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ORGANIZATIONAL CULTURE AND TACIT KNOWLEDGE SHARING: EMPIRICAL EVIDENCE FROM CROATIA

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Abstract: The paper aimed to investigate the influence of organizational culture types on tacit knowledge sharing in medium and large enterprises in Croatia. For research, organizational culture is differentiated according to the typology based on the Competing Values Framework. In the theoretical part, the basic concepts and open questions related to the issues of the subject research are systematized and analyzed. The empirical part of the paper presents the results of a survey conducted on 14 medium and large companies in the Croatian economy. A total of 492 knowledge workers were surveved in these companies. Multiple regression was used to assess the research model. The results of the research showed that organizational culture significantly influences tacit knowledge sharing, where the mentioned influence can be positive or negative, depending on the culture type. More precisely, it was found that clan and adhocracy cultures have a positive, and market culture has a negative impact on tacit knowledge sharing. However, no statistically significant influence of hierarchy culture on tacit knowledge sharing has been proven. The results of this paper have significant theoretical and practical implications.

Keywords: organizational culture; Competing Values Framework; knowledge sharing; tacit knowledge.

JEL classification: M14, M21.

INTRODUCTION

Over the last twenty years, knowledge management has been profiled as a discipline that has aroused significant interest among scientists, consultants, and practitioners. This interest is based on the conclusion that traditional industrial technologies and tangible capital are no longer key factors that ensure competitive advantage, but that such a resource that encourages organizational survival and success is knowledge (Mahdi, Almsafir, & Yao, 2011). Knowledge has specifics that distinguish it from other resources. It is intangible, volatile, increases in use can be used as an input in multiple processes at the same time, and has a wide range of effects on a company (Skyrme, 2011), which is why it has to be managed adequately. However, for the successful implementation of knowledge management, the desire or ambition of employees to share their knowledge with others is important, which has turned knowledge sharing into one of the most important processes of knowledge management.

By researching the organizational context in which organizational knowledge is created and used, scientists have concluded that organizational culture is one of the key factors determining the success of knowledge sharing (North, 2008). Further research went in the direction of discovering the mechanisms through which culture influences knowledge sharing, as well as the direction of that influence, ie the content of organizational culture that encourages or facilitates knowledge sharing. In these papers, the authors demonstrated the positive impact of certain elements of organizational culture, such as trust (Paroutis & Al Saleh, 2009) (Islam, Hasan, Ahmed, & Ahmed, 2011) (Al-Shammari & Musharraf, 2014), the interaction between staff, and leadership (Islam, Hasan, Ahmed, & Ahmed, 2011) (Al-Shammari & Musharraf, 2014) on knowledge sharing. Some researchers go a step further and investigate the impact of certain types of organizational culture on knowledge sharing (Wiewiora, Trigunarsyah, Murphy, & Coffey, 2013) (Lee, Shiue, & Chen, 2016) (Abbasi & Dastgeer, 2018) (Rohim & Budhiasa, 2019) (Castaneda & Ramírez, 2021). The attitude of this group of researchers is that organizational culture influences knowledge sharing not by individual elements but by its configuration, which is why assumptions, values, and norms in its content should be in agreement with each other. "Configurations of mutually consistent assumptions, values, and norms are nothing but types of organizational cultures" (Janicijević, 2013, str. 437). Thus, according to this second group of authors, organizational culture influences knowledge sharing not by individual elements, but by its configuration, where this impact can be positive but also negative (İlknur, Cetin, Senturan, & Demiralay, 2017). Namely, a review of recent research on the impact of organizational culture on knowledge sharing has shown that diversification is needed, as market culture type has been found to have a negative impact on knowledge sharing (Suppiah & Sandhu, 2011) and it is claimed that this area is still open to research which should go in the direction of analyzing the impact of different types of organizational culture on knowledge sharing (Abbasi & Dastgeer, 2018). The manner and success of knowledge transfer also depend on the type of knowledge. One of the most commonly used knowledge classification, especially in the organizational context, is Polanyi's (1967) division into explicit (objective) and tacit (unexpressed) knowledge, which continues Ryle's (1949) distinction between "knowing that" and "knowing how". Differentiating between the concepts of tacit and explicit knowledge is the most dominant concept in the modern theory of organizational knowledge management. Explicit knowledge is relatively easily transferred through various forms of written reports, studies, and electronic exchange of information, while tacit knowledge is much more difficult to exchange because it is located in the minds of experts and as such can be transferred only by the will of the individual through direct and intensive communication with the person to whom this knowledge is to be transferred. It is clear from the above that

