

“Transition from hierarchy to adhocratic organizational culture in a Ukrainian university: From survival to successful development in the conditions of war”

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SPECIAL ISSUE: ACADEMIC MANAGEMENT IN THE CONDITIONS OF WAR

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TRANSITION FROM HIERARCHY TO ADHOCRATIC ORGANIZATIONAL CULTURE IN A UKRAINIAN UNIVERSITY: FROM SURVIVAL TO SUCCESSFUL DEVELOPMENT IN THE CONDITIONS OF WAR

Abstract

This study aims to investigate the transformation of organizational culture during year of the of the active phase of the russian-Ukrainian war that contributes to the survival of Bogdan Khmelnytsky Melitopol State Pedagogical University as an organization and is a factor in the transition from the survival to the phase of successful and dynamic development. Due to the war and the occupation of certain territories of Ukraine, the university was forced to relocate to the free territory in the city of Zaporizhzhia. It lost all its buildings and other material resources; around 25% of students, 25% of faculty, and 25% of funding. Despite the extreme conditions of the university's functioning and the stress of teachers and students under constant attacks on civilians by the occupiers, the university has resumed its educational process and research. A formal sign of the success of the scientific work is the growth of the university's position in the Consolidated ranking of Ukrainian universities. In the educational sphere, interdisciplinary academic programs have become a significant trend during the war. Innovations in management ensured that the university quickly adapted to the extreme environment. These innovations were primarily related to transitioning from a hierarchy to an adhocratic organizational culture. The main areas of changes in the university management were: renewal of the personal composition of the university management, reorganization of structural units, updating of the system of university regulations, and complete transition to electronic document management.

Keywords

reform, higher education, management, transformation,
horizontal links, changing environment, resources,
success, strategy

JEL Classification

I23, I20

INTRODUCTION

The Ukrainian higher education system has undergone significant reforms recently (Nikolaiev, 2017; Romyantseva & Logvynenko, 2018; Satsyk, 2017; Shevchenko, 2019). However, the war has performed a crash test and pointed out promising areas of development and pseudo-reforms that imitated changes without adequate results. Organizational culture types are productive for describing phenomena and processes in business (Serrat, 2017) and education (Tierney, 2008).

This study attempts to apply this approach to explain the phenomena in education before and during the war. In Ukraine, since the beginning of the armed attack by the russian federation in 2014 (Allison, 2014), there has been a practice of relocating universities to territories

not occupied by the invaders to preserve universities as integral structures. The relocated universities as organizational structures experienced a significant stressful impact that could lead to their collapse. The restructuring of the organizational structure and transformation of the university's organizational culture can become a source of adaptive capacity that will allow for quick and practical solutions to complex unforeseen problems in the face of limited human and financial resources.

The importance of the problem is that managing transformation processes in education requires tools to test hypotheses on which proposals for education reforms are based (Mohamed Hashim et al., 2022; Pöder & Lauri, 2021). False paths that look attractive but cannot be implemented in reality with the declared result should be rejected at the stage of discussion (Hiebert et al., 2023). However, the tools should be developed to verify the potential of management decisions to achieve the planned results comparable to the time and resources required for their implementation (Biondi & Russo, 2022). The types of organizational cultures are a factor in the stability of organizational structures, provided they are consistent with the dynamic features of the environment and available resources (Fietz & Günther, 2021). Conservatism and maximization of the quality of performance discipline in a stable environment and with significant available resources create conditions for a hierarchy organizational culture with strong vertical connections (Kirkman et al., 2006). On the other hand, changing environmental and limited and fluctuating material resources, make an adhocratic culture with variable horizontal connections appropriate to solve complex and unpredictable problems (Cristofoli et al., 2021; Tipurić, 2022).

The aim of this study is to investigate the transformation of the organizational culture of a Ukrainian university during the year of the war as a condition for its survival as an organization and a factor in the transition from the survival to the successful and dynamic development on the example of Bogdan Khmelnytsky Melitopol State Pedagogical University.

1. RESULTS

1.1. Bogdan Khmelnytsky Melitopol State Pedagogical University during the war

The university was founded in 1923 and is a leading higher education institution in southeastern Ukraine. The city of Melitopol was occupied almost in the first days after the full-scale military aggression by Russia (which began on February 24, 2022, and is a continuation of Russia's war against Ukraine, which has been going on since 2014). Academic staff and students, along with all the city's residents, have been engaged in peaceful resistance against the occupation of Ukraine for a long time. Even under occupation, the university continued to work according to the laws of a free Ukraine. However, in May 2023, the occupation authorities seized the institution's buildings. The university was transferred to the unoccupied territory of Ukraine to the city of Zaporizhzhia, where the institution's administration is now located. Now the university has lost almost all material assets and buildings. Still, the extent of the

losses and the level of destruction will be estimated after the liberation of Melitopol from the occupiers.

