Organizational Culture and Quality Management (ISO/9001) Case Study: Tehran Universities Employees

Mehrdad Bozorgi-Nezhad[1*], Seyyed Javad Mosavi[2], Sajjad Salehi-Kordabadi[3]

[1,2]Researcher of Institute Culture, Art and Architect, Academic Center for Education,
Culture and Research (Iran)
[3]Department of Public Management, Science and Research Branch, Islamic Azad University -Tehran - Iran

ABSTRACT

Based on previous empirical studies on Iran organizations which have achieved ISO 9001 certification, it is obvious that after least six months of its register there is not significant changes in quality indicators. In quality management, there are a lot of organizations that not successful to reach expectation goals of the implementation quality management they do not enough attention to organizational culture. There is a total agreement that during the implementation of quality management, organizational culture must be fully adhere. Major problem focused in this article is the low effectiveness of ISO 9001quality management and the effect of organization culture on quality management. The aim of this paper is to identify the relationship between types of organizational culture and components of ISO 9001 quality management. Also, it try to help managers for understanding the organizational cultural that is more suitable in the successful implementation of ISO 9001 quality management. This means that for the successful implementation of Iso9001 quality management a specific culture is more useful or a combination of different types of organizational culture. In this research, we used field research technique and for gathering data collection used questionnaires. Statistical population was employees of Tehran universities. Then, we distributed 50 questionnaires in each university and finally 432 questionnaires returned. Also, method of research was correlation and for analyzing, we used spss software. Results indicated that there are different relationships between components of ISO 9001quality management and types of organizational culture. It shows that the combination of different types of organizational cultures is more useful than certain type of organizational culture.
KEYWORDS: Organizational Culture, ISO 9001, Quality Management, University.

INTRODUCTION

Based on International Organization for Standardization (2011) perspective quality management means monitoring the process of production and service delivery for ensure that goods or services is desire by customer or designer. ISO 9000 standards are widely recognized in quality management (Lee et al., 2009). ISO 9000 standards to draw lines to guide the organizations that they learcn how can provide some systems for quality management of products and services (Bryden , 2004). Previous researches suggests that the ISO 9000 quality management brings many benefits to organizations (Lo and Chang, 2007). Many articles has been written about the effect of quality management on organizational performance. Most papers have acknowledged that there is a positive relationship between quality management and organizational performance, however, quality management do not lead to satisfactory results in all cases (Sila, 2007; Gijo and Rao, 2005; Szeto andTsang, 2005; Ahire and Ravichandran, 2001). Based on field studies from 35 organizations who have achieved ISO 9001 certification it is obvious that after least six months of its register there is not significant changes in quality indicators. This means that quality management process was not effective and because of this the low effectiveness of quality management is the main problem in this article. Among several factors, each as a key factor in determining success is the quality of management, organizational culture among these categories are often placed at the top of the list (Prajogo, 2005).

The aims of this paper is to identify the relationship between types of organizational culture and components of ISO 9001 quality management. Quality management divided quality assurance and quality control. Among the standards of ISO 9000, ISO 9001 is about quality assurance that is composed of 8 elements. In 2008 a new edition of ISO 9001 standards was presented that we used this version in this article. In the present article for measuring the organizational culture used Queen and Spreitzer (1991) model. Also, the relationships between 4 types of organizational culture and 8 elements of quality management studied. In this paper we examine four hypotheses. In the first hypothesis we sought to measure group culture and components of quality management, second hypothesis is developed to measure developmental culture and components of quality management, third hypothesis try to evaluate the relationship between rational culture and components

of quality management and finally, in the fourth hypothesis, we measured hierarchical cultures and components of quality management.