explicit and tacit knowledge are different, which is why some authors recommend that in research these two types of knowledge be differentiated from each other (Lee, Shiue, & Chen, 2016) (Castaneda & Ramírez, 2021). But even though the nature of explicit and tacit knowledge is different, as is their volume and value to the organization, very little research are available in the literature on the impact of organizational culture types on knowledge sharing in which authors focus on tacit knowledge (Suppiah & Sandhu, 2011) (İlknur, Cetin, Senturan, & Demiralay, 2017) (Shahzadi, 2017). Given the fact that most knowledge in companies is in tacit form (Mooradian, 2005) and that such knowledge plays a key role in improving companies' performance (Reychav & Weisberg, 2009), as well as continuous efforts of company management to find ways to share tacit knowledge among employees, the focus in this paper is (only) on tacit knowledge, instead of knowledge in general. Thus, this paper aims to investigate the impact of certain types of organizational culture on tacit knowledge sharing, which represents a novelty in the Croatian context. For research purposes, organizational culture is differentiated according to one of the most established organizational culture models, the Competing Values Framework (CVF) developed by (Quinn & Rohrbaugh, 1983). Even though there is the widespread literature that analyzes the influence of organizational culture on a broad range of different phenomena, it can be stated that an application of the CVF model to tacit knowledge sharing is still in its early stages so, consequently, the role of the different CVF types of culture on tacit knowledge sharing still remains unclear. In addition, most authors investigated the issue by examining employees in a very small number of companies - in only one (İlknur, Cetin, Senturan, & Demiralay, 2017), two (Wiener, Gattringer, & Strehl, 2018), or, for example, four companies (Eckenhofer & Ershova, 2011) (Wiewiora, Trigunarsyah, Murphy, & Coffey, 2013). This led to the fact that in several studied samples some types of culture were not even detected, and the authors examined the impact of only certain types of culture from the CVF model on knowledge sharing, while other types remained unexamined. The territorial distribution of companies from the samples is often very narrow because most authors conducted their research on companies in only one region of a particular country. A larger sample of companies and their wider geographical dispersion will seek to offer clearer results on the impact of organizational culture types from the CVF model on knowledge sharing.

LITERATURE REVIEW

A very large number of definitions related to organizational culture are present in the literature. These definitions most often mention elements such as behaviour and beliefs (the way we work here), opinion (the way we think here), organizational values (what the value system is and what values are important in the organization), and norms (differentiate desirable from undesirable), which primarily indicate the way of working and living in the company. For example, (Schwartz & Stanley, 1981, str. 33) define organizational culture as "a pattern of beliefs and expectations shared by organization members," and (Sikavica & Novak, 1999, str. 596) as "a system of values, understandings, beliefs, ethics, lifestyles, personalities, and a company's character."

Values are the primary element in the operationalization of the culture for most researchers in this field. CVF was also built on them and this model experienced its most important application and extension in the field of organizational culture. Namely, its creators (Quinn & Rohrbaugh, 1983) found out that there are two key dimensions of the concept of performance based on a statistical analysis of numerous performance indicators – orientation of the organization and the type of structure that the organization prefers. According to these dimensions, (Cameron & Quinn, 1999) derived the following four types of organizational culture from the CVF model: adhocracy, clan, market, and hierarchy organizational types. The characteristics of these types are shown in Table 1.

Table 1: A CVF Model of Organizational Culture Types

Type of	Orientation					
structure	Internal	External				
Flexibility	Clan culture - Cohesion, collaboration, teamwork, employee involvement, mutual trust, high organizational commitment - Appropriate for uncertain environment - Main objectives: long term benefits and individual development	Adhocracy culture Innovation, continuous improvement, risk taking Appropriate for hyper turbulent environment Main objective: being at the leading edge of new product, services and knowledge.				
Stability	Hierarchy culture - Clear lines of decision-making - Multiple hierarchical levels - Rules and formalized procedures - Conservatism - Main objectives: efficiency and stability	Market culture - High competitiveness - Goal achievement - Measurability of work activities - Main objectives: profitability, secure customer base and strategic positioning				

Source: Adopted from (Cameron & Quinn, 1999)

When it comes to knowledge sharing, it is defined as a process in which employees share their knowledge with each other, thus creating new ones (Razmerita, Kirchner, & Nielsen, 2016). (Iebra Aizpurúa, Zegarra Saldaña, & Zegarra Saldaña, 2011) define knowledge sharing as the process through which employee knowledge is transformed into a form that others can understand, absorb and use. What is important is that the individual shares his/her knowledge with others voluntarily in a form that is clear, acceptable, and usable to others, and that this sharing multiplies knowledge (Van Den Hooff & De Ridder, 2004). Thus, knowledge gains in value through sharing as it increases, expands, and deepens. In this context, it is necessary to distinguish knowledge sharing from its transfer, which implies "only identical or partial replication of knowledge from one place to another" (Lucas, 2006, str. 259). Thus, although similar, knowledge sharing and transfer are different concepts, although in the literature they are sometimes equated.

