

The Impact of Organizational Learning Culture on Organizational Performance: Case Study for Afghanistan¹

Örgütsel Öğrenme Kültürünün Organizasyonel Performans Üzerindeki Etkisi: Afganistan Örneği

M. Moneer SHAGHSY, Istanbul Aydin University, Turkey, moneershaghsy@stu.aydin.edu.tr

Orcid No: 0000-0002-1743-1494

Hatice Şhime ÖZÜTLER, Istanbul Aydin University, haticeozutler@aydin.edu.tr

Orcid No: 0000-0002-2213-3483

Abstract: Organizational learning culture (OLC) reflects how much an organization is capable of accumulating, creating, transferring, and transforming knowledge as a resource within an organization. An organization optimizing its utility from knowledge can be defined as a learning organization. Therefore, organizational performance and organizational learning hold a direct link. Learning organizations develop a dynamic culture that allows them to rapidly adapt themselves to changes, and it results in success in all levels of organizational performance. An increased organizational performance goes beyond financial performance. In this study, seven dimensions of OLC are investigated in terms of their impact on organizational performance. Over the last decades until August 2021, multiple development projects have been undertaken, and substantial amounts of investment were made for accelerated development, peace, security, capacity building, and reconstruction in Afghanistan in collaboration with international partners. Because OLC is a constructive contributor to performance outcomes, the study conducted a survey analysis with DLOQ before August 2021 to examine the contribution of OLC to the organizational performance in Afghanistan. Empirical results revealed that there is a strong relationship between OLC and organizational performance concerning the seven dimensions of OLC. Except for the system connections and embedded systems, which hold an inverse relationship with different performance outcomes, it is observed that all OLC parameters hold a strong positive relationship with performance outcomes.

Keywords: Organizational Learning Culture, Organizational Performance, Economic Development

JEL Classification: O19, O22, L320

Öz: Örgütsel öğrenme kültürü, kurumların bir kaynak olarak bilgiyi ne derece etkin kullandığı, yarattığı, aktarabildiği ve dönüştürebildiğini yansıtır. Bu nedenle, bir kaynak olarak bilgiden elde ettiği fayda fonksiyonunu optimize eden bir organizasyon, öğrenen bir organizasyondur ve örgütsel performans ile örgütsel öğrenme doğrusal ilişkilidir. Öğrenen organizasyonlar değişikliklere hızla adapte olabilmelerini sağlayan dinamik bir kültür geliştirdikleri için organizasyonel performansın tüm seviyelerinde başarılı olmaktadır. Artan organizasyonel performans, hem finansal performansın ötesindedir hem de örgütsel öğrenme ile yakın ilişkilidir. Bu nedenle, çalışmada örgütsel öğrenme kültürü'nün yedi boyutunun örgütsel performans üzerindeki etkileri incelenmiştir. Ağustos 2021'deki son gelişmelere kadar, Afganistan ekonomisinin kalkınması amacıyla uluslararası ortaklı çok sayıda proje gerçekleştirilmiş, ülkeye barış, güvenlik, kapasite artırımı ve yeniden yapılanma amacıyla önemli miktarda yatırım yapılmıştır. Örgütsel öğrenme kültürü, organizasyonel performans katkıda bulunan önemli bir değişkendir. Bu nedenle çalışma, Afganistan'da kamu-özel işbirliğiyle yürütülen projelerde örgütsel öğrenme kültürünün, örgütsel performans üstündeki etkisini Öğrenen Organizasyon Boyutları Ölçeği (DLOQ) ile Ağustos 2021 öncesi dönemde incelemiştir. Anket çalışmasından elde edilen ampirik sonuçlar, örgütsel öğrenme kültürü'nün yedi boyutu ile organizasyonel performans arasındaki güçlü ilişkiyi onaylamıştır. Tüm performans düzeyleri ile ters ilişkili olan

¹ This Study was derived from M. Moneer SHAGHSY's Master Thesis Study "The Impact of Organizational Learning Culture on Organizational Performance in Afghanistan".

Makale Geçmişi / Article History

Başvuru Tarihi / Date of Application : 17 Temmuz / July 2021

Kabul Tarihi / Acceptance Date : 29 Ocak / January 2022

© 2022 Journal of Yaşar University. Published by Yaşar University. Journal of Yaşar University is an open access journal.

sistem bağlantıları ve gömülü sistemler dışındaki tüm parametrelerin organizasyonel performans ile pozitif yönlü güçlü bir ilişkiye sahip olduğu gözlemlenmiştir.

Anahtar Kelimeler: Örgütsel Öğrenme Kültürü, Organizasyonel Performans, İktisadi Kalkınma

JEL Sınıflandırması: O19, O22, L320

1. Introduction

Organizations now operate in a world of fast and accelerated change. This environment includes new customer demands and fierce competition, growing public expectations, increased needs for individualized services, greater workloads, technological innovations, and persistent resource restrictions. Therefore, as opposed to the traditional approach of transferring knowledge in different forms, organizations shall now learn how to adapt to these ever-changing conditions via learning how to learn. In the first, the need for more learning would diminish in the long run due to the slow development path of the state of technology while organizations shall learn to learn in today's unstable business environment to operate effectively. Once an organization has learned how to operate effectively in a relatively stable environment, the *pressures on learning processes* diminish. *The rapid environment of today's world requires the development of a dynamic, internal learning culture for organizations. They must learn to remain resilient and effective at least as rapidly as their environment changes, learn faster than their competitors and foresee the future to be innovative (Baruch and Ramalho, 2006).*

A 'learning organization' is defined as a dynamic system that is adaptive for a continuous improvement on the learning processes which uses feedback loops to improve the efficacy of its learning processes. Therefore, organizational learning and organizational performance have a strong relationship since a firm's performance improves by the organization's adaptability to the changes and its success in change management (Akhtar and Arif, 2011; Burnes et al., 2003). Organizational performance, on the other hand, can be defined as an organization's actual outcomes assessed against its stipulated goals (Ratna et al., 2014). Even determinants of performance vary across different study fields, the reference point to organizational performance is the measurement of the effects of organizational actions (Carton, 2004). The early literature of organizational performance was structured across financial returns to a company. However, it has not taken so long for the literature to focus on the assessment of the value creation processes of companies, including financial and non-financial returns (Carton, 2004). Following the literature, the contemporary conceptual domain to organizational performance has become the learning organization approach almost in the last two decades (Liao and Wu, 2009; Akhtar and Arif, 2011;

Snyder and Cummings; 1997; Demarest, 1997; Kontoghiorghes et al., 2005; Ramírez et al., 2011; Pokharel and Choi, 2013; Bhaskar and Mishra, 2017).

