

CRITERIA FOR SUCCESS OF THE ORGANIZATIONAL CULTURE OF THE DEPARTMENT OF A HIGHER EDUCATIONAL ESTABLISHMENT

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Abstract. *The article discusses outstanding characteristics of the organizational culture of the department of a higher-educational institution based on employees' ideas about existing and desired organizational culture with the goal to increase the department's successfulness. The ideas about a preferred state can be used for planning the further development of the department's organizational culture. Criteria for successfulness of department's organizational culture are determined by both internal and external factors.*

The external criterion for the assessment of successfulness of department's activity is represented by objective effectiveness of the quality of student training, which is included into department's rating and reflects successfulness of psychological and pedagogical interaction between the teaching staff and the students. It is suggested to use "objective effectiveness" as a criterion for the assessment of department's organizational culture successfulness. Also, the necessity of taking into consideration the directions of specialist training while planning the development of organizational culture of the department.

The article also presents the analysis of the internal criterion for the successfulness of the department's organizational culture, which is determined by the degree of discrepancy between the employees' ideas about existing and preferred organizational culture. High divergence degree causes socio-psychological internal tension among coworkers. We consider such an organizational culture to be unfavorable, and therefore unsuccessful. It is suggested to use organizational culture "favourability" as a criterion for successfulness.

It has been clarified that the correct OCAI methodology usage requires preliminary application of statistical criteria for checking normality of the source data distribution.

Keywords: *Organizational culture of the department of a higher-educational institution; successfulness criterion for the organizational culture of the department of a higher-educational institution; socio-psychological tension among employees.*

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Introduction. Higher-educational institution's organizational culture is an integral formation, which is comprised of the organizational cultures of its subdivisions. Competitiveness of a higher-educational institution, successfulness of its adaptation to rapidly changing stream of the modern external conditions depend on how successful is the response of the organizational culture to the challenges of the external environment. Department's organizational culture is the backbone component of organizational culture of the department of a higher-educational institution. Hence the actuality of the department's organizational culture research.

The essence of the concept "the organizational culture of the department of a higher-educational institution" has been clarified in our previous studies as the system of basic ideas about the mission, values, norms and behavioral rules. The system exists on the levels of employees' group and individual consciousness. The

system determines the nature of the professional interaction among the research and teaching staff members and psychological-pedagogical interaction between teaching staff and students.

The goal of the department's organizational culture development is to increase successfulness of the department as well as the higher-educational institution as a whole. The development of organizational culture assumes the implementation of certain changes in the nature of the professional interaction among research and teaching staff as well as psychological-pedagogical interaction between teaching staff and students. The changes might be accompanied by possible occurrence of socio-psychological tension within the department. Resolution of contradictions and the department's organizational culture development planning require identification of criteria for successfulness.

Literature review. The analysis of the publications of such authors as Alvesson M. [1], Cameron K. and Quinn R. [2], Vlasov P. [12], Herbert D., L. von Rosenstiel [3], Ivkin V. [4], Karamushka L., Kredentser O., Tereshchenko K. [5], Nakonechna N. [6], Pryhozhyn A. [7], Synhaivska I. [9], Schein E. [8] showed that despite the large number of works by Ukrainian and foreign scientists, the problem of planning the successful development of the organizational culture of the department has not been reflected sufficiently. This determined the selection of the area of our study, in particular – the identification of the criteria of successfulness of organizational culture.

Aims. The objective of the study is to determine the external and internal criteria for the successfulness of the organizational culture of the department for its development planning.

Methods. Diagnosing the features of organizational culture – OCAI (Kim S. Cameron - Robert E. Quinn). Mathematical and statistical methods of data processing: Student's t-test; Kolmogorov-Smirnov Test; Factor Analysis.

Results. The participants of the empirical study were 136 employees of 11 departments of higher-educational institutions. The departments were marked as follows: №1, №2 – degree-granting departments for information and computer sciences; №3, №4 – degree-granting departments for production and technology; №5, №6, №7 – degree-granting departments for natural sciences; №8, №11 – non-degree-granting departments for natural sciences; №9, №10 - non-degree-granting departments for Humanities.

