

The higher education social orientation construct: preliminary research of the relationship with the organizational culture in Croatia

Garbin Praničević, Daniela; Alfirević, Ana Marija; Rendulić, Darko

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FOREWORD

The 12th international symposium on Region, Entrepreneurship and Development (RED 2023) continues to deliver valuable contributions related to the topic. This year we have altogether 53 papers accepted for presentation and publication in the Proceedings. Authors of studies come from Croatia, Bosnia and Herzegovina, Serbia, North Macedonia, Hungary, Austria, Germany, France, Portugal and Ireland. We witness development and increased interest in sustainability and digital transformation issues that are increasingly present in this years' papers.

In addition to our existing partnering institutions: University of Tuzla, Faculty of Economics in Tuzla, Bosnia and Herzegovina, Croatian Academy of Sciences and Arts, The Institute for Scientific and Artistic work in Osijek and University of Maribor, Faculty of Economics and Business, Slovenia, the great news is that we have a new partner of RED – the long-time partner of Faculty of Economics and Business in Osijek, Pforzheim University, Germany is our new partner, contributing with new members of Programme and Organizing Committees. Moreover, this years' key-note speakers, prof. Thomas Cleff and prof. Harald Strotmann come from Pforzheim. We are sure this new partnership will further contribute our strive for excellency.

This year we have two key note speeches: one delivered by our above mentioned new partners from Pforzheim with the topic: International accreditation as a means of strengthening the competitiveness of business schools, which, to our opinion is crucial for further education service quality development and the second delivered by our colleague, prof. Slavica Singer on UN Sustainable Development Goals 2050 are a shared 'destination' – does it hold for regional ecosystems?

This year we again announce the Best Paper Award. The Best Paper Award for RED 2023 goes to the paper entitled: The impact of covid-19 pandemic on the SME sector and the policy response in Croatia and North Macedonia, co-authored by Maja Has, Ana Krstinovska and Mirela Alpeza. This paper provided a deeper insight into the impact of the pandemic on the SME sector in Croatia and North Macedonia, and a critical review of the measures taken by governments to support the sustainability of SMEs during the pandemic. Congratulations to the authors and we hope to have them next year with similarly good input.

Hoping that this years' event, just like the previous ones, will be a valuable experience for all the participant, I would like to thank all the members of Programme and Organizing Committee, reviewers and key note speakers for their support and engagement in making RED 2023 the best it could be.

Mirna Leko Šimić



RED 2023 Organizing Committee Chair

A scientific paper

Daniela Garbin Praničević, Ph. D., Associate Professor

University of Split, Faculty of Economics, Business and Tourism, Croatia

E-mail address: daniela@efst.hr

Ana Marija Alfirević

Marko Marulić Polytechnic in Knin, Croatia

E-mail address: anamarija.alfirevic@veleknin.hr

Darko Rendulić

Karlovac University of Applied Sciences, Croatia

E-mail address: darkorendulic1@gmail.com

THE HIGHER EDUCATION SOCIAL ORIENTATION CONSTRUCT: PRELIMINARY RESEARCH OF THE RELATIONSHIP WITH THE ORGANIZATIONAL CULTURE IN CROATIA

ABSTRACT

The paper aims to analyze the social orientation of higher education institutions in terms of their relationship to organizational culture. We define the social orientation of a higher education institution in terms of its efforts to promote human rights, social equality, and reduction of poverty, both within the institution and by communicating with the external environment. This effort has been empirically evaluated by students, who were also asked to evaluate the institution's organizational culture using Cameron and Quinn's OCAI framework. In this way, students' perceptions of their school's social orientation are matched to their perception of its organizational culture. The empirical research is based on an online survey administered at the Faculty of Economics, Business and Tourism Split and Marko Marulić Polytechnic in Knin, with 108 students responding. Statistical analysis of the survey answers leads to the conclusions on how the student body interprets the interpersonal relationships and processes within the higher education institutions and links them to the socially responsible functioning of the institution.

Key words: *social orientation, organizational culture, higher education institutions, statistical analysis, Croatia.*

1. Introduction

The rise of the knowledge economy is a significant challenge in transforming the university's mission paradigm (Ruben et al., 2017). Educational models and the value of knowledge from the social perspective are changing. Even the academic community finds itself at a crossroads between teaching, research, and the university's third mission (UTM), implying a third role or a third fundamental function for universities beyond the teaching and research areas, focusing on the university contribution to socio-economic development (Brennan, 2008).

Over time, universities were increasingly expected to include UTM in their activities, in addition to standard lectures and research processes, to contribute to the local community and society (Urdari et al., 2017). This implies that universities need to: (i) become initiators of changes that disclose through the transfer of knowledge & technologies to industry and broader society and (ii) contribute more efficiently to the social, economic, and cultural development of their communities and broader society (Secundo et al., 2017; Agasisti et al., 2019). UTM strengthens the dialogue between the university, industry, government, and society, based on which the university eventually creates a more socially oriented environment for the growth and development of society as a whole (Vakkuri, 2004). UTM is a complex phenomenon whose development began several decades ago. Nevertheless, the UTM remain underrepresented in higher education research (Predazzi, 2012; Giuri et al., 2019).

UTM also repositions the role of higher education in terms of its activities, i.e., how they perform mass higher education, professional specialization, and research (Laredo, 2007). There is a lack of critical reflection on how the universities have adopted and incorporated UTM into their core activities, which is essential for current policy and academic debates (Benneworth et al., 2016).

