptions of interdepartmental coordination since horizontal differentiation may raise barriers to productive inter-group communication. Fourth, in many articles, one finds human resource content as an explicit part of the organizational culture construct (see, for example, Gordon, 1990; Gordon & DiTomaso, 1992; Marcoulides & Heck, 1993). Finally, Rousseau (1990) argued that the degree of improvement orientation among personnel reflects an organization's ambition level, and that at least a positive inclination towards organizational improvement is required. These fifth dimensions were chosen in order to include the degree of proactivity that is intended to achieve ever better organizational results.

On the other side, EE represents the involvement of workers in their job roles (Kahn, 1990). Scholars, such as, Robinson (2004) and Wellins (2005) define EE from the psychological dimension. Where, Wellins (2005) describe EE as an illusory force that motivates employees to higher levels of performance, while Robinson (2004) defines engagement as a positive attitude held by the employee towards the organization and its values. An engaged employee is aware of the business context, works with colleagues to improve performance within his work for the benefit of the organization.

The evidence regarding the antecedents and consequences of EE can be organized in an overall model of work engagement. In building this model, we draw on two assumptions. The first assumption is that job resources, such as, social support from colleagues and supervisors, performance feedback, skill variety, and autonomy, start a motivational process that leads to work engagement, and consequently to higher performance. The second assumption is that job resources become more salient and gain their motivational potential when employees are confronted with high job demands (e.g., workload, emotional demands, and mental demands).

Bakker et al. (2005) showed work overload, emotional job demands, physical job demands, and work-home conflict are all risk factors for job burnout (particularly exhaustion and cynicism), but that the undesirable impact of job demands on burnout can be alleviated by job resources, such as, job autonomy, social support, quality of the relationship with the supervisor, and performance feedback. Since then, the model has been applied in thousands of organizations, and inspired hundreds of empirical studies (e.g., see Bakker et al., 2014; Crawford et al., 2010; Nahrgang et al., 2011). We define engagement as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002).

Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest

effort in one's work, and persistence also in the face of difficulties (Schaufeli et al., 2002). Dedication is characterized by a sense of significance, enthusiasm, inspiration, pride, and challenge. Vigor and dedication are the direct positive opposites of exhaustion and cynicism, respectively (Schaufeli et al., 2002). Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. Being fully absorbed in one's work comes close to what has been called "flow", a state of optimal experience that is characterized by focused attention, clear mind, mind and body union, effortless concentration, complete control, loss of self-consciousness, distortion of time, and intrinsic enjoyment (Csikszentmihalyi, 1990).

Employee engagement and success are closely related; engaged employees are better able to assist their organizations in overcoming both immediate and long-term obstacles. The level of service will be impacted by their development of an emotional bond with their specific schools. They will contribute fresh accomplishments to the quality of their school by growing passion and commitment and working in sync with the plans and goals of the institution. In a competitive atmosphere, employees will demonstrate greater faith in their institution and be motivated by a sense of loyalty. Success will rise if the school has a favorable atmosphere and enthusiastic staff members.

1.1. Relationship between OC and EE dimensions and research hypotheses

Studies on OC have used multiple dimensions in their assessments of the organization. It is important that the dimensions cover the wide range of the cultural construct, and should refer to the dynamics of the working groups. Measurements and elaboration related to OC were realized based on the escalation and dimensions proposed by Wilderom and Van den Berg (1999) and developed with the model of Van den Berg and Wilderom (2004).

Familiarity of employees with the culture of the organization is an important factor in the relationship that will be born and will develop in future periods. Macey (2009) reminds that it is important to be aware of the fact that the image of the organization begins to be ingrained very early on in new employees. May (2004) argues that workplace culture determines employees' attitudes about the level of commitment to the organization. According to Ramarajan (2006) an organization which treats its employees with dignity and respect, creates a work culture that fosters loyalty and commitment. Such organizations are often associated with proactive practices and very high results, through integration into culture, efforts to retain and engage employees. The more the culture promotes the appreciation of people through trust, justice, work, procedures, the greater the opportunities for employee engagement (Macey, 2009).

An aspect that greatly depends on the particular characteristics that make up the culture as a whole is how the

organizational culture is expressed in relation to the commitment of the employees' loyalty to the company. Due to this, it is important to consider how each dimension affects the quality of the relationship between employees and organizations as it relates to various facets of culture when determining this connection (Sarang, 2010). The amount of employee engagement can be influenced by organizational culture by involving people and the organization in a system where shared interests emerge. According to May (2004), an organization's workplace culture affects how committed its employees are to it.

A company that treats its employees with respect and dignity fosters a work environment that encourages commitment and loyalty, claims Ramarajan (2006). Through the integration and interweaving of efforts to engage and retain people in their culture, such firms are frequently linked to proactive practices and very high results. According to Macey (2009), engagement happens when individuals feel empowered to act independently. The prospects for employee involvement are increased in direct proportion to how much the culture values people through trust, fairness, work, and procedures (Macey, 2009). When a culture is comprehensible, consistent, and unambiguous, it succeeds. Organizational culture is too crucial to leave to chance. Organizations must completely implement strategies and foster innovation by utilizing their culture (Chatman & Cha, 2003).

OC needs to be developed to provide support to an organization and to bring about continuous improvement. The culture of an organization is very important for the progress of an organization because it affects the EE and their retention as well (Mac-Ozigbo & Daniel, 2021). Agwu (2017) noted that OC has a tremendous effect on EE and firm performance. If the employees of the organization have more understanding with the OC, they will have more job satisfaction. Organizational environment and the employee's personal characteristics can affect his job satisfaction Auernhammer and Hall (2014). The theoretical basis that OC influences EE is found in the fact that the OC of a company as part of its intellectual capital determines its ability to build core competence and thus gain a competitive

advantage in the market (Janićijević, 2020). According to a review of field research to date, this impact exists, but the intensity is lower than first thought. Also, since OC and engagement are in themselves very complex, multidimensional variables, therefore their relationship is multilayered, multidimensional, and complex which needs to be further explored.

