# The Relationship between the Learning Organization Dimensions and Transformational Leadership in Petrochemical Industry in Iran

**Fazlollah Zarepour Nasirabadi[1], Elham Vahedi[2*] and Mahdi Vahedi[3]**
[1]Department of Public Management, Azad University of Kerman, Kerman, IRAN
[2]Department of Executive Master of Business Administration, Alborz, IRAN
[3]Department of Industrial Management, Islamic Azad University, Firoozkooh, IRAN

## Abstract

*Nowadays, the external environment for many companies is characterized by turbulence associated with globalization, changing customers and investor demands, increasing product market competition, technology growth, considering knowledge and learning as the main assets of organizations and rapid increasing change and chaos. Some management sages advocated new "generative transformational" forms of learning to deal with an external reality in which everything is constantly evolving or "becoming". These assumptions rise to the notion of learning organization. However, examining the relationship between learning organization dimensions and other organizational elements makes it possible to draw on suitable strategies in order to improve learning. In this study the relationship between learning organization dimensions in point view of Watkins and Marsick including continuous learning, dialogue and inquiry, team learning, embedded system, system connection, ,empowerment, Strategic leadership and transformational leadership have been investigated. This study is a descriptive correlational research. Considering goal, it is an applied research. Statistical Population of the study includes Iranian National Petrochemical companies that are 45. Due to the accessibility of the whole statistical population, in this research census sampling method has been used. Research findings showed a significant relationship between transformational Leadership and three dimensions (among 7 dimensions) of learning organization which consist of "continuous learning", "team learning", and "embedded system". In considering the triple levels of learning organization, the findings illustrated a significant relationship between transformational Leadership and two levels (group and organizational).*

## Introduction

The organizational environment is changing rapidly because the world is turning into a global village. Globalization and increased workforce diversity have entirely changed the internal and external environment of organization[1]. Organizations face an unprecedented range of challenges and opportunities in the social, economic, political and business environment. This external environment is characterized by uncertainty, surprise, turbulence and discontinuity[2]. In order to succeed and survive, firms must continuously monitor, respond and adapt to the influences of the external environment[3, 4]. To serve these aims in 21th century, the organizations' leaders are searching for the ways of improving the capacity of organizations to quickly overcome the challenges. A large number of organization researchers have recognized that, the organization's capacity to learn may be the only true source of competitive advantage and the sole way of surviving in future[5-8]. According to Senge[9], in present world which is a complicated world of rapid changes, for an organization to survive, its rate of learning must be equal to, or greater than, the rate of change. To generate learning capacity, he (1994) advocates the idea of developing organizations into learning organizations. After the introduction

of learning organization theory by Senge[10], There were numerous normative books on what people believed would occur when a LO was implemented and how to implement it. There also were many qualitative case studies of LO interventions and, some qualitative case studies that included some quantitative measures[6]. But the shortage of empirical investigations concerning with learning organization rings warning bell[6,11]. Tosey and Smith "argued that without the capability and disposition for organizations to measure their progress toward learning organization ideals, further headway in substantive wide scale learning organization development will be seriously jeopardized". Therefore, it is obvious that there is an absence of researches (especially quantitative researches) who are concerned with learning organization and organizational learning. To establish a learning organization, some structural and contextual dimensions such as: leadership, organizational culture, technology (information technology in particular), organizational structure, environment, etc., are influential[12, 7]. These dimensions need to be analyzed more. So, The main goal of this study is the study and investigation of the relationship between learning organization dimensions in point view of Watkins and Marsick[12-14], including continuous learning, dialogue and inquiry, team learning, embedded

system, system connection, ,empowerment, Strategic leadership and transformational leadership in considering the triple levels of learning organization.

