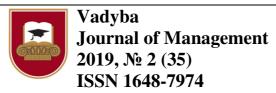
## **Social sciences**



# THE EFFECT OF COLLABORATION-ORIENTED MANAGERIAL ENVIRONMENT ON EMPLOYEE JOB SATISFACTION

# Igor Borisov<sup>1</sup>, Szergej Vinogradov<sup>2</sup>

<sup>1</sup> Szent Istvan University, Doctoral School of Management and Business Administration, <sup>2</sup> Szent István University Faculty of Economic and Social Sciences, Institute of Economics, Law and Methodology

#### **Abstract**

In our studies, we have assumed a causal chain that says managerial collaboration-oriented approach influence employee satisfaction which in turn influence intra-organizational outcomes (e.g., creativity and innovation). On the basis of existing works, we have made a score on the basis of mosaic statements presented in the European Working Conditions Survey (EWCS). In order to identify the main differences between EU countries, we made the distinction among five country groups based on their institutional conditions (i.e. social welfare system, labour culture issues etc.). The current research addressed the following hypotheses: (1) There are significant differences between the public and private sectors in employee's assessment of the quality of collaboration-oriented management environment and their job satisfaction. (2) There are statistically significant differences in the quality of the working environment and the level of job satisfaction among the groups of European countries.

To measure the collaboration-oriented managerial environment a set of 13 statements form the sixth EWCS questionnaire was selected. The same work has been done with job satisfaction. A factor analysis, cluster analysis, correlation analysis, Mann -Whitney and Kruskal-Wallis tests were applied to address the hypotheses. Cronbach's alpha was used to assess the internal consistency of each score.

Results indicated a significant relationship between the elements of the collaboration-oriented managerial environment and job satisfaction for each factor examined. The value of score the collaboration-oriented management environment is higher in the public sector than in the private sector. The organizational trust indicator is significantly higher in the private sector in all country groups, except CEE. Analysis based on Mann-Whitney test leads us to the conclusion that we cannot talk about stable established patterns distributed among groups of countries.

This research has started to understand how the organizational context impacts the collaboration-oriented managerial environment, organisational satisfaction, creativity, engagement further analysis of boundary conditions is needed. This may include organizational size, team size, geographic location and business environment and an expansion of the dependent variables. We suggest further research into these paradigms, understanding the employee impact of each paradigm under different organizational contexts.

KEY WORDS: innovation activity; creativity; working relationship; management environment; European Working Conditions Survey; job satisfaction; public & private sector.

## Introduction

People are not machines. In today's competitive environment it is impossible to achieve high results if you do not understand it. In our opinion, success and serious competitive advantages are achieved by those who create conditions for creative solutions.

Some of the studies have related managerial activities to organizational creativity and innovation, leaving the intermediate step as a "black box". In our studies testing this proposition, we have assumed a causal chain that says managerial collaboration-oriented approach influence employee satisfaction which in turn influence intra-organizational outcomes (e.g., creativity and innovation). We are not aware of any direct research with precise questions covering this topic. Therefore, first of all, on the basis of existing works, we made a score on the basis of mosaic statements presented in the European Working Conditions Survey.

For our purposes, the collaboration-oriented managerial environment is defined as the environment that helps to motivate employees to engage in innovation through the active constructive elements of working interactions. The collaboration-oriented management environment, along with "hard" elements of human capital, such as professional knowledge and competencies, also takes into account the "soft" components that determine the quality of interaction between people, such as motivation and values. We think

that we should carry out knowledge-sharing oriented staff with respect for personality and unique values based on the "personality"-oriented management, can create unity, harmonious work atmosphere, inspire staff self-esteem, responsibility, achievement desire, thereby enhancing the vitality of enterprises, forming a good corporate culture.

Modern organizations are obsessed with innovation. It seems to us that collaboration-oriented managerial environment helps to find a balance between the interests of the organization, represented by innovation, and, on the other hand, the interests of employees, represented by the degree of their satisfaction. The main reason for innovativeness is whether the internal environment that management creates motivates employees to engage in innovation (Alpkan et al. 2010; Amabile 1988; Dorenbosch et al. 2005). A relationship between the organization and the employee characterized by support and trust is important for innovative work behaviour (Scott and Bruce 1994).

The principle discussed in the theory of leadership emphasises the importance of the situation in the effectiveness of a leader's behavioural style; situational changes needs a diversity of styles (Mostovicz et al. 2009). Management with ineffective and detrimental leadership behaviour, termed as toxic, destructive, or tyrannical leadership, has an adverse impact, not only on the organization but also on the well-being of the employees (Chukwura 2016). Conversely, through trust-

building and recognition management can get participation from employees are innovation (Burroughs et al. 2011; Pieterse et al. 2010; Zhang and Bartol 2010).

The job satisfaction, as defined by Lock (cited in Gruneberg, 1979, p. 3), is a pleasurable positive emotional state as a result of work appraisal from one's job experiences. Researchers have found positive linkages between general workplace attitudes and individual performance outcomes (Iaffaldano Muchinsky 1985). One implication is that changes in management practices that increase employee satisfaction may increase business outcomes, including profit (Harter, et al. 2002). Employees satisfaction can enhance productivity organizational performance and (Cropanzano et al. 1993). Deeper job satisfaction is positively related to, for instance, employee motivation, performance, and pro-social work behaviour (Ilies et al. 2009; Judge et al. 2001).