LITERATURE REVIEW

1) Organizational culture

Numerous definitions can be found in the specialised management literature for the term "organizational culture". However, there has not yet been any definition agreed by consensus and commonly accepted by all authors (Sanchez-Canizares et al., 2007). Culture is a set of values, beliefs, common understanding, thinking and norms for behavior that are shared by all members of a society (Erkutlu, 2011). Culture provides guidance to behaviors in the society, in apparent and sometimes unnoticeable ways; and it profoundly influences your decision making (Hofstede, 2001). Organizational culture is generally seen as a set of key values, assumptions, understandings, and norms that is shared by members of an organization and taught to new members as correct (Daft, 2005). It is argued that organizational culture may be the critical key that managers can use to direct the course of their firms (Yiing and Ahmad, 2009). The same understanding that applies to societies can be well applied to management science. Organizations are quite similar to societies and communities in the sense that they are constituted by a group of people who distinguish themselves by clear boundaries from other work groups. In an organization, culture encompasses the values and norms shared by members of a social unit (Schein, 1990). These values and norms indicate correct ways of relating to others (Schein, 1990). Cultural values are in turn reflected in actual behavioral patterns.

Although a number of typologies, categorizations and instruments for measuring organizational culture exist, there is little agreement on which ones are more appropriate or superior to the other. Quinn and Spreitzer's competing value framework (Quinn and Spreitzer, 1991) is used extensively for organizational culture measurement. According to this model, there are competing tension about flexibility and control and focus on internal organization and focus on external environment. This gives rise to four types of organizational culture. Group Culture- places a great deal of emphasis on flexibility and internal focus, and stresses cohesion, morale, and human resources development as criteria for effectiveness. Developmental Culture- emphasizes flexibility and external focus, and stresses readiness, growth, resource acquisition, and external support. Rational Culture-emphasizes control and an external focus, and view planning, goal setting, productivity and efficiency as criteria of effectiveness. Hierarchical Culture - emphasizes control and an internal focus, and stresses the role of information management, communication, stability and control (Kumar et al., 2007). The organizations with emphasis on control and internal focus result in a more inward looking efficiency driven organizations. In such a system cost for sharing mistakes should be high. Flexibility allows experimentation and external focus need taking initiatives. Experimentation and initiatives are promoted if mistakes are tolerated. It is expected that hierarchical culture should not support mistake sharing by employees.

2) Quality management

The ISO 9000 family addresses various aspects of quality management and contains some of ISO's best known standards. The standards provide guidance and tools for companies and organizations who want to ensure that their products and services consistently meet customer's requirements, and that quality is consistently improved. Quality in standards of ISO 9000 is define achieve to customer satisfaction from provid their Needs and expectations in an organizational environment committed to continuously increase efficiency and effectiveness (Amiran, 2002). ISO 9000 establishes the requirements for what the company must do to manage its quality related process (Briscoe et. al, 2005). Standards of ISO 9000 are widely recognized in quality management (Lee et al., 2009). There are many standards in the ISO 9000 family, including:
ISO 9001:2008 - sets out the requirements of a quality management system;
ISO 9000:2005 - covers the basic concepts and language;
ISO 9004:2009 - focuses on how to make a quality management system more efficient and effective;
ISO 19011 - sets out guidance on internal and external audits of quality management systems.
In this article we just disscuss about ISO 9001:2008. ISO 9001:2008 sets out the criteria for a quality management system and is the only standard in the family that can be certified to (although this is not a requirement). It can be used by any organization, large or small, regardless of its field of activity. In fact ISO 9001:2008 is implemented by over one million companies and organizations in over 170 countries. Using ISO 9001:2008 helps ensure that customers get consistent, good quality products and services, which in turn brings many business benefits. As explained in the website of ISO, the latest version of the standard, ISO 9001:2008, and its predecessor, ISO 9001:2000, is based on eight quality management principles namely:
1) leadership;
2) customer focus;
3) process approach;
4) involvement of people;

5) continual improvement;
6) system approach to management;
7) factual approach to decision making; and
8) mutually beneficial supplier relationships (Lee et al., 2009; ISO, 2008).

