



7th International Strategic Management Conference

The Effect Of Organizational Culture On Organizational Efficiency: The Moderating Role Of Organizational Environment and CEO Values

Esra Aktaş^a, Işık Çiçek^{b*}, Mithat Kıyak^c

^a*Okan University, Department of Health Management, Istanbul, Turkey*

^b*Okan University, Department of Business Administration, Istanbul, Turkey*

^c*Okan University, Department of Health Management, Istanbul, Turkey*

Abstract

In today's increasing competitive conditions, reaching desired organizational efficiency level attracts both academicians' and practitioners' interest much more. The factors influencing organizational efficiency are examined with highly increasing importance. Considering organizational culture as one of the factors, the effect of the types of organizational culture on organizational efficiency is questioned. The determining effect of organizational environment getting complex on the strategy that enable achieving organizational level can play a significant role on the relationship between organizational culture and organizational efficiency. The individual effect of the organizational leaders on the efficiency strategies is viewed in terms of their values. In this study, relationship between organizational culture and organizational efficiency and the effect of stability or variability of internal and external environment on this relation are investigated. Besides, the values of self-direction, stimulation, power that leaders have are researched. 40 top managers / organizational founders are selected for sampling in health sector. Questionnaire method is utilized for gathering data. The findings show that organizational culture types are related to some organizational efficiency dimensions. The stability or variability of internal and external organizational environment and the top manager's values (self-direction and stimulation) play a moderator role on this relationship.

© 2011 Published by Elsevier Ltd. Selection and/or peer-review under responsibility of 7th International Strategic Management Conference

Keywords: organizational culture; organizational efficiency; environment; values

1. Introduction

Organization culture, in regard to its impact on various situational variables within the framework of organization, is a particular research subject in management science which has never decreased its research area popularity. Organization culture has been seen as a main factor to be investigated through in organizational life, and the researches questioning its impact on realization of organizational goals has been increasing day by day. Accomplishing the aimed organizational performance level in today's competitiveness, investigating the degree of impact of the factors concerning this are being increasingly

* Corresponding author, Tel: 0 216 6771630 -1137

E-mail address: cicekis@yahoo.com, isik.cicek@okan.edu.tr

attracted by both the academicians and the practitioners. In the literature, the researches elaborating the relation of corporate culture and organizational efficiency are questioning the relations hypothesised with distinct definitions of organizational efficiency in distinct organizational culture types. Identification of new situational variables empowering this relation between organization culture and organizational efficiency could influence the tested relations significantly.

In this research, the relation of organizational efficiency with organization culture has been investigated and the stable or variable organizational environment and the empowering impact of the top strategic decision-maker's values on this relation have been questioned. The organizational culture types known in the literature and the organizational efficiency classifications applicable for the mentioned relation's hypotheses are selected.

2. Literature Review

2.1. Organizational culture

Culture is a model of norms, values, beliefs and attitudes which affects organizational behaviour. The definition of the organizational culture exists in many versions. Kilmann et al. [1] stated that organizational culture as “shared philosophy, ideology, value, assumption, beliefs, hope, behaviour and norms that bound the organization together”. Robbins [2] mentioned it as “Common perceptions which are held by the members of an organization; a system of common meaning”, while George & Jones [3] mentioned it as “Informal design of values, norms that control the way people and groups within the organization interact through each others and with parties outside the organization” [4].

The pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them with norms for behaviour in the organization [4], [5].

Organizational culture could be a strategic asset for the organization in that it increases the adaptability of and fit between an organization and its environment [6],[7].

Members continuously interpret aspects of their work environment and these interpretations, as well as the ways in which they are enacted, from the culture of the organization [8]. Among the manifestations of culture are rituals, group norms, habits of thinking and espoused values [9], [10], [11].

2.1.1. Types of organizational culture

In the literature, there are several organizational culture typologies and related dimensions such as Schein, Schwartz, Hofstede, O'Reilly, The Competing Values Framework.

The Competing Values Framework (CVF) is one of the most influential and extensively used models in the area of organizational culture research.

Cameron and Quinn [12] have developed an organizational culture framework built upon a theoretical model called the "Competing Values Framework." The Competing Values Framework (CVF) is one of the most influential and extensively used models in the area of organizational culture research. In this study CVF is utilized.

This framework refers to whether an organization has a predominant internal or external focus and whether it strives for flexibility and individuality or stability and control. The framework is also based on six organizational culture dimensions and four dominant culture types (i.e., Clan, Adhocracy, Market, and Hierarchy) [12]. The implications of each culture type are summarized as follows.

- *The Clan Culture:* The clan culture is full of shared values and common goals, an atmosphere of collectivity and mutual help, and an emphasis on empowerment and employee involvement. A kind of organizational culture where the sense of “family” is strongly exists. Teamwork is emphasized and leader’s role is as a mentor. The organization’s focus is to maintain its stability. Loyalty, cohesiveness and participation are highly regarded in setting the criteria of success.
- *The Adhocracy Culture:* The adhocracy culture is like a temporary institution, which is dismissed whenever the organizational tasks are ended, and reloaded rapidly whenever new tasks emerge. Adhocracy is an organizational culture which gives a lot more opportunity for individuals to develop in their own way, as long as they are consistent with the organization goals. Leaders are characterized as entrepreneurs who are driven by innovation and findings of new ideas. Organization’s focus is to gain opportunity as much as it can be from the external environment.

Individuals will be considered a succeeded persons if they can create and develop new ideas and innovations.

