



## **Exploring Lecturers' Perception on Learning Organization Dimensions and Demographic Variables in Technical and Vocational Colleges**

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### **ABSTRACT**

The purpose of this study was to explore the perception of 295 lecturers on learning organization dimensions and demographic variables in technical and vocational colleges in four provinces of Fars, Khuzestan, Boushehr, and Kohgiluyeh and Boyer-Ahmad in Iran. Data was collected using a questionnaire and analyzed utilizing SPSS which included the use of descriptive and inferential statistics. The findings showed that respondents' perceptions were rated from moderate to high in learning organization dimensions with significant differences based on the type of employment, academic rank and education level. No significant differences were observed in gender and marital status towards learning organization dimensions. The relevant literature shows few studies regarding learning organization dimensions and demographic variables locally and internationally. Therefore, the findings can be evaluated as useful information and guidance for educational administrators and leaders in utilizing learning organization dimensions in the management of educational institutions.

**Keywords:** Demographic Variables, Learning organization Dimensions, Technical and Vocational Colleges

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### **INTRODUCTION AND PROBLEM STATEMENT**

Several researchers have shown that organizations which give emphasis on learning and employees empowerment have

come become more successful, adaptive to changes and survive longer than their counterparts (Asadi, Ghorbani, & Naderan, 2009; Dirani, 2009). Garvin (2003) stated that the lack of learning culture makes organizations and individuals simply repeat old practices. The development of learning culture not only helps organization members to create new knowledge, but also helps them remain dynamic too.

Learning in organization is really about empowering the workforce and integrating work with learning in a continuous manner (Bryson, Pajo, Ward, & Mallon, 2006; Ortenblad, 2004). Accordingly, many organizations are trying to recognize and adapt new ways of learning to keep with the enormous changing pace of work. In addition, it has been found that providing learning opportunities for employees to carry out their tasks more effectively with more autonomy and innovative practices are strategies for attaching people to the organizations psychologically (Agarwala, 2003; Krishna, 2008). Watkins (2005) also has stated that educational institutions more than any time need to make rapid and difficult decisions. "One way to help higher education institutions preserve their professional cultures, while still retaining both faculty governance and rapid response, is to create a learning culture, a culture that is structured to make changes more readily" (p. 415).

The subsequent benefits have often been cited as reasons for creating learning organizations. First, learning organization help to increase the levels of innovation

regarding the processes, products, and technological application (Alas & Sharifi, 2002; Garvin, 2003). Second, they provide opportunities for leadership and promote a transformational and shared style of leadership within the managerial level of the organization (Chajnacki, 2007; Ellstrom, 2001; Yulk, 1998). Third, learning organizations help to generate, analyze, store and distribute increasing amount of knowledge with the organization and provide appropriate access to employees who deal with more urgent and multifaceted problems (Alas & Sharifi, 2002; Chajnacki, 2007; Garvin, 1993; Marquardt, 2002). Fourth, learning organizations provide opportunities and resources to balance the personal and professional growth needs of employees and encourage them to use new skills in innovative ways (DiBella, Nevis, & Gould, 1996; Senge, 1990).

However, a quick review of learning organization literature shows few empirical researches on learning organization dimensions. In addition, little is known about whether the concept of the learning organization, which originated in a Western context (Marquardt, 2002; Marsick & Watkins, 2003) and in business companies (Senge, 1990) is applicable in educational settings. Moreover, the application of learning organization dimensions in educational settings together with the impact of demographic variables on learning organization dimensions have not been the focus of attention in the past (Tseng, 2010; Wang, 2005). Furthermore, as Iran is a developing country with different social

and organizational culture, the research pertaining learning organization is scarce. This raised the question whether the learning organization model which origin in the West has the capacity to be conducted in Iranian educational contexts to fill the gap of theoretical and empirical knowledge pertaining learning organization dimensions and provide empirical evidences to help educational leaders to manage their colleges more efficiently and effectively.

### **TECHNICAL AND VOCATIONAL COLLEGES**

Providing skilled and semi-skilled human resources for both governmental and private sectors as one of the basic priorities and policies of developed and developing countries has increased the importance of technical and vocational trainings in globalization era (Sadeghi, Sabheyeh, & Keshavarzi, 2008; Tilik, 2002; Zainabadi, Salehi, & Parand, 2007). Asian countries have placed varying emphasis on technical and vocational education, depending upon several historical, social, economic and political considerations. UNESCO adapted in 1974 an important detailed recommendation pertaining to technical and vocational education, and argued for provision of technical and vocational education as a) an integral part of general education; b) a means of preparing for an occupational field; c) and as an instrument to reduce the mismatches between education and employment and between school and society at large (King, 2007).

With regard to Iran, the social, political and economic environment has changed fundamentally in comparison to the past three decades. This difference has become more important over the past ten years with main reforms occurring in educational sectors (Mehralizadeh, 2005; Veisi, 2010). Technical and Vocational Colleges (TVCs) which were established in 1930 served as a means for educating skilled manpower in post high school training i.e. higher education in the technological line in Iran. These professional colleges were the recommendation of a German consultant as complementary to the Faculty of Engineering of the University of Tehran which was an academically oriented institution. The activities of these colleges were gradually terminated in 1965 due to the lack of social status of the Technical and Vocational Education (TVE) as compared with white collar institutions such as the Faculty of Engineering (Ebtekar, 1996).