3) Organizational culture and quality management

There are several organizations in quality management topics that because of ignoring the cultural factors that have not been able to achieve the expected goals of the implementation of quality management (Prajogo and McDermott, 2005). Therefore, there is a complete agreement that organizational culture must be fully concern in the implementation of quality management (Skerlavajetal, 2007). In several studies, it was stated that quality management can changes the organizational culture and on the other hand, as other research, which is the organizational culture effect on quality management and its results (Prajogo, 2005). Overall, most studies claimed that organizational culture determines the results of quality management (Maull et al., 2001; McNabb and Septic, 1995; Westbrook and Utley, 1995). Thus, in this research we try to study the relationship between organizational culture and quality management. Another important point to note here that we got from the review articles is rarely organizations may reflect a kind of special culture in the organization and usually reflect a combination of cultures in organizations (McDermott and Stock, 1999; Quinn and Spreitzer, 1991). Therefore, with the help of literature we can say that organizational culture will help to better implementation of ISO 9001 quality management as Figure 1.
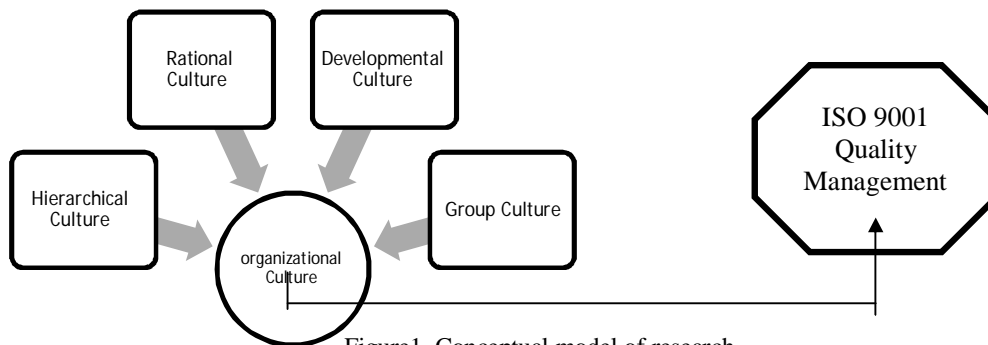

Figure1. Conceptual model of research

According to conceptual model of research, hypotheses based on different model of organizational caulture and eight quality management principles are:

1) Group culture: Emphasis on flexibility and internal cohesion and its strategy is oriented towards the development of human resources. In group culture top managers focus on protection, participation, encouragement and empowerment of employees (Denison and Spreitzer, 1991). Thus, sub-hypotheses of this section are:

1-1) There is a meaningful relationship between group culture and leadership.
1-2) There is a meaningful relationship between group culture and customer focus.
1-3) There is a meaningful relationship between group culture and process approach.
1-4) There is a meaningful relationship between group culture and involvement of people.
1-5) There is a meaningful relationship between group culture and continual improvement.
1-6) There is a meaningful relationship between group culture and system approach to management.
1-7) There is a meaningful relationship between group culture and factual approach to decision making.
1-8) There is a meaningful relationship between group culture and mutually beneficial supplier relationships.

2) Developmental culture:

In developmental culture emphasized on the high degree of flexibility and change based on external environment. Organizations that have focused on developmental cultural use some strategies such as creativity, acquisition, new resources and development of new markets (Cameron and Quinn, 1999). Therefore, sub-hypotheses of realted to developmental culture are:

2-1) There is a meaningful relationship between developmental culture and leadership.
2-2) There is a meaningful relationship between developmental culture and customer focus.
2-3) There is a meaningful relationship between developmental culture and process approach.
2-4) There is a meaningful relationship between developmental culture and involvement of people.
2-5) There is a meaningful relationship between developmental culture and continual improvement.

2-6) There is a meaningful relationship between developmental culture and system approach to management.

2-7) There is a meaningful relationship between developmental culture and factual approach to decision making.

2-8) There is a meaningful relationship between developmental culture and mutually beneficial supplier relationships.

3) Rational culture:

Rational culture oriented toward the outside environment of organization but focuses on control and stability. Organizations that have rational culture emphasized on competition and true sense of the goals. Also, they are emphasized on strategies that are often used in organizations based on performance and control of the production of competitive advantages and high efficiency (Denison and Spreitzer, 1991). So, sub-hypotheses of realted to rational culture are:

3-1) There is a meaningful relationship between rational culture and leadership.

3-2) There is a meaningful relationship between rational culture and customer focus.

3-3) There is a meaningful relationship between rational culture and process approach.

3-4) There is a meaningful relationship between rational culture and involvement of people.

