Organizational Culture and Change: The case of a Greek Public Hospital

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Abstract

For a healthcare organization to be able to cope successfully with future culture changes, it is important to define the existing culture and also the way its members would like it to be evolved in the future. A cross-sectional study was implemented in The General Public Hospital and Primary Health Care Centers in Preveza district, Greece. The collection of data was done using the Cameron and Quinn Organizational Culture Assessment Instrument (OCAI). Two hundred completed questionnaires were returned out of the 240 that were given (response rate 83.2%). According to the participants' answers, considering the present as well as the preferred organizational culture, the greatest score gathered the Culture of Hierarchy. The age of the participants showed statistically important impact on the desirable Hierarchy Culture (p-=0.013) and the preferred Adhocracy Culture (p= 0.041). The university graduates presented a higher score in the present Adhocracy Culture (p=0.008) and the post-graduates (p=0.015) preferred more Market Culture. The measurement of the organizational culture of public hospitals is an important administrative tool, that strengthens the ability of an organization to predict and successfully respond to future environmental changes mainly of the external environment is of crucial importance.

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1   Introduction

The word culture origins from the Latin word "cultura" which means "cultivation". Even though it was initially used to describe the process of cultivating, caring and producing of the land and animals by farmers and stockbreeders, throughout time the term begun to be given to and characterize forms of art, cultural and spiritual conquest, like dance, poetry, literature and sculpture. From cultivating the earth it became a synonym of cultivating mind and spirit [1, 2].

Culture was the subject of studies and research for more than a hundred years in sociology and social anthropology whilst these sciences were trying to define the human behavior using scientific criteria. The anthropologist Edward B. Tylor, in his work Primitive Culture [3], describes culture as the complex sum which holds the knowledge, ethics and customs, the laws and convictions, art and any other element that a person conquests as a member of society. Modern researchers, like Triandis [4] in order to give a better definition by a sociological perspective and explain the parameters that compose it, tried a creative mix of previous theories and created a more complete aspect, with the following criteria: a) Culture is the result of interactions and adjusting relationships, b) individuals grow common communication codes through them, c) they adopt symbols, and d) they develop common behaviors and standards.

Businesses form a social subgroup and those who work there may develop their own organizational culture, where human resources and its interactions hold the key role in forming its type in any case. By studying the elements of the organizational culture many definitions have been expressed, each one of which seems to represent the element that each researcher thought as basic. According to Schein [5] the culture of a group can be defined "as a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems". Cameron and Quinn, two of the greatest researchers on organizational culture using quantitative methods, developed a complete diagnostic model, as well as change model of culture in the limits of an organization. Their work is widely recognized and accepted while it has been applied worldwide in many businesses and organizations. According to Cameron and Quin [6] an organization's culture is reflected by what is valued, the dominant leadership styles, the language and symbols, the procedures and routines, and the definitions of success that make an organization unique.

Although, the organizational culture is what defines the course of an organization, its change is also important for its survival against external challenges. The change of culture is a process of significant difficulty, on one hand because the notion of culture is difficult to be clarified sometimes and on the other hand, it is hard to be altered [7]. However, in order to initiate a change process in an organization it is crucial to diagnose the existing culture as well as the culture that the members of the organization wish to adopt. In this climate, Cameron and

Quinn [6] developed a diagnostic and change model of the culture which depends on the "Competing Values Framework" (CVF). In order to apply the CVF the Organizational Culture Assessment Instrument (OCAI) is used, a quantitative tool, which is considered to be the most credit, since it provides the ability of measuring and changing culture, based on quantitative elements

As healthcare organizations are called to develop in a particularly difficult and competitive environment characterized by limited resources, constant evolution of medical technology, population growth and increase of chronic diseases, the organizational change is considered necessary in order for the organizations to respond to the challenges above and for the improvement of their effectiveness. The culture of its organization stands as a basic element of understanding the way it functions. For a healthcare organization to be able to cope successfully with future culture changes, it is important to define the existing culture and also the way its members would like it to be evolved in the future, in order to determine the main intervention fields. Without counting and understanding of the organizational culture, any planned changes are at risk of not being applied due to resisting them.

The purpose of this research was to measure the present and the desirable organizational culture of a General Public Hospital and its affiliated Primary Health Care Centers.

