

The Relationship between Organizational Culture and Performance of SME's: Empirical Study from a Developing Country

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Abstract This article explores the link between organizational culture and effectiveness for SMEs in transitional socio-economic environment in Serbia. By analyzing the data from the survey gathered from 760 senior executives and employees from 86 SMEs in Serbia this study empirically evaluates the dimensions of OCTAPACE model of organizational culture, and presents a multi method analysis of the link between culture and growth of SMEs in a transitional economy. This study also examines whether the level of organizational culture depends on the type of the industry that SMEs belong to (knowledge or capital intensive). Furthermore, as a legacy of economic transition we have workforce with a unique set of subcultures. By analyzing the data from the second survey gathered from 257 senior executives and employees from SMEs in Serbia and Southern California we explore the differences in cultures of SMEs from transitional economy and developed economy. Given that strong culture brings competitive advantage, the results of the second study provide basis for understanding competitive position of SMEs in Serbia, and could propose directions for development of culture in SMEs in Serbia that should help them overcome problems of the transition and reach better business results more quickly.

Keywords: effectiveness; organizational culture; Serbia; SMEs; transition economies

1 INTRODUCTION

The rise of knowledge and innovation in creating strategic advantages, the importance of knowledge sharing climate in the management of organizations, have led to putting the concept of organizational culture at the heart of the strategic policies of organizations. Companies have begun to realize that the contribution of the employees, and organizational culture that surrounds them, are key determinants for the success of the organization, and that employees represent their most valuable asset [1-7].

There are a number of key influences that are likely to play a significant role in the formation of any organizational culture. These include: size of the organization (e.g. start-up, small and medium size enterprises (SME's)), and the environment (e.g. legal, economic, social).

Larger organizations have more formalized structures and cultures than SMEs. In the literature there is a much smaller number of papers dealing with the organizational culture of SMEs. In addition, it can be noticed that very few papers have examined organizational culture in SMEs in developing countries. An even smaller number of papers deal with organizational culture specificities for SMEs in transitional environments. Economies of countries of South-East and East Europe are exposed to complex socio-economic changes [8]. Given the prevalence and profound role of SMEs in most developing economies of the world, this is an unsatisfactory situation, and there is a strong need for more research on this important topic which may help to develop a greater understanding of organizational culture in SMEs.

The empirical research was undertaken in Serbia, with an aim to reduce the gap in the literature related to organizational culture of SMEs in developing countries. The aim was also to analyze the relationship between culture and effectiveness of SMEs there. Globally most of the countries are experiencing transition from the industrial to the knowledge economy. Besides this transition, countries of the former socialist bloc are also undergoing transition from one political system to another. In addition to that social transition these countries are experiencing

transition from non-market to market economy. Countries in the South-East Europe are faced with the process of privatization of industry. Given all those transitions countries from South-East Europe present a unique, and more tumultuous environment than what can be found in developed or other developing countries. That's why the experiences from developed countries relating to relationship of the organizational culture and effectiveness can't be fully applied there.

This paper builds on the OCTAPACE framework of organizational culture developed by Pareek [9]. Empirical studies conducted by Kumar & Patnaik[10], Lather et al. [11], suggest that the values defined by the OCTAPACE model of the organizational culture are embedded in the cultures of many organizations from Asia region to a good or moderate degree. Researchers focusing on the applicability of American management theory abroad have asked "to what extent must organizational theory be modified due to national differences" [12]. Having in mind the specific challenges faced by businesses in economies like Serbia, we formulated the following research question:

RESEARCH QUESTION 1: To what extent is the OCTAPACE model of organizational culture[9] applicable to the business practices in transitional economy in Serbia? Is it possible to identify and measure the perceived organizational culture and its various dimensions in SMEs in Serbia?

Hence, the aim of this study is to reveal the culture of the SMEs in Serbia.