- *The Market Culture:* The market culture focuses on the transactions with the environment outside the organization instead of on the internal management. The organizational goal is to earn profits through market competition. Market culture is a type of culture which stresses on the effectiveness on goal achieving. Competition is a common condition among individuals in order to develop them, which cause less flexibility in personal relationship. Criteria of success are based upon target achievements by individuals, which usually conducted from activities that connect the organization with its market or stakeholders (external parties).
- *The Hierarchy Culture:* The hierarchy culture has a clear organizational structure, standardized rules and procedures, strict control, and well defined responsibilities. This culture can be simply identified through the domination of rule, system and procedure. Stability inside the organization is a prime orientation which should be maintained through a set of fixed and tight rules. Criteria of success are based on how far the individuals can do their tasks correctly based on the procedure and in the same time able to maintain the stability in the system.

The characteristics of each type of culture are shown at the Figure 1.

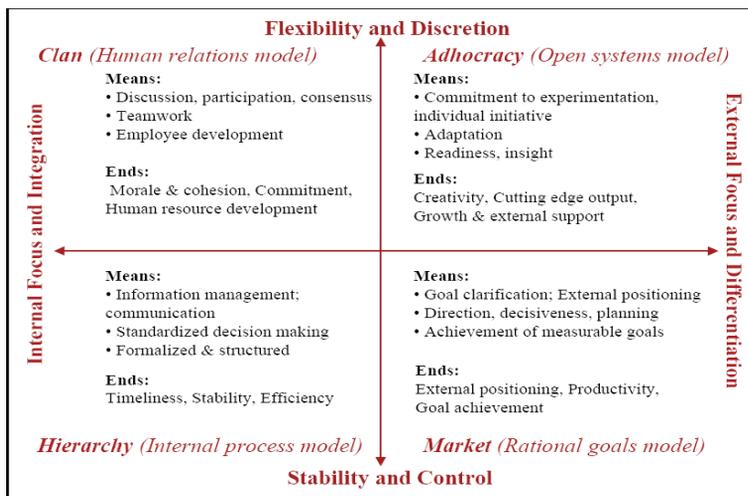


Figure 1. The Competing Values Framework of Organizational Effectiveness

Source: [13], [14]

2.2. Organizational effectiveness

The effectiveness of organizations in achieving goals at the organizational level is called organizational effectiveness [14], [15]. The organizational effectiveness is also defined as the extent to which an organization fulfils the objectives [16]. The topic of organizational effectiveness emphasized process control, information management and goal setting [13], [16].

The measurement of organizational effectiveness is a very important step in the development of an organization [17], [18].

Many researches have shown that OC has an impact on job satisfaction, job efficiency, employee commitment and cooperation, decision-making etc. [19], [20].

2.2.1 Effectiveness dimensions / models

From these various viewpoints about the nature of organizations, their relevant features and dimensions, and their key effectiveness criteria, multiple models of organizational effectiveness naturally arose.

The relationship between CVF and four models of Organizational Effectiveness is established. These efficiency models are The Human Relationship Model, The Rational Model (Closed Systems Perspective), The Open System Model, and The Internal Process Model (Closed System Perspective). According to Quinn, each of these quadrants constitutes a model in itself.

- *The Human Relations Model*: This model sees participation, discussion and openness as a means to improve morale and achieve commitment.
- *The Internal Process Model*: This model sees internal processes such as measurements, documentation and information management as methods to achieve stability, control and continuity.
- *The Open Systems Model*: This model relates insight, innovation and adaptation as a path towards external recognition, support, acquisition and growth.
- *The Rational Goal Model*: This model seeks profit and productivity through direction and goals (Martz, 2008).

The validity of these four quadrants or dimensions was also tested by Quinn and Spreitzer [21]. The analysis of these four models suggests that the competing values framework (CVF) is the most viable model for measuring organizational effectiveness between for-profit and non-profit organizations [22]

2.3. Relationship between organizational cultures and effectiveness

Steers [23] and Zammuto [24] described the measurement of effectiveness was the most issue in the organizational culture theory. For linking organizational culture, Ouchi [25] identified the characteristics to determine the organizational effectiveness. Quinn and Rohrbaugh [26] examined that relationship organizational culture and effectiveness by utilizing the competing value framework.

Kotter and Heskett [6] studied the relationship between strength of culture and organizational effectiveness. Ostroff and Schmitt [27] found that the organizational effectiveness was influenced by the organizational culture. Juechter, Fisher and Alford [28] completed the research found that the organizational culture heavily influenced the organizational effectiveness of business.

Thibodeaux and Favilla [29] utilized the planning and goal setting, flexibility and adaptation, information management, communication, readiness, evaluations by external entity and stability concepts of organizational effectiveness to research the strategic management process and found significant relationships [18]

Rohrbaugh [30], Quinn and Rohbaugh [26], and Quinn [13] noted that organizations were likely to experience tension among organizational effectiveness attributes – for example, all organizations have a need for some level of stability as well as a need to be flexible and adaptable; a need for control and discipline as well as a need to allow some degree of freedom and autonomy; a need for rational formal structures and non-rational informal relations. They concluded that effectiveness depended upon the ability of an organization, and its managers, to strike the right balance among these critical attributes, as required by the organization's objectives and situation [31]

An increasing body of evidence supports a linkage between an organization's culture and its business performance. In accordance with the studies presented above, the organizational culture has a positive influence on organizational effectiveness, therefore the relationship between organizational culture and organizational effectiveness becomes important.

