# A Study of the Nature of Adaptation to Learning Organization Dimensions: The Case of Jordanian Industrial sector

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#### **ABSTRACT**

This research aimed at answering the following question: To which extent organizations included in the research sample were able to adapt to the dimensions of a learning organization as specified by Watkins & Marsick model? Specifically it aimed to examine the adoption level to learning organization dimensions of the Jordanian shareholding industrial organizations.

Seven dimensions of learning organizations were used in this research as specified by Marsick & Watkins. These dimensions are creation of continuous learning opportunities, promotion of inquiry and dialogue, encouragement of collaboration and team learning, creation of systems to capture and share learning, empowerment of people toward a collective vision, connection of the organization to its environment, and providing strategic leadership for learning.

To reach this end a sample of mangers from different managerial levels was drawn from organizations in the industrial shareholding companies in Jordan. Ultimately, a questionnaire was developed to collect data from respondents.

Results of testing the research hypotheses indicated that all dimensions of learning organization were successfully adopted be the organization in the study sample but in a moderate manner. Respondents' means ranged from a high of 3.2 for "connection to the environment' dimension and a low of 2.62 for the "availability of strategic leadership for learning" one.

Key words: Learning organization, Watkins & Marisck model, dimensions of learning organization, and Jordanian shareholding industrial sector.

#### 1. THEORETICAL BACKGROUN

Learning organization is the concept associated with a firm that facilitates the learning of its employees and continuously transforms itself so that it develops itself because of the necessity to face challenges facing modern organizations in order to stay competitive in the increasingly tough business environments.

Senge (1990) defined learning organization a "an 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)

Globalization was seen as a contributing factor to create and maintain a learning organization. Researchers as well as mangers believe that to increase organization ability to solve problems and face difficulties, learning organization is the solution, (Ayupe and Perumal, 2010).

It is a well-known fact that, In a typical learning organization, employees learn how to systematically face work challenges and engage in the development of processes that would help forecast future and create it, (Nazari, and Dopepihie, 2012). In the other hand, Lack of learning culture makes organizations and people repeat practices (Garvin, 2000). Therefore the existence of positive learning culture in organizations helps members to create and maintain most updated knowledge and helps them remain dynamic and productive. It also empowers employees to integrate daily activities with knowledge in a continuous fashion. (Bryson, Pajo, Ward & Mellan, 2006).

Moreover, the most pronounced benefits of learning organization include: increasing level of innovation related to operational process, products, and technology utilization. This will help to create, acquire, analyze and use of knowledge organization wide, (Alas & Sharifi, 2002, Ayupp & Perumel, 2008).

For the above reasons, many organizations around the world have adopted learning organization due to its profound impacts on employees development and skill building processes, (Alam 2009, Jamili & Yusuf, 2009).

## 1.1 DIMENSIONS OF THE LEARNING ORGANIZATION

Watkins and Marsick (1993, 2004) have introduced a system of seven dimensions that describes the concept of learning organization. According to their system, mangers need to provide continual learning opportunities for employees to help them become more empowered and more productive.

These seven dimensions describe actions taken by employees, teams, managers and the organization as a whole to create a learning organization. These seven dimensions are described below:

## 1.1.1 Creation of continuous learning opportunities

It refers to the extent to which learning in the organization is institutionalized so that ability of employees to learn new knowledge is facilitated and becomes possible.

## 1.1.2 Promotion of inquiry and dialogue

This learning organization dimension is related to the existence of a learning culture that allows members to communicate in an open fashion.

## 1.1.3 Encouragement of collaboration and team learning

It refers to the degree to which members receive encouragement by their managers to work together with a team spirit prevailing as part of solid learning culture.

## 1.1.4 Creation of systems to capture and share knowledge

It refers to the creation of organizational capability to utilize technology in the process of having a systemized tool to acquire and share knowledge organization wide.

