

Available online at www.sciencedirect.com





Procedia Social and Behavioral Sciences 24 (2011) 1460-1474

7th International Strategic Management Conference

The Effects of Leadership Styles and Organizational Culture over Firm Performance: Multi-National Companies in İstanbul

Cemal Zehir^a, Öznur Gülen Ertosun^b, Songül Zehir^c, Büşra Müceldili^d, a^{*}

^{*a,b,d*} Gebze Institute of *Technology, Kocaeli, 41400, Turkey* ^{*c*} İstanbul Commerce University, İstanbul 34378, Turkey

Abstract

Literature suggests that by developing strong organizational culture and effective leadership, firms can achieve effective business performance. Although this topic has been researched worldwide, little empirical research has been investigated the association between the three concepts. This paper helps to fill this gap in the literature using the association between the leadership, culture and performance using the data collected from national and global firms with several sectors (manufacturing, finance and telecommunication) in Turkey. A survey was carried out on 295 employees who accepted to respond to our questionnaires. According to this aim, we researched/ investigated the related literature and after developing a research model and hypotheses, we made numerous analyses. The outcomes of the statistical analyses of this study have demonstrated the effects of culture and leadership over firm performance. The reliability analyses for testing the hypotheses are consistent with literature. In addition to the statistical results, the findings have been conceptually discussed and concluded. Finally implications have presented for future studies.

Keywords: Leadership style, organizational culture, performance, Turkey

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

* Corresponding author. Tel. + 90-262-605-1407 fax. +90-262-654-3224 Email address: czehir@gyte.edu.tr

^{1877–0428 © 2011} Published by Elsevier Ltd. Selection and/or peer-review under responsibility of 7th International Strategic Management Conference doi:10.1016/j.sbspro.2011.09.032

1. Introduction

In the fields of management and organizational theory, organizational culture is one of the most popular concepts. The reason of popularity is the significant relationship between organizational culture and organizational outcomes such as financial performance [1], gaining competitive advantage [2], and firm effectiveness [3]. The firms which have a superior financial performance such as McDonalds, IBM, P&G and HP have focused on the managerial values and beliefs formed in these firms' organizational cultures [4]. In the recent 30 years, the mentioned firms are grown much more, and most of researchers take attention to their success, and found close relationship between their culture and leadership. They are still the most successful global firms and for them leadership- culture fit is not a chance [5]. The important point is that, culture will remain linked with superior performance only if the culture is able to adapt to changes in environmental conditions and it must have unique qualities which cannot be imitated [6].

Equally, the relationship between leadership and firm performance is an important topic for both academician and practitioners. The leadership and its effect on firm and employee is an intriguing topic. The leadership studies began with the trait approach and broadened day by day. With the different aspects, many leadership styles such as transactional, supportive, participative, super, servant, entrepreneurial, spiritual leaderships have been emerged. A number of researchers theorize that leadership is linked to organizational performance [7, 8]. Each of these leadership styles has received notable attention in management literature and in business world.

However the relations between leadership and performance and between culture and performance have been examined independently, few studies have sought the association between three concepts. Most of the studies about culture have been conducted in the different countries [9, 10]. At these studies, culture dimensions have been argued. Many analyses of organizational cultures pay only minor attention to leadership [11]. So there is a need for understanding of how culture and leadership together affect firm performance. The aim of this study is to extend and expand the effects of the relationship between organizational culture types of organizational culture which are classified as competitive, innovative, and bureaucratic and community and leadership styles of organizational culture which are classified as competitive, innovative, and bureaucratic and community to firm performance. This study also investigates the organizational culture phenomenon and leadership styles in non-western nation. It shows evidence with regard to the organizational culture-leadership style-performance link using data from different industries in Turkey. The main questions addressed in this paper are: a) Is there a significant relationship between organizational culture and leadership styles?', b) does leadership affect organizational performance c) Does organizational culture affect organizational performance.

This paper has been divided into three parts. The first section of this paper provides a brief overview of culture types, leadership styles and the relationship among the variables, in the second section statistical analyses were done, and findings were compared with recent researches, and finally discussion and managerial implications were presented.

2. Leadership & Performance

In managing organizations, leaders interacting with employees from different backgrounds produce different types of leadership styles [12, 13,14]Although everyday a new leadership style is defined in order to find the best performing, even to develop a universal definition for the best. In general, leadership styles can be divided into two major categories: the mechanistic based leadership style and the humanistic based leadership style). The dynamic changes which occur outside and inside of the organizations have encouraged leaders to shift the paradigms of their leadership behavior from a

traditional mechanistic approach to a humanistic based leadership style in order to achieve organizational strategies and goals [15, 16, and 17].

The traditional leadership style is strongly affected by traditional management thoughts and most leaders use a mechanistic based leadership style to deal with and manage followers in their organizations [16,18]. This leadership style is widely practiced in organizations that operate in a stable market environment, focus on internal organizational environments and give less emphasis to high commitment human resource practices [19, 20, 17]. Moreover, humanistic based leadership perspective emphasizes factors related to the quality of the relationship with followers, such as consideration, mutual trust, participatory decision-making, being interaction oriented, consultative, democratic and concerned with people [12, 21]. This type of leadership is widely implemented in organizations that operate in a dynamic market environment, focusing on external competitiveness and emphasizing high performing human resource practices [22, 19, 23, 17]. The research model of the study contains 3 leadership styles; instrumental (transactional) as a mechanic-based leadership, supportive and participative leadership that are humanistic-based leadership styles of the study.

A transactional leader (as a strategic leader) is the one who operates within an existing system or culture (as opposed to trying to change them) by attempting to satisfy the current needs of followers by focusing on exchanges and contingent rewarding behavior and paying close attention to deviations, mistakes, or irregularities and taking action to make corrections [24, 25]. Transactional leaders are mostly defined as inactive leaders because they reward the good performance [26]. and intervene in the case of a performance problem [27]. So it can be said that they focus on performance and in the literature, transactional leadership's association with organizational performance is empirically supported [28, 29,30].