Developing quantitatively and qualitatively after Islamic Revolution in 1979, TVCs have played significant roles in training, nurturing, and educating competent and qualified manpower in Iran. They are also a pioneer in providing technical and vocational human resources in all fields for both boys and girls. They train human resources to fill the vacancy of lack of technicians in both governmental and private sectors. In line with Iran's march towards a comprehensive development plan, TVCs have focused their efforts to develop technical and professional trainings in all

fields to educate skilled and competent human resources (Behbahani, 2010; Khalaghi, 2003). The number of TVCs is 148 which are the biggest technical and vocational institutions for boys and girls. They admit students from technical and vocational schools which consist of three fields of industry, agriculture and services. All TVCs have been distributed based on geographical considerations in seven regions throughout Iran. These institutions need educational personnel who know how to match theory and practice in action. They should be able to apply the newest teaching strategies in class situation, too (Behbahani, 2010; Ebtekar, 1996; Sadri & Zahedi, 2010). Despite their great importance in providing competent and skillful human resources, they have not been the focus of attention in relation to research and study of new theories of organizational development in the past (Asadi *et al.*, 2009).

In addition, the literature of learning organization shows that the concept of the learning organization has received much attention in organizational studies; however, educational institutions have not fully attributed learning organization practices (Alam, 2009; Attafar & Bahrami, 2009; Yang, Watkins, & Marsick, 2004). White and Weathersby (2005) reported some obstacles including challenges of strategy, structure and culture, as well as academic culture clashes that may prevent educational institutions to become learning organizations. In this regard, the concern is whether these institutions have the capacity to create a learning culture to help their

staffs, both educational and non-educational to enhance their knowledge, skills and attitudes.

## **LEARNING ORGANIZATION DIMENSIONS**

The literature of learning organization theory shows that for more than three decades it has been the focus of attention as a subject of study, research, training and development (Asadi *et al.*, 2009; Pimapunsri, 2008). It has been conceptualized and explored from different angles and through different models by many researchers. Numerous attempts have been made in the past to define the concept of learning organization. Some researchers indicate that the concept itself is still unclear and confusing (Fulmer, Gibbs, & Keys, 1998), whereas some are happy with that (K. Watkins & Golembiewski, 1995). Others recognize the difficulty of describing what a complete learning organization looks like (Watkins & Marsick, 1993). Scholars argue that each organization produces its own learning organization and these particular learning organizations are vigorously and frequently changing (Dirani, 2009). In addition, many organizations in various countries of the world have preferred to adapt learning organization, because of its profound effects and impacts on professional and skill development of their employees (Alam, 2009). Top-level managers in organizations have realized that to increase efficiency, improve customer service, provide defect-free products, and achieve organizational objectives, the learning organization is the best choice

(Ayupp & Perumal, 2008; Jamali & Sidani, 2009). Asadi *et al.*, (2009) also stated that the learning organization is valuable as it creates innovative pattern of thinking.

Senge (1990) defined learning organization as the “organization where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together” (p.3). Ortenblad (2002) defined learning organization as an organization that is constantly increasing its capacity to form its future. Sugarman (2001) stated that a learning organization would be good at making new solutions and sharing knowledge with other members who may need it. Watkins and Marsick (1993) defined learning organization as “an organization that learns continuously and transforms itself and one that is distinguished by total employee involvement in a process of jointly conducted and collectively responsible change directed towards shared values or principles” (p.118). Central to Watkins and Marsick's (1993) theoretical framework of learning organization, are seven dimensions including: continuous learning, dialogue and inquiry, collaboration, embedded system, system connection, empowerment and strategic leadership. Watkins and Marsick further developed dimensions of learning organization questionnaire (DLOQ) measuring the learning dimensions on seven dimensions. These seven dimensions are defined based on Watkins and Marsick's (1993) conceptualization in Table 1.

To be innovative and act effectively in managing the organizations, managers need to create learning opportunities for all organization members. Learning in organization is really about empowering the workforce and integrating work with learning in a continuous manner (Bryson *et al.*, 2006; Ortenblad, 2004). In a learning organization, every individual's contribution is important to the life and well-being of the organization (Argyris & Schon, 2002; Hiatt-Michael, 2001). Despite the importance of learning organization which has been approved by theoretical and empirical researches internationally, little research can be found in the Iranian context, particularly in educational settings. The following sections provide some information of the methodology, findings and recommendations of this study.

## RESEARCH OBJECTIVE

The overall purpose of this study is to determine the level of respondents' perception on learning organization dimensions and differences in continuous learning, dialogue and inquiry, collaboration, embedded system, empowerment, system connection and strategic leadership based on employment type, academic rank and education level to help administrators of TVCs to manage their staff more effectively in Iran.