## 1.1.5 Empowerment of people toward a collective vision

It refers to having an organizational processes to help employees participate collectively in the decision making process through knowledge based forums.

## 1.1.6 Connection of organization to its environments

This dimension refers to the extent to which an organization has an open system that facilitates the interactive connection with external as well internal environments.

## 1.1.7 Providing strategic leadership for learning

This refers to the availability of leadership with conceptual skills to lead the organization into the future through a learning process that energizes employees to fulfill the requirements for change in a unified manner.

#### 1.2 OBJECTIVE OF THE STUDY

This research aims at assessing the nature of the adaptation process of the industrial shareholding sector in Jordan to the dimensions of learning organization and to which extent the firms in the sample facilitate the learning process in their organizations.

#### 2. METHODOLOGY

To fulfill the requirements of this research a sample of industrial shareholding firms was drawn from the industrial sector and a questionnaire was adapted from Watkins & Marsick (1993) which includes 43 items, in order to collect primary data for data analysis in this research.

The survey was subjected to several tests to guarantee its reliability and consistency, Cronbach alpha was 0.94 which indicates that the reliability of the survey was high.

#### 2.1 THE STUDY INSTRUMENT

Watkins and Marsick developed an instrument to measure dimensions of learning organization. This was an instrument to diagnose to which extent a firm is really adopt learning organization system and therefore the instrument can provide a comprehensive profile of the real learning organization. (song, 2011).

Since the creation of this instrument, many researchers have utilized it in their investigations of the adaptation of the dimensions of the learning organization (Weldy, 2010). They indicated that for any organization to be successfully a learning organization, it must create an atmosphere that allows individuals at all managerial levels to share learning experiences and accept to participate in the creation process of these seven dimensions (Weldy, 2010).

For the purpose of this study, the instrument was used to collect data from respondents.

Sample for this study was drawn from the industrial shareholding sector in Jordan. A total of 500 managers were selected from all managerial levels in the study sample and 376 useful survey were received.

The total number of mangers who have responded to the survey and therefore included in the study sample was 367.

The survey included 43 statement in a Likert scale format to get responses from the study sample and distributed over the seven dimensions of a learning organization as follows:

Creation of continuous learning opportunities was measured by questions one to seven and creation of systems to capture and share knowledge was measured by statements number eight to thirteen.

Statements from fourteen to nineteen was used to measure the dimension of connection to the environment while statements from twenty to twenty five was used to measure the dimension of promotion of inquiry & dialogue.

Encouragement of collaboration of team learning dimension was measured by statements from twenty six to thirty one, and the dimension of empowerment of people to toward collective vision was measured by statements from thirty two to thirty seven.

Finally, providing strategic leadership for learning dimension, was measured by statements from thirty eight to forty three.

## 2.2 SAMPLE CHARACTERISTICS

Researchers selected Jordanian industrial shareholding sector as the population of the research. This sector is considered as significant contributor to the total economic activities in the country. It was reported that this sector was classified as the second contributor after the financial sector to the economy of Jordan. The sector total contribution in 2013 was 17.6 percent (Jordan National Economic Report, 2013).

Table (2) shows the demographic characteristics of the study sample. The sample was predominantly male mangers (83%), and more than 60 percent of respondents fall in the age category of (30-40) years.

Table (2): respondents' demographic

Gender	Male	304	82.8
	Female	63	17.2
Age	Less than 30 years	41	11.2
	30-40 years	217	59.1
	41-50	70	19.1
	More than 50	39	10.6
Education	Diploma	13	3.5
	Bachelor	290	79.0
	Masters	50	13.6
	PhD	14	3.8
Tenure	Less than 5 years	56	15.3
	5-10	160	43.6
	11-15	105	28.6
	More than 15	46	12.5
Managerial Rank	GM/ Deputy	26	7.1
	Department Head		25.1
	Unit Head	55	15.0

	Supervisor	94	27.2

The percentage of respondents who have bachelor degrees was 80 present and 44 percent of managers have a tenure of 5-10 years and 29 percent have a tenure of 11-15 years in their respective firms.