Because organizational learning has internality to firms in the micro-perspective, it is effective for an economy's progress through the endogeneity it creates. Therefore, the result can either be reflective or disruptive since a learning organization further requires the internalization of organizational learning. In this context, there would be no better option than Afghanistan to investigate the relationship between organizational learning and organizational performance. Because multiple development projects have been undertaken in Afghanistan to accelerate the country's development, the relationship between organizational learning and organizational performance will be assessed in this study to explore the impact of organizational learning on organizational performance across donor projects and public institutions.

2. Organizational Learning Culture

"Organizational learning culture" can be defined as internalization of the "organizational learning" processes while "learning organization" refers to when an organization recognizes that learning is critical to its sustainability (Murray and Donegan, 2003). In a hyper-dynamic business environment, organizational learning knows how an organization analyzes its current products, processes, and systems to determine its strategic position and to utilize different learning modalities to gain a long-term competitive advantage (Hussein et al., 2016). Organizations with a strong learning culture succeed in developing, acquiring, and transferring knowledge, as well as adjusting behaviors to reflect new information and insights. Learning organizations foster shared vision and allow people to question pre-existing mental models (Murray and Donegan, 2003). Mental models can be defined as all internal images or beliefs that an organization has when reasoning how things work. They shape perceptions since they intend to simplify complexities, affect what one sees, as a result how one acts. The problem is they can limit organizations to take serious actions if they are tacid—a mix of unawareness and a widening gap between the model and reality (Senge, 1992). In a similar vein, social capital introduces social structure into a rational action paradigm by excluding extremely individualistic premises under the forms of obligations and expectations, information channels, and social norms (Coleman, 1988). Therefore, social capital, as well, is recognized as a critical determinant of productivity that influences the learning culture through trust. Because capabilities and adaptation processes vary across different units

due to the social capital, the knowledge economy has made knowledge management integral to the organizational learning culture (King et al., 2009).

2.1 Determinants of Organizational Learning Culture

Five key aspects to succeed in organizational learning are: a) to focus on collectivity in individual learning, b) to make policies comply with either the organizational learning process or information processing system of the organization, c) to concentrate on learning culture while assuming the learning organization is a metaphor to fulfill, d) to place a premium on knowledge management because there is a link from organizational learning to knowledge creation, and e) to focus on the power of innovation and creativity instead of a continuous improvement approach which has been used for so long to safeguard the organizations from relentless competitive pressures by risk optimization as a traditional competitive strategy (Wang and Ahmed, 2003). The traditional competitive strategy undermines the innovativeness and creativity of organizations since it steps organizations away from creative quality, value innovation (Wang and Ahmed, 2001; Wang and Ahmed, 2002), and value creation by locking them into the old trilogy between strategy, structure, and system. As a result, traditional strategy drives them into value appropriators rather than value creators (Ghoshal et al., 1999). On the other hand, the culture of a learning organization is defined in seven dimensions by Marsick and Watkins as continuous learning, dialogue and inquiry, team learning, embedded systems, system connections, empowerment, and leadership (Marsick and Watkins, 2003). Furthermore, Huber articulates knowledge acquisition, information distribution, information interpretation, and organizational memory as the four constituents of the organizational learning process (Huber, 1991).

2.2 Designing Organizational Learning Culture

Schein's definition of culture as "customs and rights" testifies the determinant role of cultural norms, even in organizations, since they are living organisms, and cultural norms are integral to organizational development (Schein, 1985). Organizational culture is a set of principles that adjusts external adaptation and internal integration problems. Therefore, it must be capable to show the right way to view, think, and feel on these particular issues, and transmitting the organizational principles to new members. On the other hand, organizational learning is just one of the sub-components of organizational culture amongst many others (Akhtar and Arif, 2011; Curado, 2006). Behavioral routines play a vital role in developing this culture, and it tends to be

more beneficial when integrated with competency development and institutionalized in cultural routines (Murray and Donegan, 2003). Most academics assume organizational learning is the outcome of individual learning processes which are driven by the persons that the company interacts with and exchanges knowledge. However, an individual's learning capacity exceeds the organizational culture by sharing information. As a result, individual learning is a necessary but insufficient component for organizational success (Curado, 2006). When designing organizational culture, especially in terms of organizational learning, it is preferable to use the organic design approach that is characterized by low formalization, decentralization, and high integration rather than a mechanical design approach characterized by low integration, high formalization, and centralization (Curado, 2006).

2.3 Organizational Performance

Organizational performance is defined as the organizational capacity to accomplish an organization's objective via competent management, strong governance, and a consistent commitment to the achievement of these results. Evaluating an organization's effectiveness and efficiency, various parameters can be used in the measurement process due to the relativity that may emerge in organizational goals across organizations (Ratna et al., 2014).

The organizational learning process is expected to create organizational knowledge which will result in organizational performance outcomes like productivity and customer satisfaction (Snyder and Cummings, 1998). Even there is no consensus about organizational performance, there are studies using gains from organizational knowledge and financial performance (Yang et al., 2004) (Bhaskar and Mishra, 2016); financial, supply, employee, commitment, and customer items (Ratna et al., 2014); returns on assets, equity, sales and growth in main products (Ramirez et al., 2011); innovation, customer satisfaction, and financial performance (Yeung et al., 2007); human relations, internal processes, and open systems to justify organizational effectiveness (Jiménez-Jiménez and Sanz-Valle, 2011). Venkatraman highlights that a business' economic performance has a narrow domain while organizational effectiveness is its broader notion (Venkatraman, 1987). Organizational performance can also be viewed from a three-dimensional perspective by following the specific measures related to customer satisfaction, productivity, and employee satisfaction to better understand and enhance organizational performance through the use of learning culture (Ratna et al., 2014; Kontoghiorghes et al., 2005).

