

# Empirical Examination of Relationship between Organizational Culture and Employee Competence: An Insight

Mihir Joshi<sup>1\*</sup>, Vinod Kumar Singh<sup>1</sup> and Naman Sharma<sup>2</sup>

<sup>1</sup>Faculty of Management Studies, Gurukula Kangri University, Haridwar – 249404, Uttarakhand, India; mihirgkv@gmail.com

<sup>2</sup>Entrepreneurship Development Institute of India (EDII), Bhat Village – 382428, Gandhinagar District, Ahmedabad, Gujarat, India

## Abstract

In order to enhance and improvise the individual competence it is necessary to understand the organizational culture of educational institutions besides giving growth opportunities to employees. Culture becomes an essential aspect for an individual as it's an ever changing process and there is no fix culture in any organization. The primary objective of this research is to study and analyze the influence of organizational culture on individual competence in Indian settings. A survey was conducted on 200 faculty members through a self-established instrument whose validity was tested using exploratory factor analysis and confirmatory factor analysis for scale purification in the selected educational institutions established in remote locations of a hilly state in India that have not been explored for such studies so, it is an exploratory study. The study reveals that there is a significant impact of organizational culture on individual competence in educational institutions.

**Keywords:** Confirmatory Factor Analysis, Educational Institutions, Exploratory Factor Analysis, Individual Competence, Organizational Culture

## 1. Introduction

“Organization culture or Work culture is the set of important understandings, such as norms, values, attitudes and beliefs shared by the organizational members” (Schein, 1999). This concept has its base derived from sociological and anthropological studies (Selznick, 1949; Gouldner, 1954; Graham, 1984; O'reilly, Chatman & Caldwell, 1991). Culture has also been considered to be a combination of reasoning and perception of the people in an organization (Geertz, 1973; Smircich, 1983). Linton (1945) commented that “culture is an arrangement of learned behaviors that are transmitted by the members of that group or society”. It is also considered to be a set of unconscious or conscious values and norms and provides

the members with a sense of organizational identity and generates a commitment to beliefs and values that are larger than themselves (Martin & Siehl, 1983; Schein, 1985a; O'reilly, Chatman & Caldwell, 1991).

Though ideas that become the part of culture can come from anywhere from a reader who articulates and implement ideas and values as a vision, philosophy and business strategy. To classify organizational culture several methods have been employed. Although there is no one form of organizational culture and they vary widely from organization to organization, similarities do exist and few researchers have developed models that give indications of different kinds of organizational cultures. Organizational culture is also said to be a combination of different sub-cultures as several organizations working

\*Author for correspondence

globally don't have any fix culture (Aula & Heinonen, 2016).

Imparting education these days has become similar to reaching the daily targets of sales. Several institutions have started using sales plans on yearly or quarterly basis which includes setting up of advertisement plans, resource centers and other ways that can help them lure students and sell organization. This drift in work culture in education sector from the corporate sector has redefined several parameters for the faculty members working in an institution both public and private. Pettigrew (1979) considered culture to be a tissue that makes a significant contribution to organization structure and that this system which constitutes of socially accepted meanings work for individuals or society at a given period of time.

Charles Handy (1976) gave popularity to organizational culture by linking it with organizational structure. Johnson (1988) gave culture a description of a web where a number of elements were spotted that can be used to describe organizational culture. Daniel Denison's model (1990) clearly states that organizational culture can be described by four dimensions – Mission, Adaptability, Involvement and Consistency. Daniel Denison's model is usually used to diagnose cultural problems in organizations since this model also allows cultures to be broadly explained as externally or internally focused as well as flexible versus stable. O'Reilly, Chatman & Caldwell (1991) created a model which is based on the notion that cultures can be differentiated on the basis of values that are reinforced within organizations. Organizational Cultural Profile (OCP) differentiates according to the eight categories and acts as a self-reporting tool. This model can be used to measure the influence of organizational culture upon organizational performance.

Harris (1994) gave five categories of in-organization schemata: Self-in-organization schemata, Person-in-organization schemata, Organization schemata, Object/concept-in-organization schemata, Event-in-organization schemata. These categories together constitute of a person's knowledge of an organization. This knowledge and set of skills determine an individual's competence that is utilized in the progression of an organization (Peters & Zelewski, 2005, 2007) like using linguistic ability or reasoning ability to resolve a problem. It contributes to the core competence of an organization which is developed through the inter-linkages between strategy, culture and individual competence (Bergenhengouwen et al., 1996) while the individual develops skills to take a leap in career

and contributes to the company's core competence in the long run (Bartlett & Ghoshal, 1999; Bergenhengouwen et al., 1996). Cooke & Szumal (1993) defines culture in the form of a behavior that is believed to be an integral part to meet the expectations and adjust within the organization and with the members.