2.4. Values

Values are defined as enduring goals that serve as guiding principles in people's lives [32], [33]. Rokeach [32] defined value as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" [34]

Values are conceptualized as explicit or implicit formulizations of the 'desirable' that influence individuals' means and ends of action [35] They are said to consist of 'enduring beliefs that a specific mode of conduct is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence' [32]

Schwartz [33] believed that values are certain conditions that people yearned for (eg. joy), object, goal or behaviour, and they are also the surmounting concrete scene (does not exist; rely on concrete scene), and can be the judgment and the choice standard in a series of behavioural patterns [34]

2.5. *Moderating role of organizational founder / CEO values*

Individuals with different values tend to emphasize different outcomes and are driven to achieve different goals [4]. The impact of values is pervasive in that they influence the most basic ways in which people perceive their environments [36]

Organizational culture represents an active, living, phenomenon by which key members of the organization, such as executives, create shared meaning [37], [38]. CEO / Organizational founder values shaping the organizational culture as a component affects the manner of decision making, management style and behaviour models in the organization. Leaders have also a central role in shaping and controlling organizational culture (e.g. Schein, 1992 [10]). Although founders have the initial role in establishing an organization's culture, cultures have been known to change in the hands of subsequent CEOs [39], [40].

Leadership is one of the key driving forces for improving firm performance. Leaders, as the key decision-makers, determine the acquisition, development, and deployment of organizational resources, the conversion of these resources into valuable products and services. Leadership helps organizations achieve their current objectives more efficiently by linking job performance to valued rewards and by ensuring employees have the resources needed to get the job done. Especially transformational leaders create a strategic vision, communicate that vision through framing and use of metaphor, model the vision by walking the talk and acting consistently, and build commitment towards the vision [41], [42]. Numerous studies have reported positive relationships between transformational leadership and outcomes at the individual level and firm levels [43]. The values of leader in the organization have critical importance due to the shaping the behaviour and attitude of the leader.

Haakonsan, et al. [44] investigated how misalignments between the organizational climate (measured as information-processing demand) and the leadership style (measured as information-processing capability) in their study. According to the results, misalignments may result in negative performance consequences.

Papadakis and Barwise [45] analyzed the effects of the team's "competitive aggressiveness" and the CEO's "need for achievement" and "risk propensity" on strategic decision-making characteristics such as "politicization" or "comprehensiveness." They found significant relations.

Peterson et al. [46] analyze how the CEO's personality – as measured by the Revised NEO Personality Inventory affects mediating top management team dynamics, for example the team's rigidity, leader dominance, power centralization, legalism, cohesiveness, and the performance variable "income growth." Kauer, et. al, [47] investigating the personality measures as "flexibility," "achievement motivation," "networking abilities," and "action-orientation" and organizational effectiveness criteria. Personality factors such as flexibility, achievement motivation, networking abilities, and action orientation seemed to have a clear impact on decision speed.

The impact of core-self evaluation on entrepreneurial orientation is stronger in dynamic environments because uncertainty predisposes top executives to rely more heavily upon their own frame of reference, which affords them greater discretion in shaping strategic choices. Evidence indicates that individuals with a higher core self-evaluation tend to pursue self-concordant goals, that is, goals that are internally consistent with their personal interests, values, and aspirations [48]. Because higher core self-evaluation CEOs believe that they can master their environment and that the application of their abilities will result in positive outcomes, they should be more predisposed to selectively perceive the upside potential of entrepreneurial opportunities [49]

Supporting this expectation, research suggests that self-confidence and perceptions of controllability are related to the pursuit of pioneering, forward-looking strategic initiatives [50], [51]. CEOs with lower core self-evaluation are more apt to harbor self-doubt, have less confidence in their ability to influence the environment when faced with such uncertain challenges, have a greater propensity to avoid risk [52],[53].

In the consistent approach related to previous researches, the values that can shape the leadership as power (including authority, social power, charismatic perception by others), stimulation (including openness to diversity in organization and changes, having a desire for necessary action in several

condition) and self-direction (including freedom, creativity, independency, and direction himself to suitable environment) can have the effect on organizational efficiency and relationship between culture-efficiency.

2.6. Moderating role of environment

In a dynamic environment ‘there is rapid and discontinuous change in demand, competitors, technology, or regulation so that information is often inaccurate, unavailable, or obsolete’ [54: 738]. In this context, because cause-effect relationships are generally indiscernible or simply unknown [55], the resulting means-ends ambiguity in decision making affords CEOs even greater discretion and latitude of action [53]

One the culture is initially formed, key leaders and in particular CEOs, are responsible for managing the evolution of the organization’s basic assumptions and for modifying the culture in order to keep up with the changing demands of the environments [10], [56], [57].

Given the generalized propensity of individuals to inject their personalized interpretations and psychological dispositions into their decisions when confronted with ambiguous situations [58], it would be expected this tendency to be particularly strong among higher core self-evaluation CEOs operating in dynamic environments. When the environment is stable, the impact of CEO core self-evaluation on entrepreneurial orientation is less pronounced [53].

Ugurluoglu [59] reached the results in his study that the more stable organizational environment, the more the transformational, managerial, potical, ethical leadership emerge.

Therefore, stability or variability of organizational environment can give rise to strategic and operational changes. It has an importance on the relationship between organizational culture established previously and organizational efficiency.

3. Research model and hypotheses

In the light of literature framework, the appearing of significant relationship between organizational culture and organizational efficiency dimensions, the effect of stable or variable organizational environment in internal and external context on the organizational culture and efficiency relations can be proposed for this research.

The self-direction, stimulation and power values of organizational founder or top leaders are the criteria shaping organizational culture as one of the elements and its emerging effects can be diminished or empowered via the values mentioned. The other proposal for this study is moderating effect of these values.

Research model of the study is shown at Figure 2.

