Study of Organizational Culture of Departments of Education in Isfahan Province in Academic Year 2010-11 based on Denison Model

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Abstract

The present research is made with the aim of determination of the level of organizational culture of the departments of education in Isfahan province, in which Denison model has been utilized. This model has 4 traits: involvement, adaptability, consistency and mission, and three indicators are used to evaluate each trait. In order to collect data a questionnaire was used. The statistical community of the research is the personnel of the department of education in Isfahan province consisting of 1950 people.296 people were selected as sample. The scale of stability concerning the tool for collection of data was calculated with Alpha coefficient 0.925. The analysis of data of the research cleared the conclusion that involvement has obtained the highest credit of 3.1802, and the adaptability the lowest credit of 3.0315. Among the twelve indicators, empowerment indicator obtained the highest credit of 3.3665 and capability development the lowest credit of 2.8896.

Key word: Organizational Culture, Involvement, Adaptability, Consistency, Mission

1. Introduction

The studies and researches concerning the organizational culture began since early eighties. The organizational culture affects all aspects of the organization. Studies and researches indicate that the culture affects compilation of objectives and strategies, individual behavior and organizational performance, motivation and job satisfaction, creativity and innovation, manner of decision making and scale of participation of the personnel in the affairs, the scale of devotion and commitment and level of anxiety. Managers should take into consideration the component of the organizational culture and their changes and amendments (Abzari, Dalvi,2006:12). Generally speaking lack of attention to the organizational culture, the individual's belief and value, if doesn't lead to the absolute failure of the organization and non obtaining of the objectives and future prospects, it will at least numerous bottlenecks and obstacles on the forward trend of the organization, and waste lots of energy for removal of the created problems arising from confrontation of the predicted objectives with the current culture of the organization. Therefore when the organizations are not familiar enough with their organizational culture and its dimension and indicators, they will, in practice, face plenty of problems such as organization disputes and contradictions, lack of organizational integrity and low performance. Hence knowledge of the culture assists the management to a full awareness of atmosphere prevailing their organization make use of strong points and to predict the required attempts to remove the weak point. The department of education is an organization which plays an important role in the education of individuals, therefore a survey of the status of organizational culture in the departments of education will cause to identify the weak points of the culture, and to be able to achieve solutions for removal of the weak points which may result in a strong culture.

2. *Literature review*

There is no definition of organizational culture which may appeal the public, however it can be in its simple way, be defined as follow:

When we speaks of the organizational culture , we mean a system of common understanding which the members have of an organization , and this very peculiarity causes separation of the two organizations. The organizational culture is a series of values, belief, guidelines, understanding and types of thinking which are common among the members of the organization and the new members follow them as the correct way of doing the works. Robbins stated that the organizational culture is the system of common meanings which are preserved by the members of the organization and causes differentiation of one organization from another. This shows the common understanding among the organization members (Abzari, Dalvi,2006:3).Culture is a set of key values that is accepted by the members of an organization(Tsui et al.,2006:113).Denison emphasizes the point that the organizational culture is the same essential values, beliefs and ethical principle which plays a fundamental role for a system of organization management (Iranzadeh,Mahmoodi,2010:2).

The most comprehensive definition for the organizational culture has been suggested by Edgar Schein who declared that the organizational culture is a pattern of basic understandings of an organization which has been created and developed by a group of people with the aim of facing the problems, consistent with external environment and creating organization coordination and integrity, and it enjoy a high reliability. This behavior pattern teaches new pattern of understanding, thinking and feeling to the new members (Rezaeian,1999:289).
Rahimnia and Alizadeh(2010) observed that there is a very strong relationship between the organizational culture and personal effectiveness, and leadership effectiveness and job satisfaction.

The organizational culture has lots of application such as:
1. The organizational culture brings about the causes for creation of consistence out of the organization and integration inside the organization.
2. Culture makes a group identity which helps the members of the group in coordination their adaptation to the policies, delegations and objectives of the organization.
3. Organizational culture causes group commitment (Rahimnia ,Alizadeh, 2010)

2.1. Denison model

The model used in this research is Denison model which has been propounded in 2000. The reason for which this model was chosen as the conceptive and theoretic model of the research are:

- The basic origin of this model is based on the essential point that how the organizational culture affects performance.
- This model is used for management of change in organization specifying factors of organization culture which need to be changed, so they may be reviewed prior to other factors.
- Denison model includes full and profound dimensions of the organization culture.
- This model has a very directed effect on the organization culture.
- This model offers a new framework among the models of the organizational culture.
- From the view point of measurement and weighting, the dimensions of the organizational culture are reckoned to be complete model.
- They are capable of utilization at all organization level.
- Graphic chart of this model clearly shows the characteristics of the organization culture in two internal and external dimensions and the scale of flexibility and also, at level 12 the indicators show very clearly.
- Denison model has been used very extensively abroad by different organizations in order to evaluate the organization culture.