**Literature Review: Learning Organization:** Although there are various definitions and different perspectives to learning organization such as "system thinking" of Senge[10], "learning perspective" proposed by Pedler, Burgoyne and Boydell[15] and "strategic perspective" of Garvin[16], some common characteristics can be identified. First, all perspectives to the construct of a learning organization assume that organizations are organic entities like individuals and have the capacity to learn. Central to this approach and implicit in the organization-as-organism metaphor[17-19] is the need to achieve "a balancing inside-out focus of development and transformation of what is already there"[19]. More and more organizational researchers realize that an organization's learning capability will be the only sustainable competitive advantage in the future. Second, there is a difference between two related yet distinct constructs—the learning organization and organizational learning[20-23]. These distinctions have not been totally accepted[24]. Third, the characteristics of a learning organization should be reflected at different organizational levels—generally, individual, team or group, and structural or system levels[24,7,8,13]. As Garvin[16] discusses, the learning pyramid begins with individual learning which includes the learning of every individual, goes through group learning and finally ends up with learning organization. In his opinion, learning organization is the pyramid's peak. Watkins and Marsick's[13,14] framework of learning organization served as the theoretical foundation for the current study. This theoretical framework has several distinctive characteristics. First, it has a clear and inclusive definition of the construct of the learning organization. It defines the construct from an organizational culture perspective and thus provides adequate measurement domains for scale construction. Second, it includes dimensions of a learning organization at all levels. This framework was among the few that covered all learning levels (that is, individual, team, and organizational) and system areas[25,19]. Third, this model not only identifies main dimensions of the learning organization in the literature but also integrates them in a theoretical framework by specifying their relationships. Such a theoretical framework not only provides useful guidelines for instrument development and validation but also suggests further organizational studies. Last, it defines the proposed seven dimensions of a learning organization from the perspective of action imperatives and thus has practical implications. This action perspective of the learning organization both provides a consistent cultural perspective on the construct and suggests several observable actions that can be taken to build a learning organization. In the process of instrument development, it is essential to construct a set of observable variables to form measures for latent variables or theoretical constructs. In a comprehensive review of literature on learning organizations, Örtenblad (2002)[24] developed a typology of the idea of a learning organization. Among the twelve perspectives of the learning organization evaluated by Örtenblad[24], Watkins and Marsick's[13] approach is the only theoretical framework that covers all four perspectives of the idea of a learning organization in the literature. However, those [should] be called aspects of LO instead of perspectives[24]. According to Watkins and Marsick[13,14], there are three levels of organizational learning. The first is the individual level, which is composed by two dimensions of organizational learning: *continuous learning* and *dialogue and inquiry*. The second is the team or group level, which is reflected by *team learning and collaboration*. The third is the organizational level, which has four dimensions of organizational learning: *embedded system, system connection, empowerment,* and *provide leadership for learning.* These three levels can be further considered to belong to one of the two components of Watkins and Marsick's[13] model of a learning organization. The first component represents the people who make up an organization, and the second component represents the structures and culture created by the organization's social institution.

**Transformational Leadership:** One can consider leadership from several perspectives. First, leadership can be looked upon from a historical perspective focusing on how leadership theory has developed over time. Four stages can be identified: the trait approach (1940s); behavioral (style) approach (1950s and 1960s); contingency approach (1970s and 1980s); and new leadership approach (1990s)[26]. According to Fey et. al[26], many scholars argue that one should distinguish between two fundamentally different forms of leadership: transactional and transformational. Transactional leaders operate within the framework of an existing organizational culture, identify present subordinate needs, and strive to fulfill these needs largely within the existing initiating structure. Transformational leaders, in contrast, seek to make more substantial changes based on a clear vision that they have which they try to instill in others. Transformational leaders seek to alter the organization's culture and change the group's needs and wants and consists of four sub dimensions: inspirational motivation, intellectual stimulation, individualized consideration, and charisma[27,28]. In another view, Rafferty and Griffin[29] proposed transformational leadership dimensions that include:

**Vision**: We identify vision as an important leadership dimension encompassed by the more general construct of charisma. Bass (1985)[30] argued that the most general and important component of transformational leadership is charisma[29]. Transformational leaders define the need for change, create new visions, mobilized commitment to these visions and transform individual followers and even organizations[31]. Vision defines desirable future condition of company. It will be motivating and challenging for scooping and maintaining the best and creative knowledge worker[7]. The ability of the leader to articulate an attractive vision of a possible future is a core element of transformational leadership.