The selection of degree-granting departments for the research purposes was carried out on the basis the data resulting from the complex monitoring of the quality of specialist training which is reflected in the objectively measured effectiveness, or objective effectiveness, of the department R - rating of the department.

Objective effectiveness reflects the effectiveness of the psychological and pedagogical interaction between university teachers and students in the process of educational and scientific research activities. In our study, the level of objective effectiveness is considered as one of the criteria for the successfulness of the department.

In the course of the research, the departments with high (successful) and low (unsuccessful) levels of objective effectiveness were selected, namely: information-computer orientation – department № 1 (successful), department № 2 (unsuccessful); production and technological direction – department № 3 (successful), department № 4 (unsuccessful), natural sciences – department №5 (successful), departments №6, 7 (unsuccessful) (Table 1).

Departments № 8, № 9, №10 and №11 were not monitored for the relevant indicators in full. In our study, we can not compare their effectiveness with those listed in Table 1 degree-granting departments, but to determine the directions of development of organizational culture of the department it is necessary to study the typological features of organizational culture of the departments in question.

Table 1

Distribution of departments according to the indicator of effectiveness and direction of specialist training

Objective effectiveness	Information-computer orientation	Production and technological direction	Natural sciences
High	№1	№3	№5
Low	№2	№4	№6, №7

To diagnose the typological features of the organizational culture of the department, the method of competing values by K. Cameron and R. Quinn OCAI was used [2].

The study analyzes the typological features of the organizational culture of the department by key parameters. Such an analysis will allow us to identify the areas of the development and the measures for its change to more successfully address the challenges facing the department.

For departments № 1, № 3 - №11 significant differences of input data according to the Kolmogorov-Smirnov criterion were not detected, therefore we consider averaging of these data to be quite appropriate.

Verification of the input data of the department №2 by the Kolmogorov-Smirnov criterion showed that the distributions of 13 out of 24 values of indicators of "Now" state and 8 out of 24 values of indicators of "Preferred" state differ from normal (Asymp. Sig. Is less than 0.05), and therefore cannot be averaged. Thus, the department №2 is not presented in the tables, but psychological qualitative analysis of its organizational culture is possible.

On the basis of the data received as a result of the survey of the department employees, the profiles of organizational cultures of the departments were constructed. The generalized indicators of the department of production and technological direction №3 were revealed as follows: the predominance of the "Now" hierarchical component D (40.56%) in combination with the market C (24.28%) (Fig. 1). At the same time, a sharp decrease in the level of the hierarchical component to 8.61% and a simultaneous sharp increase in adhocratic (B) and clan (A) components (from 21.39% to 30.06% and from 14.17% to 38.33% respectively) is "Proffered"

(Fig. 1). This indicates a certain degree of referentiality of the department for its employees. The obtained results were presented at the meeting of the department №3.