Organizational culture and knowledge sharing are in many ways related. Both concepts play a very important role in achieving a company's competitive advantage (Madu, 2012) (Navimipour & Charband, 2016). "Sustainable advantage of a modern organization stems from what its employees know, how effectively they use what they know and how quickly they acquire and use new knowledge" (Jakupović & Grandov, 2014, str. 231). On the other hand, organizational culture determines the company's ability to acquire and use new knowledge through knowledge sharing (Wiewiora, Tri-

gunarsyah, Murphy, & Coffey, 2013). Stojanović-Aleksić, et. al. (2019) stated that a good predictor of knowledge sharing is an organizational culture based on support. "In various literature one of the most important notions connected to tacit knowledge is organizational culture" (Ershova, 2009, str. 87). However, research on the impact of organizational culture types from the CVF model on tacit knowledge sharing is still rare, and only recently has there been an attempt to create a systematic theoretical framework. In the context of the above, it is important to determine which types of organizational culture from the CVF model encourage tacit knowledge sharing, and which block it, which is also the fundamental goal of this paper.

In previous research, the interconnection between the types of organizational culture and other variables has been analyzed in two ways (Buh, 2016): by comparing companies according to the dominant type of organizational culture, or by acknowledging the fact that the organizational culture of each company has characteristics of several types of culture. In the first approach, the authors determine the dominant type of organizational culture for each researched company. Depending on the result, companies are then classified into one of four groups (companies with a dominant adhocracy culture, companies with a dominant market culture, companies with a dominant clan culture, companies with a dominant hierarchy culture), and compared groups according to desired parameters (e.g. Bradley et al. (2006), (Zavyalova & Kucherov, 2010)). On the other hand, there are increasingly more researchers who divide the organizational culture of each company into four categories while including the obtained value for each type of culture in the analysis (Aier, 2012) (Buh, 2016). The first approach ignores the fact that company culture has at least some features of several culture types. In addition, it is possible that the organizational cultures of two companies, which belong to the same group according to the dominant type of culture, are quite different (for example, a company with a highly dominant adhocracy culture and a company with a slightly dominant adhocracy culture). In the context of the research in question, it was concluded that reliance on the solely dominant type of culture would not be an opportune solution.

The clan type of organizational culture from the CVF model, which some authors also call group culture (e.g. in the study of (Prajogo & McDermott, 2005)), is characterized by teamwork, cooperation, employee involvement, mutual trust, and high organizational commitment (Table 1). In this type of culture, the leader is called a 'mentor', whereas employees self-sacrificially add something from themselves. These are all characteristics of cultural values that are generally considered to encourage tacit knowledge sharing (Kim & Lee, 2006), which has been confirmed in several studies. For example, Suppiah & Sandhu (2011) in a study conducted on a sample of 408 respondents in seven Malaysian companies from different sectors, proved the positive impact of this type of culture on tacit knowledge sharing. The same result was reached by Ilknur et al. (2017), who conducted their research on a sample of 124 respondents from one bank in Turkey, as well as Wiewiora et al. (2013) who conducted a case study among 39 respondents in 4 project-oriented companies (various industries) in Australia. Taking this into account, it is assumed that the clan type of organizational culture will have a positive impact on tacit knowledge sharing, and the first research hypothesis is set, which reads:

H1 Clan organizational culture has a positive impact on tacit knowledge sharing.

Adhocracy culture, also known as developmental or entrepreneurial in some studies (e.g. Brettel et al. (2015)) nurtures creativity, propensity for change and risk-taking, a continuous re-examination of old ideas, search for new ways of working, and commitment to learning, which is why it is generally considered to encourage tacit knowledge sharing (Ershova, 2009). However, according to the authors, this link has not been empirically tested so far, although there is evidence of its positive impact on some dimensions of knowledge sharing in general, such as the impact on "knowledge donation" (Cavaliere & Lombardi, 2015) and intra-organizational networks (Eckenhofer & Ershova, 2011). Therefore, the second research hypothesis refers to the influence of the adhocracy type of organizational culture on tacit knowledge sharing and reads:

H2 Adhocracy organizational culture has a positive impact on tacit knowledge sharing.

Characteristics of market organizational culture, also known as rational culture (e.g. in the study of Brettel et al. (2015) are goal setting, focus on achievement, measurability of work activities, and meeting deadlines. This type of culture nurtures a competitive spirit among employees, which is why it can be assumed that they will experience the knowledge they have as their power and will not be willing to share it, which is consistent with research conducted by Suppiah & Sandhu (2011) and Wiewiora et al. (2013). Therefore, the third research hypothesis refers to the influence of the market type of organizational culture on tacit knowledge sharing, and reads:

H3 Market organizational culture has a negative impact on tacit knowledge sharing.