In terms of sample, most of researchers assessed organizational culture by using only managers or executives [13-16]. This has been heavily criticized by a few scholars [17]. They argued that to study organizational culture, it was imperative that researchers investigated all levels of organizational members. Bearing that in mind we formulated the following research question:

RESEARCH QUESTION 2: How do different groups (managers and employees) in SMEs in Serbia perceive the organizational culture?

Because the transition from industrial to knowledge economy is a process, SMEs in transition economies are at different stages of this transformation. As a consequence

there may be differences in the organizational culture. Alvesson [18] and Millar et al. [7], considered two groups of SMEs: capital intensive organizations (CIOs), knowledge intensive organizations (KIOs). Thus, the following research question was formulated:

RESEARCH QUESTION 3: How do the different groups of SMEs in Serbia (CIOs and KIOs) perceive the organizational culture?

Organizational performance is the most crucial issue for each organization. The studies elaborating the relation of organizational culture and organizational performance are questioning the relations hypothesized with distinct definitions of organizational performance in distinct organizational culture types. These studies are linked by a widespread belief that the performance of an organization is partially attributable to organizational culture [19-21]. There have been many studies examining relationship between organizational culture and company's performance in developed countries [22, 23], but there is scarcity of such studies in developing countries [17].

Growth of revenue is regarded as one of the key performance indicators in any business. Beside the revenue there are many other performance indicators like: profit, ROA, ROI, growth of customer base, increase in number of workers... According to Salojarvi et al. [24], there exist several causes for using growth of revenue as one of performance indicators in SMEs. There exists no single theory which could adequately explain growth of SMEs. In literature, the significance has been put on learning capacity, organizational culture and leadership as precursors to company growth [24-26]. Therefore, the following research question was formulated:

RESEARCH QUESTION 4: Is there a relationship between organizational culture and a) revenue growth, and b) increase in the number of employees, at SMEs in Serbia?

Quantitative research for defined **RESEARCH QUESTIONS 1-4** was conducted from January 2016 till March 2016. We received 761 responses from 86 SMEs distributed throughout the entire territory of Serbia, and representing 15 industries. Out of all respondents, 551 belong to SME from CIOs, and 210 belong to KIOs.

In our paper we also present the findings of the second study. The second study was motivated by the fact that a strong organizational culture is associated with strong organizational performance [9]. Assessing the current state of organizational culture of SMEs in Serbia and comparing with assessed organizational culture of SMEs from some developed economic region can produce useful insights regarding the roles of particular cultural dimensions. SMEs from Southern California have served us as a benchmark for comparison. The second study presented in this paper explores the following basic research question:

RESEARCH QUESTION 5: Are there differences in the assessment of organizational cultures in SMEs in Serbia and Southern California?

Quantitative research for the second study was conducted simultaneously on the territory of Serbia and Southern California from November 2016 till December 2016. The sample consists of 262 responses from managers and employees from SMEs, 146 from Southern California, and 116 from Serbia.

The goal of this study is to enlarge the state of knowledge that links organizational culture elements with organizational performances. In particular, we submit findings pertaining to the relatively under-researched area such as SMEs. Many researchers [27-29] suggest a need to investigate the phenomenon of organisational culture in different cultural context. Our study responds to calls to conduct research in non-Western societies.

The rest of this paper is organized as follows:

In **Section 2** we present a concise literature review on organizational culture and performance of SMEs, the OCTAPACE model of organizational culture underlying this study, and characteristics of the transition. In **Section 3** we present research method, data collection, and measures. In **Section 4** we present measures validations, data analysis, discussion of results. Finally, in **Section 5** we present conclusions and limitations of the presented study.