2 Material and Method

A cross-sectional study was conducted in the General Hospital and its affiliated Primary Health Care Centers in Preveza district. The collection of data was done using the Cameron and Quinn Organizational Culture Assessment Instrument (OCAI) [6], which has been translated in Greek by the Kargas [8], while he was conducting his doctoral thesis. The study population consisted of the healthcare workers, administrative and technical staff. Firstly the administration of the Hospital and its affiliated Primary Health Care Centers granted the permission for the study to be held while the participants were informed and agreed to participate. The participation to the study was voluntary. The period during which the study was implemented was from January 15th until March 15th 2017. The questionnaires were distributed to a convenience sample of 240 personnel. Two hundred completed questionnaires were returned out of the 240 that were given (response rate = 83.2%).

2.1 The Instrument
The OCAI is divided in two parts. The first part measures the present organizational culture whereas the second part measures the future- desirable organizational culture. Each of these two parts is consisted by six subscales, which measure six basic characteristics of the organization. Those characteristics are: Dominant Characteristics, Organizational Leadership, Management of Employees,

Organization Glue, Strategic Emphases and Criteria of Success. Each of these characteristics is divided to four individual descriptions (24 items totally). Each of these descriptions corresponds to four types of organizational culture: Clan, Adhocracy, Hierarchy and Culture of the Market. The participants are called to score every subscale sharing a score of 100 units to the 4 descriptions of the subscales. The total score of the four questions of every subscale may range from 0-100.

2.2   Statistical analysis

Descriptive and inferential statistics were used to analyze the research questions of the study. The t-test, variance analysis and Pearson correlation were used to detect potential relationships between the demographic and professional characteristics and the types of the organizational culture. The statistical package SPSS v.20 (Statistical Package for Social Sciences, IBM SPSS) was used for the statistical analysis of the data.

3   Main Results

The reliability of the OCAI was tested by calculating the Cronbach's alpha coefficients. Cronbachs' alpha coefficients for the subscales ranged from 0.52 to 0.73, indicating acceptable reliability (Table 1).

Table 1: Cronbach's alpha coefficients for the subscales of OCAI

Subscale	Cronbachs' alpha coefficients
Present Culture	
Clan	0.590
Adhocracy	0.680
Market	0.636
Hierarchy	0.531
Preferred Culture	
Clan	0.731
Adhocracy	0.576
Market	0.530
Hierarchy	0.691

The majority of the participants were women, high school graduates and nurses. The participants' demographics and professional characteristics are shown in Table 2.

Table 2: Demographic and professional characteristics of the participants

Characteristic	n	(%)
Age		
18-30	14	7.0
31-40	42	21.0
41-50	101	50.5
51-60	31	15
61+	6	3.0
Gender		
Male	45	22.5
Female	137	68.5
Educational Level		
Higher School	79	39.5
University Diploma	108	54
Master/PhD degree	10	5
Profession		
Physician	46	23
Nurse	111	55.5
Other health care professionals	12	6
Administrative staff	21	10.5
Technical staff	5	25
Years of work experience		
1-5	19	9.5
6-10	25	12.5
11-15	32	16
16-20	35	17.5
21-25	21	10.5
21 25+	65	32.5

According to the participants' answers, considering the present as well as the preferred organizational culture, the Culture of Hierarchy had the greatest score. Classifying the four types of the present culture by decreasing score, first is Hierarchy, second is Clan, third is the Market Culture and last the Culture of Adhocracy. Concerning the preferred culture, the greatest score gathered the Hierarchy Culture, and then the Culture of Clan, the Culture of Adhocracy and the Market Culture. Comparing the scores of the present and preferred culture, emerges that the employees wanted less Hierarchy (present score=36.86, preferred score=33.881, difference=3.06), less Clan (present score= 29.19, preferred score= 27.10 difference=2.09), almost unchanged Market Culture (present score= 17.91, preferred score=17.46, difference=0.45) and notably larger Adhocracy Culture

(present score=15.05, preferred score =21.87, difference=6.82). The scores for the four types of present and preferred culture are presented in Table 3.

To the question of how they consider the present situation of the hospital relating to a year ago only 6% (n=12) of those asked responded that they consider the existing situation improved, 23% (n=46) considers it is almost the same, while the great majority (n=140, 70.7%) answered that the situation this year is worse or worse enough comparing to last year.

The age of the participants showed statistically important impact on the desirable Hierarchy Culture (p-=0.013) and the preferred Adhocracy Culture (p= 0.041). To be more specific, as the age increased, there was the tension of the hospital employees to seek more the Hierarchy Culture, especially the age group of > 61 gave to it the impressive percentage of almost 50%, leaving the rest 50% o be shared by the remaining three cultures. In the case of age's impact to the preferred Adhocracy Culture, arisen the opposite result, meaning that as older the age, less preferred was the insertion of innovative management styles.

