

An exploration study to find important factors influencing on multi-dimensional organizational culture

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CHRONICLE

Article history:
Received May 12, 2013
Received in revised format
25 June 2013
Accepted 4 August 2013
Available online
August 5 2013

Keywords:
Organizational culture
Factor analysis
Diversity in culture
Connection based culture
Integrated culture
Structure of culture

ABSTRACT

This paper presents an empirical investigation to find important factors influencing multi-dimensional organizational culture. The proposed study designs a questionnaire in Likert scale consists of 21 questions, distributes it among 300 people who worked for different business units and collects 283 filled ones. Cronbach alpha is calculated as 0.799. In addition, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Approx. Chi-Square are 0.821 and 1395.74, respectively. The study has implemented principal component analysis and the results have indicated that there were four factors influencing organizational culture including, diversity in culture, connection based culture, integrated culture and structure of culture. In terms of diversity in culture, sensitivity to quality data and cultural flexibility are the most influential sub-factors while connection based marketing and relational satisfaction are two important sub-factors associated with diversity in culture. The study discusses other issues.

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1. Introduction

Organizational culture plays an important role on the success of any organization since assuring continuous and desirable work outcomes of employees have strong relations with their commitment to their organizations (Wilkins & Ouchi, 1983). The highly dedicated employees to their organization are addicted to the firm's objectives when they adopt their organizational culture (Denison et al., 2004). In addition, leadership is essential for the organizational effectiveness, and the development and the changes of organizational culture. Acar (2012) explored the impacts of organizational culture and leadership styles on employees' commitment and reported some positive effects of leadership and organizational culture on the organizational commitment in context of logistics industry. Acar and Acar (2012), in other work, investigated the effects of organizational culture and innovativeness on

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business performance in healthcare industry and their research supported the positive effects of innovation and organizational culture on the business performance in context of healthcare industry.

Dawson et al. (2011) performed an investigation to find out attributes that are unique to hospitality organizations as well as the characteristics and values of an employee who could be successful in a work environment that exhibited this culture. This incorporates detecting whether a person is a fit to the culture of the hospitality industry. In order to detect the variables of hospitality culture, an extensive review of the literature and a panel of industry experts were executed. The items determined from both groups were implemented to establish the constructs for a scale called the Hospitality Culture Scale. Seven hundred and forty one hospitality professionals ranked the attributes and principal component analysis determined the influential factors for the organizational culture and personal attributes. These constructs included: management principles, customer relationships, job variety, job satisfaction, principles, propitiousness, leadership, risk taker, accuracy, and composure.

Ahmed et al. (2007) investigated the relationships between some of the key organizational factors and software product line performance of an organization. The results of the survey provided some empirical evidence and further supported the theoretical foundations that in order to institutionalize software product lines within an organization, organizational factors played an essential role. Mansor et al. (2012) identified the factors that are influencing the implementation of performance management system (PMS) in South East Asia. The study inspected organizational factors influencing PMS and adopted a quantitative approach using questionnaires distributed to 123 academics across a University in Malaysia. Factor analysis was performed using Principle Component Analysis (PCA) method to detect the construct validity of factors influencing PMS. They reported that three organizational factors influenced PMS and its effectiveness at a moderate level. Colley et al. (2013) performed an investigation to find out how various patterns of perceived organizational values were related to safety.

Güteryüz et al. (2008) investigated the effect of emotional intelligence and its dimensions on job satisfaction and organisational commitment of nurses. They examined the relationships among emotional intelligence, job satisfaction and organisational commitment of nurses and the mediating impact of job satisfaction between emotional intelligence and organisational commitment. According to Tsui et al. (2006), both the functionalist and the attribution perspectives supported a strong association between CEO leadership behavior and organizational culture. However, contingency perspective implies about the potential limits of the leader's ability to change or shape an organization's culture. They aimed for a deep understanding of when and why decoupling between CEO leadership behavior and organizational culture may happen. They examined this issue in a novel context, the People's Republic of China, where there was a large variance on leader discretion in various kinds of firms. They conducted two survey studies and an interview investigation to unpack the nature of the relationship. Their findings offered some insights on both leadership and institutional factors, which could account for the decoupling between CEO leadership behavior and organizational cultural values.