Daniel Denison has had researches in the field of organizational culture and making amendments in the organization. He considers organization in four basic traits including involvement, consistency, adaptability and mission and each of these dimensions are measured by three indicators (Rahimnia, Alizadeh,2010)

1. Involvement: the theory of involvement indicates the topic that the organizations efficiency is a function of the level of involvement in work and participation of the members. High level of involvement causes creation of ownership feeling and also increase of the capability concerning the personnel's performance in uncertain conditions which result in increasing the personnel's commitment to the organization which in itself decreases the need to official control systems and increases the personnel's performance. This trait , in this model , is measured by three indicators:

   - Empowerment: any individual has the right, power, initiative and ability to manage his personal affairs which in itself causes the feeling of ownership in work and sense of responsibility towards the relevant job.
   - Team orientation: this value causes the work to be done coordinately towards the public objectives so that all the personnel may have a mutual feeling of responsibility towards materialization of these objectives.
   - Capability development: the organization research and survey ceaselessly in respect with the development of their personnel's skills in order to protect the competitive position of the organization and to supply its requirement.

2. Consistency: the consistency trait believes that in the consistence culture, communication is a very certain process for exchange of information, because there is a general agreement on the meaning of words. This trait is evaluated by the indicators mentioned below:

   - Core values: the members of organization share in a number of the values which form their identities and expectations.
   - Agreement: agreement occurs when the members of the organization can agree on significant and vital issues.
   - Coordination and integration: the units of organization with different performances can have a very good coordination in order to achieve common objectives. Such coordinated workings don't interrupt organization's borders. It has been proved that coordination and integration among different sections of organization is very necessary for development of effectiveness.

3. Adaptability: this theory believes that the culture which make the organization adapt to the desired changes and conditions , will have more ability to promote effectiveness adaptability enables the organization to show a better responses to external and internal of the organization. Adaptability is evaluated by three indicators namely:

   - Creating change: the organization is able to create adaptability methods for supplying the requirement concerning change, and to identify the environment and respond quickly to the current motivations, predict the future for changes and surpass them.
   - Customer focus: the customer focus indicates the scale of change and rotation of the organization towards customers satisfaction. The organization understands customer and answers them and intends in advance to supply their future needs.
   - Organizational learning: organizational learning is a process in which the organization receives information and signals from the environment, translate and decodes them and uses them as internal experiences and information.

4. The theory of mission states that a culture indicates common definitions of objectives and functions of an organization which affects positively the investment and endeavors towards improvement of the status of the organization. Mission is evaluated by three indicators namely:

   - Goals and objectives: clear goals and objectives can support the delegation of the prospect and strategy of the organization specifying the clear direction of the individuals' work.
   - Strategic direction: clear strategic direction indicates direction of organization culture and each individual can participate himself or herself on that part.
   - Vision: the organization has a common vision of the future status which declares the fundamental values, make thinking and heart of the human power accompany them and direction is specified simultaneously (Iranzadeh,Mahmoodi,2010:20).

Stable and flexible spectrum: If we divide the shape concerning Denison model in two vertical hemispheres, the difference between the flexible (the left side half) and stable organization (the right hand half) will be specified.

Adaptability and involvement emphasize flexibility and change. On the other side consistency and mission emphasize on the capability of organization on stability (www.denisonculture.com). Internal and external focus: If we divide the shape concerning Denison model horizontally in two hemispheres, the difference between the internal focus (lower half) and external focus (higher half) will be specified (www.denisonculture.com). MInvolvement and consistency show the internal progressiveness of an organization, but it does not show the relationship between the organization and external environment.

3. Goals of research
3.1. General goals:
1. Study of position and level of organizational culture in departments of education in Isfahan province.

3.2. Minor goals:
1. Determination of involvement trait in personnel of department of education in Isfahan province.
2. Determination of consistency trait in personnel of department of education in Isfahan province.
3. Determination of adaptability trait in personnel of department of education in Isfahan province.
4. Determination of mission trait in personnel of department of education in Isfahan province.

3.3. Research questions:
1. What is organizational culture in department of education in Isfahan province?
2. To what extent the involvement culture is there department of education in Isfahan province?
3. To what extent the consistency culture is there in department of education in Isfahan province?
4. To what extent adaptability culture is there in department of education in Isfahan province?
5. To what extent the mission culture is there in department of education in Isfahan province?