The findings of the research indicated that suggested model had appropriate fit and OC beyond its direct impact exerted indirect impact on organizational performance through the mediation of employee's organizational commitment that the extent of indirect impact was significantly higher than direct impact (Nikpour, 2017). Engelen et al. (2014) asserted that OC and EE have a strong link, whereas organizations with negative OC face a lack of EE. Despite so much research and study, there are contradictions about the impact of OC on EE. Since there are many contradictions in results, the question is whether or not OC increases EE or not. So there is a further need for research to fill this gap, mainly research has been conducted in developing countries.

Based on the above discussion, this study proposes these hypotheses:

- H1: OC has a positive influence on the vigor of employees.
- H2: OC has a positive influence on the dedication of employees.
- H3: OC has a positive influence on the absorption of employees.

1.2. The conceptual model of the study

The organization is influenced by several internal factors, but this research considers only two components (see Figure 1): (a) OC and (b) EE, which have shown great influence on organizational success (Gold et al., 2001). The conceptual model of this paper is adopted by authors and it is based on the models used by Van den Berg and Wilderom (2004) and Schaufeli et al. (2002). Where, according to Schaufeli et al. (2002) EE consists of three dimensions: energy, dedication and absorption. The image below shows the impact that observed variables of OC have on EE.

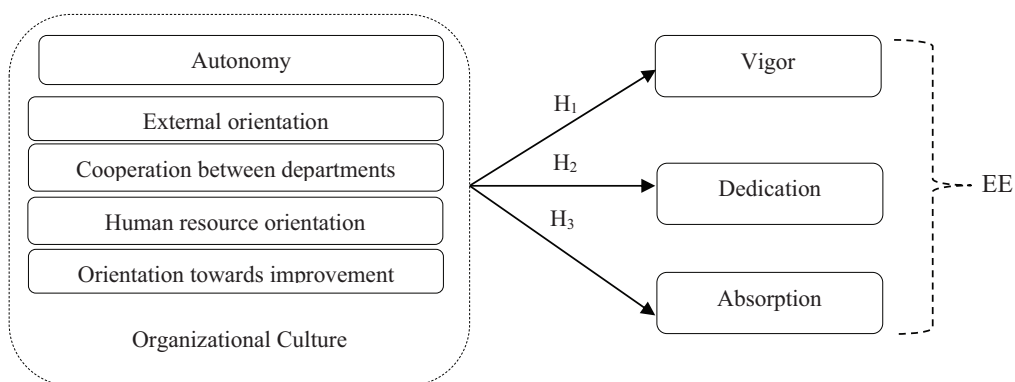


Figure 1. Conceptual model

2. Research methodology

This study uses a quantitative method where statistical procedures and research instruments are used as tools to measure the level of the relationship between culture and engagement. Thus, conclusions are drawn from a complete analysis of data collected through questionnaires, statistics and graphs. The questionnaires used in this study were designed to collect the primary data that enable the identification of key findings and the provision of management proposals. It is worth mentioning that the quantitative study was preceded by a long study (several years) and observational analysis of public high schools, where the attention was paid to the study of human resource practices if the concept of EE appeared as part of them and if it occupied a special place in the OC.

To obtain the opinion of the directors, administration and teachers regarding the engagement and the culture in their organizations, a combination of field and online questionnaires was conducted in the public high schools that operate in the republic of North Macedonia. The sampling method was chosen to provide comprehensive data. The study was conducted in the cities of Skopje, Tetovo and Gostivar, with the employees of these public schools. Data for sample calculation are based on SurveyMonkey: $N = 271$; $z = 1.96$ (with 95% certainty); $p = 0.5$ (5%); sample size = 160.

2.1. Questionnaires design

The preparation of the questionnaire is based on the theoretical model of the study. Based on the model of Van den Berg and Wilderom (2004) the section on OC questions was structured based on their tested model. The section of EE questions was prepared based on the theoretical model of Schaufeli et al. (2002), which served as the basis for compiling the research questions (see Appendix 1).

2.2. Characteristics of the sample

Why this country? The education in the Republic of Northern Macedonia, over the last years has faced many problems in different areas, such as, conditions, financial resources, teachers' skills and lack of proper management. Where, the report for the academic year 2016/2017 of the State Education Inspectorate conducted examining 162 public high schools stated that the quality of the educational process is not developed appropriately. Specifying that there are many reasons why schools do not function well. Starting from the learning equipment, continuing towards the realization of the curricula or the qualifications of the teaching staff, the supervisors, up to the level of knowledge and the level of student awareness, the public high schools resulted to be weak. Therefore, if the OC is directed to the improvement of EE in non-profit organizations, some of these problems can be solved.

The questionnaire surveyed over 160 respondents, but the final database contains the answers to only 152 of them, because the rest did not provide us with the

necessary information. The questionnaire was measured using the five-point Likert scale (1 to 5). The public high school staff who participated in the survey were from different genders, from different schools, from different ages, teachers of different subjects and in different job positions, making the sample as representative as possible (see Table 1).

Table 1. Key characteristics of the respondents (n = 152)
(source: first author)

Characteristics	Number	%
Gender		
Male	107	70.39
Female	45	29.61
Age		
To 30 years	19	12.50
31–40 years	57	37.50
41–50 years	53	34.87
More than 51 years	23	15.13
Job position		
Director	5	3.28
Teacher	130	85.53
Administration employee	17	11.19
Work experience		
To 10 years	49	32.24
11–20 years	77	50.66
21–30	24	15.79
More than 31 years	2	1.32
Education level		
Higher education	105	69.08
Master	39	25.66
PhD	8	5.26

3. Findings of this study

3.1. Internal analysis of OC and EE dimensions

To make the internal analysis of the research variables was used Mauchly's Test of Sphericity. Firstly, in Table 2a is evidenced that the range between the averages of the lowest and highest rated dimension is 0.55. The dimensions of autonomy and human resources orientation are slightly lower compared to the other three dimensions. However, at this stage is important to answer whether the stated differences are sufficiently pronounced to be treated as lawful, or are they random. Therefore, in Table 2b is conducted Mauchly's Test of Sphericity (a test of the statistical significance of the indicated differences in the evaluation of the five dimensions of the OC).

