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THE INFLUENCE OF ORGANIZATIONAL CULTURE ON JOB SATISFACTION

ABSTRACT: *The paper explains the impact of organizational culture on employees' job satisfaction. Organizational culture, through its values and norms, shapes an organization's internal context and thus impacts different elements, including job satisfaction. The paper develops two theoretical explanations of organizational culture's impact on job satisfaction, which are verified through empirical research on a sample of 324 employees from 16 companies in Montenegro. The first theoretical explanation starts with the assumption that organizational culture impacts job satisfaction by harmonizing its values and norms with specific types of employee needs, while the second starts with the assumption that organizational culture impacts job satisfac-tion based on the content of its values and norms, regardless of the employees' needs. The research shows that employees' job satisfaction level systematically and significantly varies in different organizational culture types, proving that organizational culture is a job satisfaction factor; and that organizational culture does not impact the job satisfaction level by harmonizing with employee needs but through the content of its values and norms. It also shows that the level of job satisfaction is highest in task culture, followed by power culture, and lowest in role culture.*

KEY WORDS: *organizational culture, job satisfaction, motivation, Montenegro*

JEL CLASSIFICATION: M10, M14

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1. INTRODUCTION

Organizational culture is a complex and multidimensional phenomenon; hence it is not surprising that the understanding of organizational culture is associated with epistemological and ontological controversies that give rise to different paradigms (Martin 2002; Alvesson 2002). However, mainstream thinking regarding organizational culture has adopted certain views regarding its nature, content, and effects. First, organizational culture is thought to involve a set of values and norms that are expressed through symbols shared by organization members (Hofstede et al. 1990). Second, because organizational culture is a collective rather than an individual construct, its content is created through social interaction among members of particular groups (Schein 2004). Third, the values and norms shared by organization members significantly shape their thoughts and behaviour (Schein 2004). Cultural values as inspirational ideals (Rokeach 1973) and cultural norms as specific social expectations governing behaviour (Balthazard, Cooke, & Potter 2006; Hofstede et al. 1990) guide organization members when understanding and interacting with people, phenomena, and events. The everyday decisions managers and employees make, the actions they take, and the interactions they engage in are in large part determined by the values and norms of the organizational culture. Even if they themselves do not share the predominant values and norms, organization members cannot ignore them because the organization sanctions behaviour that deviates from its values and norms. Through its influence on the decisions, actions, and interactions of managers and employees, organizational culture influences different aspects of management and organization. Extensive empirical research has documented that organizational culture affects strategy (Klein 2011; Yarbrough, Morgan, Vorhies 2011; Baird, Harrison, Reeve 2007), performance control (Deem et al. 2010), organizational structure (Ranson, Hinings, & Greenwood 1980), compensation systems (Chen 2010), performance appraisal (Henri 2006), organizational learning (Alavi, Kayworth, & Leidner 2005–6; De Long & Fahey 2000), leadership (Giberson et al. 2009; Berson, Oreg, & Dvir 2008), and organizational performance (Wilderom, Glunk, & Maslowski 2000). Organizational culture also influences job satisfaction, which is an aspect of organizational behaviour (Lund 2003; Silverthorne 2004; Johnson & McIntyre 1998).

Job satisfaction is an individual's attitude towards work that encompasses cognitive, affective, and evaluative reactions to the job (Luthans 2005). Job satisfaction is a complex attitude because it arises from the employee's appraisal of multiple work dimensions made on a daily basis (Kinicki et al. 2002). In addition, job satisfaction is not based solely on the extent to which the work itself provides the individual with satisfaction related to specific job characteristics but also on the extent to which these job characteristics are important to the individual (Locke 1969). An individual's job satisfaction is based on the extent to which the job provides rewards or outcomes that the individual considers important. Job satisfaction is an individual construct because it is a personal attitude based on the individual's experience, which distinguishes it from the organizational climate experienced by the average employee or the collective attitudes of organization employees towards their work (Schneider, Erhart, & Macey 2011). Therefore, following earlier research on job satisfaction, the present study focuses on the individual. The importance and popularity of the job satisfaction concept stems from its presumed positive impact on employee productivity (Judge et al. 2001). Although the common sense assumption that 'a happy worker is a productive worker' has not received the expected degree of support from empirical research (Staw 1986), the primary rationale for research on job satisfaction continues to be the extent to which it contributes to productivity.

To date, a number of factors affecting job satisfaction at both the organizational and individual level have been identified (Luthans 2005). At the organizational level the factors include: wage systems, job characteristics, working conditions, leadership style, organizational structure, and colleagues. At the individual level the factors include: balance between personal interests and work, work experience and age, hierarchical position, and overall life satisfaction. Organizational factors influencing job satisfaction are aspects of the organization that shape the work environment and enable employees to obtain, or hinder them from obtaining, what they value from their work. We believe that organizational culture must be included among the organizational factors influencing job satisfaction. By shaping the decisions, actions, and interactions of organization members, the culture creates the environment in which employees perform their work and obtain what they value to a greater or lesser degree. Just as with the compensation system, leadership style, or relationships

with colleagues, the values and norms established by the organizational culture become part of the organizational context in which work is performed. Because these cultural values and norms engender the quality of relationships and processes within an organization, they influence the extent to which the organizational culture creates a favourable or unfavourable environment for achieving the work outcomes an employee values.

Many researchers have regarded organizational culture as a factor related to job satisfaction (MacIntosh & Doherty 2010; Silverthorne 2004; Lund 2003; Lok & Crawford 1999, Johnson & McIntyre 1998; Nystrom 1993, Odom et al. 1990). Earlier research confirms the existence of the relationship (Lok & Crawford 1999, Johnson & McIntyre 1998), explains underlying mechanisms (MacIntosh & Doherty 2010), and analyses the influence of certain types of organizational culture on job satisfaction (Lund 2003; Odom et al. 1990). However, there continues to be a need for further research on this topic because questions remain regarding the extent of the influence of organizational culture on job satisfaction, and the mechanisms underlying this influence have not yet been fully explicated. The present research investigates the extent to which organizational culture affects job satisfaction, the nature and mechanisms underlying the relationship, and the extent to which different types of organizational culture contribute to employee job satisfaction.