Table 3: The mean, the standard deviation, the median, the minimum and maximum values of the four types of present and preferred organizational culture.

Type of Culture	Mean value	Standard deviation	Median value	Minimum value	Maximum value
Present Culture					
Clan	29.19	11.17	27.75	3.33	65.00
Adhocracy	15.05	7.88	14.17	0.00	48.33
Market	17.91	8.70	20.00	0.00	50.00
Hierarchy	36.86	11.96	37.50	0.00	80.83
Preferred Culture					
Clan	27.10	11.36	25.83	0.00	65.83
Adhocracy	21.87	8.15	22.50	0.00	50.00
Market	17.46	7.70	18.33	0.00	40.00
Hierarchy	33.81	13.64	29.58	10.83	80.00

Values are expressed as %.

Statistically significant correlation have arisen between culture and educational level. Specifically, the university graduates presented a higher score in the present Adhocracy Culture (p=0.008) and the post-graduates (p=0.015) preferred more Market Culture.

4   Discussion

The findings of this study revealed the Hierarchy Culture as dominant culture in the Hospital and Health Care Centers where the study took place. According to the Competing Values Framework of Quinn & Cameron, in an organization

characterized by Hierarchy Culture the members' relationships are typical and clearly predefined in a structured work environment. Stability and Control are emphasized whereas changes are avoided. The administrators of those organizations are good in coordinating and managing situations. Long term goal of the organizations with Hierarchy Culture is the achievement of high effectiveness maintaining though stability, foresight and risk elimination. The results of the present study agree to the findings of a study that took place to twenty public hospitals of Attica region [9], as well as with the findings of a study in a General Public Provincial Hospital [10]. In the study of the hospitals of Attica, only the present culture was designated that of Hierarchy, whilst in the Provincial Hospital the greatest score of the present as well as of the preferred, gathered the Hierarchy Culture.

The conditions in which the healthcare organizations are called to function and develop, are characterized by constant budget limitation and, at the same time, demand to increase effectiveness as well as the best efficiency of the available funds. For the sustainability of the health organizations, constant observation and mostly prediction of the development are demanded and at the same time adjustment to changes. According to a study on Organizational Culture of many Hospitals in England (NHS), the Culture of Innovation was found to be connected with higher effectiveness of the hospitals in the fields of financial and administrative autonomy, the higher wages, the less hospitalization time, the day care and the use of high imaging technology [11]. Also, the extroversion and the market orientation are elements connected to effectiveness of non-profit businesses and those of provision services, as the public hospitals are characterized [12].

An important field in which the hospital administrators have focused their attention and effort for improvement the last years is the quality of health services. Especially, the safety has become a major concern, as a series of studies revealed that during patients' hospitalization errors and adverse events are putting in danger their health and even though their lives [13,14]. The impact of organizational culture is important in the field of patients' safety. A study to the employees of 30 hospitals in the USA showed that the hospitals characterized by team and business culture presented a higher safety climate compared to hospitals characterized by Hierarchy Culture [15]. According to the findings of the present study, although the present culture of Hierarchy is powerful and remains powerful to the scores of the preferred culture, they must be evaluated positively and put in use the findings concerning the fact that the younger participants wish for more Adhocracy Culture and those who own a post graduate degree wish for the Market Culture. Both findings show that there exists space for gradual change of culture and reverse of health services to extroversion. In an Adhocracy Culture always according to Competing Values Framework of Quinn & Cameron, flexibility and adjustment characterize the organizations. The promotion of creativity is pursued and the risk taking is encouraged. The ability of an organization to predict and successfully respond to future environmental changes mainly of the external environment is of

crucial importance. The leader in such an organization is characterized by dynamism, innovative mind, and possesses the complex skills of showing such abilities for experimentation and innovation of the members of the organization as well as their presentation to the external environment, in order to give a significant competitive advantage to a constantly changing environment.

5 Conclusions

Undoubtedly, the measurement of the organizational culture of public hospitals, is an important administrative tool in order to have an image not only of the present situation but also the one that the employees desire. Even if the desirable culture is characterized by introversion and though the resistance to change is strong, the measurement of the organizational culture may promote those characteristics of employees (professional team, educational level), which are positively connected with the change of culture and which will be the important administration's ally in an effort of change.

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