2.3.1 Effectiveness

Organizational effectiveness can be defined as the amount to which an organization achieves its objectives via the use of specific resources unless diminishing its resources and putting excessive pressure on its members and society (Manzoor, 2012). According to several studies, effectiveness is the result of human values and preferences to some extent, and hence there is no common or optimum criterion for measuring effectiveness (Cameron, 1984). On the other hand, business performance conveys the strategic management perspective of organizations as a subset of organizational effectiveness. From this point of view, the fulfillment of the economic goals reflects the narrowest performance criteria as the financial performance, which does not have to focus only on accounting-based measures but can be enhanced with value-based measures as well. This perspective can be broadened by non-financial operational performance indicators which allow a company to explore the source of its operational success factors that leads to better financial performance. Lastly, to decompose the conflicts among organizational goals, these two criteria should be justified. Decomposition and removal of these conflicts are where organizational effectiveness can be reached (Venkatraman, 1986). Some researchers use organizational effectiveness and organizational performance interchangeably while some others do not (Baruch and Ramalho, 2006). For instance, having a wider conceptual domain and a broader capture on performance such as innovativeness, reputation, etc., Richard et al. differ organizational effectiveness from organizational performance (Richard et al., 2009).

2.3.2 Innovation

An idea that has been turned into a practical reality is an invention. According to many researchers, organizational learning and its product, method, business concept, or organizational knowledge are precursors to innovation (Jiménez-Jiménez and Sanz-Valle, 2011). Learning plays a crucial role for organizations to gain speed and flexibility in the innovation process. However, as some researchers point out, innovation is a costly and risky activity that can have both positive and negative consequences. Furthermore, several investigations display contradictory results. For example, Wright et al. (2005) find that product innovation has no influence on performance in benign contexts but has a favorable effect on performance in hostile situations (Jiménez-Jiménez and Sanz-Valle, 2011). Organizations with a positive learning culture encourage employees for risk-taking, innovation, and tolerance for error. The fact is that in an innovation-oriented focus with an adhocracy culture, these companies can produce more and better-differentiated

innovations faster than their rivals. In this sense, innovation is essential for achieving sustainable competitive advantages and, consequently, higher performance. This is mainly because creative companies are agile and can respond to changes faster. Through this process, it is the organizational learning culture that interrelates innovation and organizational performance (Naranjo-Valencia et al., 2016).

2.3.3 Employee Satisfaction

Every organization aspires for success and continuous development. However, employee satisfaction is difficult in today's highly competitive, ever-changing business environment. To overcome these pressures, employees and their businesses should create and maintain strong and positive relationships (Manzoor, 2012). Employee satisfaction, often known as job satisfaction, refers to an employee's level of contentment with its employment and its role in the employee's life. One of the most important aspects of organizational success is employee morale. Employees that have a high level of job satisfaction are often enthusiastic about their work, feel justice in a working environment, and believe that their profession provides them certain favorable characteristics, such as decent compensation, and security. These employees will perform extraordinarily, and organizations with such employees will be successful (Bakotić, 2016). In organizations, the key success factor is not capital but human capital. Therefore, increasing knowledge is the key to a business's success through employee satisfaction (Guță, 2013). According to Manzoor, rewards influence employee performance due to the direct link they have with employee satisfaction and their impacts on individual and group behaviors. Therefore organizations use special training, continuous learning methods, pays, promotions, bonuses, and other sorts of awards to inspire people to better perform (Manzoor, 2012).

2.4 Linkages Between Organizational Learning and Organizational Performance

The relationship between organizational learning and organizational performance is theoretically unclear. The strength and contradiction of the relationship may differ from one another organization but empirical analyses show strong evidence about this relationship (Zgrzywa-Ziemak, 2015). Improved organizational learning leads to improved organizational performance both in financial and non-financial performance outcomes (Hernaus et al., 2008). The knowledge gained through organizational learning creates higher returns, knowledge accumulation and builds higher performance outcomes. Recognized as the general assumption, learning is beneficial to performance enhancement due to its affectability. However, the relationship

between organizational learning and performance is more complex. We cannot put an equivalent sign to learning and performance gains, because learning is a process of change in cognition and behavior, and such changes do not guarantee a direct increase in performance outcomes (Guță, 2013). Even several studies emphasize the positive impact of organizational learning on organizational performance, their performance definitions vary. Most of the studies use financial measures when deciding on performance outcomes. There is no doubt that these financial outcomes are important, but there would also be more immediate outcomes establishing a relationship with these financial outcomes such as skills, systems, operational innovations, or employee satisfaction (Hernaus et al., 2008).

2.4.1 Effectiveness through Organizational Learning

Organizational learning mechanisms are more likely to provide productive learning if they are integrated into an appropriate organizational culture which is a normative system of shared values and beliefs that have an impact on how employees feel and think. Therefore, continuous learning is at the top of the hierarchy, necessitating accurate information, transparency, issue orientation, and responsibility. These ideals are demonstrated either through compatible rhetoric (espoused values), actual investments, or readiness for any losses in achieving compatible outcomes (Popper and Lipshitz, 2000). Empirical results show that dynamic capacity and organizational performance are positively related. For instance, the capacity to innovate the product enhances organizational capabilities and renewal (Hung et al., 2010).