2 ORGANIZATIONAL CULTURE, OCTAPACE MODEL, AND TRANSITION

The rise of knowledge and innovation in creating strategic advantages, the importance of knowledge sharing climate in organizations, have led to put the concept of organizational culture at the center of the strategic policies of organizations. The response of SMEs to situations which are emerging due to pressures from external environment and internal dynamics will vary according to their organizational culture [30]. Organizational culture is considered to be the primary aspect of organizational functioning, and a crucial driver of effectiveness [20, 31]. Comparative advantage obtained through a culture-driven organizational capability is usually difficult to imitate because of "socially complex" nature of organisational culture. Hence, organisational culture constitutes a beneficial source of sustainable competitive advantage. [29, 32, 33, 34].

An economy-based approach to analyzing organizational culture attempts to connect business success with cultural aspects of the company. Empirical studies [13, 35, 36] present results pertaining to impact of organizational culture on organizational processes and effectiveness.

This paper builds on the OCTAPACE framework of organizational culture developed by Pareek [9]. According to this concept a healthy organizational culture is based on eight culture dimensions: Openness, Confrontation, Trust, Authenticity, Proactivity, Autonomy, Collaboration, and Experimentation. Apart from an acronym for these values, OCTAPACE stands for eight (OCTA) steps (PACE) necessary to generate functional ethos. The OCTAPACE values aid in cultivating a climate of continuous development and are discussed below in brief:

1. **Openness:** Free articulation of emotions and beliefs, and willingness to accept comments. Organization encourages risk taking, and experimentation.
2. **Confrontation:** Accepting, not balking away from, problems; readiness for in-depth analysis of interpersonal issues; taking on challenges. Employees meet the challenges face-on and work together to find solutions.
3. **Trust:** Keeping information received from others confidential, and not manipulating it for sole benefit.

Feeling secure that the help from colleagues will be forthcoming when needed.

4. **Authenticity:** Harmony between one's feelings and actions; embracing his/her own actions and faults; unconditional expression of emotions.

5. **Proactivity:** Employees readily take initiative, they are action-oriented, and show a high degree of proactivity. They foresee the future needs, and prepare to respond to them.

6. **Autonomy:** Feeling free to plan and act in one's own space, encouraging and appreciating individual and working autonomy. One is free to act autonomously within the area defined by their job position.

7. **Collaboration:** Assisting and working with others and expecting help from others to solve problems. Collaboration assumes joint work with others and use of strengths of each member for accomplishment of common goals.

8. **Experimentation:** Using and promoting inventive ways to solve challenges; using return information for improvement; looking at things from different perspectives; promoting creativity. Experimentation as a value highlights the significance of innovation and willingness to approach problems in unique ways.

When researching relationship between organizational culture and performance, the distinctive traits of the following concepts are of significant interest in transitional economies: legal, economic and social transitions. Here transition alludes to political, economic and social changes that former socialist countries from South-East Europe are going through, while attempting to restructure their economies from centralized to market-oriented. Big changes involving all segments of society were initiated two decades ago in an effort to transform centrally regulated societies towards democracy and free market [16]. The key attribute of organizational culture is that it can be effective at certain times and situations, but it can be ineffective in others. Dysfunction of organizational culture emerges at a time of singularities. The transition is a type of singularity when rapid and discontinuous changes in demand, competitors, technology, and regulation arise. At those times the deep rooted values are no longer desirable. Organizational culture must tune to the influences of its surroundings in order to survive. Managers are accountable for transformation of the organizational culture.

3. RESEARCH METHOD

3.1 Data Collection

For defined **RESEARCH QUESTIONS 1-4** the study was executed from January 2016 to March 2016, in two phases. The first phase was to send questionnaire to the email addresses of senior executives, owners and mid-level managers of 986 randomly selected Serbian SMEs. We received answers from 132 respondents, and 114 were valid, which represents 11,56% rate of valid responses. In the phase two, questionnaires were distributed to the employees from the organizations that had responded in the first phase. Valid responses from 647 employees were collected. That gave us 761 valid responses, from 86 SMEs from the entire territory of Serbia, and from 15 industries. The sample is divided in CIOs sub-sample consisting of 551 respondents and KIOs sub-sample consisting of 210 respondents (Health services, Social services, Information

technology, Software development, Finance and Insurance industry, Education, Arts, Entertainment, Professional, Science and Technology). In terms of gender, the sample consisted of 470 male respondents (62%) and 291 female respondents (38%).