4. Methodology

The goal of this research is to study and analyze organizational culture of departments of education in Isfahan province whose its nature is functional. Method of research is descriptive. Statistical society of this research is personnel of departments of education in Isfahan province including 1950 persons. 296 samples were randomly selected by classification method appropriate to the size of each class. In this manner that 40 departments of education are classified in 3 clusters which each consists of small, medium and large departments. Then one of the clusters was randomly selected and number of each sample was calculated proportion to the population of each department. Denison organizational culture questionnaire was used for gathering date. This questionnaire includes 60 questions. In order to determine the questionnaire validity, content validity is used in this manner, various organizational culture models were studied then Denison model was studied and selected. The questionnaire components adjusted with conditions of departments of education and studies from view of education experts, instructor and advisor so the questionnaire validity was determined. Reliability was measured by SPSS software and its scale was 0.925. To analyze data, SPSS statistical software was used. Descriptive statistical such as frequency, mean and relevant charts and other analytical methods related to the research hypothesis were used.

5. Findings

In order to analyze data, first, variables were described using indexes such as frequency, percent mean, and standard deviation. To answer the research questions sample T-Test was used. 21.6% and 78.4% of the answerers are women and men respectively. 10.4%, 77.4% and 12.2% of the answerers have post graduated& graduated and secondary studies and associated degree. Table 1 shows mean and standard deviation of four traits of Denison model in departments of education. Research findings shows that involvement and adaptability obtained the highest credit and lowest credit respectively.

Table 2 shows that empowerment, team orientation and core value obtained the most credit and indicate that the above-mentioned indicators have desirable situation and capability development, vision and customer focus obtained the lowest credit (lower than mean), it implies that the departments of education don't enjoy suitable situation in the above-mentioned indicators and need more attention. To answer the research question, sample T-test was used which its results are shown in table 3. Involvement culture in departments of education in Isfahan province is higher than mean.

This is 3.1802 and with due regard to the significant level, this is higher than mean and this difference is statistically significant (0.000).

Consistency culture in departments of education in Isfahan province is higher than mean. This is 3.1441 and with due regard to calculated the significant level 0.000 so it can be said this value is higher than mean. Adaptability culture in departments of education in Isfahan province is higher than mean. This is 3.0315 and with due regard to calculated the significant level 0.355 so it can be said this value doesn't differ from value. Mission culture in departments of education in Isfahan province is higher than mean. This is 3.0763 and with due regard to calculated the significant level 0.040 so it can be said it is higher than the mean. General score of organizational culture in department of education in Isfahan province is 3.1080. Since calculated significant level is 0.000 so it can be said this value has significant difference with the mean. In other words general score of organizational culture in higher than mean.

Table 4 shows the results of single sample T-Test for studying the situations of different traits of organizational culture among men and women. In table 4 , with due regard to the calculated significant level , it can be said , mean of organizational culture in involvement and consistency and mission is more than mean and in adaptability is about mean among women. Among men, involvement and consistency is more than mean and adaptability and mission is about mean (mean=3).

Table 5 shows that mean of organizational culture in empowerment, team orientation, core value, coordination, strategic direction, goals and objective indexes is more than mean and in other indicators are about mean.

Table 6 shows organizational culture in four traits based on education level. In some cases which significant level is lower than 0.05 and the score is higher than mean, the grade is more than the mean like involvement and consistency and in traits like adaptability and mission among personnel with graduated level, it is about the mean.

An important point in table 6 is the organizational culture among holder of educational degree of secondary studies and associate's degree, it is higher than mean in all above traits. But traits like involvement and consistency is higher than mean among the holders of M.A. and M.S. degree.

Figure 1 shows chart of organization culture of departments of education in Isfahan province; empowerment and team orientation are placed in the best situation and capability development and customer focus indicators are in the worst situation. If we consider the findings of the research of department of education in Isfahan province from stable or flexible and internal or external focus, we find that the said department intends to be flexible and concentrated on internal environment.