The UTM concept is similar to other theoretical constructs that analyze a university's prosocial and community-oriented activities or another academic organization. In the profit-sector literature, Corporate Social Responsibility (CSR) has been firmly established as a dominant managerial and organizational responsibility paradigm. It implies that corporations need to take account of their stakeholders' interests instead of focusing only on the shareholders' profit maximization (Freeman, 1984). During its historical development, the CSR concept evolved into a framework addressing equity and inclusion of widely defined stakeholder groups in various organizations (Carroll, 2008).

The idea of a responsible university is mirrored by a group of different theoretical orientations, including the discussions of market orientation in higher education (Dwyer, 2022), which has already been empirically applied to the analysis of Croatian higher education (Pavičić et al., 2009). This discussion opens the issue of whether the commercialization of higher education is an inevitable aspect of neoliberal development (Kleinman et al., 2013) and whether an alternative development path is possible.

The alternative(s) include different approaches to developing the organization's and its students' prosocial orientation (Brandenberger and Bowman, 2015) and other forms of changing the university culture toward a more inclusive and socially oriented one. This might involve formal educational involvement in community charities, i.e., service-learning (Salam et al., 2019), or other forms of ethical leadership, which might influence students' moral development (Nejati and Shafaei, 2018).

Unfortunately, many studies deal with the role of universities only from the perspective of two standard mission components, i.e., teaching and research, or employing the labor market perspective, i.e., whether university graduates' knowledge and skill profiles correspond to the employers' requirements (König and Maškarin Ribarić, 2019). Respectively, less attention has been paid to identifying and analyzing university strategies in UTM (Giuri et al., 2019) or other theoretical concepts and orientations describing contemporary universities' prosocial orientation, responsibility, and involvement.

The role of university organizational culture and how it shapes the behavior of university staff (Lacatus, 2013) has been neglected in the literature on higher education social orientation and

responsibility. This paper will address this topic, which empirically reviews the relationship of the two variables, using the popular competing values framework for conceptualizing organizational culture (Fralinger and Olson, 2007; Lacatus, 2013).

The paper starts with an introduction, followed by the theoretical elaboration of the third mission and the related literature. The second section refers to the empirical research, including the methodology and results. The last section covers the discussion with concluding remarks, main research limitations, and future perspectives analysis.

2. Theoretical background

During the last several decades, different economic, political and social changes have taken place and consequently shifted the focus of contemporary universities to market orientation and commercialization of educational and research processes (Rasmussen et al., 2006; Molesworth et al., 2011). These practices are confronted by the requirements for universities to become more oriented toward stakeholders (Pavičić et al., 2009; Llonch et al., 2016) and socially involved (Jongbloed et al., 2008). To respond to such changes, universities start implementing a series of reforms (Vasilescu et al., 2010), both institutional and voluntary.

To harmonize European higher education, universities in the wider area have established a common European legal framework (the Bologna process), coordinating the national university systems (Larsen et al., 2015). Although international comparability and correspondence to the labor market needs were major objectives of the reform, it also encouraged civic and social values in higher education. It included current social issues and challenges in university curricula and programs (Seto-Pamies et al., 2011).

Other institutional initiatives were developed to support interactions between universities and society to respond to the specific demands of different stakeholders (Brennan, 2008). E.g., the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2004 highlighted education as the foundation of a more sustainable society and, consequently, encouraged the integration of sustainable development into educational systems (Velasquez et al., 2005).

A similar initiative was created by the United Nations (UN) and partners from the corporate sector, resulting in the Principles for Responsible Management Education (UNPRME) concept of responsible business and management education (Haertle et al., 2017). UNPRME should lead toward the development of more socially responsible business professionals (Godemann et al., 2014) and encourage inter-sectoral cooperation and stakeholder coordination (Sebhatu, 2021). Such initiatives share a broader perspective of increased university social orientation, which should become more inclusive regarding students' civic education and awareness (Wise et al., 2020) and be oriented toward achieving ethical and prosocial outcomes (Ryan, 2017).

Teaching and university research are called upon to play an active role in solving major social problems. This line of research starts with an influential volume (Gibbons et al., 1994), proposing that the traditional production of knowledge, driven by the concerns of scientific disciplines and the academic independence of researchers and research institutions, should be radically transformed. The described settings for academic knowledge production ('Mode 1') were to be replaced by a new paradigm ('Mode 2'), which is interdisciplinary and driven by application and partnerships. However, 'Mode 2' also corresponds to the pressures of

globalization and commercialization (i.e., mass student enrolment) to research and higher education institutions. The 'Mode 2' knowledge production has been widely discussed and compared to different theoretical agendas, describing the social role of the university (Hessels and van Lente, 2008).

Out of those, the 'Triple Helix' model stands out by describing the dynamics of relationships and overlapping responsibilities among the three actors of knowledge production: university, industry, and government. The 'Triple Helix' proponents argue that the 'etatistic' model of the relationship among the actors (inherent to 'Mode 1' knowledge production) should be replaced by the flexible structuring of hybrid organizations involving actors from all three sectors. This should allow different levels of government and inter-governmental organizations to be involved in inter-sectoral partnerships with academic and industry actors, leaving ample space for innovation and creating entrepreneurial opportunities for all the actors (Etzkowitz and Leydesdorff, 2000).