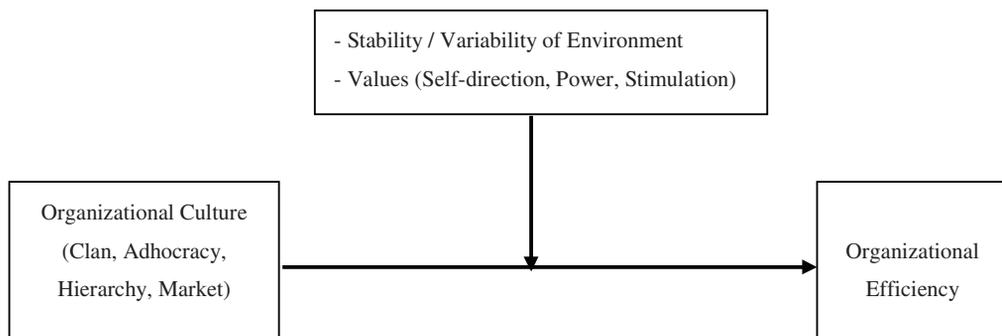


Figure 2. Research Model

H₁: Organizational culture has influence on organizational efficiency. Therefore, the examined culture types of clan, adhocracy, hierarchy, and market affect the organizational efficiency

H₂: The stability or variability of organizational environment in internal and external context have an effect on the relationship between organizational culture and organizational efficiency

H₃: The values of organization founder or CEO (self-direction, stimulation, and power) have an effect on the relationship between organizational culture and organizational efficiency

4. Method

4.1. Sampling

The research was carried out in the health sector. Values have been determined by the founder of the private hospital or top of the strategic decision-maker with the diagnosis of individual values. Therefore; only the founders of the private hospital or the top strategic decision-makers were included in the sampling. The study is applied to health enterprises in the city of Istanbul and Adana. 40 individuals having the title of CEO, general manager, or organizational founder are selected from different health care institutions randomly.

4.2. Instruments for measuring (scales)

In order to examine organizational culture types, Quinn and Cameron's Organizational Culture types (Clan, Hierarchy, Adhocracy, Market) [60] which based on the Competing Values Model is used, and for this aim the 16-items scale is used which is developed by Deshpande and the others [5]. In the scale four organization culture types have been evaluated with organization description, the bond organization employees holding together, leadership and organization's strategic emphasise.

The Turkish adaptation of the scale which divides the 100 points into the identifications representing four organization culture types regarding as when the managers use closer concepts to their organization, the bigger the grade, and when they use distinct concepts rather than their organization related, the less grade, was done by Erdem [61]. This measurement is ratio scale.

The value classification developed by Schwartz is used in the research. The terms regarding to the power, self-direction and stimulation dimensions in the research scope in 40 cloused Schwartz Portrait Values Survey which provides an evaluation with narrow expressions developed from the original scale of 10 dimensions; self-direction, universalizm, benevolence, tradition, conformity, security, power, achievement, hedonism, stimulation is used. The confidency interval of the scale in the previous studies varies between 0,63 and 0,84 [62]. Used self direction scale has four items, stimulation has three item and power has also three items, the same as original form Using the six-degree Likert scale, it has been asked to the individuals to evaluate how much identical is the each expression with themselves.

The related 12 items scale is used from the 64 items Strategic Leadership Questionnaire developed by Reyes-Guerra and Pisapia in order to measure the stability and the variability of the organizational environment. This scale is adapted into Turkish by Ugurluoglu [59]. The expressions used in the five-degree Likert scale requires each respondent to evaluate how much agreed they are with the expressions.

Organizational efficiency defined in various dimension to measure the organizational efficiency in literature operationalized with productivity-efficiency, quality, cohesion, adaptability-readiness, information management-communication, growth, planning-goal setting, human resource development, stability-control [63]. It is asked to the evaluator to identify how s/he is developed since last year in order to objectively establish the 9 efficiency factors through ordinal scale measurement; thus, it is chosen to develop an original scale of itself.

4.3. Analysis method

The organization culture, organizational environment and values evaluated with Ratio and Interval Scale are examined by Parametric Statistical Techniques, while the dependent variable organizational efficiency evaluated by Ordinal Scale is examined by Non-Parametric Analysis and Spearman Order Correlation. For the correlation, Pearson correlation analysis is used for ratio and interval scale measurement if the sampling distribution is normal. Spearman order correlation is utilized for variables measured by ordinal scale and also for variables measured by ratio and interval scales if the sampling distribution is not normal.

Regression analysis is used for examining the effect of organizational culture types on organizational efficiency dimensions. Inasmuch as dependent variable is evaluated via ordinal scale, logistic regression analysis is preferred.

The moderating effect of values (self-direction, power, and stimulation) and stability/variability of organizational environment on the relationship between organizational culture types and organizational efficiency dimensions is evaluated by means of hierarchical regression analysis. The measurement of independent and moderator variable at the ratio and interval scales enables the multiplication of these two variables to be included in the model.

SPSS 16,0 is used for all analyses.

5. Results

Demographic data of participants are shown in Table 1.

Table 1. Demographic data

| | | n | % |
|-------------------------|-------------------|----|------|
| Gender | Female | 15 | 37,5 |
| | Male | 25 | 62,5 |
| Age | 21-30 years | 1 | 2,5 |
| | 31-40 years | 13 | 32,5 |
| | 41-50 years | 18 | 45 |
| | 51-60 years | 8 | 20 |
| Managerial tenure | lower than 1 year | 1 | 2,5 |
| | 1-5 years | 7 | 17,5 |
| | 6-10 years | 14 | 35 |
| | 11-15 years | 13 | 32,5 |
| | 16-20 years | 4 | 10 |
| | above 20 years | 1 | 2,5 |
| Number of hospital beds | 50-100 | 19 | 47,5 |
| | 101-200 | 14 | 35 |
| | 201-300 | 5 | 12,5 |
| | above 300 | 2 | 5 |
| Total (n) | | 40 | 100 |

5.1. Factor analysis –reliability

The scales that are commonly used and have an acceptable level of reliability and perform with validity in the literature are utilized in the research. Therefore; Schwartz Values, type of organizational culture (ratio scale) and dimensions of organizational efficiency (ordinal scale) are not performed in the factor analysis. The factor analysis is applied to organizational environment scale (five-item Likert)

Varimax Rotated, Principle Component Analysis is utilized in the analysis. The items that have eigenvalue higher than 1 and loaded by the value of 0,5 or higher on the one factor are considered. The item loaded on more than one factor with the difference score of 0,1 or lower are removed from the analysis. That is to say, after factor analysis result, one iteration is carried out.