We tested **RESEARCH QUESTION 5** with data collected through quantitative research which was conducted simultaneously on the territory of Serbia and Southern California, from November 2016 to December 2016. The research was carried out in cooperation with the College of Business Administration from California State University, San Marcos. The sample consisted of 262 responses from managers and employees from SMEs, 146 from Southern California, and 116 from Serbia.

3.2 Measures

Survey was undertaken to gather all the necessary data through the use of structured questionnaire. The questionnaire was structured in the following way: firstly general questions related to the business were inquired (name, head office) as well as about the demographics (gender, position in the organization), followed by the questions encapsulating organizational culture traits.

In order to measure organizational cultural traits we used Pareek's OCTAPACE survey [37]. This instrument comprises 40 questions, with possible responses in the form of a four point scale (1-not valued in the organization; 2-fairly valued in the organization; 3-valued in the organization, 4 highly valued in the organization). Pareek has developed a model with eight major cultural dimensions, each measured with five items. Original questionnaire was translated and adapted to Serbian language.

For the measurement of organizational performance, two synthetic variables were formed, based on publicly available data from the Serbian Business Registers Agency.

Synthetic variables were used to define companies' revenue growth (SVR) and employee number growth (SVE) in the past four years, namely: 2013 - 2016. Chain index I_t represents relative change of revenue in two consecutive years, and is calculated as:

$$I_t = \frac{R_t}{R_{t-1}} \cdot 100, \quad (1)$$

where R_t is revenue for every $t = 2014, 2015, 2016$.

Average rate of change is calculated as:

$$SVR = \sqrt[3]{I_{2014} \cdot I_{2015} \cdot I_{2016}} \quad (2)$$

From the above formula follows the synthetic variable "SVR- revenue growth rate":

$$SVR = \sqrt[3]{\frac{R_{2016}}{R_{2013}}} \cdot 100. \quad (3)$$

Similarly, using the data for the number of employees in SMEs for the same time period we formed the synthetic variable "SVE- employee growth rate".

Table 1 Psychometric properties of the modified OCTAPACE questionnaire of organizational culture

Items	Loadings
Factor 1: Openness (KMO = 0,758; Cronbach's α = 0,746; % variance = 56,790%; Eigenvalue = 2,272)	
Q1) Free interaction among employees, each respecting others, feelings, competence and sense of judgment.	0,770
Q9) Genuine sharing of information, feelings and thoughts in meetings.	0,692
Q17) Free discussion and communication between superiors and subordinates	0,800
Q33) Free and candid communication between various levels helps in solving problems.	0,749
Factor 2: Confrontation (KMO = 0,712; Cronbach's α = 0,681; % variance = 51,799%; Eigenvalue = 2,070)	
Q2) Facing and not shying away from problems.	0,767
Q10) Going deeper rather than doing surface-level analysis of interpersonal problems.	0,641
Q18) Facing challenges directly in the work situation.a	0,749
Q34) Surfacing problems is not enough; we should find the solutions.	0,716
Factor 3: Trust (KMO = 0,714; Cronbach's α = 0,725; % variance = 55,181%; Eigenvalue = 2,207)	
Q3) Offering moral support and help to employees and colleagues in a crisis.	0,765
Q11) Interpersonal contact and support among employees.	0,609
Q19) Confiding in seniors without fear that they will misuse the trust.	0,768
Q27) Trust leads to trust.	0,813
Factor 4: Authenticity (KMO = 0,622; Cronbach's α = 0,558; % variance = 43,497%; Eigenvalue = 1,740)	
Q4) Congruity between feelings and expressed behavior	0,542
Q20) "Owning up" to mistakes made.	0,761
Q28) Telling a polite lie is preferable to telling the unpleasant truth.	0,713
Q36) People are generally what they seem to be.	0,599
Factor 5: Proactivity (KMO = 0,761; Cronbach's α = 0,671; % variance = 44,045%; Eigenvalue = 2,202)	
5) Taking preventive action on most matters.	0,670
Q13) Superiors encouraging their subordinates to think about their development and take action in that direction.	0,717
Q21) Considering both positive and negative aspects before taking actions.	0,654
Q29) Prevention is better than a cure.	0,651
Q37) A stitch in time saves nine (getting something done right away saves time later).	0,623
Factor 6: Experimentation (KMO = 0,729; Cronbach's α = 0,706; % variance = 53,601%; Eigenvalue = 2,144)	
Q8) Trying out innovative ways of solving problems.	0,720
Q16) Encouraging employees to take a fresh look at how things are done.	0,815
Q24) Making genuine attempts to change behavior on the basis of feedback received.	0,660
Q32) Thinking and doing new things improves organizational vitality.	0,726
Extraction Method: Principal Component Analysis; Rotation Method: Promax with Kaiser Normalization; Rotation converged in 6 iterations. Cronbach's α for modified OCTAPACE questionnaire: 0,917	