At the same time, the satisfaction of smart and complex work is much greater. The sense of the found calling is in itself the strongest inner inspirer. Several empirical studies show that employees report higher levels of job satisfaction the better the job matches their skills (Belfield and Harris 2002; Vieira 2005). Csikszentmihalyi (1990) claims that the state of satisfaction and happiness is achieved by the employees only when they maximally put their abilities in performing the activities and functions at work. Higher job satisfaction was found for individuals whose work environments complemented the creative requirements of their jobs (Shalley et al. 2000). In this regard, for example, employees working in innovation-oriented cultures have been found to demonstrate higher levels of satisfaction and commitment (Odom et al. 1990; Quinn & Spreitzer 1991).

And on the contrary job satisfaction with a type of work and excessive job security is adversely affected by perceived skill underutilization (Allen and van der Velden 2001; Vieira 2005).

In this way, identifying factors that positively affect workers' jobs' satisfaction might provide important benefits to organizations. We argue that collaboration-oriented managerial environment might be such factor.

Social researchers are increasingly using a trust to explain various levels of cooperation evidenced in differing social and political environments (Navickas et al. 2014). In order for people to cooperate to achieve their goals, they need not only to know one another but also to trust each other so that they will not exploit or cheat in their relationship and can expect truly to benefit from their cooperation (Field 2003). Trust, defined as the willingness to be vulnerable based on positive expectations regarding the intentions of another party (Mayer et al. 1995; Rousseau et al. 1998), is of critical importance for organizations. Trust can be horizontal between an individual and their team members or vertical between an individual member and their supervisor (Mayer et al. 1995; Schoorman et al. 2007). Without trust, their behaviour shifts towards self-protection (Colquitt et al. 2011). The norm of reciprocity allows for individuals to be more trusting of, and committed to, one another (Cropanzano and Mitchell 2005). Trust maintains social exchange (Konovsky and Pugh 1994) and can affect the relationship between behaviour and performance (Homans 1958). In line with Scott and Bruce (1994), among others, the trust conditions individual innovative work behaviour aimed at improving workplace performance. Job autonomy, closely related to trust, can be an antecedent to individual entrepreneurial behaviour (De Jong et al. 2015). When employees trust their team colleagues and supervisors, they are more likely to engage in risk-taking and innovative behaviour aimed at exceeding task demands (Mayer et al. 1995).

According to our idea management may create a psychologically safe organizational environment with regard to innovative work behaviour to apply personal-orientation mechanisms. Thus the empirical researchers have examined environmental characteristics that can affect creativity at work (Oldham & Cummings 1996; Shalley 1991). An organizational environment characterized by autonomy provides employees with the necessary decision latitude for the development of new innovative ideas (Janssen and Van Yperen 2004).

However, not everything is so clear on this issue. The behaviour introduced innovative two negative interpersonal work consequences (Yuan and Woodman 2010). Through efficiency improvement, innovative work behaviour increased work-related conflicts and decreased general job satisfaction (Cheng et al. 2010; Shalley et al. 2000). In general, people do not like change. Therefore, the prospects of organizational change can lead to some negative emotions among employees, such as the level of tension or disagreement in relationships (Avermaete et al. 2003). That is why it is important for us to clarify this duality.

Differences between the public and the private sector are well documented in the literature (e.g., Rainey 2003). A major difference is that while the purpose of the public sector is to provide services to citizens, the private sector aims mostly at maximizing financial gain (Ghobadian, et al. 2007). Even in a crisis occurs, public sector, follows special laws and regulations ensuring the stability of the personnel. That is why in most EU countries, public sector careers are becomes considered as more secure than careers in private companies in recent years (Habanik, et al. 2018). Although considerable similarities between the sectors do exist (e.g., in structure, client orientation, heterogeneity of outcomes, managerial techniques, and performance measurement), differences have always fascinated researchers seeking to identify the uniqueness of each sector. For public administration scholars and professionals, the differences, more than the generic similarities, are perceived as crucial for change, reforms, and a better prognosis for the sector. One of the major differences is in managerial and human resource mechanisms, such as employment conditions, type of employment contracts, and motivation to work and serve (Perry 1990).

## **Hypotheses**

In the model of our study, collaboration-oriented managerial environment is the 'input'. Also, our study looks at two outputs: innovative activity is the first 'output', job satisfaction is the second one.

Specifically, we test the following hypotheses:

H1: There are significant differences between the public and private sectors in employee's assessment of the quality of collaboration-oriented management environment and their job satisfaction.

The proof of this hypothesis will indicate the need for managerial differentiation depending on the sector. Based on this finding, the collaboration-oriented management environment can be considered as a possible contributor to a high-quality public service system, which finally might lead to an increase in citizens' satisfaction. We examine this hypothesis by the groups of European countries defined in comprehensive institutional studies.

H2: There are statistically significant differences in the quality of the working environment and the level of job satisfaction among the groups of European countries.

Economical researches have always been interested in the differences in organizations that revolve around the conceptual frameworks used to understand institutional variation across countries. On such frameworks depend the answers to a range of important firm-related questions. Do companies located in different nations display systematic differences in their strategies? If so, what inspires such differences? How can national differences in the pace or character of innovation be explained? What factors condition the adjustment paths a political economy takes in the face of such challenges? Investigation of this hypothesis helps to give the development a new framework for understanding the institutional similarities and differences among the European economies, one that offers a new and intriguing set of answers to such questions.

#### Materials and methods

A considerable part of our analysis is based on the data source of the 6<sup>th</sup> European Working Conditions Survey (EWCS; source: EWCS 2015). EWCS is a cross-sectional survey taken in every five years since 1990 organized by European Foundation for the Improvement of Living and Working Conditions (Eurofound, Dublin), covering the EU members and various other European countries. (Eurofound 2017).

