Analysis of the Organizational Culture of a University in the Opinion of Civil and Military Students

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Abstract:

**Purpose:** The main purpose of this article was to establish and demonstrate the relationship between changes in perception of university’s organizational culture in the opinion of students from civil and military universities.

**Approach/Methodology/Design:** The main research problem was presented in the form of the following question: Is there a relation between the type of university (Civil vs. Military) and the students’ perception of the university’s organizational culture? In order to solve the presented research problem, a diagnostic poll method was used, carried out by means of a survey technique, with the use of a survey questionnaire tool. Statistical analyzes were carried out with the use of IBM SPSS Statistics 26 package. Thanks to it, frequently analysis, the cross-table analysis with chi-square test and rho-Sperman correlation analysis have been made. The study involved 890 students at both civil and military universities.

**Findings:** It can be stated that empirical research about organizational culture, especially in the context of universities and research on the students’ opinions on this subject will allow for the development of new solutions regarding the functioning of universities which will also allow the adaptation of the educational offer to the current, changing needs of students.

**Practical Implications:** The obtained empirical data made it possible to establish a direct relation between the variables such as elements of organizational culture, changes in it and relations with the external environment and the perception of the organizational culture of the university from the point of view of civil and military students.

**Originality/Value:** The article presents the author’s approach to the question of researching the opinion of civil and military students in the context of changes and elements which create the organizational culture of university which students study in. The problem discussed in the article is timeless and extremely important because students have an influence on the shape and changes in organizational culture of universities in which the study.

**Keywords:** Organizational culture, university, civil university, military university.

**JEL codes:** I20, I21, I22.

**Paper Type:** Research article.

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1. Introduction

Currently, many researchers are taking up a discussion on organisational culture. It is a concept that is perceived and defined in various ways. Therefore, there are a number of definitions that try to describe organisational culture in a more or less comprehensive manner. So it seems reasonable to cite a few definitions in order to organise the undertaken deliberations.

Thus, the organisational culture as Cameron and Quinn (2015) write, encompasses more than 150 definitions of culture, where two basic approaches include one derived from the social sciences and the other one having its roots in anthropology. Obviously, referring to the E. Schein’s model (1985) (Cameron and Quinn, 2015; Strojkow, 2011; Wajda, 2003; Bogdanienko, 2010; Sułkowski, 2002; Szymańska, 2019; Niemiec, 2020) constitutes an undeniable basis. In the consideration, it was decided to solve the main research problem expressed in the form of a question:

Is there a relation between the type of university (civil vs. military) and the students’ perception of the university’s organizational culture?

Possible answer, which is a solution of the main research problem took the form of a research hypothesis:

I assume, there is a relation between the type of university and how students studying there perceive elements of organizational culture.

As part of research assumptions, it was decided that the analysis of the studied phenomenon will refer to students from all over the Poland, thus abstracting from European solutions. The research had been made in the following voivodships: Lower-Silesian, Kuyavian-Pomeranian, Lublin Voivodeship, Lubus Voivodeship, Łódź Voivodeship, Lesser-Poland, Masovian, Opole Voivodeship, Subcarpathian, Podlaskie, Pomeranian, Silesian, Świętokrzyskie Voivodeship, Warmian-Masurian, Greater-Poland and West-Pomeranian.

The condition for an effective solution of the research problems and verification of the hypothesis is the correct selection of research methods, techniques and tools. For the purposes of this study, used empirical researched method was a diagnostic survey, used technique – a survey and the tool used to collect the data was proprietary questionnaire.

The main purpose of the article was to establish and demonstrate the relation between changes in the perception of the organizational culture of a university in the opinion of students of civil and military universities. Therefore, the analysis was based on the following variables, manifestations of organizational culture, typology and relation with the external environment.
Solving the mentions researched problem requires answering several specific problems:

1. What characterizes organizational culture?
2. How the students perceive the following elements of organizational culture: symbols, communication methods, values, rituals, myths and taboo?
3. What factors influence on changes in the organizational culture of a university (in the opinion of students)?
4. How do students perceive the university’s relations in relation to the external environment.