6. *Discussion and conclusion:*

In this study we used Denison organization Culture questionnaire to determine organizational culture of department of education in Isfahan province. According to the results, adaptability and mission obtained minimum credit..So it is propounded to manager of departments of education to compile a strategic plan and notify it to personnel clearly. Based on the results of the study, the following suggestions are offered:

- A general strategic plan must be collected for Department of Education of Isfahan Province.
- Goals and objectives of the Department of education inform to the personnel clearly.
- Managers design a capability development plan for the personnel.
- More attention to ideas and recommendations presented by the personnel in such manner that their effective recommendations lead to change procedure of the organization.
- Improve individual's capability, account for individuals about daily learning and study scientific matters in the trends of their jobs.
- Collect the development program of managers' and personnel' capability.
- Using problem solving method in order to improve creativity culture and entrepreneurship in personnel of Department of Education.
- Considering 12 indicators of organizational culture in evaluation system of the personnel.
- Each individual know culture of organization and understand his or her role in obtaining to a strong culture.
- The relationship between personnel and students' family should be reinforced.
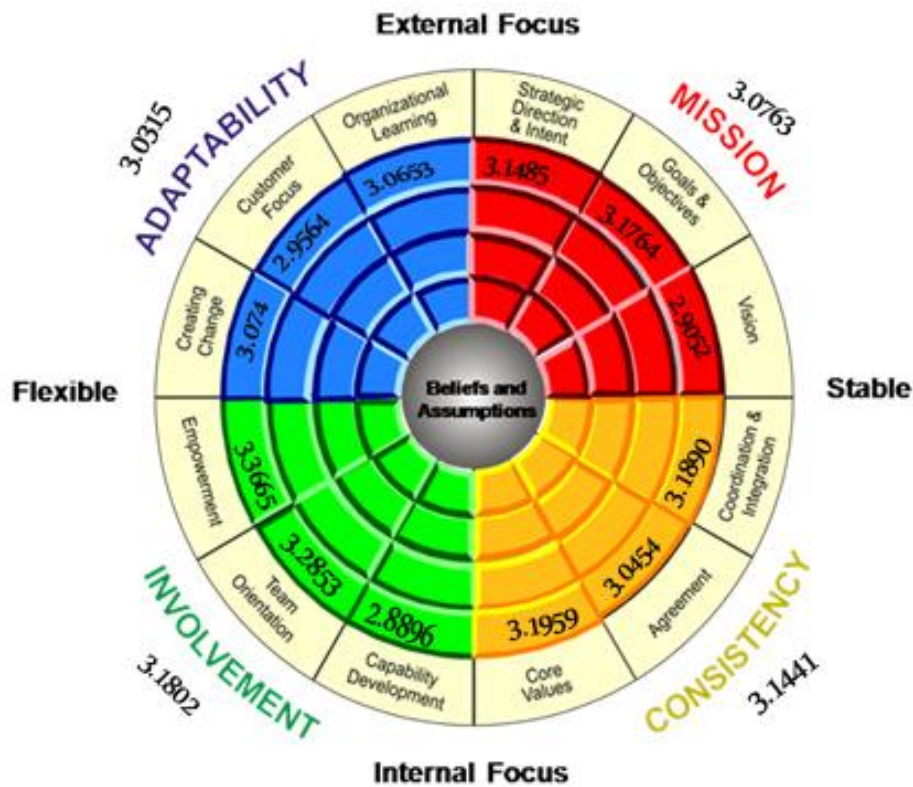
Figure 1: Denison organizational culture model in department of education of Isfahan province
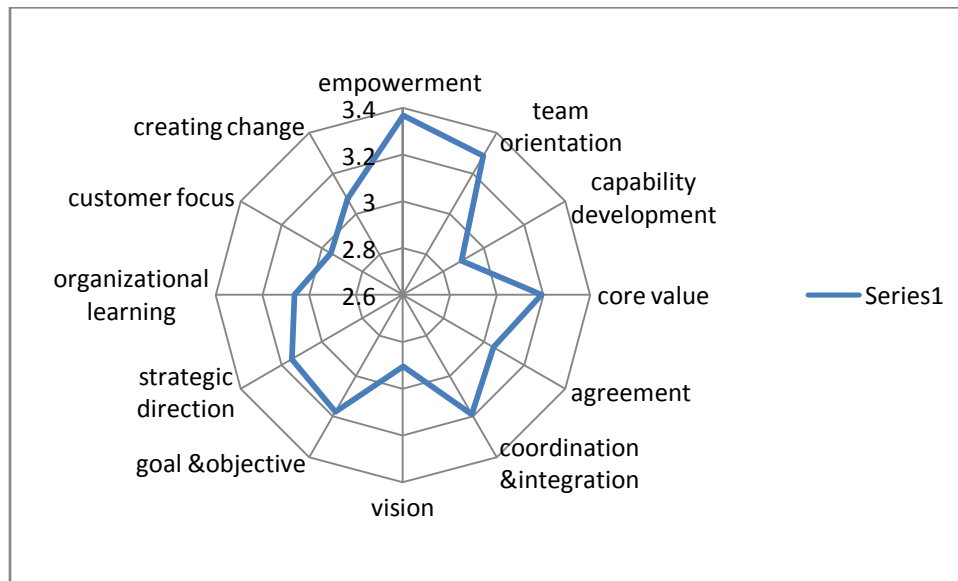
Figure 1:Radar chart of 12-level indicators of organizational culture of Department of Education in Isfahan Province