The paper is structured as follows: first, we present a theoretical framework that explains and operationalizes the organizational culture and job satisfaction investigated in the current research; second, the research hypotheses regarding the relationship between organizational culture and job satisfaction are presented; third, we present the research methodology and describe the sample, instruments, and research methods; fourth, the research results are presented and discussed; and, finally, we present the study conclusions and the theoretical and practical implications of the research, as well as its theoretical and methodological limitations.

2. THEORETICAL FRAMEWORK

The assumption that organizational culture affects job satisfaction entails that different types of organizational culture create different levels of job satisfaction in organization members. Therefore, empirical investigation of the influence of

organizational culture requires that we identify the different types of organizational culture and determine the extent to which the level of employee job satisfaction is associated with the type of organizational culture that predominates in an organization. Thus, the first step is to identify the different types of organizational culture.

The literature includes many classifications of organizational culture (Cameron & Quinn 2006; Balthazard, Cooke, & Potter 2006; Denison 2003; Trompenaars 1994; Deal & Kennedy 1982; Handy 1991). The classifications of different types of organizational culture are distinguished from each other based on the categorization dimensions employed: external versus internal focus and flexibility versus stability (Quinn & Cameron 2006; Denison 2003); the needs and orientation of the people within the organization (Balthazard, Cooke, & Potter 2006); the level of risk and rapidity of feedback from the market (Deal & Kennedy 1982); and egalitarianism versus a hierarchical distribution of power and people-oriented versus task-oriented (Trompenaars 1994; Handy 1979). To determine the influence of the type of organizational culture on job satisfaction, the classification of the culture should be based on characteristics associated with employee satisfaction, such as the Human Synergetics classification (Balthazard, Cooke, & Potter 2006), which is based on the needs and orientation of people within the organization, or Handy's (1991) and Trompenaars' (1994) classifications, which employ similar characteristics involving norms related to the distribution of power and norms related to a people orientation or task orientation. In the present study we employ Handy's classification because the questionnaire used to assess the type of organizational culture, which was based on Harison's (1979) version of the questionnaire, was available to the authors.

Handy's classification (1991) categorizes organizational cultures based on two dimensions. The first dimension involves the values and norms regarding the distribution of power within an organization. Some organizational cultures favour an unequal or hierarchical distribution of power, while others adopt values and norms that foster an equal or egalitarian distribution of power. Another dimension distinguishing organizational cultures in Handy's classification relates to the predominant focus of the organization. Every organization involves both work (task) and social (people) components. Organizational cultures differ with respect to which component predominates.

Therefore, we can identify cultures with values and norms that are predominantly people-oriented and those that are predominantly task-oriented. Simultaneously applying both dimensions generates a matrix of four types of organizational culture.

Figure 1. Handy's classification of organizational culture
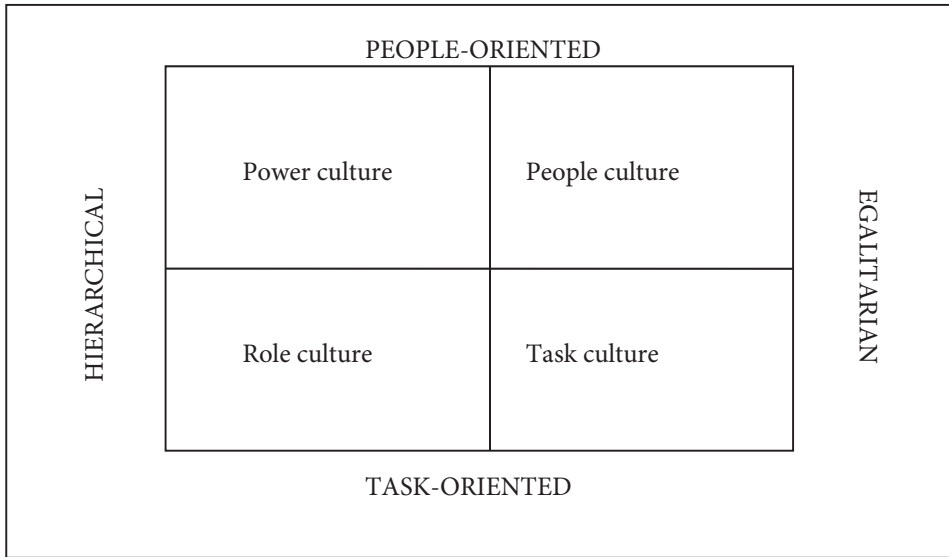
Source: Handy, C. (1991). *Gods of management*: *the changing work of organizations.* London: Business Books

Power culture combines an orientation to people with an unequal distribution of power within the organization. The main feature of a power culture is the orientation towards the leader. In this culture a metaphor describing the organization is the family, in which the leader is a 'paterfamilias' who takes care of all the members, who in turn obey him unquestioningly. Because the leader personifies the organization's work, everything receives his personal touch and depends on his leadership style and competence. The organization tends to be informal and relationships between its members tend to be very close.

Role culture is the culture exhibited by bureaucratic organizations, which combine a task orientation with an unequal distribution of power. In role culture the organization is perceived as a goal-oriented structure regulated by

formal rules and procedures. An appropriate metaphor for an organization with this culture is a machine. Because role culture is depersonalized, the basic elements of an organization are impersonally established roles rather than persons as individuals.

Task culture embodies a system of values and norms of behaviour in which success and achievement are the primary goals of the organization. This culture combines a task orientation with an egalitarian distribution of power. Because task culture is based on the premise that the organization exists to perform certain tasks, everything is oriented towards the work that needs to be performed, with everything subordinated to that goal. In this type of culture, values such as autonomy, competency, achievement, and flexibility dominate.

People culture combines an orientation towards people with an egalitarian distribution of power. It is based on the premise that the organization exists because of its members. Its main purpose is to enable its members to achieve their individual goals and interests. Because power in a people culture is widely distributed, this type of culture is the most 'democratic'.