The author of the article is aware that analyzed factors and elements of organizational culture constitute a certain fragments of reality related to the organizational culture of a university but these were considered in the context of the considerations and empirical data were collected and analyzed in this direction.

2. Organizational Culture – A Theoretical Approach

Sitko-Lutek (2018) cites several definitions of organisational culture in his publication. And so, Sikorski (2002) defines it as a system of patterns of thinking and action which are fixed in the social environment of an organisation and are important for the realisation of its formal goals. Whereas Sułkowski (2002) defines organisational culture as a learned product of collective experience, based on values and standards and the resulting cultural norms. Kostera (2010) defines organisational culture as the organisation itself, which determines all behaviours of the organisation's members (quoted from Sitko-Lutek, 2018, pp. 50-51; see more Szymańska, 2019, pp. 471-472). Of course, the above mentioned definitions are only a fragment of the proposed definitions of organisational culture. Nevertheless, it seems that they reflect the most important assumptions of this concept.

In the source literature one can find a description of the manifestations of organisational culture and according to Zbiegień-Maciąg (2005, pp. 43-50), see more on Kostera, Kownacki, and Szumski (2001, pp. 379-380), and Sułkowski (2020) there exist symbols, ways of communication, rituals, values, myths and taboos. And they were used by the author of the article to undertake comparative analysis.

Among various typologies of organisational cultures proposed in the source literature, it is worth noting the typology developed by Trompenaars (2003), because in the opinion of the author of the article it is the typology best suited to the specific character of the University, namely the combination of elements characteristic of a military University with the civil element. As Aniszewska (2003) writes, Trompenaars (2003) distinguished 4 types of organisational culture, which derive from the cultural characteristics of individual countries. And so, the family, where great attention is paid to care for the work atmosphere, the needs of individual
employees are fulfilled, a great distance to power and strong leadership is maintained.

The basis of learning is intuition and experience, conflict situations are allowed, the Eiffel Tower – where formalisation, task execution and centralisation dominate, work is precisely defined, activities are strictly controlled and coordinated, mainly by means of rules and procedures, the leader has strength, power; employees are treated as one of the company’s resources, and criticism is a manifestation of lack of reason, guided missile – where the emphasis is on the role of efficient teamwork, there is no strict description of responsibilities, activities focus on the implementation of subsequent projects, criticism is allowed, if it is constructive and allows to correct a mistake and an incubator, where the organisation is secondary to the needs of employees, is to enable their development, creativity, growth, learning, improvisation, formalization reduced to a minimum, criticism should be aimed at improving rather than negating the processes taking place (Aniszewska, 2003, after Trompenaars, 2003, pp. 17-18, see more on Stojkow, 2011, pp. 289-293).

3. Analysis of Own Research Results

To answer to the research question, statistical analyzes were carried out with the use of IBM SPSS Statistics 26 package. Thanks to it, frequently analysis, the cross-table analysis with chi-square test and rho-Sperman correlation analysis have been made. The significance level in this article was considered as α< 0,05.

3.1 Analysis of Sociodemographic Variables

In considered study, students from all over Poland participated (N = 890, incl. 485 women) from military universities (n = 30) and civil ones (n = 860) . As many as 92% of the respondents were in the age range between 19–24 years old, 6.3% of respondents in the age of 25–29 and 1.9% below 19 year old (Figure 1).

Figure 1. Age of the respondents

Source: Own study.
The largest number of people participating in the study lived in the Masovian voivodeship (12.1%) , Silesia (10.4%) and Lesser-Poland voivodeship (9.9%), other were lived in proportions: Lower-Silesian and Kuyavian-Pomeranian voivodeship by 7.3% of respondents, Lublin voivodeship by 7.8%, Lubus - 2.9%, Łódź voivodeship - 7.3%, Opole voivodeship by 2%, Subcarpathian - 5.5%, Podlaskie voivodeship - 3.3%, Pomeranian - 6.3%, Świętokrzyskie voivodeship - 3.9%, Warmian-Masurian - 3.1%, West-Pomeranian - 2.7%. Figure 2 shows the frequently distribution of students from individual voivodships.