## RESEARCH QUESTIONS

For this purpose, the research questions posed in this study is worded as the following, .

1. What is the level of lecturers' perception of learning organization dimensions in TVCs?
2. Is there any significant difference in perception of learning organization dimensions by lecturers based on employment type?
3. Is there any significant difference in perception of learning organization dimensions by lecturers based on academic rank?
4. Is there any significant difference in perception of learning organization dimensions by lecturers based on education level?

## METHODOLOGY

This study employed a quantitative research design to explore the levels of learning organization dimensions and their significant relationship with educational level, type of employment and academic rank among 1606 lecturers of TVCs in four provinces of Fars, Khuzestan, Boushehr, and Kohgiluyeh and Boyerahmad in Iran. G-power statistical software was utilized to determine the sample size. Two sampling methods including proportional stratified random sampling and simple random sampling were employed to collect data from 295 respondents (from all the four provinces)\*. It was revealed that the majority

TABLE 1  
Learning Organization Dimensions Applied in TVCs

Dimensions	Definitions
Continuous Learning	The extent to which learning is designed into work so that people learn, acquire knowledge, values and skills for personal and career development on the job. The degree an organization tries to create continuous learning opportunities for all of its members.
Dialogue and Inquiry	The extent to which the climate and culture of the organization allows organization members to talk, discuss, explain their experiences and skills and the capacity to listen and inquire into the views of others.
Collaboration	The degree to which an organization tries to design work for organizational members, have shared vision and personal mastery to exchange their views and ideas to think and learn collectively and strengthen working collectively.
Embedded System	The extent an organization prepares organizational members to try to use both high and low technology systems to capture and share learning.
Empowerment	The process of enabling people to act, and participate in policy making in creating a shared and collective vision. This process continues to get feedback from organization members to recognize the gap between the current status and the new vision and to implement a shared vision.
System Connection	The degree to which an organization has open systems to connect the organization to its external and internal environment to help people to see the impact of their work on the entire organization and think globally.
Strategic Leadership	Refers to organizational leaders' competence to think strategically and energize organization to create change, and develop collective vision to help organization members to move in the new direction.



of participants were lecturers (52.5%) who had masters degree (89.4%), while 58.3% were part-time masters students.

DLOQ developed by Watkins and Marsick (1997) consists of 43 items in a 5-point Likert Scale range from "1" as "almost never" to "5" as "almost always was employed to measure lecturers' perception on seven learning organization dimensions. The original questionnaire in English language was translated into Persian language using the forward-back translation approach (Chen, Holton & Bates, 2005). To validate the DLOQ in both English and Persian, academics (how many) and lecturers (how many) with the experience in research in the field of extension and continuing education, educational administration and organizational behavior were employed in Malaysia and Iran. They confirmed the appropriateness of validity of DLOQ for conducting in TVCs. A reliability test (pilot test) was performed on the DLOQ. The reliability coefficient, Cronbach's alpha for seven learning organization dimensions was from .80 to .87, indicating that the reliability of this instrument was relatively high, and thus suitable for this study to be carried out. (confirm with studies to show that this Cronbach alpha value is reliable).

## FINDINGS

To determine respondents' perception on learning organization dimensions, the possible mean scores based on five point Likert Scales were categorized into three levels of low (1-2.33), moderate (2.34-3.66) and high (3.67-5). It is based on

class interval width. It is the difference between the lower endpoint of an interval and the lower endpoint of the next interval according to the next formula. Class interval width = highest scale value – lowest scale value / number of categories. Class interval width =  $(5-1)/3 = 1.33$ . Thus,  $1-2.33 = \text{Low}$ ,  $2.34 - 3.66 = \text{Moderate}$ ; and  $3.67 - 5 = \text{High}$  (Nunnally & Bernstein, 1994). In addition, descriptive analysis such as mean, standard deviation and frequency were employed. Table 2 depicts the results of descriptive analysis as required by Research Question 1 as follows:

*What is the level of lecturers' perception of learning organization dimensions in TVCs?*

Table 2 displays TVCs lecturers' perception on the level of learning organization dimensions among their colleges. The results indicate that lecturers' perception on continuous learning, dialogue and inquiry and strategic leadership are at high level, whereas their perception on collaboration, embedded system, empowerment, and system connection are at moderate level. Findings indicated that lecturers' perception in dialogue and inquiry was high with a mean rating of  $M=3.78$  and  $SD = .41$ , whereas 166 (56.3%) of lecturers rated high on this dimension, 129 (43.7%) moderate and none rated low. Similarly, the results showed that lecturers' perception in strategic leadership was high with  $M = 3.72$  and  $SD = .49$ , whereas 148 (50.2%) of lecturers rated high and 147 (49.8%) rated moderate on this dimension.