2.4.2 Innovativeness through Organizational Learning

For the innovation case, empirical results approve that the relationship between organizational learning and its performance influences innovativeness indirectly (Zgrzywa-Ziemak, 2015). Furthermore, organizational learning is not only related to innovational capabilities but also related to employee satisfaction and overall organizational performance (Naranjo-Valencia et al., 2016). The higher the level of critical capacity, capability, fresh and relevant information required, the more innovative the goods, services, or techniques emerge. The cornerstone of creative activities is the process of producing organizational knowledge which derives new information from current information via organizational learning (García-Morales et al., 2012). Mascitelli makes a distinct contribution to the literature by linking innovation to organizational learning and by interrelating the terms “breakthrough innovation” with “tacit knowledge”. He defines breakthrough innovation as any original contribution that at least enables an organization

to gain a monopoly profit or a significant market share. He differs his terminology from the structural discussions made across the nature of innovation as evolutionary vs. revolutionary; continuous vs. discontinuous; sustaining vs. disruptive or incremental vs. radical innovations by focusing on the role of a knowledge-based synergy that can be created by the organizations to harness tacit knowledge. The interesting thing he emphasizes is that even for extraordinary innovations produced by tacit knowledge, a form of learning culture is required. However, Mascitelli discusses organizational learning culture indirectly through innovation by a conceptual interactive model (Masctelli, 2000).

2.4.3 Employee Satisfaction through Organizational Learning

Employee satisfaction is usually characterized by the affective responses of an employee to a job by comparing desired results with actual results. On the other hand, it is approved that organizational learning has a strong impact on employee satisfaction because both the organizational learning culture and employee satisfaction factors can be used in monitoring organizational performance, such as the motivation of employees to transfer learning processes or outcomes (Egan et al., 2004). Even there is heavy literature supporting a favorable relationship between job satisfaction and organizational performance, the two factors may not have a statistically meaningful relationship in all cases as the literature suggests (Baruch and Ramalho, 2006). By fostering an organizational learning culture, losses related to employee turnover may be avoided, and creativity may be promoted. (Egan et al., 2004). The more the empowerment and recognition of individuals in an organization, the greater their incentive to work and the effectiveness of the organization. Besides, the more employees are motivated to complete their tasks, the higher the organizational performance can be (Manzoor, 2012). The factors that show the relationship between employee satisfaction and organizational performance include fair pay, incentives, special benefits, marginal benefits, leadership, encouragement, confidence, respect, joint decision-making, supervisory quality, adequate working relationships, appreciation, growth opportunities, the loyalty of the company, recognition, empowerment, inspiration, continuous learning (Manzoor, 2012). A developed organizational learning culture customizes learning and career pathways by closing skill gaps, mobilizing human capital, and spilling over different aspects of the business (Omar, 2021).

3. Literature Review

Akhtar and Arif investigate the relative influence of organizational learning factors on organizational performance for higher education institutes in Pakistan, and their study reveals the

impact of organizational learning over performance outcomes (Akhtar and Arif, 2011). Guta reviews organizational learning both as a capability and a process. Studying with a diverged data set, the study emphasizes the role of the process as a mediator between organizational learning and organizational performance (Guta, 2013). Ho broadens the perspective by self-directed learning readiness and experience of employees. The study reveals that employees' meditation experiences have a substantial and favorable impact on their self-directed learning readiness, which provides the organizations with higher organizational innovation potential, and organizational performance (Ho, 2011). According to the study findings of Hung et al., process alignment is crucial to organizational learning since the impact of organizational learning on organizational performance is mediated through dynamic capacity (Hung et al., 2010). Skerlavaj et al. find that organizational learning influences organizations' non-financial performance outcomes in Macedonia while its influence on financial performance is indirect (Skerlavaj et al., 2011). Maktabi and Khazaei search for the relationship between innovational performance and organizational learning for Iran. The study results reveal the importance of learning organization and prove that organizational learning improves innovativeness and organizational performance as well (Maktabi and Khazaei, 2006). Pham and Hoang support that the four dimensions of organizational learning capability positively affect performance outcomes in the Vietnam case (Pham and Hoang, 2019). The study of Rondeau and Wagar demonstrates the impact of organizational learning culture on total quality management and organizational performance, both in financial and non-financial terms for Canadian health care organizations. The study findings testify that for improved organizational performance, a total quality management program should be supported with a solid organizational learning culture (Rondeau and Wagar, 2002). Sampe pursues the outcomes of organizational learning for the SMEs case in Indonesia. The study shows that organizational learning improves organizational performance, revenues, employee and customer satisfaction, and the overall success of organizations (Sampe, 2012). Studying Spanish firms, García-Morales et al. verify the direct and indirect contributions of organizational learning culture to organizational performance through organizational innovation (Garcia-Morales, Jimenez-Barrionuevo, and Gutierrez, 2012). Unfolding the contradictory relationship between market orientation and organizational performance, Suliyanto and Rahab testify that improved organizational performance through innovation is led by market orientation, which creates a learning orientation capability and innovativeness for organizations (Suliyanto and Rahab, 2012).

4. MODEL SPECIFICATION

4.1 Aim and Scope of the Research

Over the last two decades, until August 2021 when the Taliban took the power of the administration, the Afghan public authorities had been investing in peace, security, capacity building, reconstruction, and growth in collaboration with international partners such as the World Bank, Asian Development Bank, USAID, Turkey, United Kingdom, and European Union among others. Because organizational learning culture is a constructive contributor to performance outcomes, how effectively this toolkit was and can be used by the Afghan authorities need to be investigated well to better combat the challenges ahead of the country. For this purpose, the study will conduct a survey analysis to examine the contribution of organizational learning culture to the organizational performance in Afghanistan for publicly and donor-funded projects.