1.2. The impact of the war on the university staff

At the beginning of 2022, the university employed 252 academic staff. But the martial law in Ukraine and the temporary occupation of Melitopol affected the quantitative and qualitative composition of this category of employees. During the war, research and teaching staff decreased by 64 people (25%). This was primarily due to the collaboration of a certain number of research and teaching staff who are currently promoting and implementing the education standards of the aggressor state and are actively involved in the educational process under the leadership of the occupation authorities. The university now houses a fake higher education institution under the Russian flag, which is illegitimate even under Russian law. Students are being recruited there by force through occupation employment centers to imitate its impor-

tance in the occupied territory. Employees who had betrayed the country and the people of Ukraine were dismissed under paragraph 3 of Article 41 of the Labor Code of Ukraine – an employee performing educational functions committing an immoral act incompatible with the continuation of this work. Some employees resigned due to employment in other institutions in Ukraine or abroad.

The academic staff who remained working at the university are people of high moral convictions and impeccable behavior; as their example, authority and high moral behavior are paramount in shaping the consciousness of young people – higher education students.

Although the university has moved to Zaporizhzhia, it continues to make students aware of the need to comply with the Constitution and laws of Ukraine, protect the sovereignty and territorial integrity of Ukraine, educate them to respect the state language and state symbols of Ukraine, national, historical, and cultural values and to take care of Ukrainian historical and cultural heritage. As of the academic year 2022–2023, the academic staff at the university consisted of 188 people, including 32 doctors of sciences, professors, 101 candidates of sciences, associate professors, which is 70.7% of the total number of academic staff.

1.3. Dynamics of the contingent of higher education applicants: Causes and consequences

As of November 1, 2022, 2067 students were studying at the university on a full-time basis. At the expense of the state budget, 1175 students receive higher education in bachelor's and master's degrees, and 892 students studied at the cost of individuals and legal entities. As of November 1, 2022, 895 students are studying part-time in higher education programs (Table A1, Appendix A).

According to the 2022 university admission, the number of applicants for the 1st year of study decreased compared to previous years. In 2020, there were 415 applicants for the 1st year; in 2021 – 457 applicants; and in 2022 – 297 applicants. During

the war, most potential applicants to the university are in the perilous territory and cannot enter due to lack of communication. Some applicants have gone abroad or to the western parts of Ukraine. Therefore, enrollment for the first year, 65% of last year, can be considered a success. The geography of applicants is represented by all regions of Ukraine.

1.4. Changes in funding from the state budget and own sources

The funding for Bohdan Khmelnytskyi Melitopol State Pedagogical University for 11 months of 2022 amounted to UAH 96678.4 thousand. Compared to 2021, there is a decrease in estimated allocations for the general and special funds (by 24.11%) (Table A2, Appendix A). The state funding for scientific research was reduced the most. The special fund also decreased due to a decrease in student tuition fees because of the catastrophic decline in the population's ability to pay the fees due to the war.

1.5. Scientific activity

In 2022, the number and amount of funding for research from the state budget decreased significantly (Table A3, Appendix A). The university's scientists published 26 articles in 2020, 91 in 2021, and 95 in 2022 in periodicals indexed in the Scopus and Web of Science databases. According to the Consolidated ranking of Ukrainian universities, the university rose from 125th in 2021 to 105th position in the Scopus nomination in 2022. Under the indicators of funding received, there is evidence that academic staff does not stop working. At the same time, attention should be paid to the systematic preparation of projects for basic research, applied research, and scientific and technical (experimental) developments to be carried out at the expense of the state budget.

Volunteerism in the context of a full-scale war has received new vectors of activity. In particular, the university created the NGO "We Help Patriots of Ukraine Now and Always," which has repeatedly participated in organizing assistance for the Armed Forces of Ukraine, namely purchasing cars, construction materials, food packages, sleeping bags, etc.

1.6. What has changed in university management?

The main areas of changes in the university management were: 1) renewal of the personal composition of the university management; 2) reorganization of structural units; 3) updating of the system of university regulations; 4) complete transition to electronic document management.