Likewise, findings revealed that lecturers' perception in continuous learning was high with a mean rating of  $M = 3.69$  and  $SD = .46$ , whereas 169 (57.3%) of lecturers rated high, and 126 (42.7%) rated moderate on this dimension. The findings also indicated that four out of seven dimensions of learning organization including: empowerment ( $M = 3.53$ ,  $SD = .53$ ), collaboration ( $M = 3.47$ ,  $SD = .57$ ), embedded system ( $M = 3.43$ ,  $SD = .55$ ) and system connection ( $M = 3.40$ ,  $SD = .53$ ) were at moderate level. None of the dimensions were rated low. Overall, 189 (64.1%) of lecturers rated moderate, 106 (35.9%) rated high and none rated low with  $M = 3.58$ ,  $SD = .28$  on overall learning organization dimension. These results indicate that TVCs' lecturers perceive

learning organization dimensions among their colleges at high and moderate levels. The level rating from moderate to high in the study indicate that these seven dimensions are carried out and practiced in TVCs and lecturers are not alien with the concept of learning organization dimensions.

**Independent sample t-test was utilized to answer Research Questions 2 to 4 as follows:**

*Is there any significant difference in perception of learning organization dimensions by lecturers based on employment type?*

The results of t-test in Table 3 reveal that there are significant differences between full time and part time lecturers' perception in learning organization dimensions. Data

TABLE 2  
Descriptive Statistics of Learning Organization Dimensions

Descriptive Statistics	Mean	SD	Frequency		
			Low (43-100)	Moderate (101-158)	High (159-215)
Continuous Learning	3.69	.46	--	126 <sup>a</sup> (42.7) <sup>b</sup>	169 (57.3)
Dialogue and Inquiry	3.78	.41	--	129 (43.7)	166 (56.3)
Collaboration	3.47	.57	9 (3.1)	189 (64.1)	97 (32.8)
Embedded System	3.43	.55	18 (6.1)	200 (67.8)	77 (26.1)
Empowerment	3.53	.53	--	190 (64.4)	105 (35.6)
System Connection	3.40	.53	10 (3.4)	205 (69.5)	80 (27.1)
Strategic Leadership	3.72	.49	--	147 (49.8)	148 (50.2)
Overall Learning Organization	3.58	.28	--	189 (64.1)	106 (35.9)

Note: Low (1-2.33), Moderate (2.34-3.66), High (3.67-5), <sup>a</sup> = Frequency/Count, <sup>b</sup> = Percent



indicated that full time lecturers had higher mean scores in learning organization dimensions than part time lecturers in TVCs in Iran. Thus, it can be concluded that full time lecturers' perception was different from part time lecturers' perception on learning organization dimensions in TVCs.

**Table 4 displays analysis of learning organization dimensions based on academic rank as required by Research Question 3 as follows:**

*Is there any significant difference in perception of learning organization dimensions by lecturers based on academic rank?*

Table 4 shows significant differences in lecturers and teachers' perception towards learning organization dimensions. Lecturers had higher perception level than teachers in all learning organization dimensions. The

significant differences between lecturers and teachers in all learning organization dimensions signify that academic rank was an appropriate indicator to make difference between lecturers and teachers in TVCs.

**Table 5 depicts the analysis of learning organization dimensions towards education level as required by Research Question 4 as follows:**

*Is there any significant difference in perception of learning organization dimensions by lecturers based on Education Level?*

T-test analysis in Table 5 reveals that there were significant differences between perceptions of doctorate and master degree holders and below in relation to learning organization dimensions in TVCs. Doctorate lecturers showed higher mean scores than master and below degree holders in TVCs,

TABLE 3  
Means Comparison of Learning Organization Dimensions by Employment Type

Learning Organization Dimensions	Employment Type	N	Mean	SD	t-value	p
Continuous Learning	Full Time	123	3.83	.46	4.605	.001
	Part Time	172	3.60	.42		
Dialogue and Inquiry	Full Time	123	3.97	.37	7.259	.001
	Part Time	172	3.64	.38		
Collaboration	Full Time	123	3.60	.57	3.321	.001
	Part Time	172	3.38	.56		
Embedded System	Full Time	123	3.54	.59	2.633	.009
	Part Time	172	3.36	.51		
Empowerment	Full Time	123	3.63	.53	2.699	.007
	Part Time	172	3.46	.51		
System Connection	Full Time	123	3.55	.52	4.275	.001
	Part Time	172	3.29	.51		
Strategic Leadership	Full Time	123	3.89	.49	5.175	.001
	Part Time	172	3.60	.46		

P<.05 df=293 SD = Standard Deviation

TABLE 4  
Means Comparison of Learning Organization Dimensions by Academic Rank

Learning Organization Dimensions	Academic Rank	N	Mean	SD	t-value	<i>p</i>
Continuous Learning	Lecturer	155	3.89	.42	9.074	.001
	Teacher	140	3.46	.38		
Dialogue and Inquiry	Lecturer	155	3.95	.38	8.260	.001
	Teacher	140	3.59	.35		
Collaboration	Lecturer	155	3.63	.59	5.025	.001
	Teacher	140	3.30	.51		
Embedded System	Lecturer	155	3.53	.60	3.280	.001
	Teacher	140	3.32	.48		
Empowerment	Lecturer	155	3.63	.54	3.523	.001
	Teacher	140	3.41	.50		
System Connection	Lecturer	155	3.52	.55	4.120	.001
	Teacher	140	3.27	.48		
Strategic Leadership	Lecturer	155	3.89	.48	6.571	.001
	Teacher	140	3.54	.43		