As it is shown in Table 2c the calculated ANOVA for repeated measures, with applied Huynh-Feldt correction shows a statistically significant difference ($F = 47.884$, $df = 3.672$, $p < 0.000$, Partial Eta = 0.490) between the five dimensions of the OC. The calculated Partial Eta index (0.490) is quite high, which suggests high effect strength

(Leech et al., 2005). Also, this result confirms that the indicated differences in the evaluation of the five dimensions of OC in this sample are not the result of chance. For clarification, the indicated Huin-Felt correction was selected in conditions of problematic sphericity of the data, ascertained through a purpose test, given by default in the SPSS protocol at ANOVA for

repeated measures. In terms of a statistically significant test of sphericity, it is considered that one of the starting assumptions for calculating this type of ANOVA is impaired, and since the value of the Epsilon index is higher than 0.75, it is recommended in the literature to take the Huin-Felt correction for the most authoritative approximation (Leech et al., 2005).

Table 2. A statistical analysis of the dimensions of OC (source: first author)

a) Descriptive statistics of OC dimensions							
Autonomy		3.2721		.68090		152	
External orientation		3.8315		.65754		152	
Cooperation between departments		3.7122		.82729		152	
Human resource orientation		3.3246		.85575		152	
Orientation towards improvement		3.7681		.74145		152	
b) Mauchly's Test of Sphericity ^a for OC							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	Df	Sig.	Epsilon		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
OC	.780	37.205	9	.000**	.894	.918	.250
c) ANOVA for repeated measures: significance of the differences between the five dimensions of the OC							
	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Partial Eta
Sphericity Assumed	41.970	4	10.492	47.884	.000**	.241	.490
Greenhouse-Geisser	41.970	3.575	11.741	47.884	.000**	.241	.490
Huynh-Feldt	41.970	3.672	11.429	47.884	.000**	.241	.490
Lower-bound	41.970	1.000	41.970	47.884	.000**	.241	.490
d) ANOVA for repeated measures: OC in the school – post-hoc test (Pairwise Comparisons)							
Mean Difference					95% Confidence Interval		
(I) org_culture	(J) org_culture	(I-J)	Std. Error	Sig. ^b	Lower Bound	Upper Bound	
1	2	-.559*	.061	.000**	-.680	-.439	
	3	-.440*	.061	.000**	-.561	-.320	
	4	-.053	.057	.357	-.165	.060	
	5	-.496*	.050	.000**	-.595	-.397	
2	1	.559*	.061	.000**	.439	.680	
	3	.119*	.049	.016*	.023	.216	
	4	.507*	.058	.000**	.392	.622	
	5	.063	.046	.171	-.028	.154	
3	1	.440*	.061	.000**	.320	.561	
	2	-.119*	.049	.016*	-.216	-.023	
	4	.388*	.058	.000**	.274	.501	
	5	-.056	.047	.240	-.150	.038	
4	1	.053	.057	.357	-.060	.165	
	2	-.507*	.058	.000**	-.622	-.392	
	3	-.388*	.058	.000**	-.501	-.274	
	5	-.443*	.047	.000**	-.536	-.351	
5	1	.496*	.050	.000**	.397	.595	
	2	-.063	.046	.171	-.154	.028	
	3	.056	.047	.240	-.038	.150	
	4	.443*	.047	.000**	.351	.536	

The calculated post-hoc test, presented in the Table 2d, accurately locates the degree of statistical significance between each individual pair of averages, in all possible combinations between the five dimensions of OC. What can be seen from this tabular overview mainly confirms the things that are visible at the primary inspection, namely that: (a) Autonomy is valued lower than all other dimensions of OC, except compared to the Human Resources Orientation; (b) Human Resource Orientation is valued lower than all other dimensions of OC except Autonomy; (c) Improvement Orientation is valued higher than Autonomy and Human Resource Orientation. The data, however, also reveal things that are not so certain at first glance, and which are not easy to detect without such additional calculations. One such observation is that (d) External Orientation, in addition to Autonomy and Human Resource Orientation, is more valued than Inter-Departmental Cooperation.

Secondly, Table 3a shows the analysis that follows the internal structure of the measuring instrument used, i.e., the questionnaire. The presented graphic presentation shows that the respondents, in general, on this

questionnaire show relatively uniform opinions and assessments regarding the different dimensions of EE in the organization (the difference between the averages of the lowest and highest valued dimension is only 0.21).

According to the established order, the testing of the statistical significance of the indicated differences in the evaluation of these three dimensions of EE in the organization follows (see Tables 3b and 3c). The calculated ANOVA for repeated measures shows a statistically significant difference ($F = 13.229$, $df = 2$, $p < 0.000$, $\text{Partial Eta} = 0.090$) between the three levels of the independent variable, i.e., among the average indicators of the evaluation of the three dimensions of EE in the non-profit organizations (schools). The calculated Partial Eta index (0.090) for this calculation, however, is very low, suggesting low effect strength (Leech et al., 2005). The low strength of the effect, of course, does not call into question the statistical significance between the differences in the evaluation of the three dimensions of EE in this sample, but it does problematize the magnitude of the tested difference, i.e., its potential for generalization at the population level (Ballow, 2017). The arithmetic means and standard deviations