In the light of this framework of factor analysis, only one item is eliminated. Four factor- structure organizational environment scale are emerged. The factors are named in accordance with the context of items in the groups and shown in Table 2.

Table 2. Factor names and loaded items of organizational environment scale

| Factor | Name | Items |
|------------------------------|---|----------|
| 1 | external environment and organizational arrangement | 3,4,9,11 |
| 2 | work in organization and external competitiveness | 5, 7,8 |
| 3 | organizational structure | 2,6 |
| 4 | determined job | 1,10 |
| Total variance explained (%) | | 73, 3 |

Values of self-direction (4 items), stimulation (3 items) and power (3 items) from Shwartz Portrait Value Survey (six-item Likert scale) have 0,625 cronbach alpha as reliability in this research.

5.2. Descriptive Statistics Result

Mean, minimum, maksimum, and standard deviation values are shown in Table 3 for the variables of organizational culture types, values and organizaional environment factors.

Table 3. Descriptive statistics results of variables

| | Min. | Max. | Mean | Std. Deviation |
|----------------|-------------|-------------|-------------|-----------------------|
| Selfdirection | 4,25 | 6,00 | 5,0500 | ,51949 |
| Stimulation | 2,67 | 6,00 | 4,4250 | ,66661 |
| Power | 3,00 | 5,67 | 4,2833 | ,70630 |
| Clan | 10 | 285 | 114,35 | 69,302 |
| Adhocracy | 30 | 180 | 97,30 | 38,886 |
| Hierarchy | 35 | 230 | 104,67 | 48,668 |
| Market | 15 | 180 | 84,55 | 37,892 |
| Org.env fact 1 | 2,00 | 5,00 | 3,5125 | ,78640 |
| Org.env fact 2 | 2,33 | 4,00 | 3,0583 | ,45846 |
| Org.env fact 3 | 2,50 | 4,50 | 3,5625 | ,52119 |
| Org.env fact 4 | 1,00 | 5,00 | 3,6875 | ,81404 |

5.3. Relationship between variables

Significant relationships found in the result of Pearson Correlation and Spearman Order Correlation Analysis used in accordance with scale type and normality condition are shown Table 4.

Table 4. Significant relationships between variables

| Relationship between | Correlation value |
|--------------------------------------|--------------------------|
| Self-direction and stimulation | 0,577 ** |
| Self-direction and power | 0,405 ** |
| Self-direction and adhocracy | 0,319 * |
| Self-direction and environ. factor 2 | -0,346 * |
| Self direction and quality | -0,380 * |
| Stimulation and quality | -0,330 * |
| power and clan | -0,321 * |
| power and environ. factor 4 | 0,384 * |
| clan and hierarchy | -0,687 ** |
| clan and market | -0,670 ** |
| clan and environ. factor 2 | 0,558 ** |
| clan and environ. factor 3 | 0,407 ** |
| clan and cohesion | -0,368 * |
| clan- human resource development | -0,413 ** |
| clan and stability-control | 0,341 * |
| adhocracy and environ. factor 2 | -0,475 ** |
| hierarchy and market | 0,354 * |
| hierarchy and environ. factor 3 | -0,404 ** |
| hierarchy and stability-control | -0,378 * |
| market and cohesion | 0,542 ** |

| Relationship between | Correlation value |
|--|-------------------|
| environ. factor 1 and environ. factor 3 | 0,322 * |
| environ. factor 2 and environ. factor 4 | 0,330 * |
| environ. factor 2 and human resource development | -0,457 ** |
| environ. factor 3 and information management-communication | 0,315 * |
| productivity-efficiency and information management-communication | -0,461 ** |
| productivity-efficiency and stability-control | -0,395 * |
| cohesion and growth | -0,506 ** |

** Correlation is significant at 0,01 level, * Correlation is significant at 0,05 level

5.4. The effect of organizational culture types on the organizational efficiency dimensions

According to correlation analysis results, the relationships between the clan culture and cohesion, human resource development, and stability-control, between the hierarchy culture and stability-control, between the market culture and cohesion are significant.

In the logistic regression analysis, the effect of the hierarchy culture on adaptability-readiness ($p=0,016$), the effect of the market culture on planning-goal setting ($p=0,004$) and on human resource development ($p=0,033$), and the effect of the adhocracy culture on information management-communication ($p=0,012$) are significant. The variations in the hierarchy culture, market culture, and adhocracy culture can explain the variations in the organizational efficiency dimensions mentioned.

The common results of spearman order correlation and hierarchical regression analysis indicate that the hierarchy culture and the market culture have an influence on organizational efficiency.

The variation in the hierarchy, market and adhocracy cultures can explain the variation in the some organizational effectiveness dimension.

Therefore, H_1 hypothesis is accepted for some organizational effectiveness dimensions.