$P < .05$      $df=293$      $SD$  = Standard Deviation

TABLE 5  
Means Comparison of Learning Organization Dimensions by Education Level

Learning Organization Dimensions	Education Level	N	Mean	SD	t-value	<i>P</i>
Continuous Learning	Doctorate	34	4.01	.42	4.435	.001
	Master and below	261	3.65	.44		
Dialogue and Inquiry	Doctorate	34	4.00	.36	3.515	.001
	Master and below	261	3.75	.40		
Collaboration	Doctorate	34	3.77	.52	3.296	.001
	Master and below	261	3.43	.57		
Embedded System	Doctorate	34	3.67	.62	2.683	.021
	Master and below	261	3.40	.53		
Empowerment	Doctorate	34	3.92	.49	4.708	.001
	Master and below	261	3.48	.51		
System Connection	Doctorate	34	3.67	.49	3.211	.001
	Master and below	261	3.36	.53		
Strategic Leadership	Doctorate	34	4.02	.46	3.888	.001
	Master and below	261	3.68	.48		

$P < .05$      $df=293$      $SD$  = Standard Deviation

indicating that doctorate lecturers, though their number is less than master degree holders and below, spend more times to participate in practicing of learning organization dimensions than master degree holders and below.

## DISCUSSION

The findings revealed that lecturers had a moderate to high level of understanding of what the learning organization dimensions concepts might mean. The DLOQ results obtained from self rating indicated that lecturers' perception in continuous learning, dialogue and inquiry and strategic leadership dimensions were at high level, whereas their perception in collaboration, embedded system, system connection and empowerment were at moderate level, suggesting that these dimensions could be further improved. In addition, the findings showed that lecturers' perception in overall learning organization dimensions was at moderate level.

Dialogue and inquiry dimension was rated at high level indicating that lecturers give open and honest feedback to each other, listen to others before speaking, treat each other with respect, spend time building trust with each other and are encouraged to ask why regardless of the rank in TVCs. The high level rating in dialogue and inquiry pointed to the significant role played by educational administrators and leaders in promoting a learning culture at the individual level by providing an open atmosphere of talking, communicating and questioning among lecturers in TVCs. It also

implies that establishing a climate in which lecturers felt safe to offer an opinion and to have an expectation that their opinions would be valued, was a significant key factor and the role of administrators seemed to be significant in this process. This result was in line with Asadi *et al.*, (2009) findings in Iran among physical educational professionals, Zahabioun and Yousefy's (2006) results and Kumar's (2005) findings in Malaysia, whereas contradicting with Dirani's (2007) and Wang's (2005) findings.

Strategic leadership dimension was the second highest, indicating that educational leaders of TVCs had charismatic power, mentor and coach, give people control over the resources they need to accomplish their work and are authoritative in creating learning opportunities by preparing a fine knowledge management system. The high level also indicates that educational leaders and administrators have a clear understanding of their responsibility to act as facilitators and supporters of learning in TVCs. This result was supported by Zahabioun and Yousefy's (2006) findings in Iran, and Pimapunsri's (2008) findings in Thailand.

Similarly with dialogue and inquiry and strategic leadership, continuous learning opportunities was rated at high level, indicating that lecturers in TVCs have the opportunity of discussing mistakes, share knowledge and skills with their colleagues, help each other learn, consider problems as opportunities for learning, supported and rewarded financially for learning. In addition, it can be concluded

that communication among staffs, feedback, and active listening are encouraged, and prioritized in comparison to hierarchy and status. The high level rating in continuous learning indicated that there was general consensus that learning culture was supported by educational administrators as long as the learning was seen to bring benefit to the colleges. Zahabioun and Yousefy's (2006) findings, and Pimapunsari's (2008) results were similar to the continuous learning results in this study.

System connection dimension was revealed to be at moderate level according to the lecturers' perception in TVCs. System connection reflects global thinking, connecting the organization to its internal and external environment, reciprocal communication at all levels among lecturers, balancing between work and family affairs, and working to meet mutual needs. Watkins and Marsick (1996) stated that training global leaders, providing virtual networks, performing employee opinion surveys, and providing computer data bases are various strategies that can be used to connect the institutions to the environment. Asadi *et al.*, (2009) also stated that being low at system connection maybe the result of not connecting with internal and external professional communities to meet mutual needs.

Lecturers' perception on embedded system was at a moderate level. According to Watkins and Marsick (1993), creating new systems will have a basic contribution towards providing continuous learning opportunities in organizations. Krishna and Casey (2008) also stated that social contacts

through shared practices in organizations will create a strong bonding among organization members. Accordingly, the moderate level of embedded system in TVCs can be the result of not having enough tools and technology in knowledge management, limitation in paying attention to establishing knowledge networks and communities of practice, few opportunities of sharing information and not having enough facilities for lecturers to use their skills and knowledge. Dirani's (2007) findings in banking sector in Lebanon and Wang's (2005) results in China are also consistent with the results of the current study.