Table 3. A statistical analysis of the dimensions of EE (source: first author)

a) Descriptive statistics of EE dimensions							
	Mean	Std. Deviation	N				
Vigor	4.0105	.66543	152				
Dedication	4.1987	.72551	152				
Absorption	3.9878	.73800	152				
b) Mauchly's Test of Sphericity ^a for EE							
Within Subjects Effect	Approx.				Epsilon		
	Mauchly's W	Chi-Square	df	Sig.	Greenhouse-Geisser	Huynh-Feldt	Lower-bound
EE	.979	3.250	2	.197	.979	.992	.500
c) ANOVA for repeated measures: significance of the differences between the five dimensions of the EE							
	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared	Partial Eta
Sphericity Assumed	4.074	2	2.037	13.229	.000**	.081	.090
Greenhouse-Geisser	4.074	1.958	2.081	13.229	.000**	.081	.090
Huynh-Feldt	4.074	1.983	2.054	13.229	.000**	.081	.090
Lower-bound	4.074	1.000	4.074	13.229	.000**	.081	.090
d) ANOVA for repeated measures: ENGAGEMENT at school – post-hoc test (Pairwise Comparisons)							
(I) Engagement	(J) Engagement	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval		
					Lower Bound	Upper Bound	
1	2	-.188**	.042	.000**	-.272	-.105	
	3	.023	.048	.636	-.072	.117	
2	1	.188**	.042	.000**	.105	.272	
	3	.211**	.045	.000**	.123	.299	
3	1	-.023	.048	.636	-.117	.072	
	2	-.211**	.045	.000**	-.299	-.123	

for the three dimensions (subscales) of Engagement are given in Table 3a. The calculated post-hoc test, presented in the following Table 3d, accurately locates the statistically significant difference between the dimension of Commitment on the one hand, and the other two dimensions, ie. Vigor and Dedication, on the other hand. An overview of the descriptive data (Table 3a) shows that Dedication is a higher valued dimension of Engagement in the organization (school), compared to the other two.

It is worth clarifying that following is a statistical calculation of the relationship between (a) OC (taken as a collective independent variable, with simultaneous inclusion of all five of its autonomous dimensions) and (b) each of the three individual dimensions of EE.

3.2. Testing hypotheses

To test the first hypothesis, to measure the impact of independent variables in dependent variable “vigor” multivariate regression analysis has been used. According to regression analysis independent variables that enter in analysis explain 32.4% of dependent variable “vigor”. F value is 15.495 (sig. 0.000) which means that the model is important statistically with the significance level $\alpha = 0.05$. Two OC dimensions were statistically significant at level 0.01 and 0.10. Where, autonomy is positively connected with dependent variable “vigor” by predicting it for 27.3% ($b = .273$ & $p = .003$), which means that for each 1% change in pursuing of the autonomy the employee vigor

will change by 27.3%, when the other variables remain the same. As well independent variable “external orientation” is positively related with dependent variable “vigor” by predicting it for 19.3% ($b = .193$ & $p = .058$), which means that for each 1% change in application of the focus strategy the firm performance will change by 19.3%. Whereas, three other OC dimensions resulted to be non-significant on this model. If it is analyzed closely Table 4 can be concluded that independent variable “autonomy” has a higher impact in increasing employees’ vigor compare to four other OC dimensions. With these results, we can confirm that the first hypothesis is partially supported.

To test the second hypothesis, to measure the impact of independent variables in dependent variable “dedication” multivariate regression analysis has been used. According to regression analysis independent variables that enter in analysis explain 27.6% of dependent variable “vigor”. F value is 12.491 (sig. 0.000) which means that the model is important statistically with the significance level $\alpha = 0.05$. Three OC dimensions were statistically significant at level 0.05. Where, autonomy is positively connected with dependent variable “dedication” by predicting it for 23.5% ($b = .235$ & $p = .013$), external orientation is positively connected with dependent variable “dedication” by predicting it for 24.1% ($b = .241$ & $p = .022$), and cooperation between departments is positively connected with dependent variable “dedication” by predicting it for 22.8% ($b = .228$ & $p = .045$). Whereas, two other OC dimensions resulted to be non-significant on this model. If it is

Table 4. Regression analysis of dependent variable “Vigor”, n = 152

Model I	R ²	ΔR^2	β	b	S. E	F	T	p	VIF
	.347	.324				15.495			
(constant)				1.594	.297		5.368	.000	
Autonomy			.273	.267	.089		3.010	.003	1.836
External orientation			.193	.195	.102		1.912	.058	2.270
Cooperation between departments			.107	.086	.088		.980	.329	2.652
Human resource orientation			-.007	-.006	.083		-.067	.946	2.566
Orientation towards improvement			.147	.132	.112		1.172	.243	3.510

Note: b = Un-standardized Coefficients, S. E = standard error of variables, β = standardized coefficients, t = t-statistic, p = significance level. R² = square, ΔR^2 = adjusted R square.

Table 5. Regression analysis of dependent variable “Dedication”, n = 152

Model II	R ²	ΔR^2	β	b	S. E	F	T	p	VIF
	.300	.276				12.491			
(constant)				1.739	.335		5.187	.000	
Autonomy			.235	.250	.100		2.502	.013	1.836
External orientation			.241	.266	.115		2.309	.022	2.270
Cooperation between departments			.228	.200	.099		2.025	.045	2.652
Human resource orientation			-.185	-.157	.094		-1.669	.097	2.566
Orientation towards improvement			.109	.106	.127		.838	.404	3.510

Note: b = Un-standardized Coefficients, S. E = standard error of variables, β = standardized coefficients, t = t-statistic, p = significance level. R² = square, ΔR^2 = adjusted R square.

Table 6. Regression analysis of dependent variable “Absorption”, n = 152

Model III	R ²	ΔR ²	β	b	S. E	F	t	p	VIF
	.225	.198				8.473			
(constant)				2.007	.359		5.595	.000	
Autonomy			.309	.335	.107		3.131	.002	1.836
External orientation			.112	.126	.123		1.024	.308	2.270
Cooperation between departments			.302	.269	.106		2.546	.012	2.652
Human resource orientation			-.177	-.152	.101		-1.513	.133	2.566
Orientation towards improvement			-.025	-.025	.136		-.181	.857	3.510

Note: b = Un-standardized Coefficients, S.E = standard error of variables, β = standardized coefficients, t = t-statistic, p = significance level. R² = square, ΔR² = adjusted R square.

analyzed closely Table 5 can be concluded that independent variable “external orientation” has a higher impact in increasing employees’ dedication compare to four other OC dimensions. With these results, we can confirm that the second hypothesis is partially supported.