Figure 2. Frequency distribution of students from voivodships.

Source: Own study.

3.2 Analysis of the Frequency of Answers to Particular Questions

In the next part of the analysis, it was checked how important are individual elements of organizational culture in the opinion of respondents from the perspective of their impact on the organizational culture of the University where they study. It was observed that the symbols were rated as important by 41% of the respondents (Figure 3), the ways of communicating were rated as very important by 52% of respondents and by 37.2% as important (Figure 4). A similar distribution of responses was observed for the values that were assessed as very important for 40.2% of the respondents and as important for 39.1% (Figure 5).

The rituals were rated by 36.4% of the respondents as average-important and by 29.4% as important (Figure 6). Students rated myths as the least significant, which were assessed by the majority of respondents (35.7%) as not important or moderately important (31.5%). A detailed responses are presented in Figure 7.
similar way, taboo were assessed – 29.9% of respondents considered them to be of average importance and 26.2% as not so important (Figure 8).

**Figure 3. Frequently distribution of symbols rate**

![Frequently distribution of symbols rate](image)

*Source: Own study.*

**Figure 4. Distribution of frequency of a rate of communication ways**

![Distribution of frequency of a rate of communication ways](image)

*Source: Own study.*
Figure 5. Frequency distribution of values rating

Source: Own study.

Figure 6. Frequency distribution of ritual rating

Source: Own study.

Figure 7. Frequency distribution of myths rating

Source: Own study.
Summarizing this part of the considerations, it can be stated that the analyzed elements of organizational culture such as symbols, ways of communication, values and rituals are perceived by the respondents as very important, important or (in the case of rituals) of average importance. Elements relation to myths and taboo were assessed by the respondents as of average importance or not so important.

Next, it was checked how students assess the University’s relation with the external environment. Half of the respondents, or more precisely 50,8% rated the relations as good, declaring observation of significant changes in this area, while 30% of the respondents assessed the relation very well, noting the University’s opens to the external environment. The answer of no opinion on a given topic was declared by 14,3%, while 4,6% of respondents assessed the University's reports badly and 0,3% as very badly. (Figure 9). Presented frequencies may indicate a positive reception of the University’s contacts with the external environment.

Next, it was checked how the type of organizational culture of the University where the respondents study is rated. Due to the fact that organizational culture could be perceived differently due to the type of the University (military or civil), cross-tables and analysis with chi-square test of independence were made (Table 1). In military universities, students assessed the type of culture as dominated by formalization, implementation of tasks and centralization (43,3%), while 33,3% of respondents declared that they pay great attention to the care for the working environment.

Students of civil universities declared that formalization, task implementation and centralization are dominant (35,7%) and that they pay great attention to the care for the working climate (35,6%). Additionally, the chi-square test of independence was performed to check whether the observed difference in responses was statistically
significant. The chi-square test analysis showed that the assessment of the type of organizational culture of the University does not depend on its type (military or civil). Detailed results of the analysis are presented in Table 1.

**Figure 9. Frequency distribution of external environment**

![Frequency distribution of external environment](image)

2. Jak ocenia Pani/Pan relacje Uczelni ze środowiskiem zewnętrznym?

**Table 1. Cross table for rating the type of organizational culture depending on the type of university**

|                  | University | Military | 4. organization is secondary to the needs of employees | Total |
|------------------|------------|----------|-------------------------------------------------------|-------|
|                  |            | 10       | 13                                                   | 30    |
| 1. great attention is paid to taking care of the working climate, | 306        | 307      | 141                                                  | 859   |
| 2. formalization, task implementation and centralization dominate | 316        | 320      | 147                                                  | 889   |

\[ \chi^2 (3, \ N = 890) = 2.65; \ p = 0.448 \]