Tacit knowledge is stored in people's minds, and as such is most often not transmitted through prescribed procedures, official documents, and meetings, but through informal face-to-face interactions (Akın Gürdal & Kumkale, 2014). On the other hand, hierarchy organizational culture is characterized by a focus on written procedures and formal regulations, high specialization in work and control, emphasis on rules, and vertical communication, which is not conducive to sharing this type of knowledge. Ershova (2009) states that out of all four types of culture within the CVF hierarchy culture supports tacit knowledge sharing probably the least. Taking this into account, and in line with the results of research conducted by Suppiah & Sandhu (2011), it is assumed that the hierarchy type of organizational culture will have a negative impact on tacit knowledge sharing. So the last, fourth hypothesis refers to the influence of hierarchy organizational culture on tacit knowledge sharing, and reads:

H4 Hierarchy organizational culture has a negative impact on tacit knowledge sharing.

RESEARCH METHODOLOGY

The research subject of this paper is the influence of certain types of organizational culture from the CVF model on tacit knowledge sharing. To investigate these

impacts, an empirical study was conducted on 14 medium and large Croatian companies operating in different regions of the country, and belonging to different sectors. According to the practice of other researchers (e.g. Suppiah & Sandhu, (2011)), the target respondents in companies were knowledge workers, who were in this research defined as workers with a university degree (Bentley, 1990) and are identified in companies through the degree of education they possess. All the results obtained are thus based on the subjective perception of respondents in the surveyed companies, which is common in similar research.

Appropriate tools for investigating the companies' characteristics of human resources (socio-demographic variables) were constructed in a range of four questions that examined the characteristics of employees concerning age, level of education, hierarchical level, and the length of service in the surveyed company. The Organizational Culture Assessment Instrument (OCAI), developed by Cameron and Quinn (1999), was used to explore the organizational culture. OCAI is built on the CVF model and explores the types of organizational culture by assessing the following six aspects of organizational culture: dominant characteristics, strategic emphasis, organizational leadership, employee management, organizational glue, and criteria for success in a concrete organization. With its dimensionality and content of value orientations, presents a suitable integrative model for the study of culture in organizations (Sušani, 2005), and is one of the tested and verified questionnaires. Although this instrument originally supported ipsative ranking, an increasing number of researchers are using the Likert scale instead, as was done in this study. The reason is the difficulty in not understanding the ipsative ranking by the respondents, which was reported by several researchers in previous studies (e.g. Suppiah & Sandhu, (2011)), as well as its undesirable statistical properties (Sverko, 2009). The validity of this instrument (with Likert scale) for research in Croatia was confirmed by (Mečev & Grubišić, 2020). This part of the questionnaire contains 24 statements. Indicators for tacit knowledge sharing were taken from Lee (2001) and were slightly modified to match the background of this study, in a similar way as adapted by other researchers This part of the questionnaire consists of three statements related to know-how from work experience, knowwhere and know-whom, and education and training. Except in the first part of the questionnaire, which consists of variables measured by mostly closed multiple-choice questions, the majority of the research is based on statements by which respondents expressed the degree of their agreement/disagreement.

Two experts (researchers in the field of organizational behaviour) independently judged the content of the research instrument itself concerning theoretical assumptions that should prove to test the validity of the research instrument. Secondly, ten people of different socio-demographic profiles, who meet the criteria of the sample of this research, assessed the content of the question in detail and gave their opinion on the content, comprehensibility, and manner of conducting the research. In line with their views, some claims have been corrected to achieve a higher level of comprehensibility.

Since it was not possible to collect data for independent and dependent variables from different sources and at different times, in this study the common method bias sought to be reduced in a way that respondents were guaranteed anonymity, and before the survey, it was stressed that there are no wrong or right answers. Podsakoff et al. (2012) state that these procedures should decrease people's evaluation apprehension

and editing of their responses so that they would be more socially acceptable, compliant, and consistent with how they think the researcher would want them to answer.

The Cronbach's alpha coefficient was used to test the reliability of the measurement scales. Table 2 shows the values obtained for each of the subscales.

Measured construct Number of Items Cronbach alfa coefficient (α) Adhocracy organizational culture 6 0,882 Market organizational culture 6 0,785 Clan organizational culture 6 0,767 6 Hierarchy organizational culture 0,795 3 Tacit knowledge sharing 0,788

Table 2: Measurement reliability tests

Source: Research results

Based on the above, it is possible to conclude that the measuring instruments used in this study have acceptable reliability since the Cronbach's alpha coefficient (α) for all subscales exceeds the recommended value of 0,7 (Taber, 2018).

To examine the impact of certain types of organizational culture on tacit knowledge sharing, a regression analysis was performed using a multiple regression model with the variable of knowledge sharing set as a criterion, with four predictors (types of organizational culture). In addition to conducting the regression analysis itself, potential problems of autocorrelation and multicollinearity were tested. Autocorrelation or serial correlation refers to the correlation of random variables within a stochastic model and was tested by the Durbin-Watson test. Multicollinearity refers to the strength of the relationship between independent variables. In this study, it was tested with Variance Inflation Factors (VIF) and their reciprocal values (TOL).