4 DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 Validation of Measures

A sequence of exploratory and confirmatory factor analyses was performed in order to evaluate the psychometric properties of the cultural dimension measures. In order to estimate the unidimensionality of the 8 OCTAPACE organizational culture dimensions, single-factor analyses were performed on each dimension's five-item scale. For each five-item scale, a single factor was extracted (using a cut-off point of eigenvalue = 1, and item's factor loadings > 0.5), suggesting that the measurement subscales for the 8 OCTAPACE dimensions are unidimensional. The items with factor loadings < 0.5 were omitted. The Cronbach's alpha coefficient was used for the evaluation of reliability of the subscales. The psychometric properties of the modified OCTAPACE questionnaire of organizational culture are shown in Tab. 1. Two dimensions of OCTAPACE model of organizational culture were excluded because of lack of reliability. These dimensions are Autonomy and Collaboration. In that way we answered the RESEARCH QUESTION 1: **It is possible to identify and measure the perceived organizational culture of SMEs in Serbia using modified Paréek's OCTAPACE model.**

4.2 Data Analysis and Discussion of Results

The analysis of RESEARCH QUESTION 2 leads to the following hypothesis:

H1: There are differences between managers and employees in SMEs in Serbia regarding their assessment of the specific dimensions of organizational culture.

The t-test was used to determine whether statistically significant differences existed between managers and employees in regard to the evaluated grades of all organizational culture dimensions (Tab. 2).

Table 2 Differences regarding the position (manager, employee)

Cultural dimensions	Levene's Test		t-test	
	F	Sig	t	Sig (2-tailed)
Openness	1,532	0,216	4,010	0,000
Confrontation	2,534	0,112	7,411	0,000
Trust	4,368	0,037	4,351	0,000
Authenticity	3,756	0,053	3,840	0,000
Proactivity	9,690	0,002	6,155	0,000
Experimentation	12,114	0,001	4,313	0,000

Managers in SMEs evaluated more positively than employees all dimensions of organizational culture (Tab. 3). Trust is the dimension of organizational culture that has the highest assessed grade in managers sub-sample ($mean = 3,272$; $SD = 0,5158$), while Openness has the highest assessed grade in employees sub-sample ($mean = 3,005$; $SD = 0,5585$). Proactivity is the dimension of organizational culture that has the lowest assessed grade in both sub-samples, managers ($mean = 3,112$; $SD = 0,578$), and employees ($mean = 2,691$; $SD = 0,707$), (Tab. 3).