3-5) There is a meaningful relationship between rational culture and continual improvement.

3-6) There is a meaningful relationship between rational culture and system approach to management.

3-7) There is a meaningful relationship between rational culture and factual approach to decision making.

3-8) There is a meaningful relationship between rational culture and mutually beneficial supplier relationships.

4) Hierarchical culture:

Hierarchical culture emphasizes stability, control and internal focus. This culture is features by works by internal efficiency and adherence to law (Mcdermoot and Stock , 1999). Thus:

4-1) There is a meaningful relationship between hierarchical culture and leadership.

4-2) There is a meaningful relationship between hierarchical culture and customer focus.

4-3) There is a meaningful relationship between hierarchical culture and process approach.

4-4) There is a meaningful relationship between hierarchical culture and involvement of people.

4-5) There is a meaningful relationship between hierarchical culture and continual improvement.

4-6) There is a meaningful relationship between hierarchical culture and system approach to management.

4-7) There is a meaningful relationship between hierarchical culture and factual approach to decision making.

4-8) There is a meaningful relationship between hierarchical culture and mutually beneficial supplier relationships.

RESEARCH METHODS

Method: This study is a survey research, descriptive and applicable.

Measures: Questionnaire in this study is the main tool for data collection. Data collection tools in this study are two separate questionnaires for assessing organizational culture and ISO 9001 quality management. Organizational culture questionnaire design by Quinn and Spreitzer (1991) which also includes the 16 questions. Also, ISO 9001 quality management questionnaire design by Lee et al., (2009) and ISO (2008) which also includes the 26 questions. The validity of the questionnaire was approved by the previous researches. Fortheremore, to test the questionnaires reliability we used Cronbach's α scores for each variable as shown in Table1.

Table1. Cronbach's α Scores			
Variables	Dimensions	Number of items	Cronbach α
Organizational Culture	Group culture	4	0.90
	Developmental culture	4	0.78
	Rational culture	4	0.81
	Hierarchical culture	4	0.86
	Total Dimensions	20	0.89
ISO 9001 Quality Management	Leadership	3	0.85
	Customer focus	3	0.78
	Process approach	6	0.83
	Involvement of people	3	0.75
	Continual improvement	2	0.79
	Approach to management	3	0.79
	Approach to decision making	3	0.79
	Mutually beneficial supplier relationships	3	0.73
	Total Dimensions	26	0.84

In addition, descriptive statistics as shown in Table2.

Table2. Sescriptive Statistics of Variables		
Variables	**Mean**	**Std. Deviation**
Group culture	3.66	0.819
Developmental culture	3.61	0.692
Rational culture	3.45	0.780
Hierarchical culture	3.79	0.715
Leadership	3.75	0.825
Customer focus	3.91	0.684
Process approach	3.43	0.830
Involvement of people	3.53	0.872
Continual improvement	3.47	0.882
Approach to management	3.60	0.792
Approach to decision making	3.54	0.878
Mutually beneficial supplier relationships	3.66	0.732

Statistical population and sample: The statistical populations of this study are the employees of public universities of Tehran (Education department). They are 500 employees and to achieve this sample size based on convenience sampling distributed 520 questionnaires and eventually 451 questionnaires returned that after removing useless questionnaires 432 questionnaires were used for statistical analysis. Method of research was corelation and for analysing, we used spss software.

RESULTS

In the first section we have these hypotheses:

1-1) There is a meaningful relationship between group culture and leadership.
1-2) There is a meaningful relationship between group culture and customer focus.
1-3) There is a meaningful relationship between group culture and process approach.
1-4) There is a meaningful relationship between group culture and involvement of people.
1-5) There is a meaningful relationship between group culture and continual improvement.
1-6) There is a meaningful relationship between group culture and system approach to management.
1-7) There is a meaningful relationship between group culture and factual approach to decision making.
1-8) There is a meaningful relationship between group culture and mutually beneficial supplier relationships.

Based on the above relations, the hypotheses was given test by Pearson correlation due attention to Table3.