The next research step requires the operationalization of job satisfaction. This construct is most frequently operationalized following Locke's premise that job satisfaction is based on the individual's perception of the extent to which their job provides what they value (Locke 1969). Therefore, job satisfaction is operationalized as the difference between employee expectations regarding specific job characteristics and their satisfaction with these features. The greater the gap between the importance of a job characteristic and satisfaction with the job characteristic, the lower the job satisfaction (and vice versa). In addition, to operationalize job satisfaction it is critical to identify the job characteristics that employees evaluate as informing their attitude towards work. Previous studies have found that the job characteristics employees consider include the work itself, supervision, co-workers, pay, and opportunities for promotion (Kinicki et al. 2002). These job characteristics are employed in the present research.

3. RESEARCH HYPOTHESES

In addition to testing the general hypothesis that organizational culture influences job satisfaction, we generated and tested specific hypotheses

regarding the basis for the relationship. If organizational culture is a factor that affects employee satisfaction, then different types of culture should be associated with systematic, significant variation in levels of job satisfaction. These considerations produced our initial hypothesis:

H_1: Different types of organizational cultures are associated with different levels of overall job satisfaction as well as with different levels of satisfaction with particular job characteristics.

To determine the extent to which the type of organizational culture is related to the level of job satisfaction, it was necessary to present and test hypotheses to explain how organizational culture influences job satisfaction (i.e., the mechanisms underlying this influence). We identified two alternative explanations for the means through which organizational culture influences job satisfaction. The first approach posits that the mechanism involves the extent to which cultural values and norms address specific employee needs and motives. The alternative explanation posits that the mechanism involves the content or characteristics of cultural values and norms per se.

The first explanation of the influence of organizational culture on job satisfaction is based on the premise that organizational culture affects job satisfaction because its values and norms correspond to specific employee needs. Because the organizational culture creates a model for everyday behaviour in the organization, it is one of the factors creating the environment in which employees meet their needs. The values and norms of different types of organizational culture exert different effects on the organization's ability to meet employee needs, facilitating the satisfaction of certain needs and hindering the satisfaction of others. Comparing the characteristics of certain types of organizational culture with different employee needs and motives reveals the extent to which the values and norms of a certain type of organizational culture do or do not support the satisfaction of specific employee needs. Because certain job characteristics are related to particular employee needs, satisfying certain employee needs requires that employees are satisfied with the corresponding job characteristic. For example, satisfying an employee need for belonging requires that the employee is satisfied with relationships with colleagues, and satisfying an employee need for growth requires that the employee is satisfied with the

opportunities to learn and advance at work. Therefore, a particular type of organizational culture is associated with a higher level of satisfaction for related job characteristics, and a lower level of satisfaction for unrelated job characteristics. A particular type of organizational culture satisfies employees whose needs are met by the values and norms of that culture and does not satisfy employees with needs that are not addressed by the values and norms of that culture. For example, an organizational culture that values flexibility contributes to the satisfaction of employees with a need for growth but does not contribute to the satisfaction of employees with a need for safety. These considerations produced the following hypothesis:

H_2: *Different types of organizational culture are associated with different levels of employee satisfaction for job characteristics related to particular employee needs.*

To test this hypothesis, it is necessary to identify the relationships between certain types of organizational culture and the job characteristics that satisfy different employee needs. Thus it is necessary to identify the employee needs that are affected by the organizational culture and then determine the job characteristics that are related to the satisfaction of those needs. Different theories of motivation have identified the motivations underlying employee needs (Maslow 1943; Alderfer 1972; McClelland 1961). Because these theories exhibit considerable overlap, the literature suggests that organization members must satisfy physiological or existential needs, the need for safety, the need to belong, and the need for growth, actualization, and achievement. Different job characteristics satisfy different needs. Thus, for example, the amount of compensation affects an employee's ability to satisfy existential needs; job safety, and working conditions affect the need for safety; relationships with colleagues satisfy the need to belong; and opportunities for professional advancement satisfy the need for growth. In the present study we examine the impact of organizational culture on employee satisfaction for job characteristics associated with satisfaction of the need for safety, for belonging, and for growth. Aspects of the job related to the satisfaction of existential needs such as the amount of compensation are not included in the study because we do not believe that different types of organizational culture differentially affect the satisfaction of existential needs.

By analysing the characteristics of each type of organizational culture, we are able to identify the needs that each type of culture would or would not tend to satisfy. With respect to the values and norms of a power culture, we hypothesize that in organizations in which a power culture predominates, employees exhibit higher satisfaction with job characteristics associated with the need to belong, but lower satisfaction with job characteristics associated with the need for safety or growth. This organizational culture perceives the organization as an extended family whose leader serves as a 'paterfamilias', which leads employees to develop a strong sense of belonging to the organization. A power culture involves low levels of formalization and structural specialization, an authoritarian leadership style, and frequent changes that have been guided directively. In this type of environment, employees might feel less safe. Due to the highly centralized nature of decision-making and the authoritarian and often charismatic leadership that this type of culture involves, organization members do not have opportunities to develop or achieve their full potential. The organization is primarily dependent on a leader who is able to satisfy their own need for self-actualization and achievement while interfering with the satisfaction of similar employee needs. The above considerations produced the following hypothesis regarding the influence of power culture on employee satisfaction:

H_{2a}: *The predominance of a power culture in an organization is associated with higher employee satisfaction for job characteristics related to the need to belong and lower employee satisfaction for job characteristics related to the need for safety and growth.*

Based on the values and norms exhibited by a role culture, we assume that employees' need for safety is satisfied in organizations dominated by this type of culture, but not the need for belonging or for growth. A role culture involves a bureaucratic organization in which work processes are governed by predefined and formalized procedures, with tasks that are highly specialized and performed following instructions and rules. An employee who conforms to the rules and procedures in performing their duties is completely safe and protected regardless of the results of their performance. However, the machine metaphor employees in these cultures use for the organization also implies that employees are simply 'cogs' in the machine, and thus unable to satisfy the need to belong and relate to others. In addition, because the depersonalization characterizing

the role culture norm reveals that rules and procedures are more important than people, the organization is perceived as 'cold' and 'inhumane'. In a role culture, members must respect procedures and perform narrowly specialized tasks in conformity with organizational rules and regulations, which prevents the satisfaction of the need for creativity, achievement, and self-actualization. Employees in these organizations are oriented more towards promotion within the hierarchy than towards growth. The above considerations produced the following hypothesis regarding the impact of a role culture on employee satisfaction:

H_{2b}: The predominance of a role culture in an organization is associated with higher employee satisfaction with job characteristics related to the need for safety, and lower employee satisfaction for job characteristics related to need for belonging and growth.