Table 3 Descriptive indicators regarding the differences in the position

Cultural dimensions	Managers		Employees	
	mean	SD	mean	SD
Openness	3,2281	0,47827	3,0052	0,55855
Confrontation	3,2456	0,55751	2,7774	0,63252
Trust	3,2719	0,51586	2,9853	0,66898
Authenticity	3,1199	0,44595	2,9140	0,54104
Proactivity	3,1128	0,57822	2,6917	0,70736
Experimentation	3,1228	0,49583	2,8586	0,61998

The analysis of **RESEARCH QUESTION 3** leads to the following hypothesis:

H2: There are differences between CIOs and KIOs in Serbia regarding their assessment of the specific dimensions of organizational culture.

The t-test was used to determine whether statistically significant differences existed between SMEs from CIOs and KIOs sub-samples in regard to the evaluated grades of all organizational culture dimensions (Tab. 4).

Table 4 Differences regarding the type of SMEs (CIOs, KIOs)

Cultural dimensions	Levene's Test		t-test	
	F	Sig	t	Sig (2-tailed)
Openness	20,138	0,000	-2,094	0,037
Confrontation	5,716	0,017	-8,791	0,000
Trust	0,025	0,874	-4,643	0,000
Authenticity	8,223	0,004	-4,142	0,000
Proactivity	0,034	0,853	-2,674	0,008
Experimentation	19,479	0,000	-3,330	0,001

Table 5 Descriptive indicators regarding the differences in the type of SMEs

Cultural dimensions	CIOs		KIOs	
	mean	SD	mean	SD
Openness	3,0127	0,51290	3,1063	0,64214
Confrontation	2,7269	0,63410	3,1643	0,55588
Trust	2,9610	0,65075	3,2048	0,63846
Authenticity	2,8959	0,54612	3,0730	0,47361
Proactivity	2,7142	0,70160	2,8667	0,70801
Experimentation	2,8530	0,62536	3,0167	0,55204

SMEs in Serbia from KIOs sub-sample assessed more positively all dimensions of organizational culture than SMEs from CIOs sub-sample (Tab. 5). Trust is the dimension of organizational culture that has the highest assessed grade in KIOs sub-sample ($mean = 3,204$; $SD = 0,638$), while Openness has the highest assessed grade in employees sub-sample ($mean = 3,0127$; $SD = 0,512$).

Proactivity is the dimension of organizational culture that has the lowest assessed grade in both sub-samples, KIOs ($mean = 2,867$; $SD = 0,708$), and CIOs ($mean = 2,714$; $SD = 0,701$).

The analysis of **RESEARCH QUESTION 4** leads to the following hypothesis:

H3: Organizational culture has impact on revenue growth rate, and employee growth rate of SMEs.

Knowledge Management infrastructure and process capabilities, as well as knowledge management as a comprehensive concept have been proven to be a direct determinants of organizational effectiveness. However, direct relationship between organizational culture as one of three pillars of KM infrastructure capability, and organizational effectiveness has not yet been tested, to the authors' knowledge. Our research motivation was to examine each cultural dimension as unique incremental predictor for dependent variables SVR and SVE. The most suitable analysis for the data and research question 4 was hierarchical multiple regression. Type of SME (CIOs and KIOs), position (manager and employee) and gender were controlled for in a regression model. Theoretically based hypotheses of: linearity, multivariate normality, absence of multicollinearity and homoscedasticity were met. A very low level of multicollinearity was present (*VIFs* for independent predictors were in range from 1.020 to 2.416). Results of the best fitted regression models explaining dependent variable SVR for Serbia, and both subsamples (KIOs and CIOs) are presented in Tab. 6. Results of the best fitted regression models explaining dependent variable SVE for Serbia, and both subsamples (KIOs and CIOs) are presented in Tab. 7. Thus, the hypothesis H3 was supported.