RESULTS AND DISCUSSIONS

As already mentioned, the empirical research was conducted in 14 medium and large Croatian companies operating in different regions of the country, on an established representative sample of workers. Small companies (ie companies with less than 50 employees) were not taken into consideration, because in the context of the chosen issue, their inclusion would not make sense and would reduce the strength of the conclusion. There are a larger number of knowledge workers in medium and large companies, and surveying a larger number of knowledge workers is extremely important in researching organizational culture and knowledge sharing, and provides more elements to generate important conclusions than surveying several workers in small companies. Followed the approach suggested by Aboalea (2015), only companies that have been operating for more than 5 years are included in the survey. Depending on the total number of employees, between 20 and 70 knowledge workers were surveyed in the companies. Ultimately, the survey results were obtained based on the responses of 492 knowledge workers. Table 3 shows the characteristics of the company and employee samples.

Table 3: Characteristics of the samples

Characteristics of the respondents' co	Characteristics of the respondent			
Region	Frequency	Age of respondents	Frequency	
Central Croatia	7	Up to 30 years	108	
Dalmatia	4	30-40	188	
Slavonia	2	40-55	126	
Istria	1	70		
Industry types (according to NACE)	Hierarchical level			
Accommodation and food service activities	3	Executives	98	
Wholesale and retail trade	3	Senior and middle management	93	
Manufacturing	3	Professionals	197	
Information and communication	2	Operational staff	104	
Transportation and storage	1	Education level		
Professional, scientific, and technical activities	1	Bachelor	186	
Financial and insurance activities	1	Master	249	
Number of employees		Doctor	17	
50-100	8	Other	37	
100-250	2	Years of work in the company		
over 250	4	Up to 3 years	39	
Age of the company (by year of establishm	3-5	81		
5-10	2	5-10	104	
10-20	10	10-15	209	
over 20 years	2	over 15 years	59	
Total companies	14	Total respondents	492	

Source: research results

Table 3 shows that the majority of surveyed companies are from Central Croatia, which is the most populated region of the country and represents the area with the largest number of registered companies, but the survey also includes companies from other Croatian regions. More than half of the surveyed companies have between 50 and 100 employees, while the least companies have between 100 and 250 employees (2 companies). According to the number of employees, four surveyed companies belong to the category of large companies, ie they have more than 250 employees. 10 out of 14 surveyed companies have been operating between 10 and 20 years. When it comes to the characteristics of respondents, the largest number of respondents is aged from 30 to 40 years (38.2%), and most of the respondents are employed in the surveyed companies between 10 and 15 years (42.5% of all respondents). When it comes to the hi-

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erarchical level, 38.8% of respondents work at various levels of managerial positions, 40,0 % of them are independent professionals, and 21,1% work as operational staff. All respondents have some level of university education, because this condition was the primary criterion for their selection in the sample, with most respondents having a master's degree (50.6%).

After analyzing the characteristics of the samples, it remains to determine the impact of certain types of organizational culture from the CVF model on tacit knowledge sharing, because only the identification of such (or similar) links can give meaning and value to organizational culture in business and economic research. The results of the performed regression analysis are shown in Table 4.

Table 4: Results of regression analysis of the impact of organizational culture on tacit knowledge sharing

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics			
	ß	Std. Error	Beta		-	TOL	VIF		
Clan	0,323	0,113	0,415	3,011	0,004	0,730	1,370		
Adhocracy	0,274	0,148	0,271	2,562	0,022	0,561	1,781		
Hierarchy	0,139	0,208	0,075	0,669	0,508	0,940	1,064		
Market	-0,237	0,139	-0,237	-1,267	0,048	0,566	1,766		
Regression model:	R = 0,649; R2=0,421; Adjusted R2=0,374; Std. Error of the Estimate 0,628; Durbin-Watson test: 1,89 ANOVA: $F = 8,852$; p< 0,001								

Source: Research results

The analysis determined a multiple correlation coefficient of R = 0.649, and the regression of predictor variables on tacit knowledge sharing proved to be statistically significant, with an F-ratio value of 8.852 and probability of accidental occurrence p <0.001, which points to the conclusion of a significant connection between organizational culture and tacit knowledge sharing. With the help of predictor variables, the model explained 42.1% of the variable tacit knowledge sharing, which is not a negligible result within the framework of socio-economic phenomena. The remaining, unexplained part of the variance can be attributed to some other variables. The value of Standard Error of the Estimate is less than one, from which it can be concluded that there is no significantly large model error. The result of the Durbin-Watson test of 1.89 is very close to the reference value of 2,0 (Field, 2013), and it can be concluded that there is no significant residual autocorrelation problem in the model. All influential variables in the VIF value model are less than the maximum allowable limit of 5.0 (Šošić, 2004), have a high tolerance threshold, and it is concluded that in this study there is no problem of multicollinearity and the set regression analysis model can be accepted.