**Source:** Own study.

As it can be seen, it can be stated that students perceive the relations of the university in which they study with the external environment as good. However, in the context of how they perceive the type of organizational culture, the obtained research results were similar and students paid special attention the dominance of formalization, implementation of tasks and centralization, as well as care for the atmosphere in the university.
3.3 Analysis of the Interdependence between the Importance of Individual Elements of Organizational Culture

Next part of the analysis was checked whether there were any dependences between the elements of organizational culture rated in question 1. For this, the rho-Spearman correlation was analyzed, the detailed results are presented in the Table 2. A positive relationship of moderate strength was observed (0,3 < rho < 0,5) between myths and taboos assessment (rho = 0,49; p<0,001), between rituals and symbols assessment (rho = 0,36; p<0,001) and assessment of the values and ways of communication (rho = 0,30; p<0,001). However, it is worth noting that the remaining elements of the organizational culture show also a positive relationship on weak potency (0,1 < rho < 0,3) except the ways of communication and myths.

Table 2. Interdependence between individual elements of organizational culture

|                      | symbols | ways communication of rituals | values | myths |
|----------------------|---------|-------------------------------|--------|-------|
| ways of communication| rho-Spearman | 0,154 | <0,001 |       |
|                      | relevance |       |        |       |
| rituals              | rho-Spearman | 0,364 | 0,134 | <0,001|
|                      | relevance | <0,001 | <0,001 | <0,001|
| values               | rho-Spearman | 0,178 | 0,300 | 0,174 |
|                      | relevance | <0,001 | <0,001 | <0,001|
| myths                | rho-Spearman | 0,177 | 0,030 | 0,302 | 0,174 |
|                      | relevance | <0,001 | 0,332 | <0,001| <0,001|
| taboo                | rho-Spearman | 0,101 | 0,125 | 0,161 | 0,251 | 0,494 |
|                      | relevance | 0,03 | <0,001 | <0,001 | <0,001| <0,001|

Source: Own study.

3.4 Analysis of the Interdependence between Individual Factors Influencing the Process of Change in the Organizational Culture of the University

In the next part, it was checked whether there was a relationship between the assessment of individual changes that had an impact on the process of changes in the organizational culture of the University. For this, a rho-Spearman analysis was carried out, the detailed results of the analysis are presented in Table 3.

A positive relationship of moderate strength was observed (0,3 < rho < 0,5) between the evaluation of the importance of the organization’s features (including: market situation, products, technology and industry) and the type of organization (understood as: values, attitudes, education, gender, work experience, life experience and emotional ties). A positive relationship of similar, moderate strength (0,3 < rho <
0.5) was observed in the case of the type of environment (national culture, society’s value system, region’s community value system and local value system).

**Table 3. Correlation between the assessment of individual factors influencing the process of changes in the organizational culture of the University**

| Features of the Environment | rho-Spearman | Relevance |
|-----------------------------|--------------|-----------|
| Organization Type           | 0.300        | <0.001    |
| Features of the Organization| 0.269        | 0.286     |
| Relevance                   | <0.001       | <0.001    |
| Organization Type           | 0.273        | 0.224     |
| Relevance                   | <0.001       | <0.001    |
| Legal Changes in the Higher Education | 0.240     | 0.263     |
| Relevance                   | <0.001       | <0.001    |

**Source:** Own study.

### 3.5 Differences in the Perception of the Quality of the Organization’s Relationship with the External Environment Due to the Perceived Type of Organization and Structure

In the last part of analysis, it was checked whether there are differences in the perception of the quality of the organization with the external environment depending on how students perceive the organization type of the University structure. For this, independence was analyzed with the use of chi-square and post-hoc tests. Detailed results of the analysis are presented in Table 4.