**Inspirational communication**: Transformational leadership goes beyond the cost-benefit exchange of transactional

leadership by motivating and inspiring followers to perform beyond expectations[30] and inspirational motivation has been identified as an important component of transformational leadership. According to Bass[32], both charisma and inspirational motivation are displayed when a leader envisions a desirable future, articulates how it can be reached, sets an example to be followed, sets high standards of performance, and shows determination and confidence. This description suggests vision and inspirational motivation might be combined into a single construct. However, other researchers have argued that it is useful to maintain a distinction between vision and inspirational motivation[29]. In this study, we suggest that inspirational communication is a distinct construct, defined as, "The expression of positive and encouraging messages about the organization, and statements that build motivation and confidence" [29].

**Supportive Leadership**: individual cares happen when leadership shows developing tendencies toward his/her employees, paying personal attention to his/her employees and appropriately meeting their needs[29]. While a leader's charisma may attract subordinates to a vision or mission, providing individualized consideration and support is also needed to gain desired results and helps individual subordinates achieve their fullest potential[31]. We define supportive leadership as, "Expressing concern for followers and taking account of their individual needs"[29].

**Intellectual stimulation**: This leadership factor encompasses behaviors that increase followers' interest in and awareness of problems, and that develop their ability and propensity to think about problems in new ways[30]. An intellectually stimulating leader provides subordinates with a flow of challenging new ideas to stimulate rethinking of old ways of doing things [30,31] Marquardt (2002)[7] holds that, challenging traditional methods, the managers can be the leaders of new ideas. We define intellectual stimulation as "Enhancing employees' interest in, and awareness of problems, and increasing their ability to think about problems in new ways"[29].

**Personal Recognition**: although contingency reward is part of transactional leadership characteristics, there are many evidences showing that charismatic and transformational leadership also pay attention to contingency rewards. In such a system of rewarding, in response to achievement of visions which is agreed upon, various types of rewards are given. In this study, "personal recognition" is chosen because, among contingency rewards, it is more compatible with the transformational leadership[29]. We define personal recognition as, "The provision of rewards such as praise and acknowledgement of effort for achievement of specified goals"[29].

These dimensions are approximately cope with characteristics of Socioemotional leadership, considered by Casimir (2001)[33]: "Socioemotional leadership is multifaceted and includes behaviors such as providing encouragement and keeping interpersonal relations pleasant, maintaining two-way communication with subordinates, being friendly and approachable, looking out for the welfare of subordinates, treating subordinates fairly, understanding subordinates' viewpoints, asking subordinates' opinions, reducing subordinates' stress levels, and expressing appreciation for subordinates' efforts".

**The Relationship between Transformational Leadership and Organizational Learning:** Many authors have asserted relationships between leadership and organizational learning[9,34-36]. According to Arago´n-Correa[37], Transformational Leadership shows a very high and significant influence on organizational learning. Dervitsiotis suggests that leaders prepare their organization for learning by creating systems thinking, common mental models, shared vision, and strategic alignment[38]. The responsibility of leaders, argues Senge, is to ensure that a shared vision does exist. That vision can come from anywhere in the organization. Top leadership is concerned with: building shared vision; empowering people and inspiring commitment; enabling good decisions to be made through designing-learning processes (Senge, 1991)[39]. First three questions of transformational leadership questionnaire which explain exact definition of vision are related to this issue. According to Senge[10], the idea which inspires organization in terms of leadership is the capacity of creating shared vision of the future we are searching for. Garvin[16] regards leadership as one of the building block of learning organization. He says that leadership, in learning organization, appreciates empowered employees, praises experimental culture. This issue indicates the strong commitment existing in organization. These characteristics are questioned in questions related to supportive leadership and Intellectual stimulation. Regarding supportive leadership, Bass[32] states that individual cares take place when leadership has developing tendencies towards its employees and pays attention to individual care as well. According to Senge[10], Organizing and designing the structure is one of the modern leadership duties in learning organization. In learning organization, leader is not the only smart decision maker but he is teacher, designer and mentor of change[10]. Marquardt[7] also pointed out new roles of learning organization leadership such as teacher, instructor, supervisor, knowledge manager, a pattern for learning, architect, designer, coordinator, and supporter of learning projects. He considers some skills necessary for learning organization leaders. These skills are the creation of common vision, coordination of task-oriented and crossfunctional teams, experiment and feedback to mental models, cooperation in systematic thinking, creativity awards, innovation and risk, conceptualization, learning inspiring and action. Leaders are responsible for establishing organizations in which individuals incessantly develop their abilities into understanding complexities, clearing visions and expanding mental models. This means that leaders are responsible for employees' learning[10]. Most of these characteristics (such as experiment and feedback to mental models, cooperation in systematic thinking