The description of the task culture and the people culture reveal that organizations in which these cultures predominate require and expect employees to be competent, to continually develop and improve their expertise, to be hard-working, to be creative and innovative, and to achieve results. Thus, these organizations provide an environment that is able to satisfy the need for growth, achievement, and self-actualization. However, these two types of culture do not satisfy the employee need for safety because they value change, flexibility, uncertainty, and risk, as well as competition between employees. The task and people cultures emphasize individuality (particularly the people culture) as well as competition between employees (particularly the task culture), which reduces their ability to satisfy the need to belong. The above considerations produced the following hypothesis regarding the impact of task and people organizational cultures on employee satisfaction:

H_{2c}: The predominance of a task culture or people culture in an organization is associated with higher employee satisfaction with job characteristics related to the need for growth, but lower employee satisfaction with job characteristics related to the need for safety or the need to belong.

In contrast to the explanation presented above, an alternative explanation of the influence of organizational culture on job satisfaction is based solely on the characteristic values and norms exhibited by the different types of

organizational culture. Because the different types of organizational culture involve different values and norms, certain types of organizational culture are associated with higher employee satisfaction with all job characteristics, as well as higher overall job satisfaction than other types of organizational culture. As a result, employee satisfaction with different job characteristics will vary in the same way for all types of organizational culture.

Because different organizational cultures are associated with different sets of values and norms shared by organization members, certain organizational cultures might exhibit values and norms that are more favourable to employees and produce higher levels of overall job satisfaction compared to other types of culture. Employees in these cultures are expected to express equally high levels of satisfaction with all features of the job, regardless of the type of need associated with a particular job characteristic. By contrast, the values and norms of other types of organizational culture might interfere with the satisfaction of all types of employee need, and in these cultures employees will express equally low levels of satisfaction with all job characteristics. Testing this hypothesis requires identifying the types of culture that facilitate overall job satisfaction and the types of culture that interfere with employee job satisfaction on the basis of values and norms that are associated with the different types of organizational culture. In Handy's classification of organizational culture, one dimension used to distinguish the types of culture is the preferred distribution of power in the organization, and the other dimension is related to the organizational component (work or social) that predominates. Based on the first dimension, we distinguish between hierarchical cultures and egalitarian cultures. Based on the second dimension, we distinguish between task-oriented cultures and people-oriented cultures.

We hypothesize that cultures with values and norms that favour equality in the distribution of power are associated with higher overall job satisfaction, compared to cultures with values and norms favouring a hierarchical power distribution. In cultures with egalitarian values and norms, employees view themselves as active agents and perceive that the organization values them and depends upon them to fulfil its objectives. In cultures favouring a hierarchical distribution of power, employees perceive themselves as relatively unimportant and unable to influence the organization's objectives, apart from following the

orders of more powerful others. People and task cultures are both cultures with egalitarian values and norms, while power and role cultures are both hierarchical.

Another distinction in Handy's classification is between people-oriented and task-oriented cultures. Cultures with values and norms that regard people as the primary organizational component assume that satisfied employees are needed to achieve organizational goals and that employee needs are primary in relation to structure and tasks. In cultures that regard tasks as the primary organizational component, values and norms focus on results, competencies, and structures, valuing people only to the extent that they fulfil objectives. Power cultures and people cultures are both people-oriented cultures; role cultures and task cultures are both task-oriented cultures.

Based on the above discussion of the two dimensions distinguishing the different types of culture, we conclude that the people culture creates the most favourable environment for satisfying employee needs and producing the highest levels of job satisfaction, because it is both egalitarian and people-oriented; the task culture creates a favourable environment for employee satisfaction because it involves an egalitarian distribution of power; the power culture creates a favourable context for employee satisfaction because it is people-oriented; and the role culture creates the least favourable environment for employee satisfaction because it is neither egalitarian nor people-oriented. This conclusion is consistent with previous findings on the impact of types of organizational culture on job satisfaction (Lund 2003; Odom et al. 1990) Thus, we expect that employees experience the highest levels of overall job satisfaction and satisfaction with the majority of job characteristics in organizations in which a people culture predominates; employees experience a certain level of overall job satisfaction and satisfaction with the majority of job characteristics in organizations in which task or power cultures predominate; and that employees experience the lowest levels of job satisfaction and satisfaction of needs in organizations in which a role culture predominates. The above considerations produce hypothesis H_3:

H_3: Different types of organizational culture are associated with different levels of overall job satisfaction. Levels of job satisfaction will be highest in organizations

with a people culture, reasonably high in organizations with task or power cultures, and lowest in organizations with role culture.

4. RESEARCH METHODOLOGY

4.1. Sample

A study testing the hypotheses regarding the influence of organizational culture on employee satisfaction was conducted in February to May 2016 for a sample of 324 employees in 16 companies in the Republic of Montenegro. Of the 400 questionnaires distributed, 324 questionnaires were returned, a response rate of 81%. Companies were selected to be as diverse as possible: varied in type of ownership, type of business operation, age, size, and location. Although we expected to observe all types of organizational culture due to the diversity of the participating companies, the sample included few companies with a people culture. Consequently, we were unable to explore the impact of this type of culture on job satisfaction in the present study. Eight of the companies in the sample were state-owned and 8 were privately owned, with approximately equal proportions of respondents from each type of company. Three of the state-owned companies were public services; the other state-owned companies operated in services and manufacturing. Eight of the 16 companies in the sample were service providers, five companies were in the retail sector, and three were manufacturing companies.

Prospective respondents were randomly chosen from the employees listed in company directories. The number of respondents from each company ranged between 14 and 38, with the number of respondents in any one company ranging between 20 and 30. Respondent age varied: 37% were between 36 and 45 years of age. In the sample 54% of the respondents were male and 46% were female. With respect to the level of education, 159 of the respondents (49.1%) had a secondary education degree, and 30 respondents (9.3%) had a university degree. Of the 324 respondents, 81% were employees and 19% were managers, which possibly enabled us to obtain a more realistic picture of a company's organizational culture.