The war has shown the harmfulness of outdated forms and the prospects and effectiveness of new aspects of university functioning. Notably, the academic community demonstrated the trends in the social environment that were taking place throughout the country – self-organization through the formation of dense and dynamic horizontal links to solve problems in a changing climate (Stewart & Dollbaum, 2017). The rector of the university, who was in office when the war began, was targeted by the occupiers and was forced to leave the occupied territory. The acting rector and the first vice-rector betrayed their homeland and the university, began destructive activities, and did everything to prevent the university from moving to the unoccupied territory. There was a massive risk of the university's destruction and defeat. The self-organization of the academic community took place in close cooperation with the local community and its leaders. The mayor of Melitopol, Ivan Fedorov, together with the leaders of the university community, led by Natalia Falko, ensured the transit of the institution to a safe zone in Zaporizhzhia and provided for the functioning of the university in new conditions. This is an excellent example of when the practices of hierarchy organizational culture were rejected, and ad hoc approaches proved effective and led to success in implementing a specific project.

A hierarchy organizational structure shows advantages in conditions of stability. It focuses on the organization's internal environment and integration. In contrast, an ad hoc culture has an advantage in a changing environment concentrating on differentiation (Cameron & Quinn, 2006). The tragedy and dynamism of the war conditions made it necessary to change the organizational conditions. But the question arises: Is not the inhibition of urgent reforms in society and education the ultimate reason Russia's military intervention became possible?

The people who primarily formed the false perception of Ukraine as a failed state (Kuzio, 2019) sided with the occupier. Ex-employees of the university who were the leaders of academic dishonesty practices became collaborators. The raider seizure of a university's scientific journal "Ukrainian Journal of Ecology" can be cited as evidence, which has been published since 2016 in Russia, and the university lost control of it, which became possible after the criminal collusion of the previous university leadership with the fake publisher of the journal. The journal became "predatory," which significantly discredited the Ukrainian university, even though the authors of the dishonest practices were pseudo-scientists from Russia.

The relocation of the university and staffing changes led to the reorganization of university departments by merging them, which reduced the number of departments from 27 to 22. This trend has led to the disruption of links corresponding to the characteristics of a family and clan organizational culture. Higher education is characterized by a high level of secrecy, and at the level of micro-collectives, family-type ties are actually being built. Such an organizational culture has its advantages under certain conditions, but it does not have the potential to respond quickly to environmental changes and is conservative in nature. The reduced number of structural units has shortened information chains and created conditions for horizontal links to prevail over vertical ones. The situational nature of the new structures has opened up more significant opportunities for solving functional problems in general without taking into account the "traditions and needs" of individual units, which are the result of a particular historical memory rather than a response to the challenges of the current time. In practice, such restructurings are manifested in the active creation of interdisciplinary educational programs within the same or different fields of knowledge within completely different structural units at the university during the war.

The 2014 reform of higher education in Ukraine outlined prospects for increasing academic independence and self-governance of universities. University activities are based on a system of regulations constituting the legislative framework for educational processes. The system of rules created

before the war no longer regulates the functioning of the institution. The university's regulations were revised based on adhocratic organizational culture principles: legality, openness, accessibility, and transparency. It allows for an objective assessment of the professional activities of the university's academic staff. The disclosure of the creative potential of the academic staff is possible under conditions of open competition, constant collective interaction, and mutual assistance. The innovative success of the academic staff should be honestly assessed, made public, and adequately rewarded. The alpha and omega of the university management system are that the professional activity of a research and teaching staff member is a way of implementing the university's mission and strategy, a component of the system of ensuring the quality of research and teaching potential, and the quality of education at the university. Thus, decent conditions should be created to unleash the creative potential of each university employee, especially young researchers and teachers. Objectively, the university needs to expand its teaching staff and sees young people as a source for tackling this issue. By the way, the number of collaborators was the lowest among young people.

The digitalization of document management and educational processes is a marker of the institution's transition from a hierarchy to an adhocratic culture. In fact, this is the only technological alternative for the university to operate under the occupation of its buildings. Physically, students and staff are located in different cities of the country and abroad. The university was "pre-adapted" to distance work, as the Center for Educational Distance Technologies had been developed for many years. Digital technologies have also made the administrative division conditional and provide good opportunities for establishing horizontal connections in the implementation of project tasks. Examples include new educational programs and the project activities of workers on updating the university's regulations, which consist of representatives of different structural units. It should also be noted that online communications are fruitful and focused, significantly speeding up project implementation and saving faculty time. These savings can explain the phenomenon that, despite the reduction of staff by a quarter, the university's publication activity has not decreased.

1.7. What should the state and the institution do next?

The state, represented by the Ministry of Education and Science of Ukraine (MES), must catch up to the displaced universities regarding their adaptability to new conditions. The decision to abolish the formulaic distribution of university funding, which was an up-and-coming innovation of the education reforms of recent years, cannot be welcomed. The adaptive potential of institutions that have rebuilt their organizational culture allows them to solve complex educational and scientific problems even in extreme conditions. Indeed, a reduction of bureaucratic pressure from the MES would free up administrative resources of universities to address pressing management issues in a changing climate. In addition, the procedures for the competitive selection of research projects for state funding have yet to be simplified compared to peacetime. Moreover, the timeframe of projects and the financing terms are not defined, although the reduction in funding for research projects is perceived as a necessity given the war. The announced transfer of contract students to budget funding was not sufficiently elaborated to consider the realities for students evacuated from the occupied territories, significantly affecting the financial sustainability of the displaced universities.