In the recent 30 years, supportive leadership has received extensive attention in a variety of different research areas, including the leadership. House [31] defined a supportive leader as one who provides emotional, informational, and instrumental and appraisal support to followers. However, this author stated that the most intuitive meaning of social support is emotional support, which involves the provision of sympathy, evidence of liking, caring and listening. Supportive leaders express concern for, and take account of, followers' needs and preferences when making decisions [32]. Supportive leadership is found to be strongly associated with satisfaction, but is not associated with performance by the researchers (e.g. Yukl[26]). Participative leadership style is generally viewed as referring to leaders who often work more closely with their followers and involve all levels of followers in making decisions [22, 33]. The idea that the participative style of management is likely to enhance the performance of subordinates was suggested by Barnard [34] over half a century ago, and has been expanded and developed subsequently by many researchers [8]. Humanistic-based leadership styles in planning and administering organizational functions may directly increase job satisfaction [15, 16] but about performance oriented outputs researchers' findings are inconsistent.

After all based on the research model the related hypothesis is:

H1: There is a relationship between leadership types and organizational performance.

3. Culture & Leadership & Performance

Up until today, many researchers study on the effects and practices of leadership on organizational culture [35, 36, 37, 38, 39, 40, 41]. Moreover, different authors emphasize the strong connection between cultural values and concepts of leadership [10, 42]. Peterson and Smith [43] imply that all studies about changing culture include leader's power and effects. According to Schein [44] ". . . the unique and essential function of leadership is the manipulation of culture." (1985, p. 317). Parallel to this view, Karadag [41]and Bodinson [45] also highlight the importance of the relationship between the variables. Kilmann [46] believes that leadership is crucial because, as organizational cultures develop and change, they also need to be managed and controlled. He states, 'if left alone, a culture eventually becomes dysfunctional'. Reinforcing such a

perspective, Bass [47] considers that the survival of an organization depends upon the shaping of culture initiated by effective leaders rather than considering organizational culture as a function of leadership and management, organizational culture has been considered as a product of industry and environmental demands, and leadership is a function of organizational culture. According to Bass and Avalio [27] leaders create mechanisms for cultural development and cultural norms arise and change due to its leaders focus. How leaders react to problems, resolve crises, reward and punish followers are all relevant to an organization's culture as well as how the leader is viewed both internally by followers and externally by clients/customers. In addition to these, culture and leadership interaction is mutual [27, 44].

Tsui [48] provide different perspectives (the functionalist perspective, the attribution perspective and the contingency perspective) that lightening on the relationship between leadership behavior and organizational culture. In the functionalist perspective, there is a close relationship between leadership behavior and a strong culture. According to this perspective, leaders' actions and behaviors contribute to the organization's culture. Trice & Beyer [11] argued that leaders' visions provide the substance of new organizational culture. In other words, culture is a consequence of the visionary and charismatic leadership. In the attribution perspective, employees have a tendency to ascribe a high level of control and influence to leaders. Theoretical perspectives and empirical findings based on the attribution perspectives support a positive relationship between perceptions of leaders' behavior and descriptions of organizational culture [48]And, lastly the contingency perspective proposes that organizational outcomes affected by leaders' behavior under some conditions such as; during crises, high environmental uncertainty. At uncertainty or crisis conditions, organizational culture may be limiting leader's ability or culture and this can provide opportunities for leaders to exercise their abilities [48].

In addition to these perspectives, several researchers such as Hofstede [9], Scandura et al. [42], Van de Vliert and Smith [49], Jung and Avolio [50] studied about the relationship between culture (individualistic and collectivistic) and leadership (supportive and participative); significant results were found. Despite this and similar insights[51, 52] most scholarly analyses of leadership treat organizational cultures only peripherally[53, 54,55, 47,24] Also, many analyses of organizational cultures pay only minor attention to leadership (e.g., ; [50;46,]) Thus, the part that leadership plays in organizational cultures has not been systematically explored [11].

Although the relationship between the terms of culture of organizations and leadership styles are critical, and it is supported by a numerous study, the impact on organizational performance of the variables surprisingly has little empirical evidence. Most of researchers imply the relationship among leadership-culture and performance by anecdotal evidences. For example Brown [15] states that good leaders develop their skills to alter their culture in order to improve their organizational performance. Hennessey [57] studied empirically the variables but the relationships among them are investigated separately. The precise nature and form of interaction between these three concepts are not fully understood [6]. In this point Ogbonna and Harris's [6] study parallel to the aim of this study.

In order to analyze the mentioned relationships, related hypothesis are:

H2: There is a relationship between culture dimensions and leadership types

H3: There is mediating effect of culture of organizations on the relationship between leadership types and organizational performance.

4. Culture & Performance

The literature on organizational culture is rich and diverse [6] There is a large volume of published studies describing the definitions of the culture and there is little consensus on the definition of corporate culture. [58]. Deshpande and Webster [59] reviewed more than 100 studies in organizational behaviour, sociology, and anthropology and defined organizational culture as "the pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them with the norms for behaviour in the organization" (p. 4) [60]. One of the most popular definitions of culture is belong to Schein. According to Schein, organizational culture can be defined as a "pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that 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 "[5]. In 2008 Yılmaz and Ergun [61] demonstrated that culture is theorized to be the prime factor of 1) shaping organizational procedures [56, 62], 2) unifying organizational capabilities into a cohesive whole [63]. (3) providing solutions to the problems faced by the organization [44] and, thereby, (4) hindering or facilitating the organization's achievement of its goals [64].