4.2. Variables and Measurement Instruments

Investigating the impact of organizational culture on job satisfaction involved operationalizing and measuring these two variables. Because job satisfaction is an individual construct, the operationalization of each variable and the analysis of the impact of organizational culture on job satisfaction were performed at the individual level. Thus the operationalization of organizational culture was based on respondent perceptions of the predominating organizational culture in their company. Although organizational culture is a group or organizational construct, we chose to operationalize both organizational culture and job satisfaction at the individual level because the extent to which an organizational culture affects employee satisfaction is through its effect on employee perception, rather than the type of organizational culture that 'objectively' predominates. If it is true that 'what people regard as real becomes reality', then employee satisfaction depends more upon the employee's perception of the culture of the organization than upon their colleagues' perceptions of the company culture. Consequently, complications due to combining two levels of analysis were avoided.

Because organizational culture was operationalized based on Handy's classification of the types of organizational culture (1991), the questionnaire had been used in many empirical studies of organizational culture and its relationship to other organizational components (Ionescu and Bratosin 2009). For the present study, the questionnaire was translated into Serbian. Respondents completed questionnaires anonymously. Based on Handy's classification, which recognizes four types of organizational culture, the questionnaire consisted of 15 questions with four response options for each question, which were ranked from 1 to 4, with 1 representing the option that was closest to the personal opinion of the respondent. The average ranks of the four types of culture were obtained by summing the responses of each participant; a lower average rank indicated that the respondent perceived that this type of culture was more characteristic of their company. The lowest average rank for the respondent for a certain type of culture indicated that the respondent perceived that this type of culture was predominant in their organization. We calculated the average rank for each of the four types of culture for each respondent, which was then used to construct the variable 'cult type' to represent the type of culture the respondent perceived as predominating

in their organization. The variable 'cult type' could take the values of 1, 2, 3, or 4. A value of 1 represented the perception that a power culture predominated; a value of 2 represented the perception that a role culture predominated; a value of 3 represented the perception that a task culture predominated; and a value of 4 represented the perception that a people culture predominated. The 'cult type' variable was used to analyse the impact of culture on job satisfaction.

Job satisfaction was operationalized as the respondent's perception of the gap between the personal importance of certain job characteristics and satisfaction with those job characteristics. Respondents first evaluated the importance of 15 job characteristics and the extent to which they were satisfied with those job features. The difference between the importance of a job characteristic and satisfaction with the job characteristic served as the measure of job satisfaction. Ratings were on a scale ranging from 1 (not at all important, not at all satisfied) to 5 (very important, very satisfied). The job characteristics assessed by the questionnaire (co-workers, pay, advancement opportunities, working conditions, etc.) were based on earlier studies of job satisfaction (Kinicki et al. 2002). However, to test hypotheses H_2 and H_{2a}, H_{2b}, and H_{2c}, we identified particular job characteristics according to their relation to the need to belong, the need for safety, and the need for personal growth. Thus, the 15 job characteristics were selected so that five characteristics corresponded with each type of employee need. First, the gap between employee expectations and satisfaction for each of the 15 job characteristics was calculated for each respondent. Then the average gap between the importance and satisfaction was calculated for each of 15 job characteristics (i.e., Gap 1, Gap 2, Gap 3, ... , Gap15), based on all employees in the sample. In addition, the average gap between the importance of and satisfaction with the five job characteristics that corresponded to each of three types of needs was calculated: the need for safety (Safety Gap), the need to belong (Belonging Gap), and the need for growth (Growth Gap). Finally, the overall gap between expectations and satisfaction for all job characteristics was calculated for each respondent (Gap Summary).

4.3. Validity and reliability of study constructs

Cronbach's alpha was used to assess the validity of the constructs used to measure job satisfaction (Safety Gap, Belonging Gap, Growth Gap, and Gap Summary), with alpha values equal to or higher than 0.7 indicating construct

reliability. In addition, we calculated mean Inter-Item Correlations to determine whether correlation values ranged between 0. 2 and 0. 4. This statistic is often used to assess construct validity for constructs based on 10 or fewer questions, because the value of Cronbach's alpha, which is directly related to the number of questions, is often quite small for constructs based on only a few questions.

Table 1: Construct validity

Construct (or scale)	Number of questions the construct is based on	Cronbach's alpha	Mean inter-item correlation
Safety Gap	5	0.760	0.384
Belonging Gap	5	0.836	0.507
Growth Gap	5	0.836	0.505
Gap Summary	15	0.926	0.453

The values for Cronbach's alpha and the mean correlation values support the validity of the four constructs.

4.4. Statistical analysis

We used multivariate analysis (i.e., the multivariate general linear model) to test the study hypotheses because the study involved multiple dependent variables. With respect to the issue of whether to conduct a multivariate analysis or a set of univariate analyses, it should be noted that when dependent variables are correlated and the correlations between the individual dependent variables are 0.5 or higher, a multivariate analysis should be performed. The correlation matrix between the dependent variables (Gap 1, Gap 2, ..., Gap 15 and Safety Gap, Belonging Gap, Growth Gap) revealed strong correlations between certain pairs of variables, which required the use of multivariate analysis. However, when the analysis included only a single dependent variable (e.g., Gap Summary), a univariate analysis of variance (ANOVA) was performed.

5. RESULTS AND DISCUSSION

Hypothesis H_1 states that the level of satisfaction with job characteristics differs across the types of organizational culture, which indicates that organizational culture influences job satisfaction. Finding statistically significant differences between organizational cultures for the gaps associated with specific job

characteristics or for the overall gap would confirm hypothesis H_1. The results of this test are given in Table 2.

An issue that arises for a multivariate general linear model with 15 dependent variables (Gap 1, ..., Gap 15) and one factor (Cult type) with four levels is the question of which multivariate test to use. If assumptions underlying the application of the model are met – in particular, if the assumption of the homogeneity of the covariance matrix is satisfied – then it is appropriate to use Wilks' Lambda. However, if the assumptions underlying the application of the model are not met, the Pillai's Trace statistic is appropriate because it is robust with respect to failure to satisfy the assumptions of the model.