and creativity praising, innovation and risk, and inspiring) are parts of transformational leadership dimensions.

**Conceptual Frame work:** According to the literature review about The Relationship between Transformational Leadership and Organizational Learning, The conceptual frame work of the present study was designed using the constructs of learning organization in the view of Watkins and Marsick[13,14] and transformational leadership. This model is presented in figure 1.
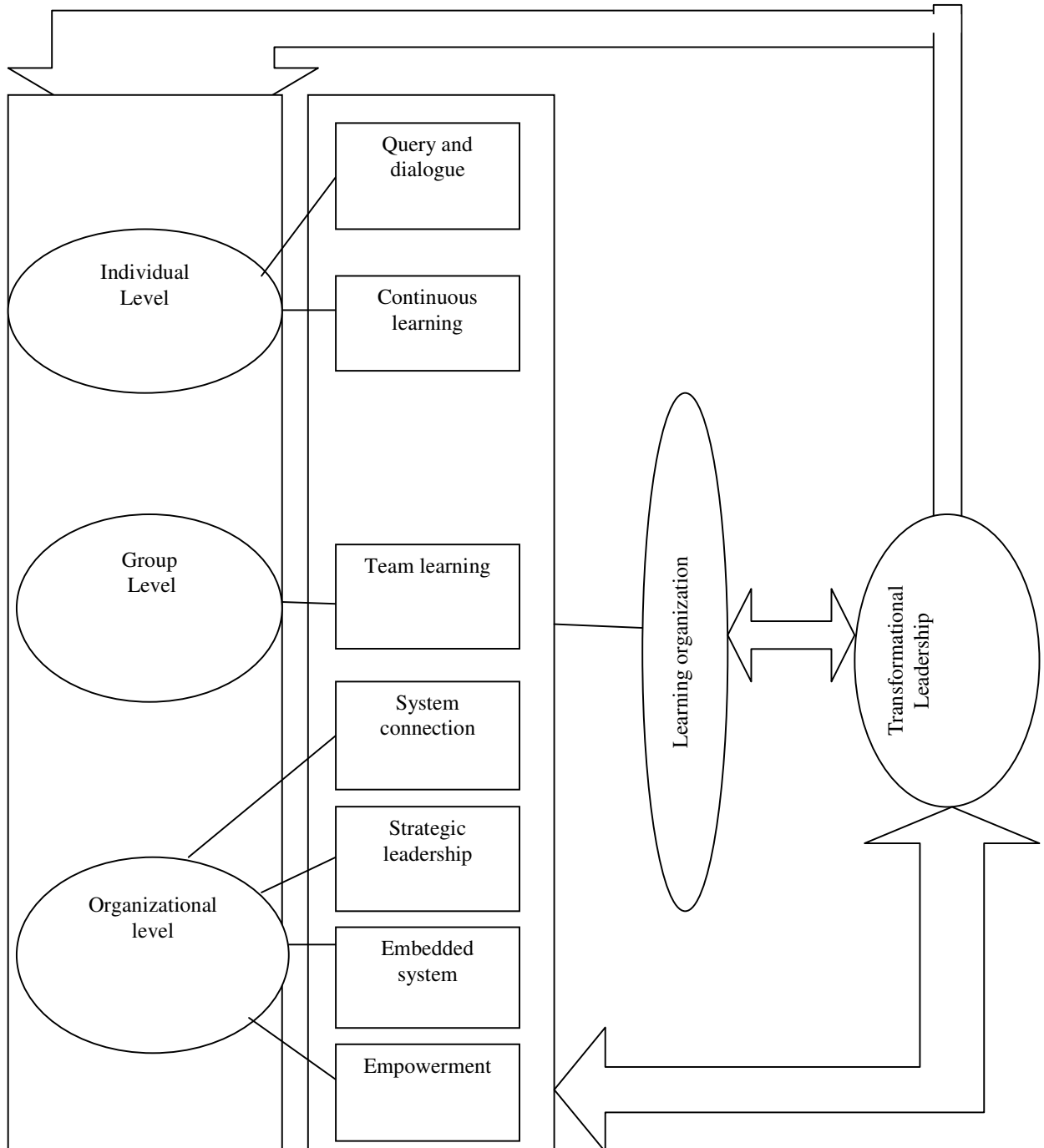