**Table 1**. Measurements and descriptive statistics for the components of collaboration-oriented managerial environment and job satisfaction

Dimensions	Sub-	Statements
	dimensions	
	(scores)	
Collaboration-	Managerial	Q61b Your manager helps and supports you (1= strongly disagree, 5= strongly agree)
oriented	support and	Q63a Your immediate boss respects you as a person (1= strongly disagree, 5= strongly agree)
managerial	recognition	Q63b Your immediate boss gives you praise and recognition when you do a good job (1= strongly disagree, 5=
environment		strongly agree)
		Q63c Your immediate boss is successful in getting people to work together (1= strongly disagree, 5= strongly agree)
		Q63d Your immediate boss Is helpful in getting the job done (1= strongly disagree, 5= strongly agree)
		Q63e Your immediate boss provides useful feedback on your work (1= strongly disagree, 5= strongly agree)
		Q63f Your immediate boss encourages and supports your development (1= strongly disagree, 5= strongly agree)
	Organizational	Q70a Employees are appreciated when they have done a good job (1= strongly disagree, 5= strongly agree)
	trust	Q70b The management trusts the employees to do their work well (1= strongly disagree, 5= strongly agree)
		Q70c Conflicts are resolved in a fair way (1= strongly disagree, 5= strongly agree)
		Q70d The work is distributed fairly (1= strongly disagree, 5= strongly agree)
		Q70e There is good cooperation between you and your colleagues (1= strongly disagree, 5= strongly agree)
		Q70f In general, employees trust management (1= strongly disagree, 5= strongly agree)
Employee Job	Organizational	Q89a Considering all my efforts and achievements in my job, I feel I get paid appropriately (1= strongly agree, 5=
Satisfaction	satisfaction	strongly disagree)
		Q89b My job offers good prospects for career advancement (1= strongly agree, 5= strongly disagree)
		Q89c I receive the recognition I deserve for my work (1= strongly agree, 5= strongly disagree)
		Q89e The organisation I work for motivates me to give my best job performance (1= strongly agree, 5= strongly
		disagree)
	Job	Q89d I generally get on well with my work colleagues (1= strongly agree, 5= strongly disagree)
	engagement	Q90a At my work I feel full of energy (1= always, 5= never)
		Q90b I am enthusiastic about my job (1= always, 5= never)
		Q90c Time flies when I am working (1= always, 5= never)
		Q90f In my opinion, I am good at my job (1= always, 5= never)

Source: authors' construction based on the questionnaire of European Working Conditions Survey (EWCS)

To measure the collaboration-oriented managerial environment was selected the characterising approvals. The same work has been done with job satisfaction. Based on these responses to the allegations, a factor analysis (Principal Component Analysis) has conducted. The statements have been grouped into two-two scores for managerial environment, and job satisfaction according to the factor structure are listed in Table 1. According to the results of factor analysis, the following groups of statements are obtained. Cronbach's alpha

reliability coefficient has been used to examine the internal consistency ("reliability") of the groups of statements. The values of scores were normalized into scale [0, 1]. Because the Kolmogorov-Smirnov test showed non-normal data distribution within European country groups, the Kruskal-Wallis test followed by post hoc Dunn-Bonferroni tests was applied for inter-group comparisons. To investigate differences in subdimensions of the collaborate-oriented managerial environment, the

job satisfaction, also the level of creativity the Mann-Whitney nonparametric test has been used.

We performed a correlation analysis between obtained scores and to measure the strength and direction of dimensions of collaboration-oriented managerial environment and job satisfaction. Cronbach's alpha was used to assess the internal consistency of each score.

**Table 2.** Sample size and Descriptive Statistics of Score of Managerial Support and Recognition [0,1] based on the data from round 6 of the EWCS

	Abbreviat		Priv	ate			Pub	lic	
Country	ion	N	Cronb. α	Mean	SD	N	Cronb. α	Mean	SD
Belgium	BE	1166	0.91	0.72	0.23	585	0.91	0.71	0.24
Bulgaria	BG	589	0.90	0.79	0.20	224	0.92	0.81	0.19
Czech Republic	CZ	555	0.89	0.74	0.20	205	0.90	0.73	0.20
Denmark	DK	501	0.89	0.74	0.22	306	0.89	0.71	0.22
Germany	DE	1226	0.89	0.69	0.21	207	0.90	0.67	0.21
Estonia	EE	515	0.87	0.67	0.21	241	0.81	0.70	0.18
Greece	EL	415	0.88	0.76	0.17	109	0.90	0.78	0.15
Spain	ES	1828	0.91	0.75	0.24	542	0.88	0.76	0.22
France	FR	795	0.90	0.68	0.25	377	0.90	0.70	0.22
Ireland	IE	540	0.92	0.79	0.22	236	0.95	0.76	0.26
Italy	IT	566	0.86	0.66	0.17	213	0.87	0.67	0.18
Cyprus	CY	574	0.91	0.77	0.18	144	0.91	0.78	0.19
Latvia	LV	465	0.89	0.68	0.23	247	0.88	0.73	0.20
Lithuania	LT	510	0.89	0.70	0.19	264	0.86	0.76	0.17
Luxembourg	LU	454	0.89	0.73	0.23	293	0.89	0.74	0.22
Hungary	HU	478	0.93	0.72	0.23	261	0.91	0.78	0.19
Malta	MT	504	0.91	0.81	0.21	263	0.91	0.78	0.21
Netherlands	NL	446	0.87	0.73	0.22	142	0.87	0.75	0.21
Austria	AT	614	0.90	0.73	0.22	169	0.89	0.73	0.22
Poland	PL	671	0.91	0.68	0.21	209	0.92	0.73	0.20
Portugal	PT	494	0.86	0.78	0.19	174	0.84	0.79	0.17
Romania	RO	592	0.88	0.78	0.18	195	0.86	0.80	0.18
Slovenia	SI	700	0.92	0.75	0.26	478	0.90	0.75	0.23
Slovakia	SK	491	0.91	0.66	0.19	249	0.90	0.72	0.18
Finland	FI	432	0.92	0.75	0.23	305	0.90	0.73	0.21
Sweden	SE	520	0.87	0.70	0.20	324	0.87	0.69	0.20
United Kingdom	UK	806	0.93	0.75	0.23	382	0.92	0.77	0.20
Croatia	HR	487	0.89	0.70	0.22	238	0.91	0.72	0.22
EU-28	-	17936	0.90	0.73	0.22	7584	0.89	0.74	0.21