As part of analysis, significant differences were observed in the assessment of the University’s relationship with the external environment depending on the perceived type of the organizational culture. The analysis showed that the assessment of the University’s relationship with the external environment may depend on the perceived type of organizational culture. It is worth noting that post-hoc tests have proven that a significantly good and very good ratings of the University’s relationship with the external environment may depend on the perception of an organizational culture in which a lot of attention is paid to the care of the working climate and in which the perceived culture is assessed such as dominated by formalization, task implementation and centralization.
Table 4. Cross-table of respondents about rating the University’s relationship with the external environment and the type of organizational culture describing the University

| How do you rate the University’s relations with the external environment. | 1. great attention to taking care of the working atmosphere is made | 2. domination of formalization, task implementation, and centralization | 3. the emphasis is on the role of efficient teamwork | 4. organization is secondary to the needs of employees |
|---|---|---|---|---|
| Amount | % | Amount | % | Amount | % | Amount | % |
| Very bad, I think that the University is still closed to the external environment | 0,00 | 2,00 | 1,00 | 0,00 | 0,00 | 66,67 | 33,33 | 0,00 |
| The importance of the difference | 0,197 | 0,267 | 0,435 | 0,555 |
| Bad, I didn’t notice any significant changes in the relations between the University and the external environment | 8,00 | 13,00 | 12,00 | 8,00 |
| The importance of the difference | 19,51 | 31,71 | 29,27 | 19,51 |
| I have no opinion | 31,00 | 52,00 | 26,00 | 18,00 |
| The importance of the difference | 24,41 | 40,94 | 20,47 | 14,17 |
| 0,005** | 0,208 | 0,197 | 0,395 |
| Good, I can see significant changes in this area | 123,00 | 210,00 | 71,00 | 47,00 |
| The importance of the difference | 27,27 | 46,56 | 15,74 | 10,42 |
| <0,001*** | <0,001*** | <0,001*** | <0,001*** |
| Very well, I see a very significant opening of the University to the external environment | 154,00 | 43,00 | 37,00 | 33,00 |
| The importance of the difference | 57,68 | 16,10 | 13,86 | 12,36 |
| <0,001*** | <0,001*** | <0,001*** | <0,001*** |

\[ \chi^2(12, N = 890) = 109,96; p<0,001 \]

Source: Own study.

In the context of analyzed, it can be concluded that there is a positive correlation between individual elements of organizational culture that related to universities.
When it comes to the perception of the process of changes in the organizational culture of universities, also seen in the respondents’ answers it can be indicated that there is a positive, moderate correlation. However, in the relation of the relations with the external environment and the type of organizational culture, it can be indicated that there is a significant difference in their perception, which explains how students perceive the relation between the external environment and the indicated type of organizational culture of the university.

Summarizing the presented research results, it can be stated that in the opinion of students who answered the questions in the questionnaire, the respondents see a significant relation between the variables such as the elements of the organizational culture of a university they study in. They also see correlations between the type of university organization and relations with the external environment.

4. Conclusions

The assumed aim of the article was to search for answers to the main research problem in the form of a question:

*Is there a relation between the type of university (civil vs. Military) and the students’ perception of the university’s organizational culture?*

Based on the above empirical research data, it can be concluded that there is a relation between how the students perceive the organizational culture of a university and the type of university they study in, so it matters whether they are students of a civil university or military university.

Nevertheless, their opinion on certain elements relating to organizational culture are similar. In a similar way respondents refer to the issue of changes which take place in their universities (in their answers). In the context of relations with the external environment, they pointed similar dependencies.

The author is aware of the fact, that the obtained research results do not exhaust the subject of organizational culture of universities fully – collected empirical data indicate the need of more extensive research in this area. Therefore, at later stage, the research should cover the students public and non-public universities and perhaps other uniformed formations educating their staff, not only civil and military universities. It seems justified to undertake the research among teachers of universities and administrative staff in order to obtain additional empirical data.

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