The Organizational Culture Inventory supports to measure twelve behavioral norms that are clubbed into three general types of cultures: Constructive cultures, Passive/defensive cultures, Aggressive/defensive cultures. The idea behind the development of Organizational Culture Assessment Instrument was Competing Values Framework as the research was conducted on success and organizational effectiveness by Kim Cameron and Robert Quinn (1999).

In this study an attempt has been made to study the organization culture in the institutions of a state from North India which apart from being a famous tourist destination (Tyagi, Dhar & Sharma, 2016) is also well known for boarding schools and several well-known academies. However, it has been under a constant process of change related to the culture since, the creation of the state and is dwindling between the regional and corporate culture paradigm shifts (Chauhan & Singh, 2015).

## 2. Literature Review

The concept of work culture in the form of organizational culture first appeared in 'The Changing Culture of a Factory' with a definition of culture that has an informal structure in the society and that culture helps to resolve an ineffective relationship between the management and employee that explains the failure of formal policies and procedures (Jacques 1951). A century ago, as per Tylor (1871) defined culture as knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society (Busse, Sun & Zhu, 2013; Busse, 2014).

Man being a social animal can rephrase and interact with several factors that determine the social behavior of a person in the society that can be molded and re-invented from time to time turning it into a complex net or a web deriving a meaning out of that web (White 1949; Geertz, 1973; Pettigrew 1979; Tierney, 1988).

Schein (1981, 1984, 1985a, 1985b, 1990, 1992, 1996) defines organizational culture as a pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of

external adaptation and internal integration and that have 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.

In Institutions the culture is defined through student groups, traditions and rituals in a college, performance of the faculty and institution in the past, including the type of leadership and succession planning (Peterson et.al., 1986; Hearn, Clugston & Heydinger, 1993; Leslie & Fretwell, 1996) and subcultures including student and faculty (Lunsford, 1963; Reisman, Gusfield & Gamson, 1970; Kezar & Eckel, 2002).

Some studies have been carried out to compare the work culture in India with that of the foreign countries such as Japan where the differences have been found in work ethos, attitudes and leadership, co-operation, team work, employee- management relationship. These researches are based on studying the importance of values, meaning of self-discipline and understanding the regulations (Bhaduiy, 1991). The Art of Japanese Management (Pascale & Athos, 1981), Corporate Culture (Deal & Kennedy, 1982), and In Search of Excellence (Peters & Waterman, 1982), these studies describe that organizations with strongly rooted values are the ones who create a benchmark among the industries.

The research in context to the Indian organizations have taken central focus on the comparisons between the work culture that exists in the West to the culture that exists in the Asia and South-East Asia and to the ways the Indian work culture got the essence of the Western culture (Sinha & Sinha, 1990; Tayeb, 1987; Singh, 1990; Tripathi, 1990).

## 2.1 Individual Competence

Knowledge, Skills, Abilities and Other characteristics (KSAOs) essential for a task is one way of defining “competence” (Campion et. al., 2011; Meyer, Brünig & Nyhuis, 2015). Individual competence also points to the individual’s specific knowledge area and its implementation so, in such a case an individual’s ability to process information through logical reasoning, Intelligence and knowledge is considered as individual competence (Hansen et.al., 1999; Abel, 2008; Kushwaha & Rao, 2015).

Creating value and applying fresh ideas paves the way to innovation which is associated with the individual competence. Innovation helps to escape through the boundaries that block creation and depends entirely on the

skill sets possessed by the individuals in an organization (Amabile, 1988; Waychal, Mohanty & Verma, 2011). If these skills are enhanced through constant training then they can lead to significant improvement in quality and actions that make an individual achievement oriented, besides requiring entrepreneurial abilities, in the organization leading to value creation (Rogers, 1962; Dyer et.al, 2009; Munshi, 2009).

However, it is important for an organization to realize the skill sets, motives and the source of motivation of an employee as motives define the individual’s competence. The individual’s personality and characteristics along with motives also decide his performance on the job (McClelland, 1993; Bergenhenegouwen, Horn & Mooijman, 1996; Turner & Muller, 2006, Cartwright & Yinger, 2007).