Table3. Correlations test of section 1 hypotheses		
	Leadership	
Group Culture	Pearson Correlation	0.41**
	Sig. (2-tailed)	.001
	N	432
	Customer focus	
	Pearson Correlation	58.4**
	Sig. (2-tailed)	.076
	N	432
	Process approach	
	Pearson Correlation	0.49**
	Sig. (2-tailed)	.007
	N	432
	Involvement of people	
	Pearson Correlation	0.40**
	Sig. (2-tailed)	.006
	N	432
	Continual improvement	
	Pearson Correlation	0.55**
	Sig. (2-tailed)	.079
	N	432
	System approach to management	
	Pearson Correlation	0.48**
	Sig. (2-tailed)	.007
	N	432
	Factual approach to decision making	
	Pearson Correlation	0.59**
	Sig. (2-tailed)	.072
	N	432
	Mutually beneficial supplier relationships	
	Pearson Correlation	0.60**
	Sig. (2-tailed)	.009
	N	432

The results of statistical tests of these hypotheses (Table3) indicate that in a significant percentage there is a significant relationship between the group culture and leadership, involvement of people, process approach, system approach to management, and mutually beneficial supplier relationships. About other dimensions of ISO 9001 quality management based on amount of Sig. we can say that there is not a significant relationship between the group culture and sactual approach to decision making, continual improvement, and customer focus.

In the tow section we have these hypotheses:
2-1)   There is a meaningful relationship between developmental culture and leadership.
   2-2) There is a meaningful relationship between developmental culture and customer focus.
   2-3) There is a meaningful relationship between developmental culture and process approach.
   2-4) There is a meaningful relationship between developmental culture and involvement of people.
   2-5) There is a meaningful relationship between developmental culture and continual improvement.
   2-6) There is a meaningful relationship between developmental culture and system approach to management.
   2-7) There is a meaningful relationship between developmental culture and factual approach to decision making.
   2-8) There is a meaningful relationship between developmental culture and mutually beneficial supplier relationships.
Based on these relations, the hypotheses was given test by Pearson correlation due attention to Table4.

Table4. Correlations test of section 2 hypotheses		
	Leadership	
Developmental Culture	Pearson Correlation	0.49**
	Sig. (2-tailed)	.072
	N	432
	Customer focus	
	Pearson Correlation	0.43**
	Sig. (2-tailed)	.001
	N	432
	Process approach	
	Pearson Correlation	0.47**
	Sig. (2-tailed)	.073
	N	432
	Involvement of people	
	Pearson Correlation	0.51**
	Sig. (2-tailed)	.079
	N	432
	Continual improvement	
	Pearson Correlation	0.61**
	Sig. (2-tailed)	.008
	N	432
	System approach to management	
	Pearson Correlation	0.53**
	Sig. (2-tailed)	.070
	N	432
	Factual approach to decision making	
	Pearson Correlation	0.63**
	Sig. (2-tailed)	.071
	N	432
	Mutually beneficial supplier relationships	
	Pearson Correlation	0.45**
	Sig. (2-tailed)	.079
	N	432

Based on the results of statistical tests (Table4) we can say that in a significant percentage there is a significant relationship between the developmental culture and customer focus, and continual improvement. There is not a significant relationship between the developmental culture and other dimensions of ISO 9001 quality management (leadership, process approach, involvement of people, system approach to management, factual approach to decision making, and mutually beneficial supplier relationships).

In the three section we have these hypotheses:
   3-1) There is a meaningful relationship between rational culture and leadership.
   3-2) There is a meaningful relationship between rational culture and customer focus.
   3-3) There is a meaningful relationship between rational culture and process approach.

3-4) There is a meaningful relationship between rational culture and involvement of people.
3-5) There is a meaningful relationship between rational culture and continual improvement.
3-6) There is a meaningful relationship between rational culture and system approach to management.
3-7) There is a meaningful relationship between rational culture and factual approach to decision making.
3-8) There is a meaningful relationship between rational culture and mutually beneficial supplier relationships.

Based on these relations, the hypotheses was given test by Pearson correlation due attention to Table5.