5.5. Moderating effect of organizational environment and values

The moderating variable is the categorical or metric variable that influences the value and direction of the relationship between dependent and independent variable. [64]

Hierarchical regression analysis is used in this study for diagnosing the moderator variable that empowers or diminishes the relationship between dependent and independent variable. In this technique, after investigating the effect of independent variable on dependent variable, the multiplication of these items is included in the model.

In the logistic regression analysis, the following methodology is used:

If independent variable or moderator variable do not have effect on the dependent variable, separately, and after multiplication, the interaction term have significant effect, moderating effect occurs. There is also similar approach that indicates both variables have influence on the dependent variable, after multiplication, if the significant relationship does not emerge, moderator relationship will appear. The results of significant multiplications are shown Table 5.

Table 5. Significant moderator relationships on organizational efficiency

| Multiplication of variables | Dependent variable | Significance | Emerging (+) Disappearing (-) |
|-----------------------------|---|--------------|----------------------------------|
| Hierarchical x org. env f 1 | Productivity-Efficiency | 0,030 | + |
| Clan x org. env f 1 | | 0,000 | + |
| Hierarchical x org. env f 4 | Quality | 0,026 | + |
| Clan x org. env f 1 | Information Management - Communication | 0,031 | + |
| Market x org. env f 3 | | 0,023 | + |
| Clan x org. env f 4 | | 0,037 | + |
| Clan x self direction | Planning- Goal Setting | 0,029 | + |
| Adhocracy x org. env f 2 | | 0,031 | + |
| Market x stimulation | | 0,063 | - |

| Multiplication of variables | Dependent variable | Significance | Emerging (+) Disappearing (-) |
|-----------------------------|----------------------------|--------------|----------------------------------|
| Adhocracy x org. env f1 | Human Resource Development | 0,041 | + |
| Adhocracy x org. env f4 | Stability-Control | 0,050 | + |

It is seen that all organizational environment factors (factor 1: external environment and organizational arrangement, factor 2: work in organization and external competitiveness, factor 3: organizational structure factor 4: determined job) have the moderator effect on the relationship between organizational culture types and organizational effectiveness dimensions for some culture types and some effectiveness dimensions. Especially factor 1 and factor 4 interact for three types of culture (Hierarchical, Clan and Adhocracy)

Therefore, findings fully supported H₂ hypothesis. H₂ is accepted.

Values of stimulation and self direction have the moderating effect on the relationship between culture and effectiveness. The findings partially supported the hypothesis H₃. H₃ is partially accepted.

6. Discussion

It has been observed in this research that the self-direction feature of CEO/top managers in the organization is related to stimulation and power. The managers with the higher self-direction character could be referred to as being more influential in this sense.

The individuals with higher self-direction and stimulation pay relatively a less importance to the quality in organizational efficiency criteria. The culture of clan and the culture of adhocracy -as expected- have been found as negatively related to the organizational environment factor which emphasizes organizational structure, work in organization, and external competition.

The importance of cohesion has been observed as high for the employees in the market culture. This implements significance to the institutional policies and human resources practices which assure employees to be market oriented and to identify themselves with the institution for this.

The participants have pointed out that it is necessary to give relatively less significance to the stability control in order to get better productivity. The strategies and policies to grow the institution have been preferred rather than the rehabilitative activities towards gaining employee's loyalty.

Market cultures to have an impact on planning-goal setting and human resources development indicators; and the adhocracy cultures to have an impact on information management- communication indicators are among the expected results.

The self-direction character of the managers has been found influential in the clan culture on establishing planning and goal setting while the stimulation character has the same impact in market cultures.

The significant effect of organizational environment factor emphasizing external competitiveness, work in organization, and organizational arrangement that are not described in the clan culture previously mean the necessity of this organizational environment factor that can accompany clan culture so as to reach desired efficiency level.

The negative relations among productivity described as a efficiency dimension in market culture, stability and information management-communication that described as efficiency dimensions in hierarchy culture emerges. This implies that the efficiency dimensions in the determined culture types as described prevail in this sampling.

Internal and external organizational environment factors in relations between various culture types and organizational efficiency dimensions are observed as significantly influential. And the main impact is the organizational environment factor which emphasizes the determined job and organizational arrangement- external environment.

True diagnosing of organization culture, the determining of strategy, politics, and human resource practices in accordance with organizational culture will enable the organization to reach desired organizational efficiency dimensions on the condition depending the stability or variability of internal and external environment.

Future Research Implications

The significant relationships between clan culture and stability and between market culture and cohesion are found unexpectedly. The causes of the relationships stemming from these efficiency dimensions occurring differently from their own corresponding culture type as described should be also investigated in a new research.

Constituting the strategies of increasing cohesion among employees by means of resources appointed to growth results in unfavourable opinion. The cause of this situation and the factors that can effect this relation can be seen as a future research.

The effect of different culture types and the other organizational founder / CEO values on the organizational efficiency dimensions should be examined in the future. In addition to twofold interactions organizational culture x CEO values or organizational culture x organizational environment, the effect of threefold interaction as organizational culture x CEO values x organizational environment on the organizational efficiency dimensions can have academic worth for further research. Furthermore, adding new variables to tested model can reveal new relations and explanatory effects such as moderator or mediate. Repeating this research at different sectors with higher number in sampling is beneficial for shaping strong relations to academicians and practitioners.