Table 6 The best fitted hierarchical regression models of organizational culture and revenue growth rate

Independent variables	Dependent variable : SVR (revenue growth rate)					
	Serbia		Subsample of KIOs		Subsample of CIOs	
	B	t	β	t	β	t
(Constant)	0,471**	5,221	0,079	1,143	0,433**	4,004
Type of SME (CIOs or KIOs)	-0,578**	-4,160				
Position	0,116	0,670	0,100	0,817	0,056	0,224
Gender	0,290*	2,299	-0,219	-1,889	0,397**	2,443
Openness	0,080	0,824	0,210**	2,779	-0,120	-0,875
Confrontation	0,209*	2,290	-0,073	-0,842	0,311**	2,688
Trust	-0,132	-1,513	-0,008	-0,100	-0,225*	-1,992
Authenticity	-0,001	-0,015	0,214**	2,988	0,095	0,871
Proactivity	-0,258**	-3,039	-0,102*	-1,960	-0,387**	-3,444
Experimentation	0,128	1,482	0,066	0,861	0,165	1,458
F full model		4,415**		10,630**		4,957**
Full R ²		0,050		0,269		0,064
Adjusted R ²		0,039		0,297		0,050

** $p < 0,01$; * $p < 0,05$.

Regression analysis of dimensions of culture and revenue growth rate for SMEs from Serbia (Tab. 6) indicated that independent variables: Type of SME (CIOs or KIOs) ($\beta = -0,578$; $p < 0,01$), and Proactivity ($\beta = -0,258$; $p < 0,01$) had significant negatively related effects on the dependent variable SVR - revenue growth rate. Independent variables Gender ($\beta = 0,290$; $p < 0,05$), and Confrontation ($\beta = 0,209$; $p < 0,05$) had significant positively related effects on SVR - revenue growth rate (Tab. 6). Since variable Type of SME had significant effect on SVR - revenue growth rate, we provided separate regression analyses for sub-samples KIOs and CIOs.

Regression models for CIOs and KIOs are also presented in Tab. 6, and the differences of those two models are significant. For example, Openness ($\beta = 0,210$; $p < 0,01$), and Authenticity ($\beta = 0,214$; $p < 0,01$) had significant positively related effects on the SVR - revenue growth rate for KIOs, while they did not have any significant effects on SVR - revenue growth rate for CIOs (Tab. 6).

Regression analyses of dimensions of organizational culture and dependent variable SVE - employee growth rate for SMEs from Serbia (Tab. 7) also indicated that variable Type of SME (CIOs or KIOs) ($\beta = 0,034$; $p < 0,05$) had significant, but in this case, positively related effects

on the dependent variable SVE - employee growth rate. That is why we provided separate regression analyses for sub-samples KIOs and CIOs (Tab. 7). Independent variable Gender was negatively related to SVE - employee growth rate in regression analysis for all three samples: Serbian SMEs, sub-sample of KIOs, and sub-sample of CIOs.

Confrontation and Experimentation were negatively related to SVE - employee growth rate in regression analyses for CIOs sub-sample, while they did not have any significant effect on SVE - employee growth rate in the case of sub-sample KIOs (Tab. 7).

Table 7 The best fitted hierarchical regression models of organizational culture and employee growth rate

Independent variables	Dependent variable: SVE (employee growth rate)					
	Serbia		Subsample KIOs		Subsample of CIOs	
	β	t	β	t	β	t
(Constant)	0,057**	6,052	0,108**	4,386	0,048**	6,494
Type of SME (CIOs or KIOs)	0,034*	2,316				
Position	0,011	0,614	0,027	0,614	0,002	0,093
Gender	-0,051**	-3,867	-0,123**	-2,983	-0,028**	-2,517
Openness	-0,007	-0,699	-0,030	-1,131	-0,005	-0,483
Confrontation	-0,037**	-3,858	-0,047	-1,541	-0,031**	-3,883
Trust	0,017	1,844	0,060*	2,190	0,001	0,147
Authenticity	0,015	1,674	0,023	0,919	0,013	1,750
Proactivity	0,019*	2,094	-0,002	-0,112	0,024**	3,160
Experimentation	-0,016	-1,721	-0,012	-0,449	-0,016*	-2,078
F full model	5,334**		3,356**		5,966**	
Full R ²	0,060		0,043		0,065	
Adjusted R ²	0,049		0,080		0,079	

** p < 0,01; * p < 0,05

The analysis of **RESEARCH QUESTION 5** leads to the following hypothesis:

H4: There are differences between Serbia and Southern California SMEs regarding their assessment of the specific dimensions of organizational culture.