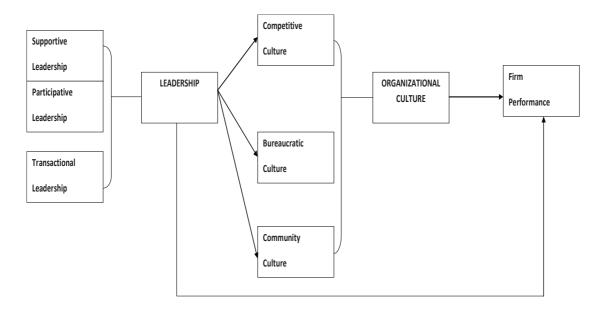
Different scholars have classified culture types or dimension with different names. Birnbaum [65] focused on institutional types with his four-part typology of dominant cultures: collegial, bureaucratic, political, and organized anarchy. And Bergquist [66] drawing on Cohen and March [67] offered a variant in describing the collegiate, managerial, developmental, or negotiating cultures [68]. Cameron and Quinn [69] divide organizations into four types; clan ,adhocracy, hierarchy and market. Henri [70] preferred to name them as hierarchical, group, developmental, rational. Further, in their study Ogbanna and Harris used the terms bureaucratic, community, innovative and competitive to classify the culture types. Moreover, Tharp [71] indicates four organizational culture types; Control (hierarchy), compete (market), collaborate (clan), and create (adhocracy). While scholars classified culture, they generally use the Competing Values Framework (CVF) as base. According to the CVF, each quadrant highlights important issues for every organization such as people, adaptation, stability and task accomplishment. The best known model in organizational culture which is prepared by Quinn and Cameron culture model is based on CVF model too. In their culture model CVF reflects two value dimensions which divide organizations into four types based on these two sets of variables (flexibility versus stability and external versus internal orientation): clan (flexible and internal), adhocracy (flexible and external), hierarchy (stable and internal), and market (stable and external).

Each organizational type has different "glue" that binds it together: types of leaders, measures of success, management styles, and so on [69]. In this study, dominant cultures are labelled as community, competitive and bureaucratic culture. Community cultures are based in loyalty and commitment to a strong leader and are focused on developing cohesion through teamwork, consensus, and participation [72]. The commitment of organizational members is ensured through participation, and organizational cohesiveness and personal satisfaction are rated more highly than financial and market share objectives [60]. This culture is similar to a large family. Leaders are considered as instructors and preceptors (mentor i.e. guide) and perhaps as parent figures [73]Competitive cultures concentrate on achieving goals under aggressive and competitive leaders who measure success by gaining advantage over peer institutions. This culture type is in direct contrast to the set of values expressed in a clan culture (hence the terminology of a "competing values" approach). In the latter, the emphasis is on cohesiveness, participation, and teamwork. [60]. Hierarchy cultures are governed by formal procedures and policies and value longevity, predictability, efficiency, and stability. The culture indicates order, rules, and regulations. Activities are under the control of surveillance, evaluation, and direction Organizational culture is described as compatible with this shape which is a formal and systematic place for working. Business effectiveness is defined by consistency and achievement of clearly stated goals [60]. Organizations from fast food restaurants (like Mac Donald) and major productive groups (like general motors' company) to governmental agencies (like ministry of justice) have hierarchy cultures [73].

Due to the link of strong organizational culture and high levels of performance, culture is a popular concept in the management literature for researchers. Scholars such as Peters and Waterman [74] have showed that the connection between culture and achievement have strengthened as time goes by. In another major study, Denison [64] indicated that organizational culture influences organizational performance directly. According to Cameron and Quinn [69] the right organizational culture is considered to be a requirement for high levels of organizational performance. The later research on organizational culture develops into a more macroscopically organizational aspect gradually. Researchers have done much investigations and tried to establish the relation between organizational culture and organizational performance, namely, there is a close connection between organizational culture and organizational performance at least [75]. Therefore we propose the following hypothesis:

H4: There is a relationship between culture types and organizational performance.

Figure 1. Research Model



5. Research Design

5.1 Data Collection and Demographic Distribution of the Sample

Scope, hypotheses, research model, scales used in the research and sample are all explained in this section. After theoretical background given, in order to test the research model statistical analyses are done. Data needed for field search has been collected through face-to-face questionnaire technique with employees of various size manufacturing and service sector companies. All most %62 of companies are global, % 25 of them are international and rest of them (%12) are national. In addition to these, almost %12 of companies is small, %30 of them are medium-sized and %58 of the companies are big companies according to KOSGEB

criteria. The employees participated to the study are randomly selected and total number of valid questionnaires are 295. Questionnaires were allocated as hard copy. Gathered data have been analyzed in SPSS software with the help of the correlation and regression analysis.

6. Measures

The demographic properties which are asked to the participants are prepared by the researchers. The other parts of the questionnaires in this study are developed by using scales adopted from prior studies. All constructs are measured using five-point likert scales (from strongly disagree =1 to strongly agree =5). The second part of the questionnaire is about organizational culture and prepared by Emmanuel Ogbanna and Lloyd C.Harris [6]. The questionnaire has four dimensions; competitive (3 items), innovative (4 items), bureaucratic (4 items) and community (4 items). In this study, culture is classified into three dimensions. Innovative culture is accepted as a sub-dimension of competitive culture? The third part assesses leadership styles, the questionnaire is developed by House & Dessler [76] and contains three parts; instrumental (4 items), supportive (4 items) and participative (5 items). In the study the leadership styles are used in order to classify leadership as humanistic based leadership and mechanistic based leadership. Last part is about operational performance and for this part Fuentes, Saez, Montes's [77] and Rahman, Bullock's [78] operational performance items are used (9 items).