Only 7 percent of the respondents were general managers or deputy general manager and 40 percent were head of departments or units head and finally 27 percent were in a managerial supervision posts.

#### 2.2.1 INSTRUMENT VALIDITY AND RELIABIBILTY

To guarantee the validity and reliability of the study instrument, several tests were performed.

Factor analysis was conducted to investigate the factor consistency of the model. To achieve this the method of principle components analysis was applied on all instrument's statements. This analysis calculates loadings a swell as communalities for each factor using varimax rotation.

Results of this test is reported in Table (3), and as shown in the table, all loadings and commonalties are high enough to guarantee the consistency of the instrument. This result is consistent with the fact that the instruments was subjected to many tests and was modified by the authors several times and used by many researchers in the process of investigating the extent to which organizations adopt to learning organization

Dimensions (Ellinger, 2002; Watkins and Mrasick, 2004; Davis, 2005; Hossain et,al, 2011; Shalvan, 2012).

Table (3a) indicates that the statements in the study survey used to collect data about the first dimension of learning organization "Creation of continuous learning opportunities" was able to explain 52.56% of the variations with a highly significant K.M.O (0.88).

Table (3a): Factor Analysis Results for "Creation of Continuous Learning Opportunities" Dimension

Item	Loadings	Commonalty	Explained variance: 52.56%
Number			Value of K.M.O test: 0.88
1	.53	.73	Sig.: 0.000
2	.63	.79	
3	.56	.75	
4	.42	.65	
5	.53	.73	
6	.49	.70	
7	.52	.72	

Table (3b) shows that, the statements in the study survey for the second dimension of learning organization "Promotion of Enquiry and Dialogue" was able to explain 53.96% of the variations with a highly significant K.M.O (0.84).

(Table 3b): Factor Analysis Results for "Promotion of Enquiry and Dialogue" Dimension

Item	Loadings	Commonalty	Explained variance: 53.96%
Number			Value of K.M.O test: 0.84
8	.51	.72	Sig.: 0.000
9	.59	.77	
10	.39	.63	
11	.62	.79	
12	.59	.77	
13	.53	.73	

Table (3c) shows that the statements in the study survey for the third dimension of learning organization "encouragement of collaboration and team learning" was able to explain 48.30% of the variations with a highly significant K.M.O test (0.83).

(Table 3c): Factor Analysis Results for "Encouragement of Collaboration and Team Learning" Dimension

Item	Loadings	Commonalty	Explained variance: 48.30%
Number			Value of K.M.O test: 0.83
14	.69	.47	Sig.: 0.000
15	.71	.51	
16	.73	.53	
17	.57	.33	
18	.74	.55	
19	.72	.51	

Table (3d) shows that the statements in the study survey for the fourth dimension of learning organization "Creation of systems to capture and share learning" was able to explain 42.34% of the variations with a highly significant K.M.O (0.75).

(Table 3d): Factor Analysis Results for "Creation of Systems to

## Capture and Share Learning" Dimension

Item	Loadings	Commonalty	Explained variance: 42.34%
Number			Value of K.M.O test: 0.75
20	.53	.38	Sig.: 0.000
21	.70	.49	
22	.72	.51	
23	.63	.40	
24	.68	.40	
25	.63	.40	

Table (3e) shows that the statements in the study survey for the fifth dimension of learning organization "providing strategic leadership for learning" was able to explain 52.45% of the variations with a highly significant K.M.O (0.85).

(Table 3e): Factor Analysis results for "Providing Strategic Leadership

for learning" Dimension

Item Number	Loadings	Commonalty	Explained variance: 52.45%
26	.67	.45	Value of K.M.O test: 0.85
27	.73	.53	Sig.: 0.000
28	.78	.61	
29	.77	.59	
30	.69	048	
31	.70	.48	

Table (3f) shows that, the statements in the study survey for the sixth dimension of learning organization "Empowerment of people toward a collective vision" was able to explain 42.20% of the variations with a highly significant K.M.O (0.78).