In conjunction with the Project Management Institute (PMI) (2007) definition for competence, Crawford (2005) divides the competencies into input, personal and output competencies. Individual competence is also measured on the use of IT tools and techniques where use of IT tools determine the individual’s skills and ability to accept technology and add to their existing knowledge, excessive use of IT may also cause negative effects in further progression to gain knowledge (Kushwaha & Rao, 2015). This knowledge adds to the confidence of an individual which further enhances their competence level since, competence is that ability which differs between high performers and average or low performers (Sanford, 1989; Tangaraja et.al., 2015; Mirabile, 1997). On the basis of numerous such studies we draw a hypothesis:

H<sub>1</sub>: Work culture has a strong influence on individual competence.

## 3. Method

A rigorous search was made about “individual competence” that differentiates itself from “competency” through online research database and repositories, simultaneously, a survey was conducted for some empirical evidence but little work exists that evaluates an individual’s competence (Waychal, Mohanty & Verma, 2011).

The questionnaire developed for the purpose of understanding the influence of work culture in higher education industry over individual competence was constructed only for the purpose of understanding the culture in the institutions since, in every industry

there are specific set of characteristics because of which the organization culture is influenced in a company or any organization (Gordon, 1991). Further he adds that all these characteristics are different for different organizations therefore, the drafting of instrument must be done on the basis of the type of population we want to study (Hofstede, 1990).

In the first section demographic information of the respondent was asked while name, job title, institution name and city were asked in optional information section. The demographic information section contained gender and age of the faculty. Since, the possibility of successfully implementing a structured and validated questionnaire for understanding the response of the population in remote location was vague, since, it involved several limitations including level of understanding of items by the respondents, provide a sample item along with the coding of responses (Likert, 1932) was developed which was validated and its reliability was tested for the purpose of conducting survey. The population constituted of the faculty members, male (60%, n=120) and female (40%, n=80), from selected educational institutions of this state. A comprehensive list of educational institutions was made out of the selected cities from which these

institutions were randomly selected. Thereafter, with the help of convenient sampling method a sample size of 200 was used as the final sample size for the study.

A majority of the employees belonged to the age group of 31-40 years (46%) followed by 21-30 years (32%) which shows that the average of faculty members is quite young and between 25-35 years and is in line with the fact that average working population in India is quite young and 56% of these employees hold an experience of 1-3 years in total. So, it can be inferred that the faculty members have less experience as a faculty but however, is well qualified with 37% of them have doctorate and 32% of them are post graduates with a close percentage of them having M. phil. (28%) degree. The study also found that 25.5% of the faculty members work on contract and 27.5 % are paid a scale of Assistant professor but as per the capacity of the institution which is quite low as compared to the full salary scale paid to the regular faculty members. In order to get clear responses employees were communicated face to face and a brief introduction of the questionnaire as well as the purpose of the study was explained to the respondents. (Table 1) shows the T test statistics of the item sets utilized in the study.

Inherent from Table 1 is:

**Table 1.** Management/non-management faculty responses T test statistics

Sl. No.	Work Culture	Management n=155		Non-Management n= 145		T	Sig. (2-tailed)
		Mean	SD	Mean	SD		
1.	Trust between the employees is present in high levels	3.01	1.203	3.08	1.323	.565	.635
2.	There is a mutual respect between the co-workers	2.76	1.349	3.03	1.280	3.625	.80
3.	All people readily help others get their work done, so everyone can achieve more	3.08	1.134	3.21	1.254	3.561	.347
4.	Employees are confident that they have long term job security	3.17	1.064	3.47	1.106	2.332	.019
5.	Organizational settings promote flow of ideas and active communication	3.28	1.049	3.56	1.086	1.597	.027
6.	Commitments made to teaching fraternity are fulfilled by the management	3.18	1.102	3.21	1.107	.008	.795
7.	People understand the key academic goals of our organization	3.09	1.136	3.28	1.135	.127	.143