Table 2. The average gap between importance of and satisfaction with job characteristics for each type of organizational culture

		Culture Type				
		Power	*Role*	*Task*	*People*	*Total*
Gap 1	*Mean*	.35	.86	.40	.64	.59
	Std. Deviation	1.00	1.16	.81	1.34	1.05
Gap 2	*Mean*	.74	1.28	.33	.79	.84
	Std. Deviation	.89	1.15	1.21	1.05	1.18
Gap 3	*Mean*	.86	.75	.80	.42	.78
	Std. Deviation	1.08	.89	1.12	.90	1.01
Gap 4	*Mean*	1.11	.71	.47	.71	.72
	Std. Deviation	1.09	.86	.83	.83	.93
Gap 5	*Mean*	.82	.78	.62	1.29	.76
	Std. Deviation	1.32	.93	1.19	1.44	1.14
Gap 6	*Mean*	.86	.66	.63	.57	.69
	Std. Deviation	1.01	.87	1.02	.85	.95
Gap 7	*Mean*	1.11	1.08	.65	.57	.93
	Std. Deviation	1.18	1.26	.92	.85	1.14
Gap 8	*Mean*	1.08	1.24	.75	1.36	1.06
	Std. Deviation	1.04	1.37	1.15	1.91	1.27
Gap 9	*Mean*	.93	.78	.65	.57	.77
	Std. Deviation	.94	1.20	.93	1.09	1.06

Gap 10	Mean	.96	1.19	.64	.79	.95
	Std. Deviation	1.15	1.29	1.06	1.97	1.25
Gap 11	Mean	.28	.69	.73	.29	.59
	Std. Deviation	1.19	.92	1.05	.61	1.03
Gap 12	Mean	.80	.96	.64	.79	.82
	Std. Deviation	1.27	.95	.95	1.58	1.07
Gap 13	Mean	.89	1.04	.78	.79	.92
	Std. Deviation	1.33	1.16	.97	1.12	1.15
Gap 14	Mean	.88	1.18	.65	1.00	.94
	Std. Deviation	1.12	1.07	1.05	1.18	1.10
Gap 15	Mean	1.05	1.34	.73	1.00	1.07
	Std. Deviation	1.45	1.18	.89	1.57	1.21
Gap Summary	Mean	12.75	14.54	9.37	14.25	12.53
	Std. Deviation	12.26	11.73	10.13	12.17	11.57
Safety Gap	Mean	.89	.98	.59	.70	.82
	Std. Deviation	.83	.83	.64	.84	.79
Belonging Gap	Mean	.90	.90	.68	.87	.83
	Std. Deviation	.90	.82	.72	.96	.82
Growth Gap	Mean	.76	1.03	.62	.94	.84
	Std. Deviation	.89	.86	.88	.90	.89

The homogeneity of the covariance matrix was assessed using Box's M statistic and Levene's test for equality of variance separately for each dependent variable. Because the statistical significance of Box's M statistic and the significance of the F statistics for Levene's test indicated that the assumption of the homogeneity of the covariance matrix was not met, we employed Pillai's Trace statistic in the multivariate analysis.

Table 3. Results of the multivariate analysis of the dependent variables

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Inter-cept	Pillai's Trace	.418	14.247[b]	15.000	298.000	.000	.418
	Wilks' Lambda	.582	14.247[b]	15.000	298.000	.000	.418
	Hotelling's Trace	.717	14.247[b]	15.000	298.000	.000	.418
	Roy's Largest Root	.717	14.247[b]	15.000	298.000	.000	.418
Cult type	Pillai's Trace	.557	4.564	45.000	900.000	.000	.186
	Wilks' Lambda	.534	4.636	45.000	886.063	.000	.189
	Hotelling's Trace	.713	4.703	45.000	890.000	.000	.192
	Roy's Largest Root	.386	7.724[c]	15.000	300.000	.000	.279
a. Design: Intercept + cult type							
b. Exact statistic							
c. The statistic is an upper bound on F that yields a lower bound on the significance level.							

Because the level of significance for Pillai's Trace was less than 0.05, we concluded that the 15 gaps were significantly associated with the cult-type factor representing the type of organizational culture. To determine which particular gaps contributed to the statistically significant difference between the types of culture, we applied univariate testing through an F-test of each gap individually with the necessary correction of the level of significance, proposed by Bonferroni, which now amounts to 0,050/15 i.e., 0,003.

Table 4. Results of univariate testing of the dependent variables Gap1,...,Gap15

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Gap 1	18,272	3	6.091	5.702	.001	.052
Gap 2	49,706	3	16.569	13.665	.000	.116
Gap 3	2,409	3	.803	.785	.503	.007
Gap 4	18,889	3	6.296	7.636	.000	.068
Gap 5	10,903	3	3.634	2.890	.036	.027
Gap 6	4,372	3	1.457	1.692	.169	.016
Gap 7	15,078	3	5.026	3.915	.009	.036
Gap 8	15,593	3	5.198	3.496	.016	.033
Gap 9	5,231	3	1.744	1.588	.192	.015
Gap 10	18,843	3	6.281	4.158	.007	.038
Gap 11	11,386	3	3.795	3.638	.013	.034
Gap 12	8,091	3	2.697	2.480	.061	.023
Gap 13	3,349	3	1.116	.841	.472	.008
Gap 14	14,660	3	4.887	4.203	.006	.039
Gap 15	20,364	3	6.788	4.818	.003	.044

The results of the analyses revealed significant differences between the types of organizational culture for a number of job characteristics. The results also revealed that there were significant differences in the overall gap between importance of and satisfaction with job characteristics (Gap Summary) associated with different types of organizational culture.

For dependent variables that differed significantly across organizational cultures, post-hoc multiple comparisons were performed using the Dunnett T3 statistic, which is appropriate when the assumption of equality of variances is not met. There were significant differences between the power and the role cultures for the gaps related to most job characteristics and for the overall gap. Similarly, there were significant differences between the role culture and task culture for the gaps related to most job characteristics and for the overall gap. The lowest differences between the importance of and satisfaction with job dimensions were between the power and task cultures, and there was also no difference in the overall gap. The study results thus reveal significant differences in the levels of job satisfaction associated with different types of organizational

culture, providing evidence that organizational culture influences job satisfaction and confirming Hypothesis 1.