In the clan and adhocracy type of organizational culture, there is a positive connection with the regression function. These findings confirmed hypothesis H1, which assumed that clan organizational culture has a positive impact on tacit knowledge sharing, as well as hypothesis H2, which assumed that adhocracy organizational culture has

a positive impact on tacit knowledge sharing. The importance of the influence of these organizational culture types on tacit knowledge sharing can be compared based on standardized regression parameters, which correspond to the correlation coefficients. Although the comparison of influences is not problematized as a separate hypothesis. it is important to mention it in the context of the whole study. It can be seen from Table 4 that clan type has the greatest relative influence on tacit knowledge sharing, while the individual contribution of the adhocracy type of organizational culture is also statistically significant, but slightly smaller. The negative sign of the regression β coefficient in the variable of market organizational type means the following: the more pronounced the characteristics of the market type in their organizational cultures, the fewer employees share their tacit knowledge with their colleagues. This confirmed hypothesis H3, which assumed that market organizational culture has a negative impact on tacit knowledge sharing. Contrary to initial expectations, the research showed that the hierarchy type of organizational culture does not have a statistically significant impact on tacit knowledge sharing, thus rejecting the H4 hypothesis. The result obtained may be explained by somewhat contradictory attributes of hierarchy culture when it comes to knowledge sharing. Control, written procedures and formal regulations, and the emphasis on rules are undeniably not conducive to tacit knowledge sharing. At the same time, it is known that strong leadership is crucial for the successful implementation of knowledge management systems in companies, and it is to be expected that companies with a pronounced hierarchy type of culture will have strong leaders.

Finally, given that the study showed a significant positive impact of the clan and adhocracy types of culture on tacit knowledge sharing, and that their common characteristic is the flexibility of the company, it can be concluded that this characteristic proved to be extremely important in encouraging knowledge sharing among employees.

CONCLUSION

The subject research analyzed the influence of organizational culture on tacit knowledge sharing in Croatian companies. For the research, a typology from the CVF model was used, according to which, given the company's orientation and type of structure, it is possible to distinguish four types of organizational culture: clan, market, adhocracy, and hierarchy. In this way, an attempt was made to impart to the lack of consensus in defining how different types of organizational culture from the CVF model can influence employees' tacit knowledge sharing behaviours. To address this issue, an empirical study was conducted on a sample of 492 respondents who are employees of 14 medium and large companies in the Republic of Croatia. As stated in the theoretical framework, only a few studies so far have reported the relationship between certain types of organizational culture from the CVF model and knowledge sharing, and none of them in Croatia or culturally similar countries. Although organizational culture may seem too "soft" to many managers, including theorists, and without economic implications, it has a significant impact on many business processes, including tacit knowledge sharing. The conducted research proved that. The results of the research showed that the clan type of culture is most favourable to tacit knowledge sharing, which confirmed the results of some previous research conducted in countries culturally different from the Republic of Croatia. However, this study also demonstrated the positive influence

of the adhocracy culture on tacit knowledge sharing, although this connection proved to be somewhat weaker than in the case of the clan type of culture. At the same time, it has been shown that the market type of culture negatively affects tacit knowledge sharing. The hierarchy type of culture has been shown to have no significant impact and further research is needed to shed light on whether the results obtained derive from the very nature of this type of culture, or some methodological limitations. This study has contributed to several courses of research. Firstly, it enriched organizational behaviour literature in general by examining the impact of all four organizational culture types from the CVF model (instead of just one or two types) on tacit knowledge sharing. Secondly, in the domicile research space, previous research studies have explored the organizational culture and tacit knowledge sharing separately. There are no research studies in Croatia that compare these two commitments. Therefore, the results of this study would represent valuable initial scientific and practical implications in the Croatian context and can be used for numerous other researches related to the subject and similar issues. The results of this research also provide some important implications for company management. Company management should pay special attention to the organizational culture of their company, as it has been shown that its characteristics can have a positive but also a negative effect on tacit knowledge sharing among employees. The leadership of the organization should promote values such as loyalty, participation, cohesiveness, and commitment to membership, as these are the main characteristics of the clan culture, which research has found to be most conducive to tacit knowledge sharing. In addition, the research showed that respondents employed in companies with a high degree of tacit knowledge sharing, perceive their colleagues as a broad family, and leaders are seen as mentors or perhaps even father images. What defines success in such companies is the internal climate and concern for people. Also, flexibility (valid for both the adhocracy and clan cultures) is perceived as an important cultural dimension, which seems to be aligned with tacit knowledge sharing. At the same time, the results showed that in companies where the emphasis is primarily on competition and the fulfilment of measurable goals, employees are reluctant to share their knowledge. Such respondents perceive their leaders as tough and demanding with very high expectations and companies in which they work as results-oriented workplaces. Contributions of this study should be acknowledged while allowing the limitations to be realized that lead towards future directions. The value of this study could be potentially reduced or limited in terms of individuals' subjectivity since the authors depended solely on cross-sectional study and self-reported perception of respondents. Although a common method bias has been treated by taking steps as recommended by Podsakoff et al. (2012), in the future, it could be avoided by collecting longitudinal data at two points in time. Furthermore, in this study, the analysis was limited to the culture types from the CVF model. Future research could use some other typologies. This analysis has remained somewhat simplified since it focused on the main effect of different organizational culture types on tacit knowledge sharing. The moderator effect of variations in the relationship between organizational culture types and tacit knowledge sharing could be further investigated in future studies.