7. Data Analysis And Hypotheses Test Results

7.1. Factor Analysis

We used SPSS software 18.0 for the evaluation of our data. Factor analysis is used for the validity and cronbach alpha scale is used to estimate the reliability of the scales. Correlation and regression analysis are conducted to analyze the hypotheses of the study. According to anti-image table values; all variables are found to be higher than 0.50 (r>0.30), so all items took place in the factor analysis. Factor analysis with principal component by varimax rotation, that was performed to find out the factor structure, all dependent and independent variables are analyzed concurrent. Since some items were below 0.50 or are having collinearity with more than one factor, and some factors contains one item, it is continued to perform factor analyzing by removing the items one by one till the ideal table. And totally 3 items are removed, rest of the items naturally revealed 6 factors.

Leadership is composed of two dimension; humanistic based (supportive and participative leadership) and mechanistic based (instrumental leadership). All performance items as expected took place in one factor. Culture is composed of three dimensions; bureaucratic, community and competitive culture. Competitive culture contains innovative culture as a sub-dimension in this sample. This result is supported by scholars expressions "Real organizations do not fall neatly into one or the other of these four models. In fact, the models do not contain organizations; organizations contain the models, all of them. In every organization all four models exist" [79]. Parallel to this view, others mention about dominant culture for companies [80, 68].

KMO (0,939) and significance value (p=0.00) shows that our sample is suitable for the hypothesis analyzes.

Table 1: Factor Loadings of the Independent Variable: Humanistic-based leadership	

KMO: ,939	Humanistic-	Mechanistic-	Competitive	Community	Bureaucratic
Explained total variance: %67,195	based leadership	based leadership	culture	culture	culture
1	(%var: 18,461)	(%var:6,638)	(%var:9,921)	(%var:9.007)	(%var:5,371)
Before taking action s/he consults	020				
with subordinates	,828				
S/he asks subordinates for their	024				
suggestions	,824				
Before making decisions, s/he considers what her/his subordinates have to say	,751				
When faced with a problem, s/he	,748				
consults with subordinates	,740				
S/he listens to subordinate's advice	749				
on which assignments should be	,748				
made					
S/he helps people to make working	670				
on their tasks more pleasant	,679				
S/he treats all group members as	(5)				
equals	,651				
S/he looks out for the personal	<				
welfare of group members	,647				
S/he does little things to make					
things pleasant	,622				
S/he schedules the work to be done					
S/he decides what and how things		,711			_
shall be done		,672			
S/he maintains definite standards of					_
performance		,594			
An emphasis on tasks and goal					_
accomplishment. A production			,716		
orientation is shared					
Entrepreneurs, innovators or risk					
takers			,636		
This company is production-					
oriented. The major concern is with			,607		
getting the job done. People aren't					
very personally involved					
This company is dynamic and					
entrepreneurial. People are willing			,605		
to take risks					
IU TAKE HISKS					

A commitment to innovation and development. There is an emphasis on being first	Growth and acquiring new resources. Readiness to meet new		,572		
development. There is an emphasis Image: Company is personal. It is like Image: Company is personal. It is like an extended family .734 .734 Commitment to this firm runs high. .620 Loyalty and tradition are important .620 Mentors, sages or father/mother .601 figures .601 Human resources. High cohesion .601 and structured. Established .581 procedures generally govern what .768 Formal rules and policies. .731 Maintaining a smooth-running .731	challenges is important A commitment to innovation and				
This company is personal. It is like an extended family	development. There is an emphasis		,558		
an extended family ,734 Commitment to this firm runs high. ,620 Loyalty and tradition are important ,620 Mentors, sages or father/mother ,601 figures ,601 Human resources. High cohesion ,581 and morale in the firm are ,581 important ,581 This company is very formulized ,768 procedures generally govern what ,768 people do ,731 Formal rules and policies. ,731 Maintaining a smooth-running ,731	on being first				
Commitment to this firm runs high. Loyalty and tradition are important here,620Mentors, sages or father/mother figures,601Human resources. High cohesion and morale in the firm are important,501This company is very formulized and structured. Established procedures generally govern what people do,768Formal rules and policies. Maintaining a smooth-running company is important here,731	This company is personal. It is like			,734	
Loyalty and tradition are important here,620Mentors, sages or father/mother figures,601Human resources. High cohesion and morale in the firm are important,581This company is very formulized and structured. Established procedures generally govern what people do,768Formal rules and policies. Maintaining a smooth-running company is important here,731					
here here here here here here here here	6			,620	
Mentors, sages or father/mother ,601 figures ,601 Human resources. High cohesion ,581 and morale in the firm are ,581 important ,581 This company is very formulized ,768 procedures generally govern what ,768 Formal rules and policies. ,731 Maintaining a smooth-running ,731 Permanence and stability. Efficient, ,511					
figures ,601 Human resources. High cohesion and morale in the firm are important ,581 This company is very formulized and structured. Established procedures generally govern what people do ,768 Formal rules and policies. Maintaining a smooth-running company is important here ,731					
Human resources. High cohesion and morale in the firm are important ,581 This company is very formulized and structured. Established procedures generally govern what people do ,768 Formal rules and policies. Maintaining a smooth-running company is important here ,731 Permanence and stability. Efficient, ,711	Mentors, sages or father/mother			,601	
and morale in the firm are important ,581 This company is very formulized and structured. Established procedures generally govern what people do ,768 Formal rules and policies. Maintaining a smooth-running company is important here ,731 Permanence and stability. Efficient, ,711	-				
and notate in the first are important	Human resources. High cohesion			,581	
and structured. Established procedures generally govern what people do Formal rules and policies. Maintaining a smooth-running company is important here Permanence and stability. Efficient,	important				
procedures generally govern what people do					,768
Formal rules and policies. Maintaining a smooth-running company is important here Permanence and stability. Efficient,					
Maintaining a smooth-running company is important here ,731 Permanence and stability. Efficient, 511					
company is important here					,731
smooth operations are important	Permanence and stability. Efficient, smooth operations are important				,511