Table 1: mean and standard deviation of four traits of Denison model in departments of education

Trait	N	Minimum	Maximum	Mean	Std. Deviation
Adaptability	264	1.60	4.40	3.0315	.55204
Mission	264	1.47	4.73	3.0763	.60219
Consistency	264	1.47	4.40	3.1441	.45278
Involvement	264	1.33	4.73	3.1802	.61510

Table 2: mean of 12 indicators of organizational culture in departments of education in Isfahan Province

Indicator	N	Minimum	Maximum	Mean	Std. Deviation
Capability development	264	1.00	4.80	2.8896	.70263
Vision	264	1.00	4.60	2.9052	.58219
Customer focus	264	1.00	4.80	2.9564	.68782
Agreement	264	1.00	4.60	3.0454	.63823
Organizational learning	264	1.00	5.00	3.0653	.68893
Creating change	264	1.20	4.60	3.0744	.66312
Strategic direction	264	1.00	5.00	3.1485	.73097
Goals & objectives	264	1.20	5.00	3.1764	.75605
Coordination	264	1.60	4.40	3.1890	.56346
Core value	264	1.60	4.40	3.1959	.49900
Team orientation	264	1.00	5.00	3.2853	.81136
Empowerment	264	1.40	5.00	3.3665	.69661

Table 3: Sample T-Test for 4 traits

	Test Value = 3					
Trait	t	Degree of freedom	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
Involvement	4.761	263	.000	.18024	.1057	.2548
Consistency	5.171	263	.000	.14410	.0892	.1990
Adaptability	.926	263	.355	.03147	-.0354	.0984
Mission	2.059	263	.040	.07632	.0033	.1493

Table 4: sample t-Test based on sex

sex	Trait	Test Value = 3					
		t	Degree of freedom	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
women	Involvement	2.218	49	.031	.19410	.0183	.3699
	Consistency	3.809	49	.000	.24120	.1139	.3685
	Adaptability	1.206	49	.233	.10316	-.0687	.2750
	Mission	2.125	49	.039	.19119	.0104	.3720
Men	Involvement	3.150	181	.002	.14551	.0544	.2367
	Consistency	3.193	181	.002	.10864	.0415	.1758
	Adaptability	-.231	181	.817	-.00924	-.0881	.0696
	Mission	.524	181	.601	.02353	-.0651	.1122

Table 5: sample T-Test based on 12 indicators

Indicator	t	Degree of freedom	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Test Value = 3	
Empowerment	8.548	263	.000	.36648	.2821	.4509
Team orientation	5.713	263	.000	.28529	.1870	.3836
Capability development	-2.553	263	.011	-.11042	-.1956	-.0253
Core value	6.379	263	.000	.19590	.1354	.2564
Agreement	1.156	263	.249	.04539	-.0320	.1227
Coordination &integration	5.451	263	.000	.18902	.1207	.2573
Creating change	1.824	263	.069	.07443	-.0059	.1548
Customer focus	-1.031	263	.304	-.04362	-.1270	.0397
Organizational learning	1.541	263	.125	.06534	-.0181	.1488
Strategic direction	3.301	263	.001	.14848	.0599	.2371
Goals &objectives	3.791	263	.000	.17639	.0848	.2680
Vision	-2.646	263	.009	-.09482	-.1654	-.0243

Table 6: sample T-Test based on educational degree

Educational degree	Trait	t	Degree of freedom	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
						Test Value = 3	
Post secondary & associated degree	Involvement	3.551	27	.001	.36312	.1533	.5729
	Consistency	5.109	27	.000	.32236	.1929	.4518
	Adaptability	3.627	27	.001	.32469	.1410	.5084
	Mission	4.721	27	.000	.44669	.2526	.6408
Graduated	Involvement	2.569	177	.011	.12473	.0289	.2206
	Consistency	2.454	177	.015	.08701	.0170	.1570
	Adaptability	-1.001	177	.318	-.04072	-.1210	.0396
	Mission	-.417	177	.677	-.01877	-.1077	.0701
Post graduated	Involvement	-.133	23	.895	-.01317	-.2176	.1913
	Consistency	3.123	23	.005	.23274	.0786	.3869
	Adaptability	-.352	23	.728	-.04028	-.2771	.1965
	Mission	.702	23	.490	.09208	-.1794	.3635

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