Hypothesis H_2 states that the satisfaction with job characteristics associated with the three types of need will vary across different types of organizational culture. Table 2 presents the average value of the gaps related to job characteristics associated with each type of need for the different types of organizational culture. Because the multivariate general linear model with the dependent variables of Safety Gap, Belonging Gap, and Growth Gap and the independent variable of Cult type failed to meet the assumption of the homogeneity of the covariance matrix, Pillai's Trace statistic was used in the multivariate analysis. Results of the analysis are presented in Table 5.

Table 5. Results of the multivariate analysis with the dependent variables Safety Gap, Belonging Gap, and Growth Gap

Effect		Value	F	Hypo thesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.359	57.877[b]	3.000	310.000	.000	.359
	Wilks' Lambda	.641	57.877[b]	3.000	310.000	.000	.359
	Hotelling's Trace	.560	57.877[b]	3.000	310.000	.000	.359
	Roy's Largest Root	.560	57.877[b]	3.000	310.000	.000	.359
Cult type	Pillai's Trace	.103	3.700	9.000	936.000	.000	.034
	Wilks' Lambda	.899	3.741	9.000	754.609	.000	.035
	Hotelling's Trace	.110	3.757	9.000	926.000	.000	.035
	Roy's Largest Root	.077	8.022[c]	3.000	312.000	.000	.072
a. Design: Intercept + cult type							
b. Exact statistic							
c. The statistic is an upper bound on F that yields a lower bound on the significance level.							

Because the level of significance of the Pillai's Trace statistic was less than 0.05, we conclude that Safety Gap, Belonging Gap, and Growth Gap significantly differed across different types of organizational culture (Cult type). To determine the specific gaps that contributed to the significant differences between the types of organizational culture, we performed univariate tests for each gap, assessing the significance of the F statistics after applying Bonferroni's correction (0.050/3 or 0.017).

Table 6. Results of univariate tests of the dependent variables Safety Gap, Belonging Gap, and Growth Gap

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Safety Gap	9.225	3	3.075	5.059	.002	.046
Belonging Gap	3.647	3	1.216	1.815	.144	.017
Growth Gap	11.119	3	3.706	4.864	.003	.045

There were significant differences between the types of culture for 2 of the 3 gaps associated with employee needs. The results of the analysis also indicated that the overall gap (Gap Summary) was significantly different across types of organizational culture. For the dependent variables that differed significantly across types of organizational culture (i.e., Safety Gap and Growth Gap), we performed post-hoc multiple comparisons using the Dunnett T3 statistic, which revealed that only the task and role cultures differed significantly with respect to Safety Gap and Growth Gap as well as the overall gap.

The results of the analyses indicate that the type of organizational culture influenced the job satisfaction associated with the three types of employee need. This finding supports H_2, which states that the extent to which employees satisfy the need for safety, the need to belong, and the need for growth differs for the three types of organizational culture.

The finding confirming the second hypothesis reveals that satisfaction with job characteristics associated with different employee needs differs across type of organizational culture because these cultures differ in their ability to fulfil these needs. However, this finding does not necessarily support the specific study

hypotheses regarding the way in which each type of organizational culture facilitates or interferes with the satisfaction of each of the three needs. The extent to which the significant differences in job satisfaction across type of culture exhibited the pattern proposed by hypotheses 2a, 2b, and 2c was identified by examining the average values of the gaps related to the job characteristics associated with the three needs for the different types of organizational culture, which are presented in the lower portion of Table 2.

If hypothesis H_{2a} is correct, respondents who perceive that a power culture predominates in their organization should exhibit the smallest gap related to the job characteristics associated with the need to belong (Belonging Gap), i.e., this gap should be smaller than the gaps related to the job characteristics associated with the need for growth (Growth Gap) or the need for safety (Safety Gap). Moreover, if the hypothesis is correct, respondents who perceive that a power culture predominates in their organization should have the lowest value for the Belonging Gap, and this value should be lower than the value for respondents who perceive that another type of culture predominates. The lower portion of Table 2 reveals that the hypothesized relationships did not occur: the value for the Belonging Gap was lowest in the task culture rather than in the power culture, and in organizations in which the power culture predominated the Growth Gap rather than the Belonging Gap exhibited the lowest value. Thus, H_{2a} was not supported and we must reject the hypothesis.

If hypothesis H_{2b} is correct, respondents who perceive that a role culture predominates in their organization should exhibit the smallest gap related to job characteristics associated with the need for safety (Safety Gap), i.e., the value for this gap should be smaller than for the gaps related to job characteristics associated with the need for growth (Growth Gap) or the need to belong (Belonging Gap). Moreover, if this hypothesis is correct, the lowest value for the Safety Gap should occur for respondents who perceive that a role culture predominates in their organization, and this value should be lower than the values for respondents who perceive that another type of culture predominates. The lower portion of Table 2 reveals that neither of these two conditions was met. The Belonging Gap rather than the Safety Gap had the lowest value in organizations with a role culture. In addition, the Safety Gap was lowest in the

task culture rather than in the role culture. Therefore, H_{2b} was not confirmed, and we must reject the hypothesis.

If H_{2c} is correct, respondents who perceive that a task or people culture predominates in their organization should exhibit the smallest gap related to job characteristics associated with the need for growth (Growth Gap), i.e., values for this gap should be smaller than for the gaps related to job characteristics associated with the need for safety (Safety Gap) or the need to belong (Belonging Gap). Moreover, if this hypothesis is correct, the lowest values for the Growth Gap should occur for respondents who perceive that a task or people culture predominates in their organization, and these values should be lower than the values for respondents who perceive that another type of culture predominates. The lower portion of Table 2 reveals that neither of these two conditions was met. First, the results for people culture were not included in the analysis because only 12 respondents perceived that this type of culture was predominant in their organization. Therefore, only the results for task culture were included in the analysis. Second, in organizations with a task culture the Safety Gap had the lowest value, although hypothesis H_{2c} predicted that the Growth Gap would exhibit the lowest value. By contrast, the Growth Gap was lowest in the task culture, but this finding was part of a general pattern in which all gaps were lower for the task culture than for the role or power cultures. Therefore, H_{2c} was not confirmed and we must reject the hypothesis.