Table 2: Factor Loadings of the Dependent Variable: Firm Performance

КМО: ,939	Firm performance
Explained total variance: %67,195	(%variance:17,797)
Defect level of products/services are decreasing	,830
Customer satisfaction level is increasing	,787
Sales are increasing	,750
Market gives more positive reaction with the change and innovation on our products, comparing to our competitors	,746
Our company is the first in the market with its new product/service supply	,746
Market share is increasing	,731
Product/service qualities meet customer demand and overreach.	, 730
Customer complaint is decreasing	,712
Our company's new product/service supply has increased in the last five years	,664

We calculated means and standard deviations for each variable and a correlation analysis is conducted to investigate the relationship between dependent variables (humanistic-based leadership, mechanistic-based leadership, competitive culture, bureaucratic culture and community culture,) and independent variable (firm performance). According to correlation analysis, all variables are correlated with each other as expected. There is a medium relationship between the variables (between 0,424 and 0,700). In order to investigate the reliability scores factors, the cronbach alpha scale is used. Alpha values are above 0.70 except "bureaucratic culture" but early studies support such a value 0,691 as an acceptable value. According to Desphande et al [60] parallel to Quinn [79] in studies related to culture cronbach alpha scores are acceptable if the values are above .65 and our all scores are acceptable according to Desphande [60].

Regarding to the results of the above statistical tests for reliability and validity, it is assumed that the factors of the variables are sufficiently valid and reliable to test hypothesis.

	S.D	MEAN	1	2	3	4	5	6
1.HBL	,88849	3,5646	(,931)					
2.MBL	,72607	3,8890	,660(**)	(,842)				
3.CC	,82271	3,8756	,564(**)	,557(**)	(,860)			
4.BC	,89349	3,7017	,424(**)	,461(**)	,551(**)	(,691)		
5.COC	,78203	3,9831	,667(**)	,568(**)	,700(**)	,495(**)	(,843)	
6.FP	,77346	3,7211	,504(**)	,544(**)	,557(**)	,424(**)	,529(**)	(,928)

Table 3: Mean, Standard Deviation and Correlation Coefficients

** Correlation is significant at the 0.01 level

SD = Standard Deviation () = Cronbach's alpha

HBL: Humanistic-based Leadership, MBL: Mechanistic-based Leadership, CC: Competitive Culture, BC: Bureaucratic Culture, COC: Community Culture, FP: Firm Performance

7.3. Regression Analysis:

In the following regression analysis, results are shown (Table 4). According to linear regression findings, humanistic based leadership is associated with firm performance (beta value is 0,256, p=0.00); in literature the findings are inconsistent for example, according to Yukl [26]. Supportive leadership is associated with satisfaction, however, performance relation is not supported empirically; and participative leadership performance relationship is suggested for a long time (exp. Barnard [34]). This study provides empirical support for the relationship. Mechanic-based leadership and firm performance relation [28, 81, 30] is supported by several studies and our finding are parallel to literature (beta value is 0,375, p=0.00).

Researchers such as Denison [64] and Quinn [79] support empirically performance-culture relationship but with the stress "right culture for the company". In this study, all three culture types are in relationship with firm performance. For competitive culture, beta value is 0,315 (p=0.00) and this refers to higher association comparing to other culture types. Bureaucratic culture beta value (0,129, p=0.24) indicates slightly lower relation with performance. Moreover, when we look at the finding for community culture (beta value is 0,244, p=0.00) there is a significant relationship with firm performance as well as other culture types. Findings are parallel with recent studies.

In the second dimension, with the help of hierarchical regression analysis, we estimated the mediating effect of culture on leadership and performance relationship. Most of researchers imply the relationship among leadership-culture and performance by anecdotal evidences (exp. Brown, [15]). Too little studies such as Ogbanna and Harris [6] supported the relationship empirically. In this study bureaucratic and competitive culture is partial mediator on this relationship, but community culture's the mediating effect on the humanistic-based leadership is stronger and beta value for humanistic-based leadership is found to be insignificant (p>.05) in hierarchical regression analysis. For the mechanic-based leadership, all culture types are partial mediators for the relation with performance. This is an empirical support for the relationship among leadership, culture and performance.

Table 4: Regression Analysis Results

	Depender	nt Variables	Mediator variables					
Independent Variables Firm I		rformance	Competitive Culture		Bureaucratic Culture		Community Culture	
Humanistic-based leadership	,256**	F:73,035 R ² :,329	,142*	F:64,784 R ² :,394	,216*	F:59,524 R ² :,379	,114	F:57,776 R ² :,367
Mechanistic-based leadership	,375**	DW:1,943	,268**	DW:1,964	,315**	DW:1,889	,313**	DW:1,971
Competitive Culture	,315**		,328**					
Bureaucratic Culture	,129*	F:54,513 R ² :,353			,187*			
Community Culture	,244**	DW:1,884					,275**	

Table columns contain standardized beta coefficients. * and ** values are significant. (**p<0.01, *p<0.05)

DW: Durbin Watson value

8. Conclusion and Discussion

This research study has revealed a link between organizational culture types, leadership types and firm performance. The results of this study imply that organizational culture seems to be the key to leadership types and firm performance. This suggests that the organizations should focus on organizational culture in achieving business performance outcomes.

Denison's [64] research indicates that organizational culture influences organizational performance directly. The present findings seem to be consistent with other research which have found a positive relationship between organizational culture and firm performance [75] The results of the current study indicate three forms of culture (competitive, bureaucratic, community) are directly related to performance. The analysis of the links between competitive form of culture and firm performance finds direct, strong and positive associations. This finding is in agreement with Slater and Narver [44] findings which showed that externally oriented organizational culture is positively linked with performance. Moreover, this finding corroborates the ideas of Ezirim et al. [75] who suggested that competitive organizational culture has a positive and significant effect on organizational outcomes. Although Ogbanna and Harris [6] have found

indirect relationship between two forms of culture (bureaucratic and community) with performance, our results have found direct relationship between bureaucratic and community culture with performance. However, the findings of the current study do not support the previous research [75] which suggested that, bureaucratic organizational culture has a negative effect on the organizational outcomes. The positive relationship between community culture and performance may be explained by the fact that community culture, elements of personnel commitment, team-work, and self-management were placed high among the organizational values.