8.	People in our organization have a sense of urgency about the need to deliver quality education to students	3.23	1.205	3.37	1.154	.376	.329
9.	In our organization, there is a minimal discrimination in status between the top academic position and an entry-level	3.26	1.190	3.26	1.141	.860	.945
10.	The main-tenance of our facility helps us deliver quality education and research outcomes	3.30	1.112	3.28	1.070	.523	.868
11.	The core values or beliefs in our institution impart trust among employees.	3.35	1.137	3.26	1.085	1.358	.469
12.	A majority of employees in institution believe that all employees who work here are important	3.39	1.028	3.32	1.039	.119	.559
13.	Core belief of our institution is to spread the knowledge	3.39	1.102	3.30	1.106	.247	.448
14.	Employees in our organi-zation are quick learners and they love sharing their learning insights with co-workers	3.35	1.292	3.35	1.216	2.405	.982
15.	Our institution follows a distinguished selection process for new hires	3.58	1.221	3.57	1.159	1.589	.952
16.	People do not hesitate to share ideas, fears and concerns	3.55	1.158	3.63	1.154	.151	.520
17.	The values or beliefs in our workplace promote quality academic work	3.40	1.272	3.38	1.275	.647	.888
18.	People in our organization receive appropriate salaries and benefits, as well as bonuses or a share of the profits	3.34	1.448	3.44	1.258	3.776	.525
19.	Employees are not afraid to disagree with anyone irrespective of their level	3.48	1.175	3.70	1.131	.656	.091
20.	A majority of employees in our organi-zation under-stand and believe in our core values, principles, or beliefs	3.25	1.132	3.36	1.316	3.005	.450
21.	Employees understand about their future role in the organization very well	3.06	1.310	3.17	1.232	.279	.438
22.	Our organi-zation provides significant resources that assist emp-loyees with their conti-nuous learning	2.81	1.687	3.00	1.700	.320	.323
23.	Organization structure promotes teamwork	3.07	1.330	3.01	1.346	.059	.679
24.	People understand the key adminis-trative goals of our organi-zation	2.83	1.736	3.00	1.756	.133	.388
25.	Organization promotes and assists Teachers with their research activities as well	2.97	1.309	3.07	1.284	.204	.527

The 2 items show significant difference between Management and Non-Management faculty members. It is affirmed that Non- Management faculty feels more secure at their job than the Management faculty. Also it can be seen that there is a difference in the flow of ideas in the communication channel between Non-Management and Management faculty. However, it would be unjust to say that Management faculty does not have a good flow of ideas in the active communication and that they feel less secure at their jobs than the Non-Management counterparts but it can be said that Management faculty as compared to Non-Management faculty is a bit inclined towards the lesser part. The individual discussion of the results is as follows:

1. The Non-management faculty (mean=3.47; t(4)=.019; p<.05) as compared to the Management faculty (mean=3.17; t(4)=.019; p<.05) feel more secure at their jobs. It can be inferred that Non-management faculty have slightly more job security than the Management faculty and the t-tests show a significant difference in this aspect, and
2. In case of Non-Management faculty (mean=3.56; t(5)=.027; p<.05) the flow of ideas and active communication is more as compared to the Management faculty (mean=3.28; t(5)=.027; p<.05) where the communication within the organizational settings is slightly less. It means that Non-management faculty is more open to put their ideas for discussion as compared to Management faculty.

### 3.1 Validity Test

In order to test the construct validity principal component analysis was applied to the instrument which helps to simplify and constrict the data set and find the most important items in the study (Cavana et al. 2001; Abdi & Williams, 2010). Before the implementation of principal component analysis, the Bartlett test of sphericity and Kaiser-Meyer-Olkin (KMO) were employed on the obtained data from the survey that was .865. The statistical test for Bartlett test of sphericity for the questionnaire was found to be significant (p = 0.000) and the values of KMO were again found to be in the acceptable range of 0.5 and 1.0.

### 3.2 Reliability Test

For this purpose the Cronbach’s Alpha reliability used in the questionnaire was calculated that was .927. Field (2005) suggested an overall value of Cronbach’s Alpha greater than 0.6 in order to establish reliability of a scale. While Carmines and Zeller (1979) suggested that the value of Cronbach’s Alpha shall be at least 0.8 for a scale to be reliable but this scale qualifies both of the criteria.

### 3.3 Measurement Model

The measurement model was created using AMOS. The CFA is a good model fit with Cmin/DF value: 1.728, CFI: .971, TLI: .956 and RMSEA: .06 (p<.001). There were no heywood cases so no items were removed and the Standardized Regression Weights (SRW) values were below 1 but greater than the threshold of .5 (Hair, 2010). Figure 1 shows the first order CFA:

## 4. Results

To test the hypothesis, linear regression was applied on the data filled for the items concerning individual competence and work culture using IBM SPSS 20.0. For this purpose work culture was taken as predictor variable and individual competence was taken as output variable.