4.2 Methodology

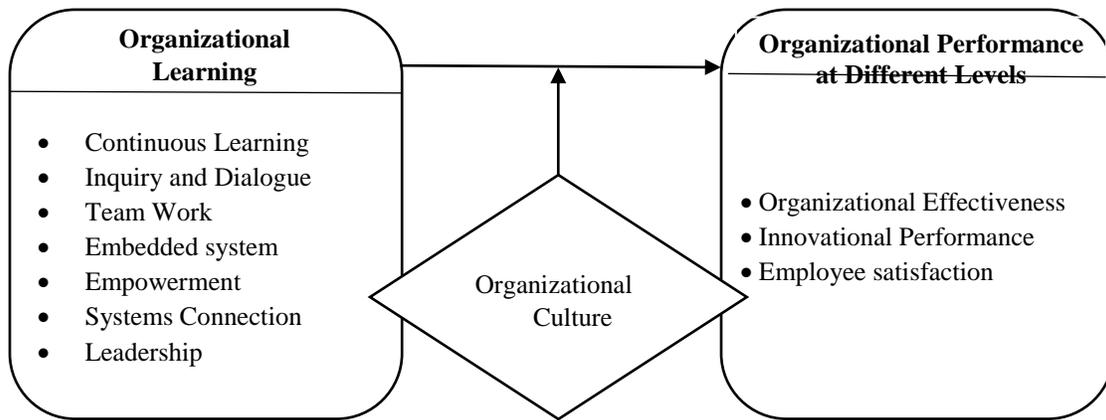
The study conducted a survey data analysis for the DLOQ scale to anticipate certain elements of the behavior of the population of interest. Dimensions of learning organizations questionnaire (DLOQ) was developed by Marsick and Watkins in the 1990s, and since then it has become the most common scale in studying the effect of organizational learning culture on organizational performance (Marsick and Watkins, 2003). The primary reason for following the DLOQ was to deal with the difficulty in defining the sub-components of OLC, especially for the Afghanistan case. Therefore, instead of developing a scale that may convey individual results for Afghan organizations, the results will allow making country-level comparisons to a certain extent. The reliability of the scale in its implementation across Afghanistan will be tested initially. However, the survey will not be restructured according to factor loadings as long as the reliability conditions were satisfied by Cronbach Alpha, Kaiser-Meyer-Olkin (KMO) and Barlett, and Chi-squared tests despite the disparity in Eigenvalues in favor of CL such it was in other country examples. The significant level of the data analyses was 0.005 for this study. The model summary statistics for the regression analyses at different performance levels along with the ANOVA will have been proven after demonstrating the reliability of the scale.

4.3 Conceptual Framework, Research Design, and Previous Studies

Questionnaires are used to define and compare various people's knowledge, values, feelings, preferences, and actions and record their replies, attitudes, and beliefs. Dimensions of learning organizations questionnaire (DLOQ) that was developed by Marsick and Watkins in the 1990s

was introduced the seven dimensions of OLC through seven factors: continuous learning (CL), dialogue and inquiry (D&I), team learning (TL), embedded systems (ES), empowerment (E), system connection (SC), and leadership (LDP) (Marsick and Watkins, 2003). Previous researches on the subject have been evaluated and refined to help with the development of the questionnaire instrument such as Basim et al. (2007), Aktar and Arif (2011), and Watkins and Marsick (1993). DLOQ was implemented on the health care systems in Greece (Goula et al., 2020), and in Nepal (Leufvén et al, 2015), followed on firm-level in Turkey (Basim et al., 2007), in Korea (Song et al., 2009) and Germany (Kortsch and Kauffeld, 2019). In this study, it is implemented for Afghan organizations.

Table 1. Conceptual Framework of the Research Model



The survey data will reveal the impact of organizational learning culture on different levels of organizational performances across organizations in Afghanistan. The hypotheses that will be tested in this study are:

H_A : Organizational learning culture has an impact on overall organizational performance.

H_B : Organizational learning culture has an impact on organizational effectiveness.

H_C : Organizational learning culture has an impact on innovational performance.

H_D : Organizational learning culture has an impact on employee satisfaction.

4.4 Target Population, Data Sample, and Sampling Size

A structured questionnaire was used to collect data from 342 respondents from the target population which consists of employees from public and private organizations in Afghanistan including the Ministry of Public Works, Ministry of Transportation, Ministry of Rural Rehabilitation and Development, Ministry of Finance, Municipalities, and Donor Funded Projects

over 25 organizations. Following a convenience sampling technique, the questionnaire was employed on a five-point Likert style scale in which each question had a scale ranging from 1 (highly agreed) to 5 (strongly disagree). The respondents were asked about their gender, educational background, and job positions to get demographic and socioeconomic information.

Over the 342 respondents, (77.2%) are males. The vast majority holds a bachelor’s degree (48.5 %) while another (32.2 %) holds a master’s degree. Data show that (9.4 %) of the respondents have a certificate of association, (5.6 %) hold a Ph.D. whereas (2.6 %) have a high school diploma. Only (0.9%) states that they did not finish high school while another (0.9%) chooses the ‘other’ option. Therefore, the majority of the workforce in our target population either holds a bachelor’s or master’s degree. In terms of the level of their positions, (%44.2) of the respondents were middle managers while it was associated with a participation rate of (%21.6) for senior managers, (%14.6) for technical and (%17) for supervisory personnel. Also, hourly employees were represented by (%2.6).

4.5 Reliability of the Scale

Internal consistency of the scale reflects the reliability of the survey conducted, and Cronbach's Alpha value can be performed to test the reliability of the questionnaire.

Table 2. Reliability Statistics

Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
All variables	.993	.993	73
Scale of OLC	.989	.989	43
Scale of OP	.987	.987	30

As shown in Table 2, the questionnaire with 73 items has a Cronbach's Alpha value of (.993) which indicates a high level of internal consistency. The scale for the OLC and OP variables respectively satisfies the internal consistency requirement with (.989) and (.987) Cronbach's Alpha values.

Table 3. Correlations

Pearson Correlation*	CL	D&I	TL	ES	EMP	SC	LDP	OP	OEF	EMS	OIN
CL	1										
D&I	.892**	1									
TL	.880**	.901**	1								
ES	.839**	.871**	.900**	1							
EMP	.854**	.838**	.875**	.884**	1						
SC	.842**	.852**	.866**	.894**	.909**	1					
LDP	.826**	.837**	.837**	.868**	.877**	.913**	1				

OP	.829**	.820**	.813**	.774**	.777**	.747**	.788**	1			
OEF	.803**	.795**	.789**	.740**	.743**	.720**	.757**	.938**	1		
EMS	.820**	.819**	.810**	.775**	.774**	.757**	.787**	.915**	.929**	1	
OIN	.845**	.842**	.824**	.798**	.788**	.765**	.797**	.920**	.914**	.941**	1

*: Pearson Correlation values; **: Correlation is significant at the 0.01 level (2-tailed).