**Figure-1**
**Conceptual Frame Work**

According to the given model, the research hypotheses are as follows:

**Hypothesis 1:** There is a significant relationship between transformational leadership and learning organization.

**Hypotheses 2:** i. There is a significant relationship between transformational leadership and continuous learning. ii. There is a significant relationship between transformational leadership and query and dialogue. iii. There is a significant relationship between transformational leadership and team learning. iv. There is a significant relationship between transformational leadership and empowerment. v. There is a significant relationship between transformational leadership and embedded system. vi. There is a significant relationship between transformational leadership and system connection. vii. There is a significant relationship between transformational leadership and strategic leadership.

**Hypotheses 3:** i. There is a significant relationship between transformational leadership and individual level of learning organization. ii. There is a significant relationship between transformational leadership and group level of learning organization. iii. There is a significant relationship between transformational leadership and organizational level of learning organization.

## Material and Methods

Considering goal, this study is an applied research because it undergoes the application of science in practice and in case of method, it is descriptive correlational. It is descriptive since it gives an image of the current situation and it is correlational as it will investigate the relationships between the variables. Statistical population   includes National Petrochemical Sub-companies and EP-C companies. According to NPC (National Petrochemical Company) there are 45 companies including petrochemical sub-companies and EP-C companies. Due to the accessibility of the whole statistical population, in this research census sampling methods has been used and data gathering tool is questionnaire that consists of two parts: learning organization dimensions including 48 questions (six-point Likert-type scale that ranged from "almost never" to "almost always") that  was extracted from standard questionnaire of Watkins and Marsick[13,14] and transformational leadership dimensions consist of 5 questions (six-point Likert-type scale that ranged from "almost never" to "almost always") that was extracted from standard questionnaire of Rafferty and Griffin (2004)[29] and For testing hypotheses Pearson Correlation test is used.

**Reliability:** Reliability of a questionnaire means that if the questionnaire by the researcher or someone else be conducted in another time and place, the results would be similar. In order to investigate the reliability of the research, we have used the method of Cronbach's alpha. First of all, a sample of 15 questionnaires were distributed and then by using the software of SPSS, coefficient of Cronbach's alpha was calculated for each of the elements. The minimum of acceptance for the above scale is considered as 0.7. The results indicate a strong reliability of the questionnaire that is well shown in the table 1.

**Table-1**
**Dimensions' Reliability Statistics**

| Variables | Questions | Cronbach's Alpha |
|---|---|---|
| Continuous Learning | 1-4-7-10-13-15-16-17 | 0.889 |
| Dialogue and query | 8-13-3-6-12-14 | 0.865 |
| Team Learning | 11-9-5-2-18-19 | 0.895 |
| Empowerment | 20-25-23-27-30-33 | 0.822 |
| Embedded System | 26-47-21-24-28-34 | 0.869 |
| System connection | 32-37-39-41-43-35 | 0.869 |
| Strategic Leadership | 40-42-22-26-29 | 0.928 |
| Transformational Leadership | 44-50-46-52-49 | 0.967 |
| Learning organization | 45-51-48-31-53 | 0.974 |

**Validity:** Questionnaire validity is that if the questions measure an important aspect of the research goal or not. In this research, face validity has been used to measure the questionnaire validity. For this matter, according to review of the literature, research backgrounds and by using the patterns of the standard and valid questionnaires, a questionnaire including 53 questions was designed. It was given to some experts in this field of area and according to their ideas; final amendments were done and distributed among the customers.