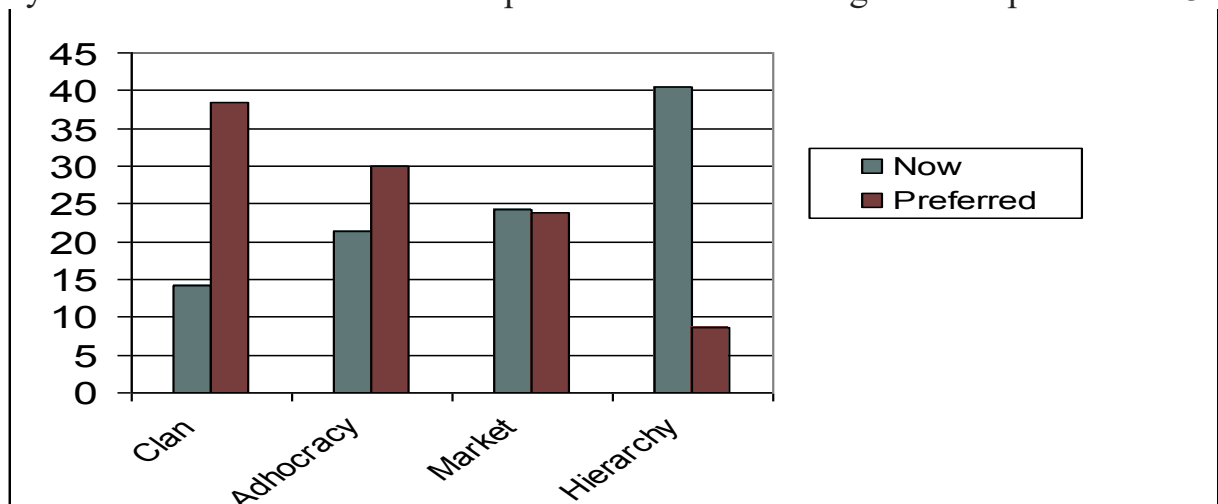


Fig. 1. Profile of organizational culture of the department №3

For the department № 4 of production and technological areas, the values of generalized indicators that characterize the "Now" state of the organizational culture were distributed as follows: clan component (A) – 35.85%, adhocratic (B) – 31.17%, market (C) – 17.56%, hierarchical (D) – 15.43%. "Proffered" for this department is the growth of clan (41.35%) and adhocratic (34.22%) components, although they are already the most pronounced, and a decrease in the market component – 14.67% and the hierarchical component – 9.76% (Fig. 2).

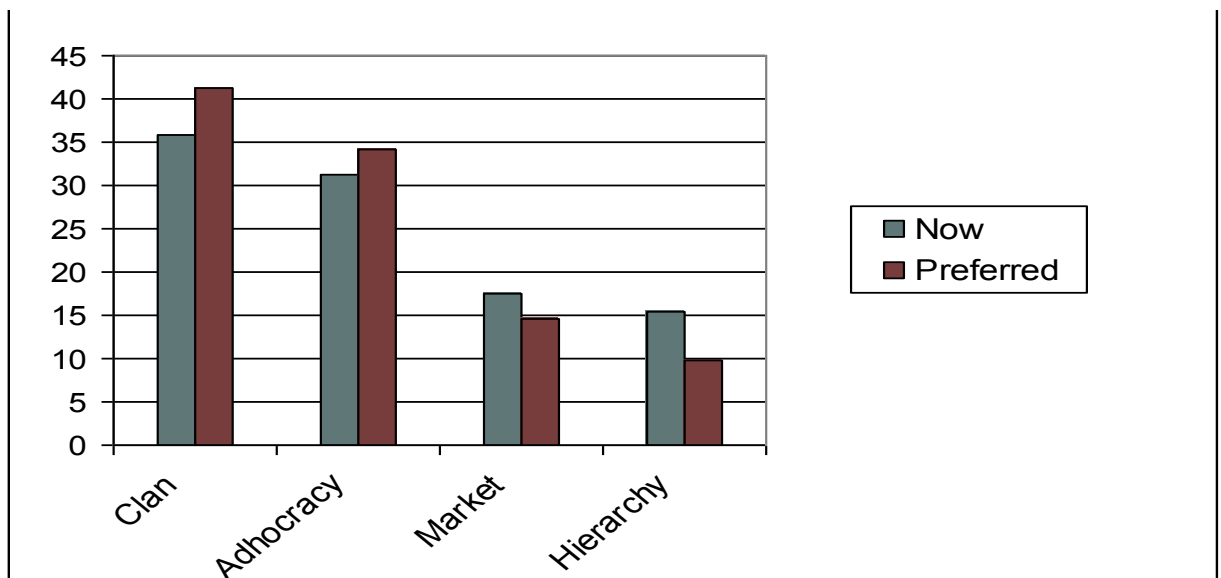


Fig. 2. Profile of organizational culture of the department №4

The departments in question have revealed certain trends in the preferred indicators of organizational culture of the university department despite the differences in the "Now" indicators of all the departments (Table 2).