Table5. Correlations test of section 3 hypotheses		
	Leadership	
Rational Culture	Pearson Correlation	0.37**
	Sig. (2-tailed)	.001
	N	432
	Customer focus	
	Pearson Correlation	0.59**
	Sig. (2-tailed)	.001
	N	432
	Process approach	
	Pearson Correlation	0.25**
	Sig. (2-tailed)	.007
	N	432
	Involvement of people	
	Pearson Correlation	0.65**
	Sig. (2-tailed)	.006
	N	432
	Continual improvement	
	Pearson Correlation	0.53**
	Sig. (2-tailed)	.079
	N	432
	System approach to management	
	Pearson Correlation	0.22**
	Sig. (2-tailed)	.007
	N	432
	Factual approach to decision making	
	Pearson Correlation	0.45**
	Sig. (2-tailed)	.002
	N	432
	Mutually beneficial supplier relationships	
	Pearson Correlation	0.64**
	Sig. (2-tailed)	.076
	N	432

The results of statistical tests of these hypotheses (Table5) indicate that in a significant percentage there is a significant relationship between the rational culture and leadership, customer focus, process approach, involvement of people, system approach to management, and factual approach to decision making. About other dimensions of ISO 9001 quality management based on amount of Sig. we can say that there is not a significant relationship between the rational culture and continual improvement, and mutually beneficial supplier relationships.

In the four section we have these hypotheses:
4-1)   There is a meaningful relationship between hierarchical culture and leadership.
4-2) There is a meaningful relationship between hierarchical culture and customer focus.
4-3) There is a meaningful relationship between hierarchical culture and process approach.
4-4) There is a meaningful relationship between hierarchical culture and involvement of people.
4-5) There is a meaningful relationship between hierarchical culture and continual improvement.
4-6) There is a meaningful relationship between hierarchical culture and system approach to management.
4-7) There is a meaningful relationship between hierarchical culture and factual approach to decision making.
4-8) There is a meaningful relationship between hierarchical culture and mutually beneficial supplier relationships.

Based on these relations, the hypotheses was given test by Pearson correlation due attention to Table6.

Table6. Correlations test of section 3 hypotheses		
	Leadership	
Hierarchical Culture	Pearson Correlation	0.44**
	Sig. (2-tailed)	.072
	N	432
	Customer focus	
	Pearson Correlation	0.41**
	Sig. (2-tailed)	.072
	N	432
	Process approach	
	Pearson Correlation	0.26**
	Sig. (2-tailed)	.073
	N	432
	Involvement of people	
	Pearson Correlation	0.32**
	Sig. (2-tailed)	.079
	N	432
	Continual improvement	
	Pearson Correlation	0.64**
	Sig. (2-tailed)	.078
	N	432
	System approach to management	
	Pearson Correlation	0.51**
	Sig. (2-tailed)	.070
	N	432
	Factual approach to decision making	
	Pearson Correlation	0.29 **
	Sig. (2-tailed)	.072
	N	432
	Mutually beneficial supplier relationships	
	Pearson Correlation	0.54**
	Sig. (2-tailed)	.079
	N	432

The results of statistical tests of these hypotheses (Table6) indicate that in a significant percentage there is not a significant relationship between the hierarchical culture and dimensions of ISO 9001 quality management. Figure 2 shows the results of all hypotheses.
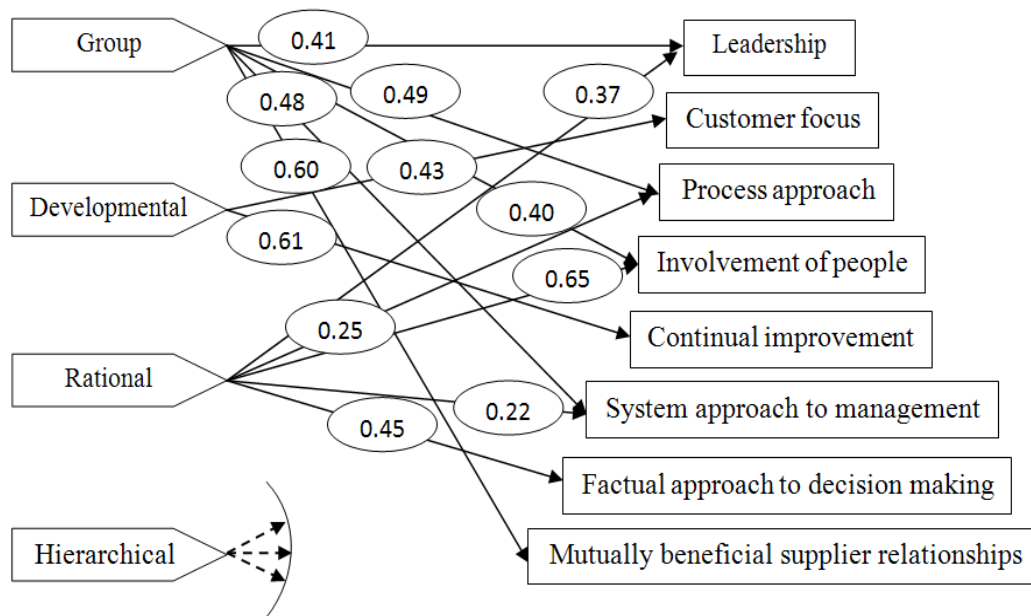