## Results and Discussion

**Checking the Status of Normality:** In this part of the study, Kolmogorov-Smirnov test was utilized for determining the normality of data distribution. In order for the distribution to be normal, the significance coefficient must be higher than 0.05. The results of this test are presented in table 2.

$H_0$: The relevant variable is normal. $H_1$: The relevant variable is not normal.

As it is indicated in the table 2, the significance values of all variables are over 0.05 which refer to the normality of the distribution of all variables. Thus, in order to confirm or reject the hypotheses, tests assuming normality are employed.

**Testing the Hypotheses:** For testing hypotheses Pearson Correlation test is used and the acceptable level for significance coefficient is lower than 0.05.

**Table-2**
**The Results of Kolmogorov-Smirnov Test of the Normality of Research Variables**

| Variable | K_S | Sig | Distribution |
|---|---|---|---|
| learning organization Dimensions | 1.44 | 0.710 | Normal |
| Continuous Learning | 1.32 | 0.243 | Normal |
| Dialogue and query | 1.15 | 0.526 | Normal |
| Team Learning | 1.70 | 0.059 | Normal |
| empowerment | 1.08 | 0.320 | Normal |
| Embedded System | 1.44 | 0.1000 | Normal |
| System connection | 1.23 | 0.089 | Normal |
| Strategic Leadership | 1.47 | 0.187 | Normal |
| transformational leadership dimensions | 1.26 | 0.500 | Normal |

**Table-3**
**Pearson Correlation between Transformational Leadership and learning organization**

| | learning organization | |
|---|---|---|
| Transformational Leader | 0.540 | Pearson Correlation |
| | 0.046 | Sig. (2-tailed) |

**Hypothesis 1:** There is a significant relationship between transformational leadership and learning organization.

According to Pearson correlation test, correlation is significant at the 0.05 level (2-tailed) (table 3), thus null hypothesis can be rejected. It means that the existence of a significant relationship between transformational leadership and organizational learning in sub-companies and EP-C companies is at 0.95 degree of confidence.

**Hypothesis 2:** There is a significant relationship between transformational leadership and every learning organization dimensions.

As you see in table 4, the relationship between transformational leadership and every dimension of learning organization is significant for "continuous learning", "team learning" and "embedded system".

**Hypothesis 3:** There is a significant relationship between transformational leadership and every level of learning organization.

The result shows that there is a significant relationship between transformational leadership and learning at both group and organizational levels (table 5). The reason is that Sig. (2-tailed) is lower than 0.05 (0.044 < 0.05). Therefore, at 0.95 degree of confidence, the relationship can be supported. For the Individual level, findings can not reject null hypothesis and the significant relationship is not supported.

**Table-4**
**Pearson Correlation between Transformational Leadership and each Dimension of LO**

| | | Continues learning | Dialog and query | Team learning | empowerment | Embedded sys | System connection | Strategic leadership |
|---|---|---|---|---|---|---|---|---|
| Transformational Leadership | Pearson Correlation | 0.583 | 0.439 | 0.574 | 0.350 | 0.588 | 0.481 | 0.462 |
| | Sig. (2-tailed) | 0.029 | 0.116 | 0.032 | 0.221 | 0.027 | 0.082 | 0.096 |
| | $H_0$ | Rejected | Not Rejected | Rejected | Not Rejected | Rejected | Not Rejected | Not Rejected |
| | significant relationship | ✓ | ✗ | ✓ | ✗ | ✓ | ✗ | ✗ |

**Table-5**
**Pearson Correlation between Transformational Leadership and each Level of LO**

| | LO levels | Individual | Team and Group | Organizational |
|---|---|---|---|---|
| Transformational Leadership | Pearson Correlation | 0.517 | 0.574 | 0.545 |
| | Sig. (2-tailed) | 0.058 | 0.032 | 0.044 |
| | H0 | Not Rejected | Rejected | Rejected |
| | significant relationship | ✗ | ✓ | ✓ |