Source: authors' calculations based on the microdata of the sixth (2015) European Working Conditions Survey (EWCS)

According to the results of the analysis, the ranking of the results according to the European innovation scoreboard (2015) has been made (Table 2). In the course of research development, we noted a significant difference between the factors affecting the management environment, and the satisfaction of employees in the public and private sectors. Therefore, we separated and comparatively review the results as for the first and second sectors. Thus, the study was conducted at two levels. The first (personal level) – the level of employees (respondents) according to European Working Conditions Survey 2015. The second (country level) is based on the average values of obtained scores.

In addition, we apply the Index of creativity (Lorenz-Lundvall 2010; Makó et al. 2018), which is also based on questions from the European Working Conditions Survey.

In order to characterize the main attributes of a creative workplace, the authors used six binary variables (Table 3). A binary variable transformed from a five-level ordinal scale, as follows: 'Almost always' and 'Often' were recoded into 'yes'; 'sometimes', 'rarely', and 'almost never' were recoded into 'no'.

**Table 3.** Index of creativity based on Lorenz-Lundvall (2010), Makó et al. (2018)

Dimension	Sub-dimension Questions and items
	[Generally, does your main paid job involve] Q53c - Solving unforeseen problems on your own.
	[Generally, does your main paid job involve] Q53e - Complex tasks.
x ivity	[Generally, does your main paid job involve] Q53f - Learning new things.
Index	[Generally, does your main paid job involve] Q54a - Your order of tasks.
of	[Generally, does your main paid job involve] Q54b - Your methods of work.
	[select the response which best describes your work
	situation] Q61i - You are able to apply your own ideas in your work.

Source: authors' construction based Lorenz-Lundvall (2010), Makó et al. (2018)

We distinguished work organizations operating in the private and public sectors. Based on the related question asked in each of the three waves of the EWCS ("Are you working in the...? private sector; public sector; joint

private-public organisation or company; not-for-profit sector, NGO; other") we were able to distinguish between private and public sector employees ("joint private-public organisation or company"; "not-for-profit sector, NGO" and "other" answers were excluded from the results).

In order to identify the main differences between EU countries, we made the distinction among five country groups on the basis of their institutional conditions (i.e. social welfare system, labour culture issues etc.). Our typology is analogous to country grouping used in comprehensive institutional studies as well as organizational studies using the same database (Gallie & Zhou 2013, Makó et al. 2018).

#### Results

In this section, the authors review the results and analysis of hypothesis testing.

H1: There are significant differences between the public and private sectors in employee's assessment of

the quality of collaboration-oriented management environ-

ment and their job satisfaction.

Based on the results of Mann-Whitney test, the level of the Collaboration-oriented management environment – measured by the Managerial support and recognition and Organizational trust subdimensions – is higher in the public sector than in the private sector (Table 4).

The Organizational trust indicator is significantly higher in the private sector in all country groups, except CEE.

The mean score of the Managerial support and recognition showed significant difference only for Nordic countries (Z = -3.245, p = 0.001), where the private sector has a higher score (Mean=0.73) comparing to public sector (Mean=0.71) and for the CEE countries (Z = -7.067, p = <0.001), where the mean score for public sector (Mean=0.75) is higher comparing to the mean value for private sector (Mean=0.72).

**Table 4.** Comparison of collaborate-oriented managerial environment and job satisfaction, also level of creativity in private and public sectors by European country groups