To test the third hypothesis, to measure the impact of independent variables in dependent variable “absorption” multivariate regression analysis has been used. According to regression analysis independent variables that enter in analysis explain 19.8% of dependent variable “vigor”. F value is 8.473 (sig. 0.000) which means that the model is important statistically with the significance level $\alpha = 0.05$. Two OC dimensions were statistically significant at level 0.05. Where, autonomy is positively connected with dependent variable “absorption” by predicting it for 30.9% ($b = .309$ & $p = .002$), which means that for each 1% change in pursuing of the autonomy the employee vigor will change by 30.9%, when the other variables remain the same. As well independent variable “cooperation between departments” is positively related with dependent variable “absorption” by predicting it for 30.2% ($b = .302$ & $p = .012$), which means that for each 1% change in application of the focus strategy the firm performance will change by 30.2%. Whereas, three other OC dimensions resulted to be non-significant on this model. If it is analyzed closely Table 6 can be concluded that independent variable “autonomy” has a higher impact in increasing employees’ vigor compare to four other OC dimensions. With these results, we can confirm that the third hypothesis is partially supported.

Discussion and conclusions

The effects of OC on EE in public high schools in the Republic of Northern Macedonia were empirically measured and analyzed in this study. According to results, there is a positive relationship between several OC components and three dimensions of EE: vigor, dedication, and absorption. As a result, the study concludes that OC has a significant positive effect on EE dimensions both in and out of school.

While study findings differ slightly, the majority of studies reach the same conclusion: EE are an important source of an organization’s competitive advantage (Teng

et al., 2007; Salanova & Schaufeli, 2008). Structured qualitative interviews with a group of Dutch employees from various occupations who scored high on the Utrecht Work Engagement Scale (Schaufeli et al., 2002) revealed that EE have a lot of energy and believe in themselves (Schaufeli et al., 2002). This enables them to exert control over events that affect their lives. Because of their positive attitude and activity level, EE, for example, generate their own positive feedback in the form of appreciation, recognition, and success. Many interviewees stated that their enthusiasm and energy can be found outside of work, for example, in sports, creative hobbies, and volunteer work. Organizations with achievement-oriented cultures or collaborative cultures, according to Al Shehri et al. (2017), do not allow rules and regulations to impede work execution. As a result, employees in such organizations are free to use their discretion while working. According to Saavedra and Kwun (2000), employees who are given the freedom to use their discretion in the workplace have higher levels of enthusiasm, which is a sign of an engaged employee, and lower levels of fatigue.

According to the findings of this study, giving employees more autonomy can increase their engagement. The study emphasizes that there is a positive correlation between OC and EE dimensions for all secondary education employees. So, the key finding of this study is that several OC components have a statistically significant impact on EE dimensions in non-profit organizations.

Employee engagement at work is influenced by organizational culture. This suggestion speaks to the necessity of emphasizing company culture if we wish to raise employee engagement. As a crucial component of organizational culture, the level of autonomy in the company needs to be raised. In terms of organizational culture characteristics, autonomy is represented by an average, which is the least important one. The “Autonomy” dimension revealed that staff did not feel independent about their work, albeit it should be noted that this was not directly related to independence, and that this was clearly uncharacteristic of the organizational culture as described by high school staff. to employees in decision-making, but given that they frequently feel “pressured” at work and have few opportunities to exercise their own initiative, managers can make important decisions without consulting their staff.

Employees also claim that managers continually exert control over them and that they constantly feel under control, which they claim inhibits their freedom and involvement at work. For the aforementioned reasons, school administrators/principals should concentrate on raising the level of autonomy, for instance: through increased exercises, choice of lecture delivery methods, autonomy in the manner/methodology of assessment, freedom in creating schedules, choice of additional training/retraining programs, creation of an enabling and development environment for undertaking initiatives/creative, innovative, project, additional activities/sections, etc.

To improve autonomy, proper policies and procedures should be created, such as allowing teachers to utilize material or books they feel are more suitable. Some textbooks are out-of-date and contain preconceptions, prejudices, and stigmatizations that lack components of respect for variety, coexistence, integration, and multiculturalism. The demoralizing regulation on textbook processing and revision makes matters much worse. The creation and adding of new content to school textbooks is a laborious and labor-intensive process that falls short of the needs of the teaching staff in terms of the most recent information in some areas, which adds to a dated educational process.

Allowing teachers to change any of the work methods. During the teaching process, the teacher has the freedom and right to change and modify work techniques.

School principals should attain the appropriate professional level for this position, which has a positive impact on high school staff engagement; each principal must be fully equipped with professional and support services.

The study showed that the dimension of autonomy has a relatively lower value of the index compared to other dimensions. The concepts of freedom of action outside the rules of the organization, freedom of self-planning of work, freedom of decision-making, are dimensions that affect the shaping of the levels of OC. The autonomy dimension, which proved to be visibly uncharacteristic of the OC perceived by high school staff, showed that staff did not feel independent about work, and it should be noted that this was not directly related to independence. This is not directly related to employee's decision-making, but to the fact that employees often feel "pressured" and work gives them little or no opportunity to use personal initiative, and sometimes managers make decisions that affects them without asking for their opinion. In addition, employee's state that they are under constant control by managers and that they constantly feel as if they are controlled, and according to them this affects their freedom and engagement in work.

According to research results, managers should focus on increasing the level of autonomy, for example: through increased independence in the way of conceptualizing lectures/exercises, selection of methods for conducting lectures/exercises, autonomy in the manner/methodology for conducting the assessment, freedom in compiling the schedules, selection of additional training/retraining

programs, enabling and development environment for undertaking initiatives/ creative, innovative, project, additional activities/sections, etc.