## Conclusion

In increasingly complicated business environment[40], the major factors influencing the climate are management's leadership[41]. Leadership is the ability to inspire others to achieve objectives actively[42]. In this research results showed that there is a significant relationship between transformational leadership and organizational learning. With regard to organizational learning dimensions, this relationship is significant for "continuous learning", "team learning" and "embedded system". Transformational leadership has a significant relationship with learning at both group and organizational learning. Marquardt's system model of learning organization (2002)[7] verifies the relationship of "organizational learning" with "organizational leadership" which belongs to individual aspect of his model. The recent research's results confirm this part of Marquardt's model. Daft's model (2001)[12] indicates the relationship between learning and leadership, strategy, information transfer, structure, culture and delegation of authority. In this research the significant relationship between leadership and learning accords with Daft's model. Regarding the support of the direct relationship between leadership and learning, the leaders of organizations can improve the growth and development of learning with the help of transformational leadership indices. This idea is important in relation with the development of "continuous learning", "team learning" and "embedded system". In according to a significant relationship between transformational leadership and "learning in organizational level," the transformational leadership can be used as a means of achieving more learning at organizational level. Transformational leadership should be taught to CEOs but it is important to know that CEO with transformational leadership characteristics is primarily employed.

## References

1. Abdullah I., Rashid Y., and Umair T., Effect of Organizational Learning and Knowledge Management Practices on Organizational Performance, *Journal of Basic and Applied Scientific Research*, **3(5)**, 34-39 **(2013)**

2. Coulson-Thomas C.J., Developing tomorrow's professionals today, *Journal of European Industrial Training*, **15(1)**, 3-11 **(1991)**

3. Florence T.T. and Phua D., Senior executives' perception of environmental uncertainty and the strategic functions of construction, *International Journal of Project Management* xxx xxx–xxx, 1- 9, **(2007)**

4. Rowden R.W., The learning organization and change, *SAM Advanced Management Journal*, **66(3)**, 11-20 **(2001)**

5. Yang Jen-Te, Knowledge Sharing: Investigating Appropriate Leadership Roles and Collaborative Culture, *Tourism Management*, **28(2)**, 530–543 **(2007)**

6. Kiedrowski P.J., Quantitative Assessment of a Senge Learning Organization Intervention, *the Learning Organization.* **13(4)**, 369-383 **(2006)**

7. Marquardt M.J., Building The Learning Organization, 2nd ed., Daviese-Black, Palo Alto, CA - McClelland, D.C. (1975). Power: The inner experience. New York: Irvington Publishers **(2002)**

8. Hill Rosemary, A measure of the learning organization, *Industrial and Commercial Training*, **28(1)**, 19–25 **(1996)**

9. Senge P.M., The fifth discipline, New York' Doubleday Publ **(1990)**

10. Senge P.M., the Leaders' New Work: Building Learning Organizations, *Sloan Management Review*, **32(1)**, 7-23 **(1990)**

11. Tashapara A., Cognation, Culture and Competition, *the Learning Organization*, **10(1)**, 31-50 **(2003)**

12. Daft R.L., Organization Theory and Design, 7th ed., South Western College, Cincinnati, OH **(2001)**

13. Watkins K.E. and Marsick V.J., Sculpting the Learning Organization: Lessons in the Art and Science of Systemic Change, Jossey-Bass, San Francisco, CA **(1993)**

14. Watkins K.E. and V.J. Marsick, In Action: Creating the Learning Organization, Alexandria, VA: American Society for Training and Development, **(1996)**

15. Pedler M., Burgoyne J. and Boydell T., the Learning Company: A Strategy for Sustainable Development, McGraw-Hill, London **(1991)**

16. Garvin, D. Building a learning organization. *Harvard Business Review*, July-August, 78- 91**(1993)**

17. Morgan, G., Images of Organization, Sage, London **(1997)**

18. Schein, E. H., Organizational and Managerial Culture as a Facilitator or Inhibitor of Organizational Learning, Sloan Management Review, May, **(1994)**