It was revealed that empowerment dimension was at moderate level. Kanter (1993) based on organizational empowerment theory, stated that employees' empowerment towards a collective vision will provide opportunities for learning which in turn influence employees' work, attitudes and behaviors. Chen and Chen (2008) also stated that employees' empowerment can occur as a result of participating employees in decision making process. In addition, O'Neil (2003) and Watkins and Marsick (1993) have remarked that lack of necessary coordination among different parts of the organization and existence of an overcautious atmosphere that leads to conservative behaviors can affect empowering people towards a collective vision negatively. Regarding the empowerment dimension, Dirani (2009), Wang (2005), Asadi *et al.*, (2009) and Veisi (2010) has reported results similar to the current study.

The results regarding collaboration revealed that lecturers have rated this dimension at a moderate place. Watkins and Marsick (1996) stated that collaborative atmosphere of learning in organizations foster and develop job related skills. The collaborative efforts cause each member of the organization shares knowledge and experience with each other. The findings pertaining collaboration are in line with White and Weathersby's (2005), Bui and Baruch (2010) statements that academics are highly individualistic in their work and seek to reach personal development. The findings of this study were also in line with governing culture in higher education organizations and the society in Iran. Based on a cross-cultural study, Alavi and McCormick (2004) stated that Iranian organizations face some problems in team learning, system thinking and developing shared visions. They stated that some aspects of management theories and models which their roots are in highly developed countries may not be completely in line with cultural characteristics of other countries such as Iran (Alavi and McCormick, 2004). What emerged from this study was a picture of TVCs that were utilizing learning to develop their competitive edge, remain dynamic, create knowledge and skills, and integrate work with learning to attach lecturers to colleges psychologically.

Since there have been few researches studying how demographics can impact learning organization dimensions, whether demographic compositions characterize learning organization dimensions or not

remains unknown (Tseng, 2010; Wang, 2005). The results indicated that there were significant differences in lecturers' perception towards learning organization dimensions based on type of employment, education level and academic rank. This indicates that lecturers had different understanding pertaining learning organization dimensions in TVCs.

In terms of type of employment, there were significant differences between full time and part time lecturers' perception in all learning organization dimensions. In all comparisons, full time lecturers scored the highest. Mean score of full time lecturers in all dimensions were higher than mean score of part time lecturers in all dimension of learning organization. It signifies that full time lecturers pay more attention to the activities performed regarding learning organization dimensions in TVCs in Iran. Another possibility is related to the fact that part time lecturers are not permanent employees that may affect their perception regarding learning organization dimensions in TVCs. This phenomenon indicates that part time lecturers have the strongest sense of the need to improve learning organization dimensions.

For academic rank, there were significant differences between lecturers' perception of being in the position of lecturer and teacher in learning organization dimensions in TVCs in Iran. Those who were lecturers showed higher perception level in comparison to those who were in position of teacher in seven learning organization dimensions. The results indicated that the higher the level

of academic rank, the more mean scores regarding the perception level of learning organization dimensions.

For education level, the significant differences between perception of lecturers with degree of doctorate and master and below connote that doctorate lecturers may have higher education contributes to one's understanding of the value of learning organization dimensions than master and below degree holders in TVCs. Lecturers in higher level of education obtain higher perception on learning organization dimensions than lecturers in lower level of education. It was revealed that education level was a significant indicator in learning organization dimensions between doctorate and master and below degree holders in TVCs. The result of this study regarding education level is in line with Tseng's (2010) findings in Taiwan, whereas Lim's (2003) findings in private organizations in Korea were inconsistent with the results of this study. These results revealed that perception level of learning organization dimensions was varied according to education level, type of employment and academic rank.

## CONCLUSION AND IMPLICATIONS

The study indicated that lecturers were clearly aware of the learning organization dimensions and generally saw the learning organization evident in their colleges through the provision of opportunities to increase their knowledge and skills. On the other hand, it was evident that lecturers were quite content with their working

lives. The study provided empirical and theoretical information for educational administrators and leaders to prepare educational programs, standards and other professional development activities. It also helps them develop and sustain a culture conducive to learning and adapt it as a means of survival and success. The findings of this study are valuable sources for educational administrators, leaders and human resource developer professionals to understand the present status, differences and relationships in learning organization dimensions in TVCs. By providing learning opportunities in the light of learning organization dimensions, educational administrators send a message to lecturers that TVCs care about them and support them.

The results revealed that respondents in the position of full time, doctorate and lecturer had higher perception of learning organization dimensions than part time lecturers, master and below degree holders and teachers in TVCs. This indicates that educational administrators should try to preserve and further develop the present status of full time, doctorate and lecturers in TVCs by providing them opportunities to attend such events as courses, seminars, conferences and workshops. In addition, to enhance and develop perception of part time lecturers, teachers and master and below degree holders pertaining learning organization dimensions in TVCs, educational administrators should provide them programs such as training, meetings, project teams, symposiums and workshops.