The market- and opportunity-based knowledge production leads universities to contribute to economic development and growth as their 'third mission' – acknowledging the primary roles of teaching and research. Thus, Etzkowitz et al. (2000) see universities as transforming toward entrepreneurial organizations, serving the 'knowledge societies' needs. The hybridization of the 'Triple Helix' actors, pushing the government to serve as a 'venture capitalist,' industry to become more research- and knowledge-intensive, also requires the academic sector to adopt the market-driven concept, often described as the 'entrepreneurial university' (Etzkowitz, 2003). Such an academic organization would become a 'collective entrepreneur,' taking a more dynamic or central role in coordinating the government and industry sectors in the knowledge-producing processes (Etzkowitz et al., 2008).

Nevertheless, the UTM does not need to be related to commercialization and entrepreneurial transformation only, as its generic definition involves interaction and positive influence toward its socio-economic environment. Even the interpretation of the concept remains challenging, as it can refer to HEI's income production, regardless of the entrepreneurial context, as well as involvement in human and social development (Molas-Gallart and Castro-Martínez, 2007). This leaves ample space for reconsidering the 'Triple Helix' and the 'entrepreneurial university' models, calling for representation of a range of university stakeholders in the 'Mode 3' production of knowledge relevant to both the corporate sector and society (Carayannis and Campbell, 2012).

Therefore, it could be argued that the notions of the third mission, university social responsibility and inclusiveness, stakeholder and social orientation, could be summarized in terms of *social orientation*, in analogy to the social (market) orientation of nonprofit organizations (Sargeant et al., 2002, 46–47). Universities need to be *oriented toward multiple stakeholders/constituencies* (Padanyi and Gainer, 2004) or *communities*, according to Jongbloed et al. (2008). Such an orientation should have both external and internal components, which is implied by the market orientation theories, emphasizing the need to develop productive relationships with the customers/users (as an *external component* of the university orientation/responsibility) based on a range of *internal components*, including internal knowledge, inter-functional coordination and appropriate employee behavior (Lafferty and Hult, 2001).

Suppose a common denominator for the three internal components of social orientation is to be identified. In that case, it can be argued that the university (organizational) culture is to serve

as such since the very notion of culture denotes a "*historically pattern of meanings (...) expressed in symbolic forms*" (Geertz, 1973, 29). On the one hand, they include practical university management mechanisms, such as the definitions of strategy and mission, leadership, and employee socialization. On the other hand, culture also determines how employees interpret their (organizational) environment and relevant (market) orientation, and it also shapes their behavior (Tierney, 1988, 8). Culture can also serve as a barrier to market orientation in all kinds of organizations (Harris, 1996), which should be considered in this type of research.

Narver and Slater (1990), who theorized its central role in shaping organizational behavior oriented toward the customer (user) needs, recognize the described role of culture in determining the employee and organizational orientation toward the customers (users).

3. Research model and hypothesis

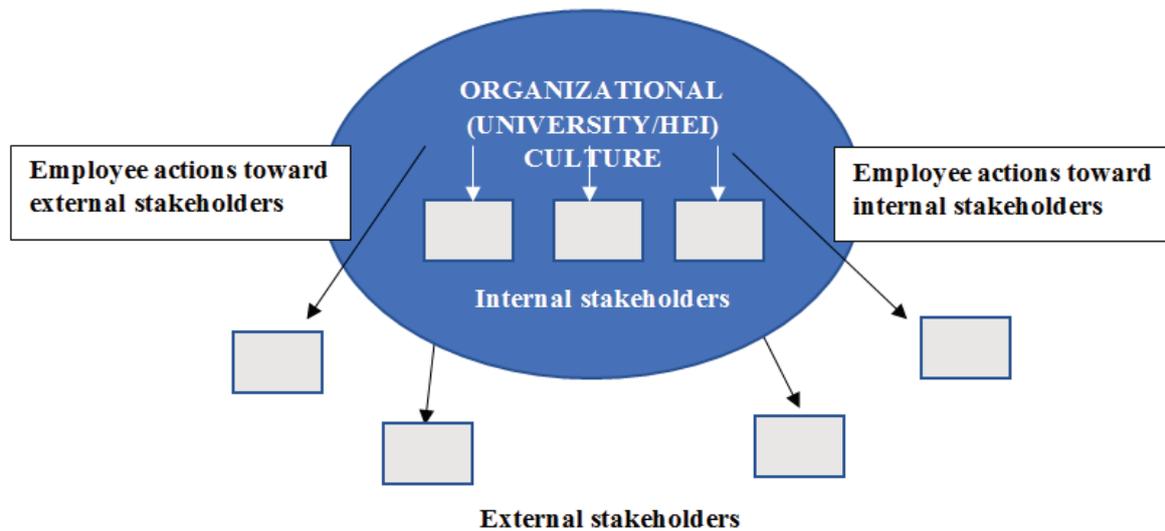
This study relies on the assumptions of the previously described theoretical concepts to propose the concept of *university, or, in a more generalized way – Higher Education Institution (HEI) social orientation*, describing the orientation of universities (HEIs) toward the promotion of human rights, social equality, reduction of poverty and other socially desirable outcomes.

In line with the social (market) orientation theories, the *university (HE) social orientation* recognizes the *university's (HEI) relationships with the relevant internal and external stakeholders*, leading both to *internally and externally (socially) recognized effects (outcomes)*. *Organizational (university/HEI) culture* is viewed as a *comprehensive enabling framework*, leading employees toward both internal and external socially desirable outcomes. Figure 1 presents the research model and the hypothesized relationships among its variables.