2. The proposed study

This paper presents an empirical investigation to find important factors influencing multi-dimensional organizational culture. The proposed study designs a questionnaire in Likert scale consists of 21 questions, distributes it among 300 people who worked for different business units and collects 283 filled ones. Cronbach alpha is calculated as 0.799. In addition, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Approx. Chi-Square are 0.821 and 1395.74, respectively. Since we plan to factor analysis and this method is sensitive to skewness of the data we first look at some of the basic statistics including the skewness of the data, which are summarized in Table 1.

Table 1
The summary of basic descriptive statistics

	N	Range	Minimum	Maximum	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q1	283	4	1	5	1.012	-1.191	.145	1.325	.289
Q2	283	4	1	5	.969	-.707	.145	.101	.289
Q3	283	4	1	5	.979	-.584	.145	.093	.289
Q4	283	4	1	5	1.054	-.621	.145	-.212	.289
Q5	283	4	1	5	.993	-.815	.145	.379	.289
Q6	283	4	1	5	.939	-.789	.145	.312	.289
Q7	283	4	1	5	1.115	-.653	.145	-.308	.289
Q8	283	4	1	5	1.038	-.550	.145	-.459	.289
Q9	283	3	2	5	.824	-.788	.145	-.005	.289
Q10	283	4	1	5	1.103	-.341	.145	-.615	.289
Q11	283	4	1	5	.975	-.748	.145	.024	.289
Q12	283	4	1	5	1.079	-.293	.145	-.567	.289
Q13	283	4	1	5	1.144	-.626	.145	-.524	.289
Q14	283	4	1	5	1.022	-.868	.145	.083	.289
Q15	283	4	1	5	1.220	.069	.145	-1.035	.289
Q16	283	4	1	5	1.165	-.314	.145	-.967	.289
Q17	283	4	1	5	1.029	-.333	.145	-.734	.289
Q18	283	4	1	5	1.086	-.403	.145	-.520	.289
Q19	283	4	1	5	1.129	.199	.145	-.849	.289
Q20	283	4	1	5	1.078	-.296	.145	-.781	.289
Q21	283	4	1	5	.977	-.521	.145	-.310	.289
Valid N (listwise)	285								

As we can observe, we need to remove the first question due to skewness issue and the rest of the survey has been accomplished based on the remaining 19 questions. Table 2 demonstrates the results of principal component analysis.

Table 2
The summary of principal component analysis

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.526	21.553	21.553	4.526	21.553	21.553	2.788	13.278	13.278
2	2.348	11.181	32.734	2.348	11.181	32.734	2.437	11.605	24.883
3	2.067	9.843	42.577	2.067	9.843	42.577	2.345	11.165	36.048
4	1.190	5.669	48.245	1.190	5.669	48.245	1.882	8.961	45.009
5	1.033	4.919	53.164	1.033	4.919	53.164	1.713	8.155	53.164
6	.932	4.438	57.602						
7	.876	4.172	61.774						
8	.822	3.913	65.687						
9	.744	3.545	69.232						
10	.683	3.251	72.483						
11	.671	3.195	75.678						
12	.662	3.150	78.829						
13	.614	2.926	81.754						
14	.598	2.847	84.602						
15	.590	2.810	87.412						
16	.546	2.600	90.012						
17	.463	2.204	92.216						
18	.439	2.092	94.308						
19	.434	2.068	96.377						
20	.410	1.950	98.327						
21	.351	1.673	100.000						

Next, we need to extract important components from the study of this paper. Fig. 1 demonstrates the summary of Scree plot.