Figure 2: results of all hypotheses.

DISCUSSION

As was found with the help of data analysis group culture are associated with five dimensions of ISO 9001 standards (leadership, process approach, involvement of people, system approach to management, mutually beneficial supplier relationships). Developmental culture was connected to the two dimensions (customer focus and continual improvement). In developmental culture, continual improvement isn't the main purpose but organization can provide employee education and training to succeed in their jobs. Also, thete are relationships between rational culture six components of quality management (leadership, customer focus, process approach, involvement of people, system approach to management, factual approach to decision-making). Understanding customer and have a closely relation with customers are the main strategy of competitive advantage that is the root of rational culture. As is clear in Figure 2 there is not relations among hierarchical culture and quality management. As the model shows each dimensions of quality management was supported by different cultures. Finally, it is suggested that organizations for success in implementing of quality management need to provide freedom and autonomy for their employees and create some skills that employees were committed to be innovative and efficient and continuous improvement activities.

Conclusion

When specified that organizational culture was an important and influence criteria on the quality management, the number of quantitative research that study the relationship between organizational culture and quality management are very rare. In this paper, we try to understand the relationship among organizational culture and quality management by exploring the relationship between type of organizational culture and dimensions of quality management. Based on the results of paper, the different types of cultures are related to the various dimensions of quality management. Before the implementation of quality management in the organization the management needs to be awareness from the main culture that exist in organization. The results of this research can be guidance managers to design policies that can be easily adapted by the dimensions of quality management. Thus, create the suitable cultural environment is essential for complete support from various dimensions of quality management to enhance to increase the success implementation of quality management. It was found that the tendency of relationship between organizational culture and quality management is from organizational culture to dimensions of quality management. It means that organizational culture can affect the quality management. for the successful implementation of quality management in organizations is best to have a combination of cultural types. Basically, there are few organizations that have a kind of culture and cultural landscape in most organizations is composed of a variety of cultures. In total, we reach the conclusion that the combination of different cultures can perform better than a certain kind of culture. But more research is needed on how to balance the culture of the organization established and more importantly, how to keep the balance in the long term.

REFERENCES

Ahire, S. L.; Ravichandran, T.(2001),"An innovation diffusion model of TQM implementation", **IEEE Transactions on Engineering Management**, Vol. 48, No. 4, pp. 445-464.

Amiran, H. (2002),"Quality management systems", **Tadbir**, Vol. 13, No. 120, pp. 64-69.

Briscoe, J. A.; Fawcett, S. E.; Todd, R. H. (2005),"The implementation and impact of ISO 9000 among small manufacturing enterprises", **Journal of Small Business Management**, Vol. 43, No. 3, pp. 309-330.

Bryden, A. (2004),"Why standards matter", **The British Journal of Administrative Management**, No. January/February, pp. 28-29.

Cameron, K. S.; Quinn, R. E. (1999),"**Diagnosing and Changing Organizational Culture**", Addison Wesley, Reading , MA.