Empirical validation of the entire model is complex. It should be performed on extensive university staff and student samples in multiple countries since this is a preliminary study, intending to test the major relationship between the university (HEI) culture and its internal and *external social orientations*. Suppose this relationship is not confirmed, or, at least, some empirical variability of university (HEI) social orientation is not identified. In that case, pursuing further empirical research on the proposed topic does not make sense.

Therefore, the following *research hypothesis* will be tested in this study:

There is statistically significant empirical variability of university (HEI) social orientation toward internal and external stakeholders across different dominant university (HEI) organizational cultures.

Figure 1: Research model and hypothesized relationships among the variables

Source: Authors

4. Research methodology

The empirical data have been collected as a part of the student survey performed at the beginning of the 2022/2023 academic year (i.e., in autumn 2022). Two research constructs were measured: *the social orientation of universities, i.e., higher education institutions (HEIs)*, as described in the theoretical part of the paper, and *the organizational culture of universities, i.e., HEIs*. Social orientation was measured based on the previously validated and published research instrument (Petković et al., 2022). Three items have been adopted from the questionnaire, developed by the previously mentioned authors, and rephrased to describe HEI social orientation. Those three items include:

- (a) Assessment of the university (HEI) social orientation in its internal functioning,
- (b) Assessment of the university (HEI) social orientation contribution to the social environment and
- (c) Assessment of HEI cooperation with external stakeholders in implementing the social orientation.

All three items were measured on a Likert scale, with nine levels of agreement (four negative, neutral, and four positive levels), in analogy to the research instrument, which was used as a source of survey items. Overall social orientation has been computed using the SPSS statistical software package for Windows as a mean of the three survey items.

HEI (Organizational) Culture has been measured by using the well-established Cameron and Quinn's (2011) Competing Values Framework (i.e., OCAI - Organizational Culture Assessment Instrument). The used theoretical framework proved to be valuable for the evaluation of the organizational culture of HEIs in Poland (Dębski et al., 2020) and Turkey (Caliskan and Zhu, 2019) and in other organizations and industries, where it proved to serve as a valuable culture evaluation and change instrument (Cameron et al., 2022, 187-204). The translated version of their original instrument was used, as published by Cameron and Quinn (2011), and available

online¹, and modified the measurement scales. The nine-point measurement scales were used to achieve consistency with the first set of questions concerning HEIs' social orientation. The process of translation was based on the classical, two-step procedure. Firstly, we translated the questionnaire from English to Croatian, and consulted with a professor of English, regarding the validity of translation. Another professor of English language translated the questionnaire back from Croatian to English. For the items, where two translations did not match, we asked the advice of two English language professionals, how to correctly formulate the Croatian survey item.

Data were collected from a non-random sample of undergraduate students (2nd year of Bachelor studies) at the Faculty of Economics, Business and Tourism at the University of Split (76 students) and Polytechnic of Knin (31 students from the 2nd year of Bachelor studies). One student has not responded to the question about the institution they studied at.

The data collection instrument has been an anonymous Web-based form (Google Forms), which consisted of three parts: (a) Demographic characteristics of respondents; (b) Assessment of their HEI's social orientation; (c) Assessment of their HEI's organizational culture. Data were imported, and statistical analysis was performed in the IBM SPSS statistical software package for Windows.

5. Research results

5.1. Student demographics

There were 27.1% male and 72.9% female students, producing a rather considerable gender bias. However, this is common with student surveys in social science in Croatia and the broader region, as male students might have less motivation to fill in the social science surveys (Šerić and Garbin Praničević, 2018; Stupar-Rutenfrans et al. 2021). The majority of respondents, i.e., 63% study as full-time students (funded by the Ministry of Education & Science), 21.5% are self-funded full-time students, and 15% part-time students.

Regarding the social background, most students perceive themselves as middle-class (72.2%), only 2.8% as a lower, but 7.4% perceive being a part of a higher class, while 17.6% did not answer this question. Most students (73.1%) have at least some work experience, with 12% of respondents having some personal entrepreneurial experience, while 47.2% have an entrepreneurial family background.

While these results are probably too high compared to the average values for Croatian and regional students, it should be emphasized that the respondents were business students who volunteered to participate in the survey. Those with work and entrepreneurial experiences were more likely to participate due to a higher understanding of how the business curriculum is applied in business practice.

5.2. Empirical values of research constructs

As presented in Table 1, the HEI social orientation construct is measured on a scale with levels of measurement, which can be converted to the numeric values of one to nine due to the equidistance of the values on the Likert scale (Dobson and Mothersill, 1979). It is evident that the HEI social orientation for the surveyed sample, computed as a mean of its three components, has a modest positive value.

¹ See; <https://www.ocai-online.com/> (accessed 6 October 2022).

The modified OCAI instrument provides numerical values for the four organizational culture archetypes recognized by the underlying theoretical framework (clan, adhocracy, market, and hierarchy). Therefore, the dominant organizational culture has been established by comparing the four values and selecting the one with the highest numerical score. The dominant HEI organizational culture assessment has been recorded for each survey participant, with the descriptive statistics presented in Table 2.