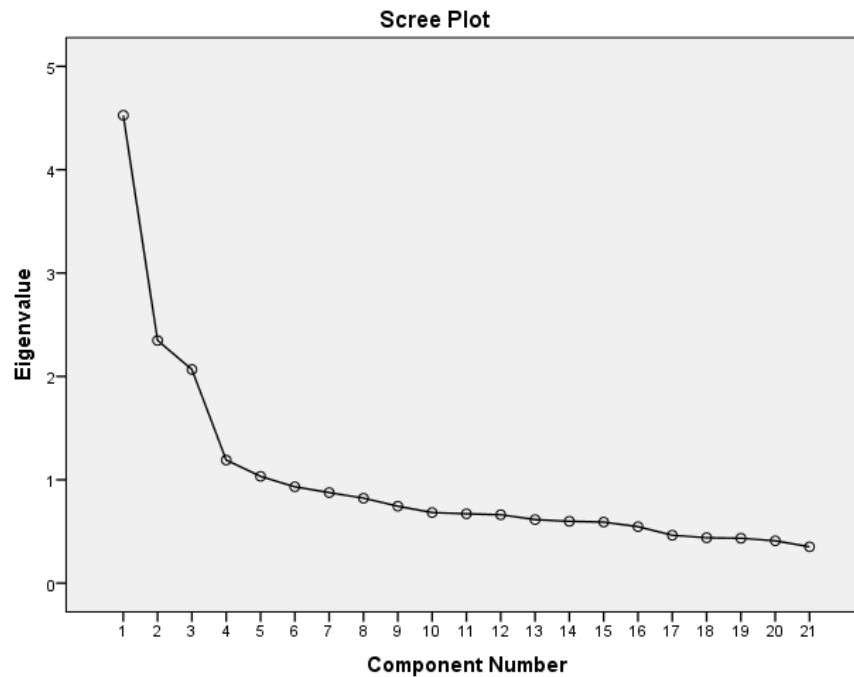


Fig. 1. The summary of Scree plot

As we can observe from the results of Fig. 1, there are four factors whose Eigenvalues are greater than one and, therefore, extract four factors, which are summarized in Table 3 as follow,

Table 3
The summary of factor analysis

Factor	Measurable variable	Weight	Eigenvalue	Variance	Accumulated
Diversity in culture	Sensitivity to quality data	0.708	2.788	13.278	13.278
	Cultural flexibility	0.700			
	Group culture	0.680			
	Hierarchy culture	0.644			
	Individual perception	0.549			
	Relational performance	0.437			
Connection based culture	Connection based marketing	0.698	2.437	11.605	24.883
	Relational satisfaction	0.625			
	Cultural consistency	0.563			
	Difference in organizational culture	0.425			
Integrated culture	Organizational consistency	0.789	2.345	11.645	36.045
	Inter-cultural coordination	0.673			
	Enterprise resource planning	0.564			
	Organizational environment	0.533			
	Coordination in various objectives	0.424			
Structure of culture	Values	0.762	1.882	8.961	45.009
	Gender	0.624			
	Innovation and risk	0.540			
	Leadership	0.407			

As we can observe from the results of Table 3, there are four factors associated with the proposed study including diversity in culture, connection based culture, integrated culture and structure of culture.

4. Discussion and conclusion

In this survey, we have performed an investigation on measuring the impact of various factors on multi-dimensional organizational culture in some Iranian business units mainly headquartered in city of Tehran, Iran. The study has implemented principal component analysis and the results have indicated that there were four factors influencing organizational culture including, diversity in culture, connection based culture, integrated culture and structure of culture.

In terms of diversity in culture, there are six sub-components where sensitivity to quality data is the most important sub-factor followed by cultural flexibility, group and hierarchy culture, individual perception and relational performance comes last. The second factor, connection base culture, consists of four factors including connection based marketing, relational satisfaction, cultural consistency and difference in organizational culture. In this group connection based marketing is the most influential factor. The third factor, integrated culture, consists of five factors, which are list in terms of priority as organizational consistency, inter-cultural coordination, enterprise resource planning, organizational environment and coordination in various objectives. Finally, the last item is structure of culture and this item involves in four sub-components including values, gender, innovation and risk and leadership.

Acknowledgment

The authors would like to thank the anonymous referees for their construction comments on earlier version of this work.

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