Regression analyses held in order to test the effect of leadership styles on firm performance have revealed a significant relationship. The findings of the current study are consistent with those of Ogbanna and Harris [6] who found positive relationship between supportive and participative leadership styles with performance. These findings further support the idea of supportive leader behaviour is expected to increase performance especially under the stressful or ambiguity conditions [82]. This study also confirms that organizational performance can be gained by increasing subordinate involvement and commitment under the participative leader behaviour [82]. The relationship between mechanic based leadership (instrumental leadership) and performance also accords with earlier studies [83]

This study has produced results which corroborate the findings of a great deal of the previous work in this field [84]. The results reveal that mechanistic-based leadership and humanistic-based leadership are significantly related to organizational culture.

As predicted, the associations between the leadership styles and organizational performance are mediated by organizational culture. In this study, for the humanistic-based leadership bureaucratic and competitive culture is partial mediator on this relationship, but surprisingly community culture is not significant. Moreover, community culture's mediating effect on humanistic-based leadership is stronger comparing to other mediating relationships. For the mechanic-based leadership, all culture types are partial mediators for the relation with performance. This is an empirical support for the relationship among leadership, culture and performance.

These results imply that, organizational culture and leadership are vital components of firm performance. If it is taught that firms have to achieve positive firm performance in the recent competitive business environment; firms have to give importance to organizational culture and leadership.

9. Limitations and Future Research

This study has its own limitations. First, in this study only three leadership styles have been examined. In future investigations, it might be possible to use different leadership types such as transformational, servant, spiritual and charismatic leadership. And four culture types should be investigated due to their association with the mentioned leadership types.

Secondly, this study only focused on the link between culture, leadership and performance. Future research should include individual outcomes such as employee satisfaction, commitment and creativity.

Lastly, the study was conducted in Turkey. Future research should focus on exploring this topic in different national cultures and across different types of organizations.

References

[1] Jiang X (2008) "The determinants and trends of China's exportable structure" China Economic J., Vol. 1, No. 2, July 2008, 191–202

[2] Certo, S.C, Certo S.T (2009), "Modern Management Concepts and Skills" Pearson Int.Ed.

[3] Denison, D R.; Mishra, Aneil K. (1995), "Toward a Theory of Organizational Culture and Effectiveness" *Organization Science*, Mar/Apr, Vol. 6 Issue 2, p204-223,

[4] Barney J. B. (1986), "Organizational Culture: Can It Be a Source of Sustained Competitive Advantage?" Academy of Management Rev. Vol. 11. No. 3. 656-665.

[5] Schein, E. H., (2004), Organizational Culture and Leadership, 3th ed., John Wiley & Sons.

[6] Ogbonna E. and Harris C. L. (2000), "Leadership style, organizational culture and performance: empirical evidence from UK companies," *Int. J, of Human Resource Management*, 11:4 August 2000 766-788.

[7] Howell, J. M., & Avolio, B. J. (1993), "Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated business-unit performance" *J. of Applied Psyc.*, 78, 891–902.

[8] Huang X., I. Joyce, A. Lu, Y. Gong, (2010), "Does participative leadership enhance work performance by inducing empowerment or trust? The differential Effects on Managerial and Non-managerial Subordinates", *J. of Organizational Behavior*, 31, 122–143.

[9] Hofstede G (2001), Culture's Consequences Comparing Values, Behaviors, Institutions, and Organizations Across Nations, Sage Pub.

[10] House R. (2004), Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies, Sage Pub.

[11] Trice, H. M.; Beyer, J. M. (1991), Cultural Leadership in Organizations, Organization Science, Vol. 2 Issue 2, p149-169.

[12] Amabile, T.M., Schatzel, E.A., Moneta, G.B., & Kramer, S.J. (2004), "Leader behaviors and the work environment for creativity: Perceived leader support" *Leadership Quarterly*, 15(1), 5-32.

[13] Masadeghrad, A.M. (2003), The Role of Participative Management (Suggestion System) in Hospital Effectiveness and Efficiency, *Research in Medical Sciences*, Isfahan, 8(3), 85-9.

[14] Yukl, G. (2002), Leadership in Organizations, 5th ed., Englewood Cliffs, NJ: Prentice-Hall.

[15] Brown, B.B. (2003), Employees' Organizational Commitment and Their Perception of Supervisors' Relations-Oriented and Task-Oriented Leadership Behaviors, Virginia Polytechnic Inst. and State Uni.

[16] Rad, A.M.M., & Yarmohammadian, M.H. (2006), "A Study of Relationship Between Managers' Leadership Style and Employees' Job Satisfaction", *Leadership in Health Services*, 19 (2), 11 – 28.

[17] Ismail A., N. F.A. Zainuddin, Z. Ibrahim, (2010), "Linking Participative and Consultative Leadership Styles to Organizational Commitment As an Antecedent of Job Satisfaction", *Unitar E-Journal*, Vol. 6, No. 1.

[18] Yousef, D. A. (2000), "Organizational Commitment: A Mediator of The Relationships of Leadership Behavior with Job Satisfaction and Performance in A Non-Western Country", *J. of Managerial Psyc.*, 15(1), 6-24.

[19] Coulter, M., & Robbins, S.P. (2008), Management, Malaysia: Prentice Hall.

[20] Noe, R.A., Hollenbeck, J.R., Gerhart, B.N., Hollenbeck, J.R., Barry, G., & Wright, P.M. (2007), *Human Resource Management: Gaining a Competitive Advantage*, New York: McGraw-Hill Companies.