The inter-item correlation matrix in Table 3 highlights the relationships between the variables that are used in the study. Since a Pearson correlation $>.70$ recognizes the variable as statistically meaningful with a $p\text{-value} < .005$ at %5 significance level, all variables are linked to each other with a Pearson value $>.70$. The results reveal that the scale is statistically significant for all variables. The sampling adequacy of data must be provided before factor analysis, and Kaiser-Meyer-Olkin (KMO) is an appropriate measure to test for the sampling adequacy of data. The KMO value must not be less than .5 to satisfy the necessary condition to continue with factor analysis in which a KMO value that exceeds .90 would be recognized as an excellent measure (Field, 2000). The KMO value of the data shows excellent suitability for the factor analysis. Furthermore, Bartlett's test of sphericity is also significant ($\chi^2(21) = 3696.239, p < .05$). Consequently, the sampling satisfies the suitability conditions and shows normal distribution when the strong Cronbach's Alpha value (.98) is considered as well. Because DLOQ was a scale that has proven its reliability, it is not mandatory to test factor loadings. Even so, it has become common to test factor loadings since they can describe cross-cultural dimensions for OLC. Communalities that are all above .30 and component matrix values all above .90 confirm the suitability of the scale; however, only CL satisfies the eigenvalue >1 condition amongst the seven factors. This can be due to the differences in socio-economic and cultural norms, and the level of technology inclusion.

4.6 Regression Analysis and Hypothesis Testing

As mentioned in the model specification, four hypotheses will be tested to verify the varying impact of OLC on overall organizational performance, organizational effectiveness, organizational innovativeness, and employee satisfaction.

Hypothesis A

H_{A0} : Organizational learning culture has no impact on overall organizational performance.

H_{A1} : Organizational learning culture has an impact on overall organizational performance.

In Table 4, the ANOVA with the $p\text{-value} (.000) < (.005)$ reveals that the model is statistically significant, and the model summary demonstrates that the model has an R^2 value value of (.745) and the OLC explains %74 of the variations on the overall organizational performance. Therefore

the null hypothesis is rejected. Coefficients for the OLC variables show strong evidence that respectively continuous learning (CL), leadership (LDP), and dialogue and inquiry (D&I) positively contribute to overall organizational performance. Embedded systems (ES) and systems connection (SC) variables show a negative relationship with the overall performance. Even though embedded systems (ES) have a negligible inverse relationship with organizational performance, it is interesting for the system connection (SC) parameter to have a strong negative impact on organizational performance following the positive impact of leadership (LDP).

Table 4. Model Summary, ANOVA and Coefficients (OLC&OP)

ANOVA (OLC & OP)									
Model		Sum of Squares	DF	Mean Square	F	Sig.			
1	Regression	300.074	7	42.868	138.369	.000 ^b			
	Residual	102.546	331	.310					
	Total	402.620	338						
a. Dependent Variable: OP									
b. Predictors: (Constant), LDP, CL, ES, EMP, D&I, TL, SC									
Model Summary (OLC & OP)									
Model	R	R Square	Adjusted R Square	Std. Error	Change Statistics				
					R Square	F Change	df1	df2	Sig. F
1	.863 ^a	.745	.740	.55660	.745	138.369	7	331	.000
a. Predictors: (Constant), LDP, CL, ES, EMP, D&I, TL, SC									
Coefficients (OLC & OP)									
Model		Unstandardized Coefficients		Standardized	t	Sig.	95.0% Confidence Interval		
		B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	.196	.076		2.579	.010	.047	.346	
	CL	.330	.068	.339	4.847	.000	.196	.464	
	D&I	.218	.074	.226	2.949	.003	.073	.364	
	TL	.193	.078	.202	2.482	.014	.040	.347	
	ES	-.004	.072	-.005	-.060	.952	-.146	.138	
	EMP	.092	.074	.098	1.254	.211	-.053	.237	
	SC	-.286	.085	-.302	-3.374	.001	-.453	-.119	
LDP	.321	.069	.344	4.688	.000	.187	.456		
a. Dependent Variable: OP									

Hypothesis B

H_{B0} : Organizational learning culture has no impact on organizational effectiveness.

H_{B1} : Organizational learning culture has an impact on organizational effectiveness.

In Table 5, the ANOVA with the p-value (.000) < (.005) reveals that the model is statistically significant, and the model summary shows that the model has an R^2 value of (.697) and the OLC explains %69 of the variations on the organizational effectiveness. Therefore the null hypothesis is rejected. Coefficients for the OLC variables respectively reflect that continuous learning (CL), leadership (LDP), team learning (TL), dialogue, and inquiry (D&I) positively contribute to organizational effectiveness. Team learning (TL), and dialogue and inquiry (D&I) show very close performance in terms of organizational effectiveness. The negative correlation that the embedded systems (ES) and system connection (SC) variables showed on organizational

performance has validity for the organizational effectiveness too. Furthermore, their negative impacts on organizational effectiveness exceed the positive impact of empowerment (E).

Table 5. Model Summary, ANOVA and Coefficients (OLC&OEF)

ANOVA (OLC & OEF)									
Model		Sum of Squares	Df	Mean Square	F	Sig.			
1	Regression	289.839	7	41.406	108.880	.000 ^b			
	Residual	125.875	331	.380					
	Total	415.715	338						
a. Dependent Variable: OEF									
b. Predictors: (Constant), LDP, CL, ES, EMP, D&I, TL, SC									
Model summary (OLC & OEF)									
Model	R	R Square	Adjusted R Square	Std. Error	Change Statistics				
					R Square	F Change	df1	df2	Sig. F
1	.835 ^a	.697	.691	.61667	.697	108.880	7	331	.000
a. Predictors: (Constant), LDP, CL, ES, EMP, D&I, TL, SC									
Coefficients (OLC & OEF)									
Model		Unstandardized Coefficients		Standardized	t	Sig.	95.0% Confidence Interval		
		B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	.279	.084		3.311	.001	.113	.444	
	CL	.329	.075	.333	4.369	.000	.181	.478	
	D&I	.236	.082	.240	2.876	.004	.075	.397	
	TL	.238	.086	.245	2.756	.006	.068	.408	
	ES	-.056	.080	-.060	-.698	.486	-.213	.102	
	EMP	.043	.082	.045	.526	.599	-.118	.203	
	SC	-.250	.094	-.260	-2.663	.008	-.435	-.065	
	LDP	.309	.076	.325	4.066	.000	.159	.458	
a. Dependent Variable: OEF									

Hypothesis C

H_{C0} : Organizational learning culture has no impact on innovativeness (innovational performance).