Western partners have shown interest in funding educational and research projects in Ukraine but distrust official institutions. Therefore, to restore the trust of international partners and to support education, the MES could act as a moderator of direct contact between Ukrainian universities and Western partners capable of providing financial assistance to restore the economic viability of the country's universities.

The war was a significant challenge for Bogdan Khmelnytsky Melitopol State University, as well as for the entire population of Ukraine. Ukraine received help and support from its partners. The university has received endorsement from the community for the benefit of which it is supposed to function. Horizontal links in Ukrainian society have created an irresistible force of resistance against the brutal occupation. The self-organization of the academic community in close cooperation with the local community and political leaders allowed for the survival and development of the university.

CONCLUSION

This study analyzed the transformation of the organizational culture of Bohdan Khmelnytsky Melitopol State Pedagogical University during the war. The findings showed that the university managed to survive as an organization and even transited from the survival to the phase of successful and dynamic development. This became possible due to the transition from the traditional hierarchy organizational culture of higher education to an adhocratic culture. The adhocratic culture at the university creates opportunities for unleashing the creative potential of all academic staff, which is a source of successful development of the university in the future. The prevalence of a hierarchy organizational culture in the higher education system is one of the reasons for the slowdown in reforms that have been ongoing since 2014. Obviously, the experience of university adaptation to the extreme conditions of war should be extended to the post-war period to achieve success in the scientific and educational fields.

AUTHOR CONTRIBUTIONS

Conceptualization: Natalia Falko, Olexander Zhukov.

Data curation: Natalia Falko.

Formal analysis: Olexander Zhukov.

Investigation: Natalia Falko, Olexander Zhukov.

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Writing – review & editing: Natalia Falko.

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APPENDIX A

Table A1. Number of higher education students who graduated from university in the year before the war (2021) and during the war (2022)

Education level	2021	2022	Change in %
Full-time education			
Bachelor's degree	417	375	-10.1
Master's degree	438	323	-26.3
Total	855	698	-18.4
Part-time education			
Bachelor's degree	260	201	-22.7
Master's degree	315	181	-42.5
Total	575	382	-33.6
Total			
Bachelor's degree	677	576	-14.9
Master's degree	753	504	-33.1
Total	1430	1080	-24.5

Table A2. University funding in 2021 and 2022

Indicators according to the classification of state budget expenditures and lending	Amount of financing, thousand UAH		Comparison, %
	2021 (fact of execution)	2022 (for 11 months)	
General fund of the state budget			
Total	96090.6	81081.7	-15.62
Including			
2201160 "Training of personnel by higher education institutions and ensuring the operation of their practice bases"	81392.9	68607.0	-15.71
2201040 "Scientific and scientific and technical activities of higher education institutions and research institutions"	1907.6	789.0	-58.64
2201190 "Payment of academic scholarships"	10844.3	11655.0	7.48
2201140 "Fund for the development of institutions of professional higher education"	1800.0	-	-100.00
2201390 "Support for priority fields of scientific research and scientific and technical (experimental) developments in higher education institutions"	145.8	30.7	-78.94
Raising funds from sources other than the state budget (Special fund)			
Total	25167.0	11243.7	-55.32
Including			
1. Funds received as a fee for services	25167.0	11183.0	-53.28
2201160 "Training of personnel by higher education institutions and ensuring the operation of their practice bases"	23689.5	11066.9	-92.14
2201040 "Scientific and scientific and technical activities of higher education institutions and research institutions"	1477.5	116.1	-87.29
2. Funds received from other sources of own revenues			
2201160 "Training of personnel by higher education institutions and support of their practice bases"	477.7	60.7	-55.56
Charitable financial assistance from the Ministry of Foreign Affairs of the Republic of Bulgaria	234.8	-	-100.00
Other charitable assistance	242.9	60.7	-75.01
Total	121735.3	92386.1	-24.11

Table A3. Amount of R&D funding in 2020–2022 (number of research projects and amount of funding, thousand UAH)

Categories of scientific research	Before the war				During the war	
	2020		2021		2022	
	number	thousand UAH	number	thousand UAH	number	thousand UAH
Fundamental	-	-	-	-	-	-
Applied	3	2041.1	3	1640.682	2	867.433
Economic contractual	1	1621.0	1	1621.0	-	-