This study contributes significantly to the scientific and academic value (Skenderi et al., 2016; Mustafa et al., 2022, Islami, 2021, 2022) of the effect of OC components in EE dimensions in North Macedonia, in the region, and beyond.

Research implications

The world economy is going through times of radical changes. Since competence has become the key element that is valued in a knowledge-based economy, the study of EE is of particular importance for macro-level policy-making, as well as for companies seeking talent. Over the last decade there has been a special focus, although limited in research, regarding the OC and EE. Therefore, the results of this study may help practitioners and academics in several ways.

Managers should pave the way to an employee-centric ethical culture. They should understand their employees' physical and mental needs and what motivates and demotivates them. They must build trust and serve as role models for their employees, which improves employee value-driven behaviors (Huhtala & Feldt, 2016). Managers who can meet these challenges will benefit from a loyal and engaged workforce who will go the extra mile. This mission is challenging and can be long-term (Kotter & Haskett, 1992) but can also preserve their organization for generations (Collins & Porras, 1995). This study pushes to design plans for studies and later orientations, this paper paves the way for more in-depth studies on the impact of OC and organizational communication on EE at work and their impact on organizational performance.

This study contributes to the literature in several ways. First, it opens up a long perspective about the study and academic analysis of EE in different country's high schools.

Second, it synthetically presents the most up-to-date literature on the subject. Careful analysis of this literature comes as one of the first contributions in the field of EE study.

Third, public schools can use the study as a measuring instrument for internal issues related to the effective management of human resources, identification of internal problems, analysis by model, and solutions referring to practice or suggestions in the literature.

Fourth, the sample size and diversification of the survey evidence makes the study essential. This gives researchers a lot of opportunities to analyze many implications regarding the elements of the model, performance with job growth and the impact on EE, and so on. Empirical strength increases the importance of the study because it makes the study more in-depth in relation to all the factors that have been taken into analysis and that affect EE.

Fifth, the study, in addition to the global character of the literature, measures all the elements related to the

reality in the country. This fact applies not only to researchers inside the country but also to those abroad, who will analyze cultural contexts related to EE.

Limitations of the study

The study presents some limitations regarding the context in which the study was conducted. One of its limitations is the fact that the study was conducted in a certain period of time, over several months, and that of course, in this context the data collected for the study are subject to that moment, which may reflect the commitment of employees during that time period. Secondly, the method of quantitative data collection was a survey method through completing the questionnaire and the online method of completing the questionnaire. Researchers face difficulties to this type of data collection method due to its high rate of non-response, complex and confusing and often lengthy questions (Cooper & Schindler, 2003). Respondents' responses may also vary in how they are perceived by different groups, such as age, gender, and level of hierarchy in the company. Thirdly, the number of participants in the study is relatively low (152). In light of this, close attention must be paid to the generalization of the findings from this study (Mulolli et al., 2015). Fourthly, the data gathered in a moment of time, not in different periods of time, the study would have been more valuable for understanding the dynamics of the OC components and EE dimensions. Finally, there is a further need for research to fill the gap that yet remains in this area, we suggest that future research be conducted mainly in developing countries in order to compare the results between different developing countries.

Disclosure statement

We confirm that this work is original and has not been published elsewhere nor it is currently under consideration for publication elsewhere. We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

We confirm that we have given due consideration to the protection of intellectual property associated with this work and that there are no impediments to publication, including the timing of publication, with respect to intellectual property. In so doing we confirm that we have followed the regulations of our institutions concerning intellectual property.

We understand that the Corresponding Author is the sole contact for the Editorial process (including Editorial Manager and direct communications with the office). He/she is responsible for communicating about progress, submissions of revisions and final approval of proofs. We confirm that we have provided a current, correct email address which is accessible by the Corresponding Author.

References

- Agwu, M. O. (2017). Organizational culture and employee performance in the NAFDAC, Nigeria. *Global Journal of Management and Business Research*, 14(2), 690–712.
- Akanpaadgi, E., & Binpimbu, F. (2021). Employee engagement and organizational performance. *Business, Management and Economics Research*, 7(3), 93–100. <https://doi.org/10.32861/bmer.73.93.100>
- Al Shehri, M., McLaughlin, P., Al-Ashaab, A., & Hamad, R. (2017). The impact of organizational culture on employee engagement in Saudi Banks. *Journal of Human Resources Management Research*, 1(1), 1–23. <https://doi.org/10.5171/2017.761672>
- Al-dalahmeh, M., Masadeh, R., Abu Khalaf, R. K., & Obaidat, B. Y. (2018). The effect of employee engagement on organizational performance via the mediating role of job satisfaction: The case of IT employees in Jordanian banking sector. *Modern Applied Science*, 12(6), 17–43. <https://doi.org/10.5539/mas.v12n6p17>
- Alvesson, M. (2012). Organizational culture and performance. In *Understanding organizational culture* (pp. 42–70). Sage. <https://doi.org/10.4135/9781446280072.n3>
- Auernhammer, J., & Hall, H. (2014). Organizational culture in knowledge creation, creativity and innovation: Towards the Freiraum model. *Journal of Information Science*, 40(2), 154–166. <https://doi.org/10.1177/0165551513508356>
- Avey, J. B., Luthans, F., & Mhatre, K. H. (2008). A call for longitudinal research in positive organizational behavior. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 29(5), 705–711. <https://doi.org/10.1002/job.517>
- Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 29(2), 147–154. <https://doi.org/10.1002/job.515>
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10(1), 170–180. <https://doi.org/10.1037/1076-8998.10.2.170>
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD-R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
- Balow, C. (2017). The “effect size” in educational research: What is it and how to use it. *Illuminate Education*.
- Batool, A., & Batool, B. (2012). Effects of employees training on the organizational competitive advantage: Empirical study of Private Sector of Islamabad, Pakistan. *Far East Journal of Psychology and Business*, 6(5), 59–72.
- Collins, J., & Porras, J. I. (1995). *Lanetzh nivnu* [Built to last: Successful habits of visionary companies] (Translated by D. Landes). Packer Press.
- Cooper, D. R., & Schindler, P. S. (2003). *Business research methods* (8th ed.). McGraw-Hill.
- Chatman, J. A., & Cha, S. E. (2003). Leading by leveraging culture. *California Management Review*, 45(4), 20–34. <https://doi.org/10.2307/41166186>
- Crawford, E. R., Lepine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burn-