Table 1: Mean values of the HEI social orientation construct

	N	Minimum	Maximum	Mean	Std. Deviation
Entire HEI activities reflect the principles of social orientation.	108	1	9	5.06	2.340
HEI popularizes social orientation in its community and society.	108	1	9	5.35	2.141
HEI cooperates with other stakeholders, including the government, in implementing social orientation.	108	1	9	5.34	2.243
The social orientation of a higher education institution	108	1.00	9.00	5.2500	1.88844

Source: Authors

As demonstrated by Table 2, in the two surveyed HEIs, students assessed the organizational culture to follow the clan prototype in 38.2% of cases (without regard to the participants, who did not provide valid answers). This culture type fosters cooperation based on committed leadership, human development, and participation. In 22.5% of cases, survey participants recognized the HEI organizational culture to follow the adhocracy archetype, which has a creative orientation, entrepreneurial and creative leaders, and commitment to developing vision, innovation, and new resources. In 23.6% of cases, organizational cultures in the two HEIs were recognized as hierarchical, i.e., based on controlling and formal power held by the leaders, who emphasize efficiency, consistency, being timely and following rules. In only 15.7% of cases, the dominant organizational culture is recognized as market-based, which would be compatible with the entrepreneurial university concept (Dvorski et al., 2020). This type of culture is based on competition, favoring the leaders, oriented toward producing and competing, supporting the behaviors, gaining market share, achieving profitability, and focusing on customers (Cameron and Quinn, 2011, 53).

Table 2: Assessment of the dominant HEI organizational culture type

Dominant organizational culture	Frequency	Percent	Valid Percent
Clan culture	34	31.5	38.2
Adhocracy culture	20	18.5	22.5
Market culture	14	13.0	15.7
Hierarchical culture	21	19.4	23.6
Total valid	89	82.4	100.0
Missing	19	17.6	
Total	108	100.0	

Source: Authors

5.3. Relationship between HEI social orientation and dominant organizational culture

A potential relationship between the HEI social orientation and the dominant organizational culture can be established, by using the statistical analysis of variance (ANOVA), which tests for the significant differences of means, across several groups (Arnerić and Protrka, 2019). Firstly, means and standard deviations of HEI social orientations are presented, across the groups, defined by their perception of the dominant organizational culture (see Table 3).

Table 3: Social orientation descriptive statistics for groups, defined by organizational culture

	N	Mean	Std. Deviation	Std. Error
Clan culture	34	5.0686	1.88879	.32393
Adhocracy culture	20	6.0167	1.94508	.43493
Market culture	14	5.4524	1.37503	.36749
Hierarchical culture	21	4.4127	1.90585	.41589
Total	89	5.1873	1.89094	.20044

Source: Authors

Test of the homogeneity of variances (Levene's test) determines if the statistical assumption of the dependent variable's variance being equal over the observed groups holds. Since the results of Levene's test (see Table 4) that it is non-significant ($p < 0.05$), it is possible to interpret the ANOVA table and the F-test results (see Table 5).

Table 4: Levene's test of homogeneity of variances

		Levene Statistic	df1	df2	Sig.
HEI Social Orientation	Based on Mean	.684	3	85	.564
	Based on Median	.597	3	85	.619
	Based on Median and with adjusted df	.597	3	81.122	.619
	Based on trimmed mean	.693	3	85	.559

Source: Authors

Analysis of the variance shows significant differences among the groups ($p < 0.05$), demonstrating *a statistically significant relationship between the student perceptions of HEI social orientation and its organizational culture*. Figure 2 shows the mean values of the HEI social orientation constructs defined by organizational culture across the groups.

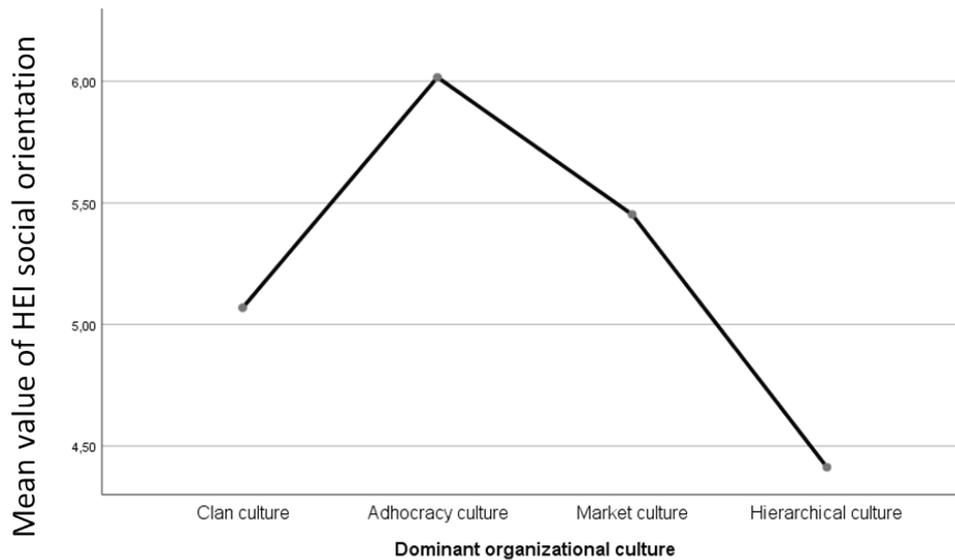
Table 5: Analysis of variance

HEI Social Orientation	Sum of Squares	df	Mean Square	F	Sig.
Between groups	27,820	3	9,273	2.748	.048
Within groups	286,837	85	3,375		
Total	314,657	88			

Source: Authors

Adhocracy, the dominant type of HEI organizational culture, is associated with the highest level of social orientation, followed by market, clan, and hierarchical culture archetypes. Since these initial research results are based on a small sample from only two higher education institutions in Croatia, further research is needed to reach general conclusions.