References

- [1] Kilmann, R. H. (1985). Corporate culture: managing the intangible style of corporate life may be the key to avoiding stagnation. *Psychology Today* 1985; **19** (4): 62-68.
- [2] Robbins, S. *Essentials of organizational behavior*. John Wiley & Sons, 1984
- [3] George, Jennifer M. and Jones, G. R. *Organizational behaviour*. Prentice Hall; 2002
- [4] Berson, Y., Oreg, S., and Dvir T. Organizational culture as a mediator of CEO values and organizational performance. *Academy of Management Best Conference Paper* 2005; Israel.
- [5] Deshpande, R. and Webster, F. E. Organizational culture and marketing: defining the research agenda, *Journal of Marketing* 1989, **53**: 3-15.
- [6] Kotter, J. P. and Heskett, J.L. *Corporate culture and performance.*, New York: The Free Press; 1992
- [7] Peters, Tom, and Waterman., R. *In search of excellence: lessons from America's best run companies*. New York: Harper and Row; 1982
- [8] Martin, J. *Cultures in organizations: three perspectives*. New York Oxford University Press; 1992
- [9] Deal, T. E. and Kennedy, A. A. *Corporate cultures: The rites and rituals of corporate life*. Reading, MA: Addison-Wesley, Pub. Co; 1982
- [10] Schein, E. H. *Organizational culture and leadership*. 2nd edition, San Francisco: Jossey-Bass; 1992
- [11] Trice, H. M. and Beyer, J. M. *The cultures of work organization.*, Englewood Cliffs, N.J. Prentice Hall; 1993
- [12] Cameron, K. S. and Quinn, R. E. *Diagnosing and changing organizational culture: based on competing values framework*. Reading, MA, Addison-Wesley; 1999
- [13] Quinn, R. E. *Beyond rational management: mastering the paradoxes and competing demands high performance*. San Francisco: Jossey-Bass; 1988
- [14] Robert E. Quinn and Rohrbaugh, J. A spatial model of effectiveness criteria: towards a competing values approach to organizational analysis. *Management Science*, 1983; **29** (3): 363-377
- [15] Cameron, Kim S., Whetten, David A. *Organizational effectiveness: A comparison of multiple Models*. Academic Press, New York; 1983
- [16] Desion, D. R., Haaland, S. and Goelzer, P. Corporate culture and organizational effectiveness: is Asia different from the rest of the World?., *Organizational Dynamics* 2004; **33** (1): 98-109.
- [17] Handa, V. and Adas, A. Predicting the level of organizational effectiveness: a methodology for the construction firm. *Construction Management and Economic* 1996; **14**: .341-352.
- [18] Lee T. Z. and Tseng, Y.F. A study of the relationship between organizational culture and organizational effectiveness in Taiwan. *Research Institute of Mathematical Sciences* 2005; **1491** :161-178
- [19] Langan-Fox, JanIce and Philomena Tan . Images of a culture in transition; personal constructs of organizational stability and change. *Journal Occupational and Organizational Psychology* 1997; **70** (3): 273-29.

- [20] O'Reilly, C. A., Chatman, J., Caldwell, D. F. People and organisational culture: a profile comparison approach to assessing person-organisation fit. *Academy of Management Journal* 1991; **34**: 487–516.
- [21] Quinn, R. E., Spreitzer, G. M. 'The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality of life. *Research in Organizational Change and Development* 1991; **5**: 115-142.
- [22] Venkataiah, P. Models of organizational effectiveness. *Osmania Journal Of Management* 2006; **2**, (2) : 1-7
- [23] Steers, R. N. Problems in the measurement of organizational effectiveness. *Administrative Science* 1975; **20**: 546-548
- [24] Zammuto, R. F. *Assessing organizational effectiveness*. Albany, New York: State University of New York Press; 1982
- [25] Ouichi, W. G. Markets, bureaucracies, clans. *Administrative Science Quarterly* 1980; **25**: 129-141
- [26] Quinn, R. E., Rohrbaugh, J. A spatial model of effectiveness: criteria towards a competing values approach to organizational analysis. *Journal of Management Science* 1983; **29**: 363-377
- [27] Ostroff, C., Schmitt, N. Configurations of organizational effectiveness and efficiency. *Academy Of Management Journal* 1993; **36** (6): 1345-1361
- [28] Juechter, W. M., Fisher, C., Alford, R. J. Fire conditions for high performance cultures. *Training and Development* 1998; **52** (5): 63-68
- [29] Thibodeaux, M. S., Favilla, E. Strategic management and organizational effectiveness in college of business. *Journal of Education for Business*, 1995; **70** (4): 189-196
- [30] Rohrbaugh, J. The competing values approach: innovation and effectiveness in the job service. In: R Hall R. H, and Quinn R.E. editors. *Organizational Theory and Public*, Beverly Hills: Sage; 1983
- [31] Baker, K. A. ; Branch, K. M. *Chapter 1: Concepts underlying organizational effectiveness: trends in the organization and management science literature*. Trends, 1-14; 2002
- [32] Rokeach, M. *The nature of human values*, New York: Free Press; 1973
- [33] Schwartz, S. H. Universals in the content and structure of values: theory and empirical tests in 20 countries. In: Zanna M. editor. *Advances in experimental social psychology*. New York, Academic Press 25, 1992, 1-65
- [34] Ma, X. Organizational values: a review. *International colloquium on computing, communication, control, and management*, 2009: 483-486, China.
- [35] Kluckhohn, Clyde Values and value-orientations in the theory of action: An exploration in definition and classification. In : Parsons T. & Shils E. editors. *Toward a general theory of action*. Cambridge, MA: Harvard University Press ; 1951
- [36] Meglino, R.M. and Ravlin, E.C. Individual values in organizations: concepts, controversies and research *Journal of Management* 1998, **24** (3): 39, 351.
- [37] Morgan, G. *Images of organization*. 2nd ed. Thousand, Oaks, CA: Sage Publications; 1997
- [38] Berson, Y., Oreg, S., and Dvir, T. CEO values, organizational culture and firm outcomes. *Journal of Organizational Behaviour* 2008; **29**: 615-633.
- [39] Davis, S. M. *Managing corporate culture*. Cambridge, MA: Ballinger Pub. Co; 1984
- [40] Kerr, J. and Slocum, J. W. Managing corporate culture through reward systems. *The Academy of Management Executive* 2005; **19**: 130-138.
- [41] Avolio, B. J. *Full leadership development: building the vital forces in organizations*, Sage, Thousand Oaks, CA; 1999
- [42] McShane, S. L. and Von Glinow, M.A. *Organizational behaviour*. Irwin/McGraw-Hill, Boston, MA.; 2000
- [43] Zhu, W., Chew, I. K. H., and Spangler, W. D. CEO transformational leadership and organizational outcomes: the mediating role of human-capital-enhancing human resource management. *The Leadership Quarterly* 2005; **16**: 39-52
- [44] Haakonsan, D.D., Burton, R. M., Obel, B, and Lauridbn, J. How failure to align organizational climate and leadership style affects performance. *Management Decision* 2008; **46** (3): 406-432
- [45] Papadakis, V.M. and Barwise, P. CEO versus top management team: which matters more in strategic decision-making?. *British Journal of Management* 2002; **13** (1): 83-95.