- out: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(1), 834–848.
<https://doi.org/10.1037/a0019364>
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper.
- Demerouti, E., Bakker, A. B., & Fried, Y. (2012). Work orientations in the job demands-resources model. *Journal of Managerial Psychology*, 27(6), 557–575.
<https://doi.org/10.1108/02683941211252428>
- Engelen, A., Flatten, T. C., Thalmann, J., & Brettel, M. (2014). The effect of organizational culture on entrepreneurial orientation: A comparison between Germany and Thailand. *Journal of Small Business Management*, 52(4), 732–752.
<https://doi.org/10.1111/jsbm.12052>
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185–214.
<https://doi.org/10.1080/07421222.2001.11045669>
- Gordon, G. G., & DiTomaso, N. (1992). Predicting corporate performance from organizational culture. *Journal of Management Studies*, 29(6), 783–798.
<https://doi.org/10.1111/j.1467-6486.1992.tb00689.x>
- Gordon, G. G. (1990). The relationship of corporate culture to industry sector and corporate performance. In R. H. Kilmann, M. J. Saxton, & R. Serpa (Eds.), *Gain ing control of the corporate culture* (pp. 103–125). Jossey-Bass.
- Hofstede, G. (2002). Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. *The Academy of Management Review*, 27(3), 460–462.
<https://doi.org/10.2307/4134391>
- Huhtala, M., & Feldt, T. (2016). The path from ethical organizational culture to employee commitment: Mediating roles of value congruence and work engagement. *Scandinavian Journal of Work and Organizational Psychology*, 1(1).
<https://doi.org/10.16993/sjwop.6>
- Islami, X. (2021). How to integrate organizational instruments? The mediation of HRM practices effect on organizational performance by SCM practices. *Production & Manufacturing Research*, 9(1), 206–240.
<https://doi.org/10.1080/21693277.2021.1978007>
- Islami, X. (2022). Lean manufacturing and firms' financial performance: The role of strategic supplier partnership and information sharing. *Benchmarking: An International Journal*, (ahead-of-print). <https://doi.org/10.1108/BIJ-02-2022-0084>
- Islami, X., & Mulolli, E. (2021). Linking HRM practices to operational performance in the emerging economy. In *Proceedings of FEB Zagreb International Odyssey Conference on Economics and Business*, 3(1), 890–900. University of Zagreb, Faculty of Economics and Business.
- Janićijević, N. (2020). The impact of organizational culture on firm performance: Organizational culture as a magic wand or silent killer? In *Proceedings of the 54th International Academic Virtual Conference*. International Institute of Social and Economic Sciences. <https://doi.org/10.20472/IAC.2020.054.013>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.5465/256287>
- Kazimoto, P. (2016). Employee engagement and organizational performance of retails enterprises. *American Journal of Industrial and Business Management*, 6(4), 516–525.
<https://doi.org/10.4236/ajibm.2016.64047>
- Kotter, J. P., & Heskett, J. L. (1992). *Corporate culture and performance*. The Free Press.
- Laniado, E. (2017). The interrelationship between motivation, organizational culture and engagement. In *The next challenge for 21st century leaders* (No. 59/2017). Institute of Economic Research Working Papers.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2005). *SPSS for intermediate statistics: Use and interpretation* (2nd ed.). Lawrence Erlbaum Associates Publishers.
<https://doi.org/10.4324/9781410611420>
- Luthans, F., & Avolio, B. J. (2009). The “point” of positive organizational behavior. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 30(2), 291–307.
<https://doi.org/10.1002/job.589>
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of Management*, 33(3), 321–349.
<https://doi.org/10.1177/0149206307300814>
- Macey, W. S. (2009). *Employee engagement tools for analysis, practice and competitive advantage*. Wiley-Blackwell.
<https://doi.org/10.1002/9781444306538>
- Mac-Ozigbo, A., & Daniel, C. O. (2021). The effect of organizational culture on employees' performance of NAFDAC, Abuja. *World Journal of Management and Business Studies*, 1(1), 29–44.
- Marcoulides, G. A., & Heck, R. H. (1993). Organizational culture and performance: Proposing and testing a model. *Organization Science*, 4(2), 209–225.
<https://doi.org/10.1287/orsc.4.2.209>
- May, D. R. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1), 11–37.
<https://doi.org/10.1348/096317904322915892>
- Motyka, B. (2018). Employee engagement and performance: A systematic literature review. *International Journal of Management and Economics*, 54(3), 227–244.
<https://doi.org/10.2478/ijme-2018-0018>
- Mulolli, E., Islami, X., & Skenderi, N. (2015). Human resource management practices and SMEs performance: Study based in Kosovo. *International Review of Management and Business Research*, 4(4).
- Mustafa, N., Bajrami, A., & Islami, X. (2022). Electronic services management in local governance – evidence from a transitional economy. *International Journal of Sustainable Development and Planning*, 17(2), 615–621.
<https://doi.org/10.18280/ijssdp.170226>
- Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1), 71–94.
<https://doi.org/10.1037/a0021484>
- Narayanamma, P. L., Neelima, S., & Mounika, K. (2022). Employee engagement and organizational performance: A literature review. *Journal of Positive School Psychology*, 6(3), 3558–3563.
- Nikpour, A. (2017). The impact of organizational culture on organizational performance: The mediating role of employee's organizational commitment. *International Journal of Organizational Leadership*, 6(1), 65–72.
<https://doi.org/10.33844/ijol.2017.60432>
- Øgaard, T., Larsen, S., & Marnburg, E. (2005). Organizational culture and performance – evidence from the fast food restaurant industry. *Food Service Technology*, 5(1), 23–34.
<https://doi.org/10.1111/j.1471-5740.2005.00109.x>
- Perrin-ISR, T. (2006). *Engaged employees help boost the bottom line*. Towers Perrin-ISR, US.