H_{C1} : Organizational learning culture has an impact on innovativeness (innovational performance).

The ANOVA with the p-value (.000) < (.005) reveals that the model is statistically significant, and as shown in Table 6, the OLC explains %77 of the variations on the innovational performance with an R^2 value of (.771). Therefore the null hypothesis is rejected. Coefficients for the OLC variables show that respectively continuous learning (CL), dialogue and inquiry (D&I), and leadership (LDP) have a strong positive relationship with innovativeness (innovational performance). Compared to organizational performance, it is seen that the positive contribution of team learning (TL) decreases for innovational performance. Empowerment (E) is still the less-performing variable among those having a positive correlation with innovativeness and organizational effectiveness. However, the negative impact of embedded systems (ES) on overall organizational performance and effectiveness turns to a positive correlation for innovativeness.

Table 6. Model Summary, ANOVA and Coefficients (OLC & OIN)

ANOVA (OLC & OIN)									
Model		Sum of Squares	Df	Mean Square	F	Sig.			
1	Regression	355.734	7	50.819	159.062	.000 ^b			
	Residual	105.753	331	.319					
	Total	461.487	338						
a. Dependent Variable: OIN									
b. Predictors: (Constant), LDP, CL, ES, EMP, D&I, TL, SC									
Model summary (OLC & OIN)									
Model	R	R Square	Adjusted R Square	Std. Error	Change Statistics				
					R Square	F Change	df1	df2	Sig. F
1	.878 ^a	.771	.766	.56524	.771	159.062	7	331	.000
a. Predictors: (Constant), LDP, CL, ES, EMP, D&I, TL, SC									
Coefficients (OLC & OIN)									
Model		Unstandardized Coefficients		Standardized	t	Sig.	95.0% Confidence Interval		
		B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	.017	.077		.215	.830	-.135	.168	
	CL	.366	.069	.351	5.293	.000	.230	.502	
	D&I	.290	.075	.280	3.852	.000	.142	.438	
	TL	.137	.079	.134	1.730	.085	-.019	.293	
	ES	.075	.073	.076	1.023	.307	-.069	.219	
	EMP	.060	.075	.059	.797	.426	-.088	.207	
	SC	-.268	.086	-.264	-3.108	.002	-.438	-.098	
	LDP	.283	.070	.283	4.068	.000	.146	.420	
a. Dependent Variable: OIN									

Hypothesis D

H_{D0} : Organizational learning culture has no impact on employee satisfaction.

H_{D1} : Organizational learning culture has an impact on employee satisfaction.

The ANOVA with the p-value (.000) < (.005) reveals that the model is statistically significant, and the model summary section seen in Table 7 displays that the OLC explains %73 of the variations on employee satisfaction with an R^2 value of (.732). Therefore the null hypothesis is rejected, and continuous learning (CL), leadership (LDP), dialogue and inquiry (D&I), and team learning (TL) respectively reveal a significant positive relationship with employee satisfaction. Keeping its negative impact on overall organizational performance, organizational effectiveness, and innovativeness, it is observed that System Connection (SC) loosens its negative impact for employee satisfaction, while at the same time, embedded systems (ES) once again loosen their positive impact.

Table 7. Model Summary, ANOVA and Coefficients (OLC & EMS)

ANOVA (OLC & EMS)									
Model		Sum of Squares	Df	Mean Square	F	Sig.			
1	Regression	325.123	7	46.446	129.296	.000 ^b			
	Residual	118.903	331	.359					
	Total	444.026	338						
a. Dependent Variable: EMS									
b. Predictors: (Constant), LDP, CL, ES, EMP, D&I, TL, SC									
Model summary (OLC & EMS)									
Model	R	R Square	Adjusted R Square	Std. Error	Change Statistics				
					R Square Change	F	df1	df2	Sig. F
1	.856 ^a	.732	.727	.59935	.732	129.296	7	331	.000
a. Predictors: (Constant), LDP, CL, ES, EMP, D&I, TL, SC									
Coefficients (OLC & EMS)									
Model		Unstandardized Coefficients		Standardized	t	Sig.	95.0% Confidence Interval		
		B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	.134	.082		1.633	.103	-.027	.295	
	CL	.302	.073	.296	4.125	.000	.158	.447	
	D&I	.257	.080	.253	3.217	.001	.100	.413	
	TL	.190	.084	.190	2.268	.024	.025	.355	
	ES	-.003	.078	-.003	-.037	.970	-.156	.150	
	EMP	.059	.079	.060	.747	.455	-.097	.215	
	SC	-.197	.091	-.197	2.150	.032	-.376	-.017	
	LDP	.295	.074	.301	4.001	.000	.150	.441	
a. Dependent Variable: EMS									

Consequently, all the hypotheses in favor of the impact of OLC on different levels of organizational performances are supported as shown in Table 8. The survey results reveal that organizational learning culture has an impact on organizational performance in Afghanistan.

Table 8. Hypotheses Test Summary

H	Hypothesis	Prob	Result
HA0	Organizational learning culture has no impact on overall organizational performance	0.000	Rejected
HB0	Organizational learning culture has no impact on organizational effectiveness	0.000	Rejected
HC0	Organizational learning culture has no impact on innovativeness	0.000	Rejected
HD0	Organizational learning culture has no impact on employee satisfaction	0.000	Rejected

5. Conclusion

This study was conducted before the Taliban took control over Afghanistan in August 2021, and on the day this article is ready to publish, the country is struggling with the worst humanitarian disaster it has ever seen. Even if the study findings showed some hopeful achievements for the last couple of decades, it is not easy to know where things may go and end unless the country meets with a real and democratic administration. Because the size of the investments in Afghanistan has been increased with multiple development programs for the last couple of decades until August 2021, the study aimed to question whether the returns of these social and

economic investments can be accelerated by fostering OLC or not. Therefore, in the attainment of increased organizational performance, the impact of seven dimensions of the OLC was investigated through a survey data analysis based on DLOQ.