Figure 2: Mean values of HEI social orientation across groups, defined by the dominant culture



Source: Authors

6. Discussion, research limitations, and future research

This study is limited in a few ways since it was developed as a preliminary analysis of variation of the social orientation variable over different dominant types of university culture. Further research should address all components and relationships specified in the research model (see Figure 1). Empirical research on this model should be conducted in multiple academic settings and countries, including internal and external university stakeholders and their perspectives.

Regardless of the research limitations, it is interesting that adhocracy is associated with the highest level of HEI social orientation, followed by market-oriented HEI culture. Collaboration and people orientation (in the case of perceived clan culture), as well as market orientation, are more aligned with the HEI 'third mission'/social sustainability imperatives than the clan (people-oriented-) and hierarchy- (bureaucracy-) oriented cultures.

Since this research is limited to the preliminary analysis of social orientation variability over dominant types of different university (organizational) cultures, this discussion is not about the social orientation values in different organizational settings and cultures. It matters that *social orientation does vary in different cultures, which provides a solid argument for further empirical research on the proposed topic.*

Results of this study are supported by a variety of previous empirical results, starting with a very general notion of the university culture as a guiding framework for the management of universities (HEIs), which has been previously studied by Sporn (1996).

Entrepreneurial culture has been previously linked to knowledge production in universities, as a part of the UTM (Zawdie, 2010), with the organizational culture being listed as a factor, limiting the scope and implementation of the UTM (Koryakina et al., 2015). In this context, it would be interesting to explore further the role of university (HEI) culture in all three aspects of the university mission and functioning (teaching, research, and the UTM) and how they are linked to the university's (HEI) social orientation.

When considering similar or related concepts, such as market orientation, in the corporate sector, McClure (2010) found an empirically significant relationship between organizational culture and market orientation, mediated by the level of organizational conflict. In another profit sector study, Homburg and Pflesser (2018) have shown that organizational culture leads to market performance, which can be further linked to corporate financial performance. In the context of higher education, which has been examined in public universities, it could be argued that similar additional research should be performed in the future. It might link organizational culture to the university's (HEIs) social orientation, using the cooperation (or conflict) levels with the internal and external stakeholders as a mediating or moderating variable.

In their review of stakeholder management research in universities (HEIs), Alves, Mainardes, and Raposo (2010) mention university culture as a factor, potentially limiting its stakeholder management practice. Beyond this single study, the authors found no additional studies linking university culture to the analysis and orientation toward stakeholders in higher education.

7. Conclusion

The empirical analysis leads to the conclusion that a statistically significant variance exists *in the university social orientation construct across different dominant types of (organizational) culture in universities (HEIs)*. Therefore, the proposed *research hypothesis is to be accepted, confirming the need for further research, elaboration of the proposed theoretical model, and empirical verification*.

REFERENCES

- Agasisti, T., Barra, C., & Zotti, R. (2019): *Research, knowledge transfer, and innovation: The effect of Italian universities' efficiency on local economic development 2006– 2012*, Journal of Regional Science, Vol. 59, No. 5, pp. 819-849.
- Alves, H., Mainardes, E. W., & Raposo, M. (2010): *A relationship approach to higher education institution stakeholder management*, Tertiary Education and Management, Vol.16, No. 3. pp. 159-181.
- Arnerić, J., and Protrka, K. (2019): *Modeli analize varijance (ANOVA)*. Matematičko fizički list, Vol.70, No. 277, pp. 25-32.
- Benneworth, P., Pinheiro, R., & Sánchez-Barrioluengo, M. (2016): *One size does not fit all! New perspectives on the university in the social knowledge economy*, Science and Public Policy, Vol. 43, No. 6, pp. 731-735.

Brandenberger, J. W., and Bowman, N. A. (2015): *Prosocial growth during college: Results of a national study*, Journal of Moral Education, Vol.44, No.3, pp. 328-345.

Brennan, J. (2008): *Higher education and social change*. Higher Education, Vol.56, No. 3, pp. 381-393.

Caliskan, A., and Zhu, C. (2019): *Organizational culture type in Turkish universities using OCAI: Perceptions of students*, Journal of Education Culture and Society, Vol. 10. No. 2, pp. 270-292.

Cameron, K. S., and Quinn, R. E. (2011): *Diagnosing and changing organizational culture: Based on the competing values framework*, New York: John Wiley and Sons.

Cameron, K., Quinn, R., DeGraff, J., Thakor, A. (2022): *Competing Values Leadership*. Cheltenham: Edward Elgar Publishing.

Carayannis, E.G., and Campbell, D.F.J. (2012): *Mode 3 Knowledge Production in Quadruple Helix Innovation Systems. 21st-Century Democracy, Innovation, and Entrepreneurship for Development*, New York: Springer.

Carroll, A. B. (2008): *A history of corporate social responsibility: Concepts and practices*, in Crane, A., Matten, D., McWilliams, A., Moon, J., and Siegel, D. S. (Eds.) The Oxford handbook of corporate social responsibility, Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199211593.003.0002>

Dębski, M., Cieciora, M., Pietrzak, P., & Bołkunow, W. (2020): *Organizational culture in public and non-public higher education institutions in Poland: A study based on Cameron and Quinn's model*, Human Systems Management, Vol.39, No.3, pp.345-355.