Ramarajan, L. (2006). *What makes the job tough? The influence of organizational respect on burnout in the human services*. University of Pennsylvania.

Robinson, D. S. (2004). *The drivers of employee engagement*. IES.

Rousseau, D. (1990). Quantitative assessment of organizational culture: The case for multiple measures. In B. Schneider (Ed.), *Organization climate and culture* (pp. 153–192). Jossey-Bass.

Saavedra, R., & Kwun, S. K. (2000). Affective states in job characteristics theory. *Journal of Organizational Behavior*, 21(2), 131–146. [https://doi.org/10.1002/\(SICI\)1099-1379\(200003\)21:2<131::AID-JOB39>3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1099-1379(200003)21:2<131::AID-JOB39>3.0.CO;2-Q)

Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? *Human Resource Development Quarterly*, 25(2), 155–182. <https://doi.org/10.1002/hrdq.21187>

Salanova, M., & Schaufeli, W. B. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *International Journal of Human Resource Management*, 19(1), 116–131. <https://doi.org/10.1080/09585190701763982>

Sarangi, S. (2010). Reconfiguring self/identity/status/role: The case of professional role performance. *Discourse, Identities and Roles in Specialized Communication*, 125(1), 33–56.

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92. <https://doi.org/10.1023/A:1015630930326>

Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410–421. <https://doi.org/10.1037/0003-066X.60.5.410>

Skenderi, N., Islami, X., & Mulolli, E. (2016). The influence of macroeconomic factors in the failure of returning the bank credits in Kosovo. *Mediterranean Journal of Social Sciences*, 7(1), 320–327. <https://doi.org/10.5901/mjss.2016.v7n1p320>

Sun, L., & Bunchapattanasakda, C. (2019). Employee engagement: A literature review. *International Journal of Human Resource Studies*, 9(1), 63–80. <https://doi.org/10.5296/ijhrs.v9i1.14167>

Teng, C. I., Huang, K. W., & Tsai, I. L. (2007). Effects of personality on service quality in business transactions. *Service Industries Journal*, 27(7–8), 849–863. <https://doi.org/10.1080/02642060701570495>

Truss, C., Shantz, A., Soane, E., Alfes, K., & Delbridge, R. (2013). Employee engagement, organisational performance and individual well-being: Exploring the evidence, developing the theory. *The International Journal of Human Resource Management*, 24(14), 2657–2669. <https://doi.org/10.1080/09585192.2013.798921>

Van den Berg, P. T., & Wilderom, C. P. (2004). Defining, measuring, and comparing organizational cultures. *Applied Psychology*, 53(4), 570–582. <https://doi.org/10.1111/j.1464-0597.2004.00189.x>

Wellins, R. &. (2005). *Creating a culture for engagement*. Workforce Performance Solutions.

Wilderom, C. P. M., & Van den Berg, P. T. (1999). *Firm culture and leadership as firm performance predictors: A resource-based perspective* (Center Discussion Paper, Vol. 2000-03). Operations research. <https://pure.uvt.nl/ws/portalfiles/portal/534202/3.pdf>

APPENDIX 1. CFA RESULTS OF CONSTRUCTS

Items	Loading
Please express your opinion on the following expressions using a scale of 1 to 5 according to their importance: 1 – I absolutely disagree to 5 – I completely agree.	
Cultural Organization	
<i>Autonomy (a = 0.715)</i>	
There is freedom for employees to act outside the rules	.511
There is freedom for employees to implement decisions from their point of view	.738
Employees have significant decision-making influence at work	.727
Employees have the freedom to plan their own work	.639
Employees are given the opportunity to present their views before decisions are made	.715
Employees monitor in their own way the work they have to perform	.487
<i>External orientation (a = 0.583)</i>	
Job evaluation is taken seriously	.760
Employees look for opportunities to improve the organization	.708
The school also cooperates with other schools in the city	.746
<i>Cooperation between departments (a = 0.872)</i>	
There is fruitful cooperation between departments / units	.891
There is an exchange of information between departments	.860
Departments support each other in problem solving	.862
There is mutual communication between the director and the deputy director	.784

Items	Loading
<i>Human resource orientation (a = 0.637)</i>	
There are treatments and procedures dedicated to young workers	.859
Work on staff training	.835
The selection of new employees is done very carefully	.601
<i>Orientation towards improvement (a = 0.742)</i>	
Attention is paid to identifying the wants and needs of workers	.656
Work is being done to improve the condition of the school	.836
Employees have the right and necessary information about the functions they perform	.820
Employees look for opportunities to improve the organization	.694
Work Engagement	
<i>Vigor (a = 0.850)</i>	
In my work I feel overwhelmed with energy	.850
In my work I feel strong and energetic	.796
When I wake up in the morning, I go to work with desire	.784
I can continue to work for long periods of time during the work day	.733
In my work I am very fresh, mentally, I recover quickly	.811
<i>Dedication (a = 0.936)</i>	
In my work I am very persistent even when things do not go well	.762
The work I do seems to me to have clear and meaningful objectives	.910
I'm enthusiastic about the work that I do	.919
The work I do inspires me	.912
I'm proud of the work I do	.894
The work I do is challenging for me	.840
<i>Absorption (a = 0.878)</i>	
When I work time flies	.782
When I work, I forget about everything else around me	.845
I feel happy when I work harder	.849
I feel immersed in my work	.785
When I work, work totally takes me	.762
I find it difficult to separate myself from work	.712

Note: a – reliability.