(Table 3f): Factor Analysis Results for "Empowerment of People

Towards a Collective Vision" Dimension

Item Number	Loadings	Commonalty	Explained variance 42.20%
32	.67	.44	Value of K.M.O test: 0.78
33	.63	.40	Sig.: 0.000
34	.62	.39	
35	.73	.53	
36	.60	.36	
37	.64	.41	

Table (3g) shows that the last six statements in the study survey for the seventh dimension of learning organization "connection to the environment" was able to explain 57.25% of the variations with a highly significant K.M.O (0.73).

(Table 3g): Factor Analysis Results for "Connection to the Environment" Dimension

Item	Loadings	Commonalty	Explained variance: 57.25%
Number			Value of K.M.O test: 0.73
38	.40	.57	Sig.: 0.000
39	.61	.78	
40	.43	.65	
41	.47	.58	
42	.80	.89	
43	.72	.80	

#### 3. FINDINGS

As reported in table (1) below, all seven dimensions of learning organizations were moderately adopted by the research sample. Connection to the environment ranked number one with an average of 3.22 and 0,94 standard deviation, followed by Promotion of inquiry & dialogue with an average of 3.17 and 0.93 standard deviation.

Creation of systems to capture and share knowledge ranked third with an average of 3.6 and 1.03 standard deviation, while creation of continuous learning opportunities ranked fourth with an average of 3.02 and a standard deviation of 0.97.

Table (1): Results of descriptive statistics for respondents' evaluation of the dimension of learning organization

Number	Dimension	Average	Standard Deviation	Level of Adaptation	Rank
6	Connection to the environment	3.22	0.94	Medium	1
2	Promotion of inquiry & dialogue	3.17	0.93	Medium	2
4	Creation of systems to capture and share knowledge	3.16	1.03	Medium	3
1	Creation of continuous learning opportunities	3.02	0.97	Medium	4
5	Empowerment of people to toward collective vision	2.83	0.86	Medium	5
3	Encouragement of collaboration and team learning	2.75	0.95	Medium	6
7	Providing strategic leadership for learning	2.62	0.79	Medium	7

Empowerment of people to toward collective vision ranked as number five with an average of 2.83 and a standard deviation of 0.86, then encouragement of collaboration and team learning ranked as number six with an average of 2.75 and a standard deviation of 0.95.

Lastly, providing strategic leadership for learning dimension ranked last with an average of 2.62 and a standard deviation of 0.79.

#### 4. DISCUSSION AND RECOMMENDATIONS

Results indicated that Jordanian industrial shareholding firms are moderately adapted to the learning organizations dimensions. The connection to the environment dimension classified first and availability of strategic leadership to learning dimension classified last.

This quite an important finding that Jordanian industrial organizations were very much aware of the importance of continuous monitoring of the external environmental strategic factors. This actually helps organizations to identify available opportunities in the external environment and thus develop strategies to capture them.

When an organization continue to scan the external environment, it should be able to identify threats and risks that otherwise cannot be discovered.

Higher levels of connection to the external environment provide organization members with the necessary understanding of the importance of such a connection and help them discover any news trends that is relevant to their work and success.

The last learning organization dimension was the availability of strategic leadership for learning. This dimension indicates the fact that it is difficult to build up a learning organization in absence of full support from the top strategic level in the organization. It is necessary that the support of the top management must be made available to support learning, otherwise none of the learning organization dimensions can work properly.

It is obvious that, a low level of strategic support is available in the sample, which might have been responsible about the moderate use of learning organization dimensions by firms in the study sample.

Therefore, it is critical that the strategic levels in Jordanian industrial shareholding firms must develop strategies and take definite decisions to enhance their engagement and support for learning activities in their respective organizations.

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