LITERATURE

- Abbasi, S. G., & Dastgeer, G. (2018). Effect of contextual factors on knowledge sharing behavior. *Amazonia Investiga*, 7(16), pp. 209-225.
- Aboajela, S. (2015). The Influence of Organizational Culture on Performance Measurement Systems in Libyan Higher Education. Huddersfield.: The University of Huddersfield.
- Aier, S. (2012). The Role of Organizational Culture for Grounding, Management, Guidance and Effectiveness of Enterprise Arhitecture Principles. *Information Systems and E Business Management*, 12(1), pp. 43-70.
- Akın Gürdal, S., & Kumkale, İ. (2014). The Relationship Between Organizational Culture and Knowledge Sharing: Kırklareli Sample of Manufacturing Sector. *IIB International Refereed Academic Social Sciences Journal*, 16(5), pp. 19-45.
- Al-Shammari, M., & Musharraf, H. (2014). The relationship between organizational culture and knowledge sharing in a GCC company. *Information and Knowledge Management*, 4(11), pp. 107-112.
- Bentley, T. (1990). The knowledge workers. *Management Accounting London*, 68(3), pp. 47-65.
- Bradley, R. V. (2006). Information systems success in the context of different corporate cultural types: an empirical investigation. *Journal of Management Information Systems*, 23(2), pp. 267-294.
- Brettel, M. C. (2015). How organizational culture influences innovativeness, proactiveness, and risk-taking: Fostering entrepreneurial orientation in SMEs. *Journal of small business management*, 53(4), pp. 868-885.
- Buh, B. (2016). Approaches towards business process management adoption under different organizational cultures. Ljubljana: Faculty of Economics.
- Cameron, K., & Quinn, R. (1999). *Diagnosing and changing organizational culture based on the competing values framework.* Boston: Addison Wesley.
- Castaneda, D. I., & Ramírez, C. A. (2021). Cultural Values and Knowledge Sharing in the Context of Sustainable Organizations. *Sustainability*, *13*(14), pp. 1-15.
- Cavaliere, V., & Lombardi, S. (2015). Exploring different cultural configurations: how do they affect subsidiaries' knowledge sharing behaviors? *Journal of Knowledge Management*, 19(2), pp. 141-163.
- Eckenhofer, E. M., & Ershova, M. (2011). Organizational culture as the driver of dense intraorganizational networks. *Journal of competitiveness*(2), pp. 28-42.
- Ershova, M. (2009). Tacit Knowledge Sharing and Organizational Culture Model of Competitive Values Framework: A Theoretical Research. *Proceedings of the 9th International Conference Liberec Economic Forum*.
- Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics* (4. ed.). Los Angeles, London, New Delhi: Sage.
- Iebra Aizpurúa, L., Zegarra Saldaña, P. E., & Zegarra Saldaña, A. (2011). Learning for sharing: an empirical analysis of organizational learning and knowledge sharing. *International Entrepreneurship and Management Journal*, 7(4), pp. 509-518.
- İlknur, U. C., Cetin, C., Senturan, S., & Demiralay, T. (2017). The Relationship Between Organizational Culture And Knowledge Sharing: A Research On Participation Banking Sector. *Research Journal of Business and Management*, 4(3), pp. 347-358.
- Islam, Z. M., Hasan, I., Ahmed, S. U., & Ahmed, S. M. (2011). Organizational culture and knowledge sharing: Empirical evidence from service organizations. *African Journal of Business Management*, *5*(14), pp. 5900-5909.
- Jakupović, E., & Grandov, Z. (2014). Upravljanje znanjem-koncept za kreiranje konkurentske