- [46] Peterson, R.S., Smith, D.B., Martorana, P.V. and Owens, P.D. The impact of chief executive officer personality on top management team dynamics: one mechanism by which leadership affects organizational performance. *Journal of Applied Psychology* 2003; **88** (1): 795-808
- [47] Kauer, D., Waldeck, T. C. P., and Schaffer, U. Effects of top management team characteristics on strategic decision making: shifting attention to team member personalities as mediating process. *Management Decision* 2007; **45** (6): .942-967.
- [48] Judge, T.A., Bono, J.E., Erez, A. et al. Core self-evaluations and job and life satisfaction: The role of self concordance and goal attainment. *Journal of Applied Psychology* 2005; **90**: 257–268.
- [49] Chatterjee, A. and Hambrick . D. C. It's all about me: narcissistic chief executive officers and their effects on company strategy and performance. *Administrative Science Quarterly* 2007; **52**: .351-386
- [50] Boone C., De Brabander B, Van Witteloostuijn A. CEO locus of control and small firm performance: an integrative framework and empirical test. *Journal of Management Studies* 1996 ; **33** (5): 667–699.
- [51] Simon, M., and Houghton. S. M. The relationship between overconfidence and the introduction of risky products: evidence from a field study. *Academy of Management Journal* 2003; **46**: 139-149.
- [52] Hiller, N., and Hambrick, D. Conceptualizing executive hubris: the role of (hyper-) core self-evaluations in strategic decision-making. *Strategic Management Journal*, 2005; **26**: 297–319.
- [53] Şimşek, Z., Heavay, C., and Veiga, J. The impact of CEO self-evaluation on the firms entrepreneurial orientation. *Strategic Management Journal* 2010; **31**: 110-119.
- [54] Eisenhardt, K., and Bourgeois, L. J. Politics of strategic decision making in high velocity environments: Toward a mid-range theory. *Academy of Management Journal* 1988; **31**: .737-770.
- [55] Finkelstein, S. And Hambrick, D. *Strategic leadership: top executives and their effects on organizations*. St. Paul, MN: West; 1996
- [56] Agle, B. R., R. K. Mitchell, et al. Who matters to CEOs? An investigation of stakeholder attributes and salience, corporate performance, and CEO values. *Academy of Management Journal* 1999; **42** (5): 507-525.
- [57] Wally, S., & Baum, J. R. Personal and structural determinants of the pace of strategic decision making. *Academy of Management Journal* 1994; **37**: 932–957
- [58] Mischel W. 1977. The interaction of person and situation. In *Personality at the Crossroads: Current Issues in Interactional Psychology*, Magnusson D, Endler NS (eds). Erlbaum: Hillsdale, NJ; 333–352.
- [59] Uğurluoğlu, O. Hastane yöneticilerinin stratejik liderlik özelliklerinin değerlendirilmesi. Yayımlanmamış Doktora Tezi, 2009, Hacettepe Üniversitesi, Sağlık Bilimleri Enstitüsü, Ankara, (Assessment of Strategic Leadership Characteristics of Hospital Managers, Unpublished Doctoral Thesis , Hacettepe University, Institute of Health Sciences and Health Care Administration, Ankara, Turkey).
- [60] Quinn, R. E. and Cameron. K. S. Organizational life cycles and shifting criteria of effectiveness: some preliminary evidence. *Management Science*, 1983; **29** (1): 33-51.
- [61] Erdem, R. Örgüt kültürü tipleri ile örgütsel bağlılık arasındaki ilişki: elazığ il merkezindeki hastaneler üzerinde bir çalışma. *Eskişehir Osmangazi Üniversitesi İ.İ.B.F. Dergisi*, Ekim, 2007; **2** (2): 63-79. (The Relationship between Organizational Culture and Organizational Citizenship Behaviour: A Study at Hospitals in Elazığ City Centre, Eskişehir University, *Journal of Economics and Administrative Sciences Faculty*).
- [62] Demirutku, K. Parenting styles, internationalization of values, the self-concept. Unpublished Doctoral Thesis. 2007, Middle East Technical University, Ankara, Turkey.
- [63] Kiroğlu, I. The role of human resource management in organizational effectiveness. Unpublished master thesis, 2008, Marmara University, Department Of Organizational Behaviour, Istanbul, Turkey
- [64] Baron, R.M. and Kenney, D.A. The moderator- mediate variable distinction in social psychological research: conceptual, strategic, and statistical consideration”, *Journal of Personality and Social Psychology*, 1986; **51**: 1173-1182.