[21] Avolio B.J., Zhu W., Koh W. & Bhatia P. (2004), "Transformational Leadership and Organizational Commitment: Mediating Role of Psychological Empowerment and Moderating Role of Structural Distance", *J. of Organizational Behaviour*, 25, 951-968.

[22] Berson, Y., & Avolio, J. (2004), "Transformational Leadership and The Dissemination of Organizational Goals: A Case Study of A Telecommunication Firm", *The Leadership Quarterly*, 15(5),625-646.

[23] Mondy, R.W. (2009), Human resource management, New York: Prentice-Hall.

[24] Bass, B. M. (1985), Leadership and Performance Beyond Expectations, New York: The Free Press.

[25] Burns, J. M. (1978), Leadership, New York: Harper & Row.

[26] Yukl, G., (1999), "An Evaluation of Conceptual Weaknesses in Transformational and Charismatic Leadership Theories", *Leadership Quarterly*, 10(2), 285–305..

[27] Bass, B. M., & Avolio, B. J. (1990), The multifactor leadership questionnaire, Palo Alto, CA: Consulting Psychologists Press.

[28] Tosi, H. J. 1982, "Toward A Paradigm Shift In The Study Of Leadership", In J. G. Hunt, U. Sekaran, & C. A. Schriescheim (Eds.), *Leadership: Reyond Establishment Views*, Carbondale: Southern Illinois Uni. Press.

[29] Lowe, K. B., Kroeck, K. G., Sivasubramaniam, N. (1996), "Effectiveness Correlates of Transformational and Transactional Leadership: A meta-analytic Review of the MLQ literature", *Leadership Quarterly*, 7: 385-425.

[30] Waldman, D. A., G. Ramirez, R. House, P. Puranam, (2001), "Does Leadership Matter? Ceo Leadership Attributes and Profitability under Conditions of Perceived Environmental Uncertainty", *Academy of Management J.*, Vol. 44, Nn. 1, 1:14-143.

[31] House, J. S. (1981), Work Stress and Social Support, Reading, MA: Addison-Wesley Publishing.

[32] Rafferty A. E., M. A. Griffin, (2006), "Refining Individualized Consideration: Distinguishing Developmental Leadership and Supportive Leadership", J. of Occupational and Organizational Psyc., 79, 37–61.

[33] Jong, P.J de., & Hartog, D.N.D. (2007), "How Leaders Influence Employees' Innovative Behaviour", *European J. of Innovation Management*, 10, 41-64.

[34] Barnard, C. I. (1938), The Functions of the Executive. Cambridge, MA: Harvard Uni. Press.

[35] Bass, B. M. (1990), Bass & Stogdill's Handbook of Leadership: Theory, Research, & Managerial Applications, NY: The Free Press

[36] Goffee, R., Jones, G. (1999), İnsanlar Liderliğinize Ne Diye Gerek Duysun?, (çev. ElHüseyni). İstanbul: MESS.

[37] Hood, J. N. (2003), "The Relationship of Leadership Style and CEO Values to Ethical Practices in Organizations", *J. of Business Ethics*, 43(40), 263-273.

[38] Kouzes, J., & Posner, B. (2002), The Leadership Challenge, San Francisco, CA: Jossey-Bass.

[39] McKee, D. (2003), Spirituality and Marketing: An Overview of the Literature, In R. A. Giacalone, & C. L.

[40] Verschoor, C. C. (2006), "Strong Ethics is a Critical Quality of Leadership", Strategic Finance, 87(7), 19.

[41] Karadağ E., (2009), "Spiritual Leadership and Organizational Culture: A Study of Structural Equation Modeling", *Educational Sciences: Theory & Practice*, 9 (3), 1391-1405.

[42] Scandura, TA, Von Glinow, MA & Lowe, KB (1999), 'When East meets West: Leadership "best practices" in the United States and Middle East', in WH Mobley (ed) Advances in Global Leadership, vol. 1, pp. 235-248.

[43] Peterson M. F. & Smith P (2000), Sources of Meaning, Organization and Culture: Making Sense of Organizational Events. Handbook of Organizational Culture and Climate, Thosands Oak Sage, p101-116.

[44] Schein, E. H., (1985), Organizational Culture and Leadership, 3th ed., John Wiley & Sons.

[45] Bodinson G. W (2005), Change Healthcare Organizations Good to Great Quality Progress Quality Progress November 2005 pp22-33

[46] Kilmann, R. H., Sexton M. J., Serpa R. (1985), Gaining Control of the Corporate Culture, San Francisco: Jossey-Bass.

[47] Bass, B. M. (1981), Stogdill's Handbook of Leadership (Revised and Expanded Edition), New York: The Free Press.

[48]Tsui, Anne S., Zhi-Xue Zhang, Hui Wang, Katherine R. Xin, and Joshua B.Wu (2006), "Unpacking The Relationship Between CEO Leadership Behavior and Organizational Culture", *The Leadership Quarterly*, 17, pp. 113-137.

[49] Van de Vliert, Evert; Smith, Peter B. (2004), "Leader Reliance on Subordinates across Nations That Differ In Development and Climate", *Leadership Quarterly*, Vol. 15 Issue 3, p381-403, 23p;

[50] Jung, Dong I.; Avolio, Bruce J. (1999), "Effects of Leadership Style and Followers' Cultural Orientation on Performance in Group and Individual Task Conditions", *Academy of Management J.*, Vol. 42 Issue 2, p208-218, 11p.

[51]Pettigrew, A. (1979), "On Studying Organizational Cultures," Administrative Science Quart., 24, 570-581.

[52]Pfeffer, J. (1981), Management as Symbolic Action: The Creation and Maintenance of Organizational Paradigms, in Research in Organizational Behavior, B. M. Staw and L. L. Cummings (Eds.), 3, 1-52, Greenwich, CT: JAI Press.