- prednosti. Economy and market Communication review, 4(2), pp. 221-237.
- Janićijević, N. (2013). *Organizaciona kultura i menadžment*. Beograd: Ekonomski fakultet Univerziteta u Beogradu.
- Kim, S., & Lee, H. (2006). The impact of organizational context and information technology on employee knowledge-sharing capabilities. *Public administration review, 3*, pp. 370-385.
- Lee, J. C., Shiue, Y. C., & Chen, C. Y. (2016). Examining the impacts of organizational culture and top management support of knowledge sharing on the success of software process improvement. *Computers in Human Behavior*(54), pp. 462-474.
- Lee, J. N. (2001). The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success. *Information & management*, 38(5), pp. 323-335.
- Lucas, L. (2006). The role of culture on knowledge transfer: the case of the Multinational Corporation. *The Learning Organization*, *13*(3), pp. 257-275.
- Madu, B. (2012). Organization culture as driver of competitive advantage. *Journal of academic and business ethics*(5), pp. 1-9.
- Mahdi, O. R., Almsafir, M. K., & Yao, L. (2011). The role of knowledge and knowledge management in sustaining competitive advantage within organizations: A review. *African Journal of Business Management*, *5*(23), pp. 9912-9931.
- Mečev, D., & Grubišić, D. (2020). Organizacijska kultura i poslovna uspješnost poduzeća: Perspektiva suparničkih vrijednosti u kontekstu hrvatskog ICT sektora. *Ekonomska misao i praksa*, 29(2), pp. 327-346.
- Mooradian, N. (2005). Tacit knowledge: philosophic roots and role in KM. *Journal of knowledge management*, *9*(6), pp. 104-113.
- Navimipour, N. J., & Charband, Y. (2016). Knowledge sharing mechanisms and techniques in project teams: Literature review, classification, and current trends. *Computers in Human Behavior*, pp. 730-742.
- North, K. (2008). *Upravljanje znanjem vođenje poduzeća usmjereno prema znanju*. Jastrebarsko: Naklada Slap.
- Paroutis, S., & Al Saleh, A. (2009). Determinants of knowledge sharing using Web 2.0 technologies. *Journal of Knowledge Management*, 13(4), pp. 52-63.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*(63), pp. 539-563.
- Polanyi, M. (1967). The tacit dimension. Garden City, NY: Anchor Books.
- Prajogo, D. I., & McDermott, C. M. (2005). The relationship between total quality management practices and organizational culture. *International journal of operations & production management*, 25(11), pp. 1101-1122.
- Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management science*, 29(3), pp. 363-377.
- Razmerita, L., Kirchner, K., & Nielsen, P. (2016). What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. *Journal of Knowledge Management*, 20(6), pp. 1-22.
- Reychav, I., & Weisberg, J. (2009). Good for workers, good for companies: How knowledge sharing benefits individual employees. *Knowledge and process Management*, 16(4), pp. 186-197
- Rohim, A., & Budhiasa, I. G. (2019). Organizational culture as moderator in the relationship between organizational reward on knowledge sharing and employee performance. *Journal of Management Development, 38*(7), pp. 538-560.

- Ryle, G. (1949). The Concept of Mind. London: Hutchinson.
- Schwartz, H., & Stanley, D. (1981). Matching Corporate Culture and Business Strategy. *10*(summer), pp. 30-48.
- Shahzadi, I. (2017). Clan Culture and Spiritual Motivation to devise Academicians' Intention towards Tacit Knowledge Sharing in business schools of Pakistan. *Journal of Managerial Sciences*, *XI*(03), pp. 459-484.
- Sikavica, P., & Novak, M. (1999). Poslovna organizacija. Zagreb: Informator.
- Skyrme, D. (2011). https://www.skyrme.com. Retrieved from https://www.skyrme.com/kmbasics/kchars.htm
- Stojanović-Aleksić, V., Nielsen, J. E., & Bošković, A. (2019). Organizational prerequisites for knowledge creation and sharing: empirical evidence from Serbia. *Journal of Knowledge Management*, 23(8), pp. 1543-1565.
- Suppiah, V., & Sandhu, M. S. (2011). Organisational culture's influence on tacit knowledge-sharing behaviour. *Journal of Knowledge Management*, 15(3), pp. 462-477.
- Sušanj, Z. (2005). Organizacijska klima i kultura. Jastrebarsko: Naklada Slap.
- Šošić, I. (2004). *Primijenjena statistika*. Zagreb: Školska knjiga.
- Šverko, D. (2009). Implikacije primjene standardnih korelacijskih statističkih postupaka na normativnim i ipsatiziranim rezultatima mjerenja emocija. *Suvremena psihologija, 12*(2), pp. 283-296.
- Taber, K. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48(6), 1273-1296.
- Van Den Hooff, B., & De Ridder, J. A. (2004). Knowledge sharing in context: the influence of organizational commitment, communication climate and CMC use on knowledge sharing. *Journal of knowledge management*, 8(6), pp. 117-130.
- Wiener, M., Gattringer, R., & Strehl, F. (2018). Participation in inter-organisational collaborative open foresight A matter of culture. *Technology Analysis & Strategic Management*, 30(6), pp. 684-700.
- Wiewiora, A., Trigunarsyah, B., Murphy, G., & Coffey, V. (2013). Organizational culture and willingness to share knowledge: A competing values perspective in Australian context. *International Journal of Project Management, 31*(8), pp. 1163-1174.
- Zavyalova, E., & Kucherov, D. (2010). Relationship between organizational culture and job satisfaction in Russian business enterprises. *Human Resource Development International*, 13(2), pp. 225-235.