(Table 2) shows that adjusted R square value indicates the percentage of the variance in the employee competence explained by work culture. Adjusted R square value is 0.477 which indicates that the work culture accounts for 47.7% of variance in the competence.

**Table 2.** Model summary

Variables	Competence		
	B	R <sup>2</sup>	ΔR <sup>2</sup>
Work Culture	.088*	.480	.477

n= 200 \*p<0.05

The results in (Table 3) show the correlation of the work culture with the individual competence in the selected educational institutions. It can be seen from the (Table 2) that work culture has a strong positive correlation with competence (.69) while individual competence has a weak negative correlation with the gender of the faculty

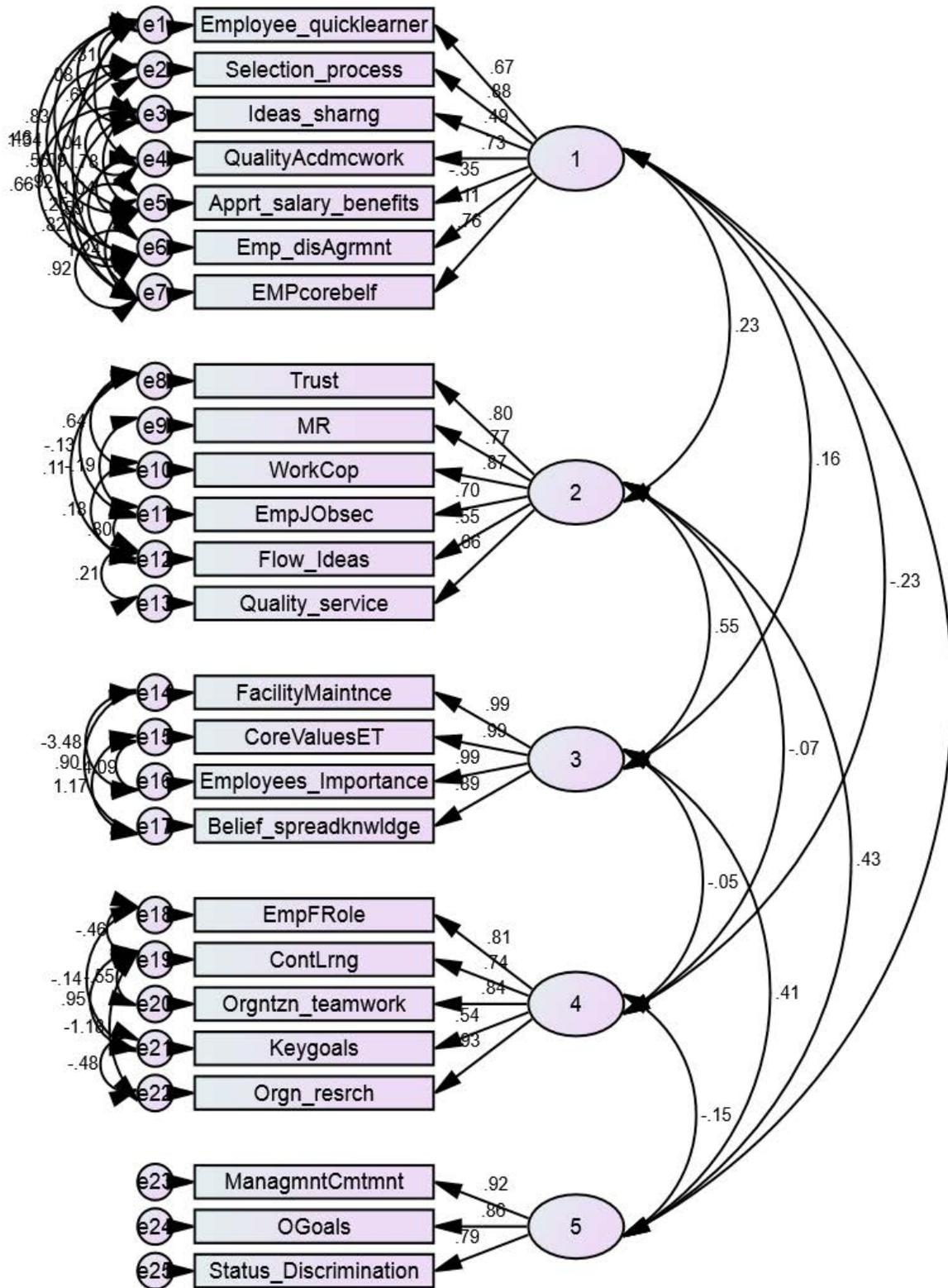


Figure 1. CFA first order.

which shows that competence has nothing to do with the gender of an individual.