The analyses testing hypotheses H_2, as well as H_{2a}, H_{2b}, and H_{2c}, which were derived from it, produced intriguing results. Although the results confirming H_2 indicate that the type of organizational culture differentially influences satisfaction with job characteristics associated with different employee needs, the rejection of hypotheses H_{2a}, H_{2b}, and H_{2c} indicates that the mechanism underlying the effect is not what we assumed. The hypothesis that the mechanism through which organizational culture affects job satisfaction involves the correspondence between the characteristics of a particular type of organizational culture and a specific employee need was not supported. The values presented in the lower portion of Table 2 reveal that the gaps related to job characteristics associated with the three employee needs did significantly differ across type of organizational culture, but did not support the specific hypotheses H_{2a}, H_{2b}, and H_{2c}. Table 2 indicates that the gap values for job

characteristics associated with all three employee needs were highest for the role culture, lower for the power culture, and lowest for the task culture. These findings support the alternative explanation of the influence of organizational culture on job satisfaction and provide a test of hypothesis H_3, which was based on the alternative explanation.

Hypothesis H_3 states that the characteristics associated with the type of organizational culture influence the overall level of job satisfaction, which is predicted to be highest in people and task cultures, lower in power cultures, and lowest in role cultures. To test H_3 it was necessary to determine the extent to which overall job satisfaction (Gap Summary) was associated with the type of organizational culture as predicted, with the lowest values in the people culture, higher values in the task culture, even higher values in the power culture, and the highest values in the role culture.

The analysis testing hypothesis H_1 revealed that the Gap Summary differed significantly across type of organizational culture, but did not reveal whether the differences exhibited the pattern predicted by hypothesis H_3. Table 2 reveals that the Gap Summary had the largest value for the role culture, a lower value for the power culture, and the lowest value for the task culture. The analysis excluded data for the people culture due to the small number of cases. The pattern of results confirms H_3, which was also supported by the analyses testing hypotheses H_{2a}, H_{2b}, and H_{2c}. The finding that the Belonging Gap, Safety Gap and Growth Gap differed in the same manner based on the type of organizational culture, with values for all three gaps lowest in the task culture, higher in the power culture, and highest in the role culture, indicates that job satisfaction is influenced by the content and characteristics of the organizational culture, rather than the extent to which the culture fulfils particular employee needs.

6. CONCLUSIONS, IMPLICATIONS, AND LIMITATIONS

The empirical research presented in this paper reveals that organizational culture is an organizational factor influencing job satisfaction. Organizational culture is an important factor because it determines the internal environment of the organization in which organization members perform their work and achieve desired outcomes (Schein 2004; Ashkanasy et al. 2001). As a result it

influences job satisfaction, which the study operationalized as the gap between the importance of a particular job characteristic for an employee and employee satisfaction with the job characteristic. For the companies in the sample, the analysis found that systematic and statistically significant differences in employee satisfaction were associated with the type of organizational culture that employees perceived to be predominant in their company.

Another major study finding was that organizational culture did not influence job satisfaction because its values and norms fulfilled employee needs for belonging, safety, or growth. Although satisfaction with job characteristics associated with these three needs was different for different types of organizational culture, the observed pattern of relationships did not confirm the hypothesized relationships, in which a particular type of organizational culture should facilitate satisfaction with job characteristics associated with certain employee needs, and should interfere with satisfaction with job characteristics associated with other employee needs.

The third major finding of the study was that different types of organizational culture were associated with different levels of employee satisfaction due to the content or characteristic values and norms they exhibit. Therefore, overall job satisfaction as well as satisfaction with job characteristics (regardless of the needs with which they are associated) were lowest for organizations with a role culture, higher for organizations with a power culture, and highest for organizations with a task culture. Differences in the level of job satisfaction associated with different types of organizational culture were based on values and norms that differed with respect to the distribution of power and the work or social orientation of the organization.

The study results have significant theoretical and practical implications. The key theoretical contribution of the present study is the finding that organizational culture is an organizational factor that influences job satisfaction. In addition to other factors identified by the research literature, such as supervision, organizational structure, working conditions, and compensation systems, to a certain extent organizational culture also determines employee job satisfaction. However, the study results do not address the issue of the extent to which the organizational cultures exert indirect, moderating effects on job satisfaction in

addition to direct effects. Future research should explore this issue, because it is possible that organizational culture indirectly contributes to job satisfaction by influencing other job characteristics that are also related to job satisfaction. Another theoretical contribution of the study is the finding that certain types of culture are associated with a higher level of job satisfaction than other types of culture. A practical implication of the study findings is that managers seeking to produce satisfied employees should focus on establishing a task culture rather than a role culture.

The study also exhibits certain theoretical and methodological limitations. One theoretical limitation of the study is the relatively arbitrary choice of the three types of needs associated with characteristics of the work environment. Although the choice was based on accepted theories of motivation, existential needs were not included due to the assumption that some needs are affected by organizational culture and others are not. Another theoretical limitation of the study was the decision to analyse organizational culture at the individual level. Although this decision was justified because perceived job satisfaction is an individual construct, from this perspective the employee's perception of the predominant type of organizational culture was more important than the type of organizational culture that actually predominated. The third theoretical limitation of this study involves the scope of the research model, which examined the relationship of only two variables. A model including more variables would have provided a more accurate picture of the influence of organizational culture on job satisfaction.

There were also a number of methodological limitations. First, because the sample was not sufficiently representative, few organizations exhibited the people culture and it was not included in the analysis. However, this situation might have occurred because the values and norms associated with this type of culture are rare. Instruments that encompass organizational culture have been used relatively little in research. Handy's questionnaire is not used to the extent of some other questionnaires such as, for example, Quinn and Cameron's (2006) questionnaire. Finally, a methodological limitation of the study in relation to the assessment of organizational culture is that only the dominant type of organizational culture as perceived by the respondents was taken into account, and not the other types present in the organization Although the questionnaire

which determined job satisfaction included items previously used in other questionnaires, the questionnaire itself has not been used in other research. In addition, the choice of job characteristics and the identification of the job characteristics related to the three types of employee need were arbitrary. A final methodological limitation of the study was the failure to control for a number of factors that might influence the relationship between culture and job satisfaction. Although the analysis controlled for the influence of salary, type of company ownership, respondent age, and respondent gender on the relationship between organizational culture and job satisfaction, the influence of other potentially important factors such as company performance, organizational structure, leadership style, and company size were not controlled for.

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