Dobson, K. S., and Mothersill, K. J. (1979): *Equidistant categorical labels for construction of Likert-type scales*, Perceptual and Motor Skills, Vol.49, No. 2, pp. 575-580.

Dvorski Lacković, I., Kovšca, V., & Lacković, R. (2020): *Do universities and students need to be entrepreneurially oriented? A literature review*, CroDiM, Vol.3, No. 1, pp. 107-112.

Dwyer, T. (2022): *Conceptualisations of market orientation in the higher education literature*, Journal of Marketing for Higher Education, pp.1-23. <https://doi.org/10.1080/08841241.2022.2089941>

Etzkowitz, H., and Leydesdorff, L. (2000): *The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university–industry–government relations*, Research Policy, Vol.29, No.2, pp. 109–123.

Etzkowitz, H., Webster, A., Gebhardt, C., & Terra, B. R. C. (2000): *The future of the university and the university of the future: Evolution of ivory tower to entrepreneurial paradigm*. Research Policy, Vol.29, No.2, pp. 313-330.

Etzkowitz, H. (2003): *Innovation in Innovation: The Triple Helix of University-Industry-Government Relations.*, Social Science Information, Vol.42, No. 3, pp. 293–337.

Etzkowitz, H., Ranga, M., Benner, M., Guarany, L., Maculan, A.M., & Kneller, R. (2008). *Pathways to the entrepreneurial university: towards a global convergence*, *Science and Public Policy*, Vol.35, No. 9, pp. 681–695.

Fralinger, B., and Olson, V. (2007): *Organizational culture at the university level: A study using the OCAI instrument*, *Journal of College Teaching & Learning*, Vol.4, No.11, pp. 85-98.

Freeman, R. E. (1984): *Strategic management: A stakeholder approach*, Bloomington/London: Indiana University/Pitman.

Geertz, C. (1973): *The Interpretation of Culture*, New York: Basic Books.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. (1994): *The new production of knowledge: The dynamics of science and research in contemporary societies*, London/Thousand Oaks: SAGE Publications.

Giuri, P., Munari, F., Scandura, A., & Toschi, L. (2019): *The strategic orientation of universities in knowledge transfer activities*, *Technological Forecasting and Social Change*, Vol.138, pp.261-278.

Godemann, J., Haertle, J., Herzig, C., & Moon, J. (2014): *United Nations supported principles for responsible management education: Purpose, progress and prospects*. *Journal of Cleaner Production*, Vol.62, pp. 16-23.

Haertle, J., Parkes, C., Murray, A., & Hayes, R. (2017): *PRME: Building a global movement on responsible management education*, *The International Journal of Management Education*, Vol.15, No. 2, pp. 66-72.

Harris, L.C. (1996): *Cultural obstacles to market orientation*, *Journal of Marketing Practice: Applied Marketing Science*, Vol.2, No. 4, pp. 36-52.

Hessels, L. K., and van Lente, H. (2008): *Re-thinking new knowledge production: A literature review and a research agenda*, *Research Policy*, Vol.37, No. 4, pp.740–760.

Homburg, C., and Pflesser, C. (2000): *A multiple-layer model of market-oriented organizational culture: Measurement issues and performance outcomes*, *Journal of Marketing Research*, Vol.37, No.4, pp. 449-462.

Jongbloed, B., Enders, J., & Salerno, C. (2008): *Higher education and its communities: Interconnections, interdependencies and a research agenda*, *Higher Education*, Vol. 56, No. 3, pp. 303-324.

Kleinman, D. L., Feinstein, N. W., & Downey, G. (2013): *Beyond commercialization: Science, higher education and the culture of neoliberalism*. *Science and Education*, Vol.22, No.10, pp. 2385-2401.

König, Lj. S., and Maškarin Ribarić, H. (2019): *Is there a mismatch between employers' and university teachers' perceptions on graduate employability in Croatia?*, *Management – Journal of Contemporary Management Issues*, Vol.24, No. 1, pp. 87-102.