[53] House R. J., M. L. Baetz (1979), *Leadership: Some Empirical Generalizations and New Research Directions*, in Research in Organizational Behavior, B. M. Staw (Ed.), 1, 341-423, Greenwich, CT: JAI Press.

[54] House R. J., J. V. Singh (1987), "Organizational Behavior: Some New Directions for I/O Psychology," *Annual Rev. of Psyc.*, 38, 669-718.

[55] Yukl, G., (1981), Leadership in Organizations, Englewood Cliffs, NJ: Prentice-Hall.

[56] Deal T. E., Kennedy A. A. (1982), Corporate Cultures: The Rites and Rituals of Corporate Life, Reading MA: Addison-Wesley.

[57] Hennessey J.T. (1998), "Reinventing government: Does leadership make the difference?", *Public Admin. Rev.* Volume: 58 Issue: 6 Pages: 522-532.

[58] Baridam, D. M., & Nwibere, B. M. (2008), "Understanding and Managing Organizational Behaviours", Sherbrooke Associates, Port Harcorut

[59] Deshpande R & Webster F. (1989), "Organizational Culture and Marketing: Defining the Research Agenda", J. of Marketing, Vol. 53 3-15.

[60] Deshpande R, Farley J. U, Webster, Jr. F. (1993), "Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrad Analysis", J. of Marketing Vol. 57, 23-27 Quadrad.

[61] Yılmaz C. Ergun E. (2008), "Organizational Culture and Firm Effectiveness: An Examination of Relative Effects of Culture Traits and the Balanced Culture Hypothesis in an Emerging Economy", *J. of World Business*, 43, 290-306

[62] Jarnagin, C, Slocum Jr., John W. (2007), "Creating Corporate Cultures through Mythopoetic Leadership", *Organizational Dynamics*, Vol. 36 Issue 3, p288-302.

[63] Day G. S. and Nedungadi P. (1994), "Managerial Representations of Competitive Advantage", J. of Marketing, 47, 79-89.

[64] Denison D. R. (1990), Corporate Culture and Organizational Effectiveness, N. Y.:Wiley

[65] Birnbaum, Robert (1988), How Colleges Work, The Cybernetics of Academic Organization and Leadership, San Francisco: JosseyBass Inc.

[66]. Bergquist, William H., The Four Cultures of the Academy, San Francisco: Jossey-Bass Inc.

[67] Cohen, M. D.; March, J G.; Olsen, J. P. (1972) A Garbage Can Model of Organizational Choice. Administrative Science Quarterly, Mar, Vol. 17 Issue 1, p1-25, 25p

[68] ASHE Higher Education Report ,(2005), Understanding Institutional Culture, John Willey & Sons. Inc.

[69] Cameron, K. S., & Quinn, R. E. (1999). Diagnosing and Changing Organizational Culture: Based on The Competing Values Framework, Reading, MA: Addison-Wesley.

[70] Henri J. F. (2006) Organizational culture and performance measurement systems Accounting, Organizations and Society, 31, 77-103

[71] Tharp, B. M. (2010), *Four Organizational Culture Types*, Harwoth Organizational Culture White Paper, http://www.haworth.com/en-us/Knowledge/Workplace-Library/Documents/Four-Organizational-Culture-Types.

[72] Chan Janet B. L., (1997), Changing Police Culture: Policing in a Multicultural Society, Cambridge Uni. Press.

[73] Allame, S M; Asgarnejad; Tavakoli, Yasin S; Shokrani, Sayed Ahmad R (2011), "Effect of Organizational Culture on Success of Knowledge Management System's Implementation" (Case Study: Saderat Bank in Isfahan province) *Interdisciplinary J. of Contemporary Research in Business*, Vol. 2 Issue 9, p321-346, 26p.

[74] Peters T. Waterman R. (1982), In Search of Excellence, N. Y.: Random House.

[75] Ezirim C. B. Nwibere B. M Emecheta B.C. (2010), "Organizational Culture and Performance: The Nigerian Experience" *Int. J. of Business and Public Administration*, Volume 7, Number 1.

[76] House, R. J. ve Dessler, G. (1974), "The Path-Goal Theory of Leadership: Some Post Hoc and a Priori Tests", Hunt, J. G.

And Larson, L. L. (Der.), Contingency Approaches to Leadership, Carbondale, IL: Southern Illinois Uni. Press.

[77] Fuentes M., Albacete-Saez Carlos A., Mar Llorens-Montes F. J., "The impact of environmental characteristics on TQM principles and organizational performance", Faculty of Economics and Business, Uni. of Granada.

[78] Shams-ur Rahman, Philip Bullock (2005), "Soft TQM, Hard TQM and Organisational Performance Relationships: An Empirical Investigation", *Omega*, 33, 73 – 83.

[79] Quinn, R.E. (1988), Beyond Rational Management, San Francisco: Jossey-Bass.

[80] Martin, J., C. Siehl (1983), "Organizational Culture and Counterculture: An Uneasy Symbiosis", *Organizational Dynamics*, 12, 52-65.

[81] Lowe, K. B., Kroeck, K. G., Sivasubramaniam, N. (1996), "Effectiveness Correlates of Transformational and Transactional Leadership: A Meta-Analytic Review of The MLQ Literature", *Leadership Quarterly*, 7, 385-425.

[82] House, R. J (1996), "Path-Goal Theory of Leadership: Lessons, Legacy, And a Reformulated Theory", *Leadership Quarterly*, Vol. 7 Issue 3, p323, 30p.

[83] Rowold J, Rohmann A. (2009), "Transactional Leadership Styles, Followers' Positive and Negative Emotions, and Performance in German Nonprofit Orchestras" *Non-profit Management & Leadership*, vol. 20, no. 1.

[84] Bakan I. (2009), Liderlik Tarzlan ile Örgüt Kültürü Türleri Arasındaki Ilişkiler: Bir Alan Çalişmasi, TİSK Akademi.