Table 2

**Tendencies of the "Preferred" indicators of organizational culture
in relation to the "Now" indicators**

Departments	Basic type of organizational culture							
	CLAN		ADHOCRACY		MARKET		HIERARCHY	
	Now / Preferred	change of indicators	Now / Preferred	change of indicators	Now / Preferred	change of indicators	Now / Preferred	change of indicators
№1	20,63 / 29,40	increase	21,77 / 28,69	increase	32,09 / 24,91	decrease	25,52 / 17,00	decrease.
№3	14,17 / 38,33	increase	21,39 / 30,06	increase	24,28 / 23,86	decrease	40,56 / 8,61	decrease
№4	35,85 / 41,35	increase	31,17 / 34,22	increase	17,56 / 14,67	decrease	15,43 / 9,76	decrease
№5	30,92 / 32,27	increase	23,88 / 23,32	decrease	24,48 / 24,04	decrease	20,73 / 20,38	decrease
№6	25,48 / 31,31	increase	21,79 / 28,33	increase	24,40 / 23,33	decrease	28,33 / 17,02	decrease
№7	38,31 / 37,42	decrease	28,83 / 29,83	increase	23,86 / 23,97	increase	16,50 / 8,78	decrease
№8	34,67 / 39,68	increase	29,28 / 32,80	increase	19,23 / 15,52	decrease	17,68 / 12,01	decrease
№9	9,45 / 27,16	increase	13,39 / 32,32	increase	37,51 / 27,20	decrease	41,26 / 14,88	decrease
№10	24,88 / 27,26	increase	28,10 / 30,12	increase	27,86 / 26,67	decrease	19,17 / 15,95	decrease
№11	27,43 / 30,09	increase	23,57 / 26,57	increase	23,67 / 22,87	decrease	25,33 / 20,46	decrease

"Preferred" indicators have the same tendencies - increasing the levels of clan (↑) and adhocratic (↑) components while reducing the market (↓) and hierarchical (↓) components. This prompted us to conduct a factor analysis of the "Preferred" indicators of all the departments.

Regarding the determination of the nature of "socio-psychological tension" of employees, in our study we limit ourselves to studying the relationship between the "Now" and "Preferred" values of organizational culture indicators, i.e. through clarifying and analyzing the differences between them. The existence of the differences between "Now" and "Preferred" indicators of organizational culture, in our opinion, reflects the presence of certain socio-psychological tension in the collective between the manager and employees, as well as among employees themselves. Student's t-test was used to clarify the differences between the "Now" and "Preferred" values of organizational culture indicators. Determining such, in principle, a statistically formal criterion of favourability / unfavourability of the organizational culture requires a psychological justification of how it reflects the actual level of socio-psychological tension of employees. This requires additional theoretical and empirical research that can be implemented in the future work.

In our study, we proceed from the fact that the statistical significance of the differences between the "Now" and "Preferred" values of organizational culture, in

our opinion, can be an indicator of a favorable organizational culture. Socio-psychological tension is considered high if the differences between the "Now" and "Preferred" values of organizational culture indicators are significant. Organizational culture in this case is considered unfavorable. The absence of significant differences between the "Now" and "Preferred" values of indicators of organizational culture, respectively, will be considered an indicator of low socio-psychological tension and we will consider such an organizational culture as favorable.

Determining the differences between the "Now" and "Preferred" values of organizational culture indicators are presented in Table 3.

Table 3

Assessment of differences between the "Now" and "Preferred" values of the indicators of organizational culture (t_{exp})

Departments	CLAN	ADHOCRACY	MARKET	HIERARCHY
№ 1	1,35	1,26	1,09	2,51
№ 3	3,03*	1,31	1,44	8,36**
№ 4	1,27	1,75	1,55	1,73
№ 5	0,23	0,15	1,14	1,45
№ 6	3,72*	5,16**	0,71	11,51**
№ 7	0,68	1,29	0,17	0,11
№ 8	2,08	1,22	1,35	1,63
№ 9	3,01*	3,06*	3,24*	10,13**
№ 10	2,66*	2,56	0,29	3,14*
№ 11	0,89	1,33	0,54	2,02

* $p < 0,05$, ** $p < 0,01$ (1)

It was found that for the departments №1, №4, №5, №7, №8, №11 the values of the "Now" and "Preferred" indicators of organizational culture do not have any significant differences. It is possible to consider the level of social and psychological tension among the employees as low and to determine the nature of their organizational culture as favorable.