As respondents in full time, doctorate level and lecturer showed the strongest sense of improving the learning organization dimensions; it can be inferred that demographic factors can have different influences on seven learning organization dimensions and need to be further investigated. For researchers, this study contributes to the understanding of the learning organization theory locally, nationally and internationally and further research. Furthermore, it also provides a better understanding of learning organization dimensions in educational context based on personal variables, based on which, more programs can be developed. The applicability of DLOQ originally developed in western countries indicated that the Iranian contexts and western contexts share a high level of similarity. This study also proved that the learning organization dimensions are applicable and understandable by lecturers in TVCs.

## REFERENCES

- Agarwala, T. (2003). Innovative human resource practices and organizational commitment: an empirical investigation. [Article]. *International Journal of Human Resource Management*, 14(2), 175-197.
- Alam, M. F. (2009). Learning organization and development of woman managers in Pakistan. [Article]. *Human Resource Development International*, 12(1), 105-114.
- Alas, R., & Sharifi, S. (2002). Organizational learning and resistance to change in Estonian companies. *Human Resource Development International*, 5(3), 313-331.
- Alavi, S. B., & McCormick, J. (2004). A cross-cultural analysis of the effectiveness of the Learning Organization model in school contexts. *The International Journal of Educational Management* 18(7), 408-416.
- Argyris, C., & Schon, D. (2002). *Organizational Learning II: Theory, Method and Practice*: Addison Wesley Publishing, Reading, MA.
- Asadi, H., Ghorbani, M. H., & Naderan, M. (2009). The Relationship Between the Learning Organization and Productivity in Iran Physical Education Organization. *World Journal of Sport Sciences*, 2(3), 160-164.
- Attafar, A., & Bahrani, M. S. (2009). The extent use of Learning Organization Dimensions in Governmental and Azad Universities of Shahrekord city of Iran. *Higher Education Association Quarterly*, 2(1), 161-179.
- Ayupp, K., & Perumal, A. (2008). A learning organization: exploring employees' perceptions. *Management & Change*, 12(2), 29-46.
- Behbahani, A. (2010). Technical and vocational education and the structure of education system in Iran. *Procedia Social and Behavioral Sciences* 5(3), 1071-1075.
- Bryson, J., Pajo, K., Ward, R., & Mallon, M. (2006). Learning at work: organisational affordances and individual engagement. *Journal of Workplace Learning*, 18(5), 279-297.
- Bui, H., & Baruch, Y. (2010). Creating learning organizations in higher education: applying a systems perspective. *The Learning Organization*, 17(3), 228-242.
- Chajnacki, G. M. (2007). *Characteristics of learning organizations and multi-dimensional organizational performance indicators: a survey of large, publicly-owned companies*, Unpublished Disseration.
- Chen, H. F., & Chen, Y. C. (2008). The Impact of Work Redesign and Psychological Empowerment

- on Organizational Commitment in a changing environment: an example from Taiwan's state-owned Enterprise *Public Personnel Management*, 37(3), 279-302.
- DiBella, A. J., Nevis, E. C., & Gould, J. M. (1996). Understanding Organizational Learning Capability. *Journal of Management Studies*, 33(3), 361-379.
- Dirani, K. M. (2007). *The Relationship Among Learning Organization Culture, Job satisfaction, and Organizational Commitment in the Lebanese Banking Sector Unpublished Dissertation*. Urbana, Illinois.
- Dirani, K. M. (2009). Measuring the learning organization culture, organizational commitment and job satisfaction in the Lebanese banking sector. *Human Resource Development International*, 12(2), 189-208.
- Ebtekar, T. (1996). *The Development of Technical and Vocational Education for the Islamic Republic of Iran-a case study in quality improvement: Case Studies on Technical nad Vocational Education in Asia and the Pacific*.
- Ellstrom, N. (2001). Integrating learning and work: problems and perspectives. *Human Resource Development Quarterly*, 12(1), 35-47.
- Fulmer, R. M., Gibbs, P., & Keys, J. B. (1998). The second generation learning organizations: New tools for sustaining competitive advantage. *Organizational Dynamics*, 27(2), 6-20.
- Garvin, D. A. (1993). Building a learning organization. *Harvard Business Review*, 71(July-August), 78-91.
- Garvin, D. A. (2003). *Learning in action: a guide to putting the learning organization to work*: Boston: Harvard Business School Press.
- Hiatt-Michael, D. B. (2001). Schools as Learning Communities: A Vision for Organic School Reform. *The School Comunity Journal* 11, 113-127.
- Jamali, D., & Sidani, Y. (2009). Learning organizations: diagnosis and measurement in a developing country context: The case of Lebanon. *The Learning Organization*, 15(1), 58-74.
- Kanter, R. M. (1993). *Men and women of the corporation (2nd ed)*. New York: Basic Books.
- Khalaghi, A. (2003). Characteristics of Technical and Vocational Training System of Australia: Lessons for Improvement of Technical and Vocational Training System in Iran. *Instructional Innovations Quarterly*, 5(3), 67-83.
- King, K. (2007). *The role of UNESCO in supporting and promoting technical and vocational education and training in the Asia-Pacific Region: UNESCO, Bangkok*.
- Krishna, V. (2008). *Exploring Organizational Commitment from an Organizational Perspective: Organizational Learning as a Determinant of Affective Commitment in Indian Firms. Unpublished Dissertation*. The George Washington University.
- Krishna, V., & Casey, A. (2008). *Employee Perceptions of Organizational Learning as Determinants of Affective Commitment in Knowledge Intensive Firms* Paper presented at the Academy of Human Resource Development International Research Conference in the Americas (Panama City, FL, Feb 20-24, 2008).
- Kumar, N. (2005). *The Relationships Between Learning Organization Dimensions and Performance among Malaysian Private Institutions of Higher Learning, Unpublished Dissertation*. University Putra Malaysia.
- Marquardt, M. (2002). *Building the learning organization: mastering the five elements for corporate learning*. Palo Alto, CA: Davies-Black.
- Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: the dimensions of the learning organization