Score	European country groups	Mear	rank	Mann-Whitney U	Z	p-value
		Private	Public	_		
Managerial support and	Nordic countries	1268.0	1173.4	670761.5	-3.245	0.001
recognition	Anglo-Saxon countries	989.6	989.3	419775.0	-0.008	0.994
	Continental countries	3349.4	3377.3	4421784.0	-0.525	0.600
	Mediterranean countries	2974.6	2922.5	3239480.0	-1.019	0.308
	CEE countries	4408.2	4824.3	8139619.5	-7.067	< 0.001
Organizational trust	Nordic countries	1293.4	1125.5	621840.5	-5.767	< 0.001
	Anglo-Saxon countries	1027.3	922.0	381483.0	-3.824	< 0.001
	Continental countries	3398.7	3114.9	4038919.0	-5.420	< 0.001
	Mediterranean countries	2997.8	2838.6	3177139.0	-3.158	0.002
	CEE countries	4405.8	4664.8	8248920.0	-4.432	< 0.001
Organizational satisfaction	Nordic countries	1343.1	1167.1	669919.5	-5.947	< 0.001
	Anglo-Saxon countries	1025.8	971.8	412469.5	-1.932	0.053
	Continental countries	3506.5	3530.4	4848393.5	-0.441	0.659
	Mediterranean countries	3076.8	3152.4	3540470.0	-1.451	0.147
	CEE countries	4643.3	4664.5	9320340.0	-0.356	0.722
Job engagement	Nordic countries	1285.2	1307.2	789021.5	-0.741	0.459
	Anglo-Saxon countries	1016.0	1095.8	430147.0	-2.827	0.005
	Continental countries	3539.1	3618.7	4941638.5	-1.470	0.142
	Mediterranean countries	3020.2	3356.4	3310521.0	-6.516	< 0.001
	CEE countries	4595.2	5092.9	8772901.5	-8.286	< 0.001
Creativity index based	Nordic countries	1228.5	1366.0	705378.5	-5.009	< 0.001
on Lorenz-Lundvall (2010), Makó et al.	Anglo-Saxon countries	989.9	1149.2	391984.0	-5.801	< 0.001
(2018) Wiako et al.	Continental countries	3480.1	4012.6	4440119.0	-9.957	< 0.001
	Mediterranean countries	3034.9	3657.1	3057379.5	-11.866	< 0.001
	CEE countries	4439.8	5210.8	7888407.0	-13.049	< 0.001

Source: authors' calculations based on the microdata of the sixth (2015) European Working Conditions Survey (EWCS)

In all groups of the EU countries the mean values of the Creativity index are higher in the public sector than in the private sector. These results are consistent with Makó et al. (2019). A significant difference was found for the Nordic country group in the level of the Organizational satisfaction. The private sector employees in Nordic countries have significantly higher level (Z = -5.947, p =

<0.001) of Organizational satisfaction (Mean=0.65) than their colleagues from the public sector (Mean=0.61). For other country groups no a significant differences were found between public and private sectors in the level of the Organizational satisfaction.

In terms of another subdimension of Employee Job Satisfaction, Job engagement the results of Mann-Whitney test show that the mean score for public sector is slightly higher than in the private sector in the Anglo-Saxon, Medditerian and CEE countries. For the Nordic (p=0.459) and Continental countries (p=0.142) there is no significant difference between the two sectors in the level of Job engagement.

Thus, the Hypothesis 1 is largely proven true.

H2: There are statistically significant differences in the quality of the working environment and the level of job satisfaction among the groups of European countries.

For examining significant differences in scores across country groups of origin by private and public sectors, the Kruskal–Wallis test was used followed by post hoc Dunn-Bonferroni tests (Appendix 1).

During examining two subdimensions of the Collaboration-oriented managerial environment, it can be established that Anglo-Saxon countries have a significantly higher score for the Managerial support and recognition in both sectors compared to all other country groups (Fig. 1, Appendix 1). In private sector the managerial support and recognition is held in low esteem by employees in the Continental and CEE countries. In public sector the Nordic and Continental countries have the lowest value of this score.

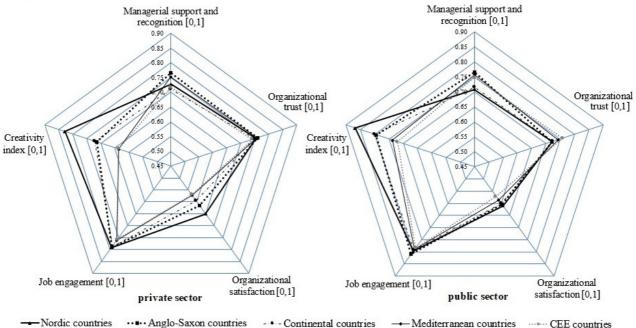
In case of the second subdimension of the Collaboration-oriented managerial environment – the

Organizational trust – it can be stated, that the Anglo-Saxon countries have a significantly higher mean score compared to the Continental and CEE countries in private sector. In the public sector the CEE countries' employees have a significantly higher level of the Organisational trust comparing to all other country groups.

As result of examining the two aspects of the employee job satisfaction – organizational satisfaction and job engagement – it can be concluded that the average level of the organizational satisfaction and job engagement is higher in Nordic and Anglo-Saxon countries, however in Mediterian and CEE countries the employees have a lower opinion of the organizational satisfaction and job engagement, both in private and public sectors (Fig. 1, Appendix 1).

Comparing the country groups, we may see that the Organizational satisfaction score distributes a quite similar picture within both the private and public sectors. This is especially true for CEE countries, where the average score is substantively lower than the score of Continental, Northern, and Anglo-Saxon countries. Especially this separation is expressed in the case of the private sector. Nordic and Mediterranean countries have higher levels of job satisfaction compared to others.

In the public sector, the mean score of the Job engagement for Anglo-Saxon countries group is significantly higher (Kruskal-Wallis: p=0.012) compared to all other country groups (Fig. 1). In the private sector, two homogeneous subsets can be identified based on the value of the Job engagement: the first – Mediterranean countries and CEE countries having the lower value, and all other groups of countries that have higher value of the employees 'job engagement.



**Fig. 1.** Comparison of Mean values of scores of Collaborate-oriented Managerial Environment, Job Satisfaction, and Creativity for European Country Groups by Private and Public sectors

Source: authors' calculations based on the microdata of the sixth (2015) European Working Conditions Survey (EWCS)

The index of creativity distributes countries in a fixed hierarchy in both the private and public sectors: the Nordic countries have the leadership, Anglo-Saxon countries and Continental countries are staying confident in the middle, Mediterranean countries and CEE countries close the country ranking based on the level of creativity.