**Table 3.** Correlations

Variables	1	2	3
Age			
Gender	.03		
Competence	.04	-.022	
Work Culture	.01	-.00	.69**

n= 200 \*\* $p < 0.01$ , \* $p < 0.05$

## 5. Discussion, Limitations of the Study and Future Research Directions

The findings clearly explain that an increase in work culture contributes to an increase in employee's competence in educational institutions. This means that work culture has a positive relationship with the competence. This helps to evaluate the work culture and is related to the feelings that employees have towards their job as it is not only evaluated on the basis of the salary alone but also on the basis of mental satisfaction which involves having a purpose to the daily work that may directly or indirectly help the organization and society at large (Maslow, 1954; Hellriegel & Slocum, 1974; Hutcheson, 1996; Kerego & Mthupha, 1997; Sempene, et. al. 2002; Ahamed & Mahmood, 2015).

It was also seen that core belief of the institution is to spread knowledge, mutual cooperation among workers (faculty), belief of the management in employees, work environment created for the faculty and students, belief of employees in core values of the organization and the structure of the organization that help in creating a better work culture. These studies are consistent with the previous studies that have established several dimensions to define work culture (Cooke & Rousseau, 1988; Schein, 1992).

The strong values and factors that define the work culture in the educational institutions support that the performance of these institutions is dependent upon these values and beliefs and that any organization that has a stable and strong work culture has a long and distinguished position in the society and the industry (Gordon & DiTomaso, 1992; Kotter & Heskett, 1992; Collins & Porras, 1996; Sorensen, 2002; Curteanu & Constantine, 2011).

The first major limitation of the study is that the survey was performed using questionnaire method as there is always scope for biased responses with this process and so, in remote locations a qualitative method would have been more appropriate. Moreover, several studies conducted in past on organizational culture suggest that questionnaire distribution is appropriate by being in direct touch with the respondent (Singh, 1990). The instrument constructed for this study considered the education sector but was not distributed in any major metropolitan or tier-1 city as the work scenario in those cities would have been quite different and it would require drafting of a different item set (Hofstede, 1990). However, an already validated scale such as Hofstede's value survey module (Hofstede, 1990) or Organizational culture profile (O'reilly, Chatman & Caldwell, 1991) could have been used but there were no prior studies conducted in this area to our knowledge so we had to establish our own item sets. Again there was no module through which an individual's competence could be measured in this particular sector. Another important limitation of the study is the 200 sample size which was quite small when considering a single state. In further studies personality of an individual can be taken as a separate variable that will give more inputs to understand the individual's competence.

Future research can also examine the influence of the changes that have occurred in the work culture in different industry specially, manufacturing sector after the formation of State Industrial Development Corporation of Uttarakhand Limited (SIDCUL) and other smaller industrial hubs. The change in the beliefs, values and norms of the people of this state after its inception could be given preference as it has been observed by the state about people moving to other metropolitan areas or states in search of better options of employment. However, the question still lingers of creating enough employment opportunities in the state and that too in the areas that are less accessed and less inhabited, and lie 3000m above sea level. In such case an ethnographic form of study can be carried out that covers a larger population and understands the community wise shift in the culture.

## 6. Conclusion

After Peters and Waterman's best seller *In Search of Excellence* (1982), work culture became an important topic of discussion which determined the company's

success, customer relationship and social orientation. Since then, work culture was popularized, to be studied in various forms, and a number of articles, books and research papers made work culture an important point of discussion. When individuals compare their work place with other work places it is then when they actually understand about the work culture of their organization which affects their thought process, behavior towards employees and towards organization. An employee who has been through different organizations would be able to correlate easily.

Although work culture is often not studied at colleges and universities but if studied extensively it can help transform the existing culture and help sustain the past beliefs and norms in the changing society. A decade ago the image of the culture of this state was based on spiritual growth and rejuvenation, agriculture and horticulture, a hub for school education, a decade later it has become a center of investment for corporate giants which has gradually changed the nature of work and eventually the work culture.

Culture is evolving and changing constantly so, it is necessary for the higher education sector to remain in touch with the ever transforming corporate culture and the culture in urban areas. The stronger the roots of a culture are the longer it will prevail (Schein, 1984) and change in the culture must be taken as a positive. However, it also influences an individual who was born in a different culture and is adapting in the present which influences the competence and performance of a person.

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