For the departments №3 and №10 the values of the indicators are marked by significant differences in the clan ($p < 0.05$) and hierarchical components ($p < 0.01$). For the department №6 the values of the indicators are marked by significant differences in the clan ($p < 0.05$), adhocratic ($p < 0.01$) and the most significant in the hierarchical component ($p < 0.01$). For the department №9 significant differences in all components were found, and the most significant differences were in the market ($p < 0.05$) and hierarchical ($p < 0.01$) components.

Thus, for the departments №2, № 3, №6, №9, №10 the level of social and psychological tension among the employees is considered high, and the nature of the organizational culture of the departments is unfavorable.

Thus, it was found that departments with the high level of objective effectiveness have both favorable and unfavorable nature of organizational culture; departments with the low level of objective effectiveness also have a different in terms of favourability nature of organizational culture. That is, we can conclude that

the indicators of "favourability / unfavourability" and "objective effectiveness" are independent.

"Favorability" is proposed as a criterion for the successfulness of organizational culture of the department, because in such a departmental environment, the psychological features of the organizational interaction between the employees and the head and among themselves probably contribute to the referential significance of the department for the employees.

The positions of degree-granting departments according to the criteria of successfulness of organizational culture "objective effectiveness" and "favorability" are presented in Fig. 3.

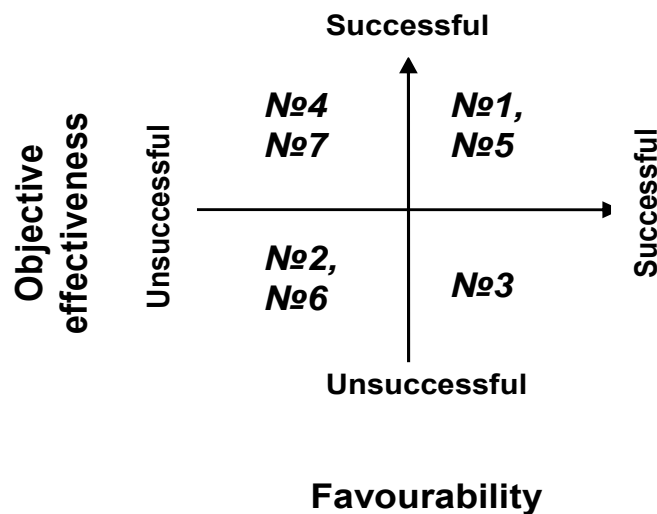


Fig. 3. Positions of departments on the criteria of "Objective effectiveness" and "Favourability "

In general, according to the criterion of "favourability", organizational cultures of the departments №1, №4, №5, №7, №8, №11 are successful, and the unsuccessful ones are №2, № 3, №6, №9, №10.

Discussion. Organizational culture of department №2 is contradictory by the nature. Therefore, this department survey results couldn't be correctly processed using statistic criteria which assume normal distribution of source data. Respondents of the department could be divided into two approximately equal groups which express quite opposite points of view regarding hierarchic and clan components of the organizational structure. One group believes that hierarchic component (strict structuration, control, demanding and relationship formalization) is clearly dominating and identifies it in more than 50% cases. Another group mentions hierarchic component less than in 10% cases. That might mean existence of certain cliques of department's employees, which have diametrically opposed points of view. Probably level of socio-psychological internal tension within department is relatively high. Hence, department's organizational culture is unsuccessful according to

“favourability” criterion. Analysis of the results by OCAI methodology six key measurements allowed us to formulate recommendations for possible changes improvement within organizational culture (though with some limitations).

For objective effectiveness department №3 for hierarchic and clan components the ratio between “now” and “preferred” values of the indicators shows possible presence of increased demands on the side of department’s management toward department’s employees. Also, it indicates that formal organizational relationships which are established between a manager and employees as well as among the employees themselves could be psychologically dangerous for employees. The department’s organizational culture is unsuccessful according to “favourability” criterion. It’s valid to assume that department’s employees who are engaged in intensive activities and do not get sufficient support and adequate assessment of their activities results from manager and entire department, could experience negative mental states which cause professional burning syndrome. In its turn, professional burning of the department’s employees can have negative impact on the process of psychological-pedagogical interaction with the students.