These arguments lead us to the conclusion that we cannot talk about stable established patterns distributed among groups of countries. *Thus, our findings appeared to provide rejection for Hypothesis* 2.

## **Discussion and Conclusion**

Public employees seem to respond more favorably to a people-oriented leadership style than do private employees (Zeffane 1994). In competing with private sector colleagues, government executives consider their coworkers and bosses significantly more important than doing business executives (Posner and Schmidt, 1996). Therefore, as we see the 'respect factor' from the statement 63C has a significant impact in this case.

For most country groups (except Nordic countries) there were no significant differences found between public and private sectors in the level of the Organizational satisfaction. Which, perhaps, indicates a greater connection of this score with national social capital than with the economic sector.

Job engagement is again higher in the public sector than in the private sector. Creativity index value similarity which repeats the same trend. In this case, we believe that it reflects a positive trend. European organizations have undergone changes in recent years. Some efforts are being made to change the attitudes and perceptions of public sector employees as to their job and mission of service (Vigoda-Gadot & Meiri 2008). Protean careers and the need for self-fulfilment are emerging as a significant part of public organization work (Hall 2004; McDonald et al. 2005). The enjoyment or self-satisfaction associated with serving society and helping the needy becomes a motivating drive. Work-related values such as the employees' desire to help others, benefit society, or engage in meaningful public service (Frank & Lewis 2004; Lewis & Frank 2002) are highlighted today more than in the past.

In the case of the Organizational trust, we see the opposite trend, which can be explained by the reaction to the above changes. Performance management and performance audit in the public sector becomes the name of the game and drive the relationship within the administration, between executive politicians and the administration, and between the legislative and executive branches. As a consequence, internal control systems, internal audit and external audit are reorganised, upgraded and expanded to include new procedures, actors and data to guide, control and evaluate relationships, even if there is a cost that is increasingly more substantial than the benefits (Put & Bouckaert 2011). This basic distrust affects the internal public sector culture. Once again this points to the needs for research the balance of management impacts.

Reviews of the relevant literature revealed that work motivation among public sector employees and managers is very different from that of their private sector counterparts (Ambrose and Kulik 1999; Rainey and Bozeman 2000). Public sector employees are less extrinsically motivated (Buelens & Van den Broeck 2007) This implies that extrinsic motivation factors such as pay and advancement have a significantly greater motivating potential for private managers than for public and nonprofit managers, while intrinsic rewards have the higher motivating potential for public and nonprofit managers than for private ones. Public and nonprofit employees are less likely to be motivated by extrinsic factors and more likely to be motivated by intrinsic rewards compared to workers in the for-profit sector (Buelens and Van den Broeck 2007).

Management finds itself challenged with the task to keep workers satisfied with their work in order to maintain organizational effectiveness. This finding may be highly relevant for practice because it testifies to the importance of organizational managements` environment.

In the context of limited resources, individualized flexible work arrangements, where practical, may go some way to reduced employee dissatisfaction and low rates of turnover intention. To retain employees organizations must create a collaboration-oriented managerial environment that keeps their employees happy or satisfied.

Explaining the results of the examining differences between the public and private sectors in employee's assessment of the quality of collaboration-oriented management environment and their job satisfaction, we assume that the indicators of the private sector to a greater extent reflect the characteristics of the social capital of groups of countries, as at the moment in all national economies of the EU public sector is represented in a smaller proportion. According to 4-th EWCS, early seven out of every 10 workers are employed in the private sector.

This research has started to understand how the organizational context impacts the collaboration-oriented managerial environment, organisational satisfaction, creativity, engagement further analysis of boundary conditions is needed. This may include organizational size, team size, geographic location and business environment and an expansion of the dependent variables. We suggest further research into these paradigms, understanding the employee impact of each paradigm under different organizational contexts.

Although many of the findings in this study are left controversial, it has suggested some interesting topics for future cross-cultural research. Organization and management theorists have much to contribute to this topic, and its further development is an exciting prospect for the field.

#### References

Allen, J., & Van der Velden, R. (2001). Educational mismatches versus skill mismatches: effects on wages, job satisfaction, and on □the □job search. *Oxford economic papers*, 53(3), 434-452.

Alpkan, L., Bulut, C., Gunday, G., Ulusoy, G., & Kilic, K. (2010). Organizational support for intrapreneurship and its interaction with human capital to enhance innovative performance. *Management decision*, 48(5), 732-755.

- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123-167.
- Ambrose, M. L., & Kulik, C. T. (1999). Old friends, new faces: Motivation research in the 1990s. *Journal of management*, 25(3), 231-292.
- Avermaete, T., Viaene, J., Morgan, E. J., & Crawford, N. (2003). Determinants of innovation in small food firms. *European journal of innovation management*, 6(1), 8-17.
- Belfield, C. R., & Harris, R. D. (2002). How well do theories of job matching explain variations in job satisfaction across education levels? Evidence for UK graduates. *Applied economics*, 34(5), 535-548.
- Buelens, M., & Van den Broeck, H. (2007). An analysis of differences in work motivation between public and private sector organizations. *Public administration review*, 67(1), 65-74.
- Burroughs, J. E., Dahl, D. W., Moreau, C. P., Chattopadhyay, A., & Gorn, G. J. (2011). Facilitating and rewarding creativity during new product development. *Journal of Marketing*, 75(4), 53-67.
- Cheng, C. F., Lai, M. K., & Wu, W. Y. (2010). Exploring the impact of innovation strategy on R&D employees' job satisfaction: a mathematical model and empirical research. *Technovation*, 30(7-8), 459-470.
- Chukwura, F. A. (2016). The Impact of Selected Leadership Styles and Behaviors on Employee Motivation and Job Satisfaction (*Doctoral dissertation*, *University of Maryland University College*).
- Colquitt, J. A., LePine, J. A., Zapata, C. P., & Wild, R. E. (2011). Trust in typical and high-reliability contexts: Building and reacting to trust among firefighters. *Academy of Management Journal*, 54(5), 999-1015.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management*, 31(6), 874-900.
- Cropanzano, R., James, K., & Konovsky, M. A. (1993). Dispositional affectivity as a predictor of work attitudes and job performance. *Journal of Organizational Behavior*, 14(6), 595-606.
- Csikszentmihalyi, M. (1990). Flow. The Psychology of Optimal Experience. New York (HarperPerennial) 1990.
- De Jong, J. P., Parker, S. K., Wennekers, S., & Wu, C. H. (2015). Entrepreneurial behavior in organizations: does job design matter?. *Entrepreneurship Theory and Practice*, 39(4), 981-995.
- Dorenbosch, L., Engen, M. L. V., & Verhagen, M. (2005). On □ the □ job innovation: The impact of job design and human resource management through production ownership. *Creativity and innovation management*, 14(2), 129-141.
- Eurofound (2017) European Working Conditions Surveys (EWCS) [revised 2019 09 15], https://www.eurofound.europa.eu/surveys/europeanworking-conditions-surveys
- Field, J. (2003). Social Capital. NY: Routledge.
- Frank, S. A., & Lewis, G. B. (2004). Government employees: Working hard or hardly working? *The American Review of Public Administration*, 34(1), 36-51.
- Gallie, D., & Zhou, Y. (2013). Work organisation and employee involvement in Europe [Report] Publications Office of the European Union, Luxembourg, 2013.
- Ghobadian, A., Gallear, D., Viney, H., & O'Regan, N. (2007).
  Public sector performance improvement through private sector management practices: a satisfactory solution?.
  International Journal of Business Performance Management, 9(4), 363-379.
- Gruneberg, M. M. (1979). *Understanding job satisfaction* (p. 63). London: Macmillan.

- Habanik, J., Martosova, A., & Gullerova, M. (2018). Motivation of Public Sector Employees. *Social & Economic Revue*, Trencin: FSEV TnUAD, 16(4), pp. 79-85.
- Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of vocational behavior*, 65(1), 1-13.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Businessunit-level relationship between employee satisfaction, employee engagement, and business outcomes: A metaanalysis. *Journal of applied psychology*, 87(2), 268.
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of management*, 21(5), 967-988.
- Homans, G. C. (1958). Social behavior as exchange. *American journal of sociology*, 63(6), 597-606.
- Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological bulletin*, 97(2), 251.
- Ilies, R., Fulmer, I. S., Spitzmuller, M., & Johnson, M. D. (2009). Personality and citizenship behavior: The mediating role of job satisfaction. *Journal of Applied Psychology*, 94(4), 945.
- Innovation Union Scoreboard (2015), European Commission, ISBN 978-92-79-44089-2 [revised 2019 09 15], https://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards\_en
- Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of management journal*, 47(3), 368-384.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological bulletin*, 127(3), 376.
- Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of management journal*, 37(3), 656-669.
- Lewis, G. B., & Frank, S. A. (2002). Who wants to work for the government?. *Public administration review*, 62(4), 395-404.
- Lorenz, E., & Lundvall, B. Å. (2010). Accounting for Creativity in the European Union: A multi-level analysis of individual competence, labour market structure, and systems of education and training. *Cambridge Journal of Economics*, 35(2), 269-294.
- Makó, C., Illéssy, M., & Borbély, A. (2018). Creative workers in Europe: is it a reserve of the 'Would-Be Entrepreneurs'? A cross country comparison. *Entrepreneurship and Local Economic Development* (pp. 204-225). Routledge.
- Makó, C., Illéssy, M., & Borbély, A. (2019). Public Sector Innovation in Europe. AARMS Vol. 18, No. 1 (2019) 93–
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of management review*, 20(3), 709-734.
- McDonald, P., Brown, K., & Bradley, L. (2005). Have traditional career paths given way to protean ones? Evidence from senior managers in the Australian public sector. *Career Development International*, 10(2), 109-129.
- Mostovicz, I.E., Kakabadse, N. K., & Kakabadse, A. P. (2009). A dynamic theory of leadership development. *Leadership & Organization Development Journal*, 30(6), 563-576.
- Navickas, V., Skackauskiene, I., & Navikaite, A. (2014). Theoretical investigation of trust in small and medium sized enterprises. Business: Theory and Practice/Verslas: Teorija ir Praktika, 15(2), 160-169.
- Odom, R. Y., Boxx, W. R., & Dunn, M. G. (1990). Organizational cultures, commitment, satisfaction, and cohesion. *Public Productivity & Computer Management Review*, 157-169.

- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of management journal*, 39(3), 607-634.
- Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public administration review*, 367-373.
- Pieterse, A. N., Van Knippenberg, D., Schippers, M., & Stam, D. (2010). Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment. *Journal of organizational behavior*, 31(4), 609-623.
- Posner, B. Z., & Schmidt, W. H. (1996). The values of business and federal government executives: More different than alike. *Personnel Administration*, 25(3), 277-289.
- Put, V., & Bouckaert, G. (2011). Managing performance and auditing performance. *The Ashgate research companion to New Public Management* (pp. 223–36.).
- Quinn, R. E., & Spreitzer, G. M. (1991). The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality of life. Emerald.
- Rainey, H. G. (2003). *Understanding and managing public organizations*. John Wiley & Sons.
- Rainey, H. G., & Bozeman, B. (2000). Comparing public and private organizations: Empirical research and the power of the a priori. *Journal of public administration research and theory*, 10(2), 447-470.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of management review*, 23(3), 393-404.
- Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. Academy of Management Review, Vol. 32, No. 2, 344–354.

- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. Academy of management journal, 37(3), 580-607.
- Shalley, C. E. (1991). Effects of productivity goals, creativity goals, and personal discretion on individual creativity. *Journal of Applied psychology*, 76(2), 179.
- Shalley, C. E., Gilson, L. L., & Blum, T. C. (2000). Matching creativity requirements and the work environment: Effects on satisfaction and intentions to leave. Academy of management journal, 43(2), 215-223.
- Vieira, J. A. C. (2005). Skill mismatches and job satisfaction. *Economics letters*, 89(1), 39-47.
- Vigoda ☐ Gadot, E. R. A. N., & Meiri, S. (2008). New public management values and person ☐ organization fit: A socio ☐ psychological approach and empirical examination among public sector personnel. *Public administration*, 86(1), 111-131.
- Yuan, F., & Woodman, R. W. (2010). Innovative behavior in the workplace: The role of performance and image outcome expectations. *Academy of management journal*, 53(2), 323-342.
- Zeffane, R. (1994). Patterns of organizational commitment and perceived management style: A comparison of public and private sector employees. *Human relations*, 47(8), 977-1010
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of management journal*, 53(1), 107-128.

Appendix 1

Table 5. Homogeneous Subsets based on the Dunn-Bonferroni post hoc test for private sector

Mana	gerial recog			d	Organizational trust				Organizational satisfaction					Jo	b engag	ement	Creativity index			
Cntry	Hom	ogene	eous s	ubsets	Cntry groups		nogene subsets		ntry oups	Hon	nogen	eous si	ubsets	Cntry groups		geneous osets			mogene subsets	
C. gre	1	2	3	4	Cl	1	2	3	Cn	1	2	3	4	Cl	1	2	Cı	1	2	3
CON	8752				CEE	8839			CEE	9146				MED	9124		MED	8816		
CEE	8803				CON	9014	9014		MED	9167				CEE	9228		CEE	8911		
NRD		9195			NRD		9212	9212	CON		9594			CON		10142	AGS		10429	
MED			9764		MED		9251	9251	AGS			10251		AGS		10280	CON		10517	
AGS				10369	AGS			9447	NRD				10993	NRD		10323	NRD			12663
K-W test: p-value		<0	.001			<0.	001	001 <0.001 <					<0.001			< 0.001				

*Note:* Homogeneous subsets are based on asymptotic significances. The significance level is 0.05. Each cell shows the sample average rank of score/index. AGS= Anglo-Saxon countries, NRD= Nordic countries, CON= Continental countries, MED= Mediterranean countries, CEE= Central and Eastern European countries

Source: authors' calculations based on the microdata of the sixth (2015) EWCS

Table 6. Homogeneous Subsets based on the Dunn-Bonferroni post hoc test for public sector

Manag	erial su recognit		ınd	Organizational trust			Organiz	zational sat	isfaction	J	ob engage	Creativity index					
ntry oups		nogene subsets		itry oups		nogene subsets		ntry nups	Homog sub	eneous sets	ntry oups	Homog sub	geneous sets	Cntry groups		nogene subsets	
Cn	1	2	3	Cn	1	2	3	C or or or	1	2	Cr gro	1	2	Cr gro	1	2	3
NRD	3536			NRD	3617			CEE	3915		MED	4071		CEE	3705		
CON	3685			CON	3701			MED	4007	4007	CEE	4107		MED	3767		
CEE		4023		AGS	3776	3776		CON		4132	CON	4135		CON		4319	
MED		4024		MED		3934		NRD		4179	NRD	4169		AGS		4348	
AGS			4344	CEE			4196	AGS		4184	AGS		4443	NRD			5064

# Igor Borisov, Szergej Vinogradov

K-W test: p-value <0.001
--------------------------

*Note:* Homogeneous subsets are based on asymptotic significances. The significance level is 0.05. Each cell shows the sample average rank of score/index. AGS= Anglo-Saxon countries, NRD= Nordic countries, CON= Continental countries, MED= Mediterranean countries, CEE= Central and Eastern European countries

Source: authors' calculations based on the microdata of the sixth (2015) EWCS

RECEIVED: 18 September 2019 ACCEPTED: 14 October 2019

**Igor Borisov.** PhD Candidate in Doctoral School of Management and Business Administration in Szent István University (Hungary). He holds a degree in Public Administration HR counselling and has more than 6 years of relevant professional managerial experience. His research area is related to interrelations among management, organizational changes and human resources. He has been involved in several research projects allowed him to acquire experiences in both qualitative and quantitative international comparative research.

mail: Igor.Borisov@phd.uni-szie.hu

Sergey A. Vinogradov, PhD (in business and management), Associate Professor in Szent István University (Hungary), Faculty of Economic and Social Sciences, Institute of Economics, Law and Methodology. Head of the Department of Methodology for Economic Analysis. He is an author and co-author of more than 100 refereed papers in scientific journals, books, and conference proceedings. Current research interests: social economical statistics, actual problems of sustainable development in EU countries. E-mail: Vinogradov.Szergej@gtk.szie.hu