- Koryakina, T., Sarrico, C. S., & Teixeira, P. N. (2015): *Third mission activities: university managers' perceptions on existing barriers*, European Journal of Higher Education, Vol.5, No. 3, pp. 316-330.
- Lacatus, M. L. (2013): *Organizational culture in contemporary university*, Procedia-Social and Behavioral Sciences, Vol.76, pp. 421-425.
- Lafferty, B. A., and Hult, G. T. M. (2001): *A synthesis of contemporary market orientation perspectives*, European Journal of Marketing, Vol.35, No. (1/2), pp. 92–109.
- Laredo, P. (2007): *Revisiting the third mission of universities: Toward a renewed categorization of university activities?* Higher Education Policy, Vol.20, No. 4, pp. 441-456.
- Larsen, I. M., Maassen, P., & Stensaker, B. (2009): *Four basic dilemmas in university governance reform*. Higher Education Management and Policy, Vol.21, No.3, pp. 1-18.
- Llonch, J., Casablancas-Segura, C., & Alarcón-del-Amo, M. C. (2016): *Stakeholder orientation in public universities: A conceptual discussion and a scale development*, Spanish Journal of Marketing, Vol.20, No.1, pp. 41-57.
- McClure, R. E. (2010): *The influence of organizational culture and conflict on market orientation*. Journal of Business & Industrial Marketing, Vol.25, No.7, pp. 514-524.
- Molas-Gallart, J., and Castro-Martínez, E. (2007): *Ambiguity and conflict in the development of "Third Mission" indicators*, Research Evaluation, Vol.16, No. 4, pp. 321–330.
- Molesworth, M., Scullion, R., & Nixon, E. (Eds.). (2011): *The marketisation of higher education and the student as consumer*, London: Routledge.
- Narver, J. C., and Slater, S. F. (1990): *The effect of a market orientation on business profitability*, Journal of Marketing, Vol.54, No. 4, pp. 20–35.
- Nejati, M., and Shafaei, A. (2018): *Leading by example: the influence of ethical supervision on students' prosocial behaviour*, Higher Education, Vol.75, No. 1, pp. 75-89.
- Padanyi, P., and Gainer, B. (2004): *Market orientation in the nonprofit sector: Taking multiple constituencies into consideration*, Journal of Marketing Theory & Practice, Vol.12, No. 2, pp. 43–57.
- Pavičić, J., Alfirević, N., & Mihanović, Z. (2009): *Market orientation in managing relationships with multiple constituencies of Croatian higher education*, Higher education, Vol.57, No.2, pp. 191-207.
- Petković, S., Alfirević, N., & Zlatković Radaković, M. (2022): *Environmental sustainability and corporate social responsibility of business schools: is there evidence of transdisciplinary effects?*, Economic Research-Ekonomska Istraživanja, Vol. 35, No.1, pp. 6445-6465.
- Predazzi, E. (2012): *The third mission of the university*, Rendiconti Lincei, Vol.23, No.1, pp. 17-22.

- Rasmussen, E., Moen, Ø., & Gulbrandsen, M. (2006): *Initiatives to promote commercialization of university knowledge*, Technovation, Vol.26, No. 4, pp. 518-533.
- Ruben, B. D., De Lisi, R., & Gigliotti, R. A. (2017): *A guide for leaders in higher education*, Sterling, VA: Stylus Publishing.
- Ryan, R. G. (2017): *Social and Cognitive Outcomes of Service Learning: Results from a Pre-Post and Control Group Comparison*. Journal of Community Engagement and Higher Education, Vol.9, No. 3, pp.19-34.
- Salam, M., Awang Iskandar, D. N., Ibrahim, D. H. A., & Farooq, M. S. (2019): *Service learning in higher education: A systematic literature review*, Asia Pacific Education Review, Vol.20, No.4, pp. 573-593.
- Secundo, G., and Elia, G. (2014): *A performance measurement system for academic entrepreneurship: a case study*, Measuring Business Excellence.
- Sebhatu, S. P. (2021): *PRME: impact for transformative change*, in Sebhatu, S., Enquist, B. and Edvardsson, B. (Eds.), Business Transformation for a Sustainable Future (pp.194-212). Abingdon: Routledge.
- Setó-Pamies, D., Domingo-Vernis, M., & Rabassa-Figueras, N. (2011): *Corporate social responsibility in management education: Current status in Spanish universities*, Journal of Management and Organization, Vol.17, No.5, pp. 604-620.
- Sargeant, A., Foreman, S., & Liao, Mei-Na. (2002): *Operationalizing the marketing concept in the nonprofit sector*, Journal of Nonprofit & Public Sector Marketing, Vol.10, No. 2, pp. 254–268.
- Sporn, B. (1996): *Managing university culture: an analysis of the relationship between institutional culture and management approaches*, Higher Education, Vol.32, No. 1, pp. 41-61.
- Stupar-Rutenfrans, S., et al. (2021): *Ethnic outgroup aggression: A pilot study on the importance of emotion regulation, nationalism and susceptibility to persuasion*, International Journal of Intercultural Relations, Vol. 84, pp. 79-85.
- Šerić, M., and Garbin Praničević, D. (2018): *Managing group work in the classroom: an international study on perceived benefits and risks based on students' cultural background and gender*, Management: Journal of Contemporary Management Issues, Vol.23, No.1, pp.139-156.
- Tierney, W. G. (1988): *Organizational culture in higher education: Defining the essentials*, The Journal of Higher Education, Vol.59, No.1, pp. 2-21.
- Urdari, C., Farcas, T. V., & Tiron-Tudor, A. (2017): *Assessing the legitimacy of HEIs' contributions to society: the perspective of international rankings*, Sustainability Accounting, Management and Policy Journal, Vol.8, No.2, pp. 191-215.

Vakkuri, J. (2004): *Institutional change of universities as a problem of evolving boundaries*, Higher Education Policy, Vol.17, No.3, pp. 287-309.

Vasilescu, R., Barna, C., Epure, M., & Baicu, C. (2010): *Developing university social responsibility: A model for the challenges of the new civil society*, Procedia-Social and Behavioral Sciences, Vol.2, No.2, pp. 4177-4182.

Velazquez, L., Munguia, N., & Sanchez, M. (2005): *Deterring sustainability in higher education institutions: An appraisal of the factors which influence sustainability in higher education institutions*, International Journal of Sustainability in Higher Education, Vol.6, No.4, pp. 383-391.

Wise, G., Dickinson, C., Katan, T., & Gallegos, M. C. (2020): *Inclusive higher education governance: managing stakeholders, strategy, structure and function*, Studies in Higher Education, Vol.45, No.2, pp. 339-352.

Zawdie, G. (2010): *Knowledge exchange and the third mission of universities: Introduction: The triple helix and the third mission—schumpeter revisited*, Industry and Higher Education, Vol.24, No.3, pp. 151-155.