Prevention or correction of possible negative ramifications of department №3 organizational culture current state can happen once adhocratic culture has been promoted. It can be effective only under the condition of simultaneous change of the clan component toward its increase. The question of how current state of department №3 organizational culture is psychologically safe for the employees cannot be unambiguously resolved without additional socio-psychological and individual-psychological research.

We assumed at the start of the research that the specifics of organizational culture of objectively well-performing departments have to serve as an example for objectively under-performing departments. The analysis of the “Preferred” profile for objectively well-performing department №1 and “Now” profile for objectively under-performing department №4 show that in the ratio of quantitative characteristics they are almost identical, i.e. are similar. This gives us grounds to draw a conclusion that a certain profile of the department’s organizational culture is not sufficient for its objective successful performance. However, “preferred” state serves as a reference point for managing department’s organizational culture.

The analysis has demonstrated that taking into account the results of organizational culture evaluation within the context of organizational development of the department and the increase of its activities successfulness require consideration of external factors, for which the nature of their action for departments with different professional orientation may differ significantly. Therefore, the example, relatively speaking, could be defined only for departments with certain corresponding direction of specialist training. That means that the usage of OCAI methodology for planning organizational culture development has certain limitations and require mandatory research and consideration of external conditions.

The attempt to figure out the “ideal” preferred profile of organizational culture by using factor analysis allowed us to receive the results listed below. In particular, two factors that reflect representations of employees of all the departments involved

into the researched regarding desired development of department's organizational culture, were identified.

We have already named the first factor – “free creativity”, which has the following factor loads: “clannishness” (0.801), “adhocracy” (0.812). The employees express the willing to increase level of adhocracy. It is adhocracy, that is in tune with the concept of “academic freedom”, which is defined as an “independence and autonomy of the educational process participants during implementation of pedagogical, research-pedagogical, research and/or innovation activities, that carried out on the principles of freedom of speech and creativity, dissemination of knowledge and information, scientific research and their results usage” [11]. Together with this, employees “desire” to strengthen the team unity feeling, mutual agreement on the basis of traditions, moral values, that are shared between all department members. The maintenance of the healthy internal atmosphere and care for employees are also “preferred”.

The second factor, which has the following factor loads: “marketability” (-0,654), “hierarchy” (-0,778), we named – “controlled competitive creativity”. Here “desirable” are the reduction in the level of formalization and control of business relations within the department, relaxing the leader demands, shaping the organizational atmosphere, focused on competition and victory within education market.

That means the necessity of determination of department's organizational culture success criterions within context of professional success for high educational institution teacher, who in fact is a holder of the culture. It's necessary to research the conditions for professional success achievement for a teacher as a member of department's research-pedagogical staff from one hand, and within process of psychologic-pedagogical interaction with students [10].

According to “favourability” criterion organizational cultures of departments №1, №4, №5, №7, №8, №11 are successful, while №2, №3, №6, №9, №10 are unsuccessful.

Organizational cultures of degree-granting departments №1 and №5 are successful by ah criteria, while №2 and №6 are unsuccessful.

For successful departments it does not mean that the need in development is currently irrelevant. In n fact, the problem of envisioning changes in the external environment, which have been accelerating in recent decades, is vital for all departments. There is a need to perform proactive monitoring of the external environment with regard to the organization of the environment according to certain parameters and develop the department's organizational culture accordingly.

Conclusion. Summarizing the said above, we can conclude:

- It is suggested to use evaluation of “objective effectiveness” of psychological and pedagogical interaction between teaching staff and students as external criterion for department's organizational culture success.

- It is suggested to use “favourability” of the department's organizational culture nature as an internal success criterion.

– Organizational culture of objective effectiveness departments has different typological specifics and might be favorable as well as unfavorable by its nature. Therefore, directions of specialist training should be taken into consideration for planning department's development.

– It's advisable to use preliminary application of statistical criteria for checking normal distribution of source data in order to prevent possible incorrect processing of the data, which is obtained by OCAI methodology usage.

Prospects for further research of criteria identification for department's organizational culture successfulness include the analysis and empirical research into the conditions for professional successful achievement by higher-educational institution's teacher as a member of department's research and pedagogical staff, on the one hand, and on the other within the process of the psychological-pedagogical interaction with the students.

Author contributions. The authors contributed equally.

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