- questionnaire. *Advances in Developing Human Resources*, 5(1), 132-151.
- Mehralizadeh, Y. (2005). New Reforms in the Management of the University: Transition from Centralized to Decentralized (University- Based Management) in Iran. *Higher Education Policy*, 18, 67-82.
- Nunnally, J., & Bernstein, I. (1994). *Psychometric Theory* (3rd ed.) New York: McGraw-Hill.
- O'Neil, J. (2003). Participant's Guide for Interpreting Results of the Dimensions of the Learning Organization. *Advances in Developing Human Resources* 5(2), 222-230.
- Ortenblad, A. (2004). The learning organization: towards an integrated model. *The Learning Organization*, 11(2), 129-144.
- Pimapsunri, P. (2008). Factors affecting Learning Organization Culture and hotel managers' Leadership Styles in Thailand. *Educational Journal of Thailand*, 2(1), 34-43.
- Sadeghi, H., Sabheyyeh, M., & Keshavarzi, A. (2008). The analysis of expese-profit of technical and vocational colleges in Iran. *Quarterly of Economical Research*, 8(2), 101-118.
- Sadri, A., & Zahedi, A. (2010). Sequential Study on Technician Training Performance in Technical and Vocational Colleges of Iran *journal of Research and Planning in Higher Education*, 15(4), 99-112.
- Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*: Doubleday Publishers, New York, NY
- Sugarman, B. (2001). A learning-based approach to organizational change: Some results and guidelines. *Organizational Dynamics*, 30(1), 62-76.
- Tilik, J., B, G. . (2002). *Vocational Education and Training in Asia; In john P. Keves and Rye Watanable (Eds). The Handbook on Educational Research in the Asia Pacific Region*, Kluwer Academic Publishers.
- Tseng, C. C. (2010). *The Effects of Learning Organization Practices on Organizational Commitment and Effectiveness for Small and Medium-Sized Enterprises in Taiwan. Unpublished Doctral Disserteation* The University of Minesota.
- Veisi, H. (2010). Organizational Learning in the Higher Education Institutions (A Case Study of Agricultural and Natural Recourses Campus of University of Tehran). *International Online Journal of Educational Sciences*, 2(1), 21-36.
- Wang, S. (2005). *Relationship among organizational learning culture, job satisfaction and organizational commitment in Chinese state-owned and privately-owned enterprised*, *Unpublished Dissertation. University of Minnesota*.
- Watkins, K., & Golembiewski, R. T. (1995). Rethinking Organization Development for the Learning Organization. *The International Journal of Organizational Analysis*, 3(1), 86-101.
- Watkins, K., & Marsick, V. J. (1993). *Sculpting the learning organization Lessons in the art and science of systematic change* San Francisco: Jossey-Bass.
- Watkins, K. E. (2005). What Would Be Different if Higher Educational Institutions Were Learning Organizations? *Advances in Developing Human Resources*, 7(3), 414-421.
- Watkins, K. E., & Marsick, V. J. (1996). *In action: Creating the learning organization*. Alexandria, VA: American Society for Training and Development.
- Watkins, K. E., & Marsick, V. J. (1997). *Dimensions of learning organization (DLOQ) [survey]* Warwick, RI: Partners for the Learning Organization.

- White, J., & Weathersby, R. (2005). Can universities become true learning organizations? *The Learning Organization*, 12(3), 292-298.
- Yang, B., Watkins, K. E., & Marsick, V. J. (2004). The construct of the learning organization: dimensions, measurement, and validation. *Human Resource Development Quarterly*, 15(1), 31-56.
- Yulk, A. (1998). *Leadership in Organizations*, Upper Sadle River, NJ: Prentice Hall.
- Zahabioun, Z., & Yousefy, A. (2006). The Extent of Conformity of Isfahan Education Organization characteristics with Learning Organization characteristics based on teachers's View in School year 2004-2005 *Danesh and Pajouhesh in educational Studies*, 14(2), 125-144.
- Zainabadi, H., Salehi, K., & Parand, K. (2007). Girls Technical and Vocational Training: Evaluation of Quality of personal, Social, Economical Output of Tecnical Schools of Tehran City. *Women Research*, 5(2), 129-164.