Daft, R.L. (2005),"**The Leadership Experience**", 3rd ed., Thomson-Southwestern, Vancouver.

Denison, D. R.; Spreitzer, G.M. (1991),"Organizational culture and organizational development", **Research in Organizational Change and Development**, No. 5, pp. 1–22.

Erkutlu, H. (2011),"The moderating role of organizational culture in the relationship between organizational justice and organizational citizenship behaviors", **Leadership & Organization Development Journal**, Vol. 32, No. 6, pp. 532-554.

Gijo, E.V.; Rao, T.S. (2005),"Six Sigma implementation—hurdles and more hurdles", **Total Quality Management**, Vol. 16, No. 6, pp. 721-725.

Hofstede, G. (2001),"**Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations**", Sage, Thousand Oaks, CA.

ISO (2008),"ISO 9000 principles: benefits and actions", available at: **www.iso.org/iso/en/iso9000-14000/understand/qmp.html**.

Kumar, M.; Jha, V.; Vaidya, S. D. (2007)," Empirical Investigation of Impact of Organizational Culture, Prosocial Behavior and Organizational Trust on Sharing Mistakes in Knowledge Management Systems", avaliable at: **http://www.pacis-net.org/file/2007/1325.pdf.**

Lee, P. K. C.; To, W. M.; Yu, B. T. W. (2009),"The implementation and performance outcomes of ISO 9000 in service organizations: An empirical taxonomy", **International Journal of Quality & Reliability Management**, Vol. 26 , No. 7, pp.646-662.

Lo, L. K.; Chang, D. S. (2007),"The difference in the perceived benefits between firms that maintain ISO certification and those that do not", **International Journal of Production Research**, Vol. 45, pp. 1881-1897.

Maull, R.; Brown, P.; Cliffe, R. (2001),"Organisational culture and quality improvement", **International Journal of Operations & Production Management**, Vol. 21, No.3, pp. 302-326.

Mcdermott, C. M.; Stock, G. N. (1999),"Organizational culture and advanced manufacturing technology implementation", **Journal of Operations Management**, No. 17, pp. 521–533.

McNabb, D. E.; Sepic, F.T. (1995),"Culture, climate, and total quality management: measuring readiness for change", **Public Productivity & Management**, Vol. 18 ,No. 4, pp. 369-385.

Prajogo, D. I.; Mcdermott, D. M. (2005),"The relationship between total quality management practices and organizational culture", **International Journal of Operations & Production Management**, Vol. 25, No. 11, pp. 1101-1122.

Quinn, R. E.; Spreitzer, G. M. (1991),"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**, No. 5, pp. 115-142.

Sanchez-Canizares, S. M.; Munoz, M. A.; Lopez-Guzman, T. (2007),"Organizational culture and intellectual capital: a new model", **Journal of Intellectual Capital**, Vol. 8, No. 3, pp. 409-443.

Schein, E.H. (1990),"Organizational culture", **American Psychologist**, Vol. 45, pp. 109-119.

Sila , I. (2007),"Examining the effects of contextual factors on TQM and performance through the lens of organizational theories: an empirical study", **Journal of Operations Management**, No. 25, pp. 83–109.

Skerlavaj, M.; Stemberger, M. I.; Skrinjar, R.; Dimovski, V. (2007),"Organizational learning culture the missing link between business process change and organizational performance", **International Journal of Production Economics**, No. 106, pp. 346–367.

Szeto , A.Y.; Tsang, A. H. (2005),"Antecedents to successful implementation type: relationships to effectiveness", **Research in Organizational Change and Development**, No. 5, pp. 23–58.

Westbrook, J. D.; Utley, D. R (1995),"TQM – the effect of culture on implementation", **Engineering Management Journal**, Vol. 7, No. 2, pp. 31-34.

www.iso.org/iso/iso_catalogue/management_and_leadership_standards/quality_management.htm

Yiing, L. H.; Ahmad, K. Z. B. (2009),"The moderating effects of organizational culture on the relationships between leadership behaviour and organizational commitment and between organizational commitment and job satisfaction and performance", **Leadership & Organization Development Journal**, Vol. 30, No. 1, pp. 53-86.