19. Yeo Roland K., Revisiting the roots of learning organization: A synthesis of the learning organization literature*, The Learning Organization*, **12(4)**, 368-382**, (2005)**

20. Tsang E.W.K., Organizational learning and the learning organization: a dichotomy between descriptive and prescriptive research, *Human Relations*, **50(1)**, 73-89 **(1997)**

21. Argyris C. and Schone D.A., Organizational learning: A Theory of Action Perspective, Reading, MA. Addison-Wesley **(1978)**

22. Easterby-Smith M., Disciplines of organizational learning: contributions and critiques, *Human Relations*, **50(9)**, 1085-113 **(1997)**

**23.** Easterby S.M. and Araujo L., Organizational learning: current debates and opportunities, In Easterby-Smith, M., Burgoyne J. and Araujo L. Organizational Learning and the Learning Organization: Developments in Theory and Practice. London: Sage **(1999)**

**24.** Ortenblad Anders, On Differences Between Organizational learning and learning organization, *The Learning Organization*, **8(3)**, 125-133 **(2001)**

**25.** Redding, J., Hardwiring the learning organization*, Training & Development*, **51(8)**, 61-7 **(1997)**

**26.** Fey C.F. et al., Developing a model of leadership styles: what works best in Russia?, *International Business Review,* **10**, 615–643 **(2001)**

**27.** Bass B.M. and Avolio B.J., Improving organizational effectiveness through transformational leadership. Thousand Oaks, CA: Sage; **(1994)**

**28.** Bass B. and Avolio B.J., Multifactor leadership questionnaire (MLQ) Form 5X-Short, Redwood City, CA: Mind Garden, Inc.; **(2000)**

**29.** Rafferty A.E. and M.A. Griffin, The Leadership Quarterly, **15**, 329–354 **(2004)**

**30.** Bass B., Leadership and performance beyond expectations. New York: The Free Press **(1985)**

**31.** Keegan A.E. and Den Hartog D.N., Transformational leadership in a project-based environment: a comparative study of the leadership styles of project managers and line managers, *International Journal of Project Management*, **22** 609–617 **(2004)**

**32.** Bass, B. M. Two decades of research and development in transformational leadership, *European Journal of Work and Organizational Psychology*, **8(1),** 9–32 **(1999)**

**33.** Casimir G., Combinative aspects of leadership style ordering and temporal spacing of leadership behaviors, The *Leadership Quarterly*, **12** 245–278 **(2001)**

**34.** Senge P., Roberts C., Ross R.B., Smith B.J. and Kleiner A., The fifth discipline fieldbook New York' Doubleday Publ., **(1994)**

**35.** Tushman M.L. and Nadler D.A., Organizing for innovation. *California Management Review*, **28(3),** 74– 92 **(1986)**

**36.** Brown lillas M. and Posner Barry Z., Exploring the relationship between learning and leadership, *Leadership and Organization Development Journal*, **22/6**, 274-280 **(2001)**

**37.** Arago´n-Correa J.A., Garcýa-Morales Výctor J., Cordon-Pozo E., Leadership and organizational learning's role on innovation and performance: Lessons from Spain, *Industrial Marketing Management,* **36,** 350 349–359 **(2007)**

**38.** Dervitsiotis K., The challenge of managing organizational change, *Total Quality Management,* **9(1),** 109-122 **(1998)**

**39.** Senge P.M., Transforming the Practice of Management, Paper presented at the Systems Thinking in Action Conference, 14 November **(1991)**

**40.** Barati M., Dadashi I., Behzadnia Z. and Zarei S., A Study of Risk Management in Iranian Banks, *Research Journal of Recent Sciences,* **2(7),**1-7**(2013)**

**41.** Rosman Md. Y., Shah F.A., Hussain J. and Hussain A., Factors Affecting the Role of Human Resource Department in Private Healthcare Sector in Pakistan: A Case Study of Rehman Medical Institute (RMI), *Res. J. Recent Sci.,* **2(1),** 84-90**(2013)**

**42.** Riaz A., Noor A. and Muhammad T.M., The Essence of Project Leadership is Significant to Project Management, *Res. J. Recent Sci.,* **2(5),** 44-48 **(2013)**