The t-test was used to determine whether statistically significant differences existed between SMEs in Serbia and Southern California in regard to the evaluated grades of the following dimensions of organizational culture: Openness, Authenticity and Experimentation (Tab. 8).

with the highest grade (Tab. 3 and Tab. 5). Also, there is concurrence among four groups of respondents: managers of SMEs, employees of SMEs, respondents from CIOs, and respondents from KIOs. Namely, Proactivity was assessed with the lowest grade in all sub-samples. These results stem from the fact that for decades Serbian SMEs were used to operate under circumstances which allowed for stability and job security. The tradition of central control and authority implies that any new employee initiative with a new value chain has been suppressed, and has rarely been considered by superiors. This means that it is hard to change particular principles and values, used in everyday business operation, and which are firmly established in Serbian SMEs. Results presented in Tab. 5 indicate that KIOs are more advanced segment of the SMEs in Serbia, and CIOs should make an effort to adjust their organizational culture towards the culture of KIOs.

Assessing the current state of organizational culture of SMEs in Serbia and comparing with assessed organizational culture of SMEs from Southern California (which have served us as a benchmark for comparison), provided valuable insights regarding the discrepancies in the level of development of specific dimensions of the organizational culture. Efforts of SMEs in Serbia should be concentrated on the development of cultural dimensions where statistically significant differences have been identified: Openness, Authenticity and Experimentation (Tab. 8 and Tab. 9).

Identified differences in the consequences of certain cultural dimensions on the observed performances of SMEs in Serbia, point to the need to create specific strategies for the development of organizational culture for these two SME segments in Serbia (CIOs, KIOs).

The indirect impact of culture on the SMEs' performance is often analyzed in the literature (e.g. through the influence of knowledge management on performance). Our research indicated statistically significant direct impact of culture on SMEs' performance (SVR and SVE). The influence of organizational culture on SVR is especially noticeable for KIOs (29,7%) (Tab. 6).

Table 8 Differences regarding the country (Serbia, Southern California)

Cultural dimensions	Levene's Test		t-test	
	F	Sig	t	Sig (2-tailed)
Openness	1,101	0,295	-2,840	0,005
Confrontation	0,665	0,416	-1,277	0,203
Trust	6,052	0,015	-1,340	0,181
Authenticity	0,485	0,487	-3,678	0,000
Proactivity	2,174	0,142	-0,906	0,366
Experimentation	0,183	0,669	-2,756	0,006

Respondents from Southern California assessed more positively all of the dimensions of organizational culture compared to respondents from Serbia (Tab. 9), although the differences are statistically significant only for the dimensions Openness, Authenticity and Experimentation.

Table 9 Descriptive indicators regarding the differences between countries

Cultural dimensions	Southern California	Serbia
	mean	mean
Openness	3,058511	2,851695
Confrontation	2,934397	2,849576
Trust	3,003546	2,896186
Authenticity	2,829787	2,493644
Proactivity	2,947518	2,901695
Experimentation	2,952128	2,737288

5 CONCLUSIONS AND LIMITATIONS

We can conclude that managers of SMEs, and respondents from KIOs group of SMEs assessed the Trust with the highest grade. The employees of SMEs and respondents from CIOs group of SMEs assessed Openness

The fact that only Serbian SMEs were examined limits this study. On the other hand, social and economic conditions experienced by Serbian SMEs are very similar to the conditions encountered by SMEs in other countries from South-East Europe. Hence, the results from this study could be considered as a benchmark for the entire region.

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