The study findings revealed that continuous learning, dialogue and inquiry, team learning, embedded systems, system connections, empowerment, and leadership showed a statistically meaningful relationship with organizational performance and capacity building in different performance levels. Survey data analysis demonstrated that continuous learning, leadership, dialogue, and inquiry outperformed the rest of the OLC dimensions for all performance levels in Afghanistan. Opposed to these three dimensions of OLC, system connections and embedded systems showed an inverse relationship with the organizational performance for all levels. Furthermore, it is observed that the empowerment parameter was less-performed among those having a positive correlation with organizational performance. This consistency may shed some light on the missing part of the OLC dimensions in the study sample.

System connections and embedded systems are especially expected to foster innovational performance due to their technology-intensive structures as opposed to the survey results. However, it is observed that the system connections hinder the innovational performance instead of fostering the transmission of knowledge. Furthermore, in terms of employee satisfaction, it is observed that this negative impact of system connections is decelerated. Therefore, the study findings suggest that there may be a transmission problem between the employee skills and the state of technology to accelerate returns from investments in the context of OLC, and these two factors are the barriers in front of creating learning organizations in Afghanistan. Furthermore, during the last couple of months after the militant group seized control of the country, all the international support was withdrawn from the country, women were left isolated, public finance collapsed, almost 97% of the population were put at risk of falling into poverty and starvation. The nation is in the worst situation ever since either to allow or not to allow the ruling power to have access to the international funding and financial system both may deteriorate the overall country profile and draw the country back from its past condition. The transmission problem between the employee skills and the state of technology is likely to grow, and the developments are threatening the achievements of the past years since administrative, political, and economic systems work together. Even if they are weak, the use of past experiences in organizational learning may help the country to combat the troublesome issues that await to be fixed in the near future.

REFERENCES

- Adler, H. P., Goldoftas, B. and Levine, I.D. (1999). "Flexibility Versus Efficiency? A Case Study of Model Changeovers in the Toyota Production System", *Organization Science*, 10(1), 43-68.
- Adler, H. P., Goldoftas, B. and Levine, I.D. (1998). "Stability and Change at NUMMI", 128-161, (in) edited by Robert Boyer, Elsie Charron, Ulrich Jürgens, and Steve Tolliday. (1998). *Between Imitation and Innovation: Transfer and Hybridization of Productive Models in the International Automobile Industry*, Oxford University Press.
- Akhtar, C., Arif, A., Rubi, E., and Naveed, S. (2012). "Impact Of Organizational Learning On Organizational Performance: Study Of Higher Education Institutes", *International Journal of Academic Research (IJAR)*, 3(5), 327-331.
- Bakotić, Danica. (2016). "Relationship Between Job Satisfaction and Organisational Performance", *Economic Research-Ekonomska Istraživanja*, 29(1), 118-130.
- Basim, N., Harun, S. and Korkmazıyrek, H. (2007). "A Turkish Translation, Validity and Reliability Study of the Dimensions of the Learning Organization Questionnaire", *World Applied Sciences Journal*, 2(4), 368-374.
- Baruch, Y. and Ramalho, N. (2006). "Communalities and Distinctions in the Measurement of Organizational Performance and Effectiveness Across For-Profit and Nonprofit Sectors", *Nonprofit and Voluntary Sector Quarterly*, 35(1), 39-65.
- Bhaskar, U. and Mishra, B. (2017). "Exploring Relationship Between Learning Organizations Dimensions and Organizational Performance", *International Journal of Emerging Markets*, 12(3), 593-609.
- Burnes, B., Cooper, C. and West, P. (2003). *Management Decision*, 41(5), 452-464.
- Cameron, Kim. (1986). "A Study of Organizational Effectiveness and its Predictors", *Management Science*, 32(1), 87-112.
- Carton, Robert. (2004). *Measuring Organizational Performance: An Exploratory Study*. Unpublished Ph.D. Thesis, University of Georgia, Athens.
- Coleman, J. S. (1988). "Social Capital in the Creation of Human Capital", *American Journal of Sociology*, 94, S95-S120.
- Curado, Carla. (2006). "Organisational Learning and Organisational Design", *The Learning Organization*, 13(1), 25-48.
- Demarest, Marc. (1997). "Understanding Knowledge Management", *Long Range Planning*, 30(3), 374-384.
- Egan, T., Yang, B. and Bartlett, K. (2004). "The Effects of Organizational Learning Culture and Job Satisfaction on Motivation to Transfer Learning and Turnover Intention", *Human Resource Development Quarterly*, 15(3), 279-301.
- Field, A. (2000). *Discovering Statistics Using SPSS for Windows*. London, Thousand Oaks, Sage Publications, New Delhi.
- García-Morales, V.J., Jiménez-Barrionuevo, M.M. and Gutiérrez-Gutiérrez, L. (2012). "Transformational Leadership Influence on Organizational Performance through organizational Learning and Innovation", *Journal of Business Research*, 65(7), 1040-1050.
- Ghoshal, S., Bartlett, C.A. and Moran, P. (1999). "A New Manifesto for Management", *Sloan Management Review*, Cambridge, 40 (3), 9-20.
- Goula, A., Stamouli, M. A., Latsou, D., Gkioka, V. and Sarris, M. (2020). "Validation of Dimensions of Learning Organization Questionnaire (DLOQ) in Health Care Setting in Greece", *Journal of Public Health Research*, 9(4), 1962.
- Guță, Luciana. (2013). "Organizational Learning, and Performance. A Conceptual Model", (in) *Proceedings of The 7th International Management Conference: "New Management for the New Economy"*.
- Hernaus, T., Škerlavaj, M. and Dimovski, V. (2008). "Relationship Between Organisational Learning and Organisational Performance: The Case of Croatia", *Transformations in Business Economics*, 7(2), 32-48.
- Huber, George. (1991). "Organizational Learning: The Contributing Processes and the Literatures", *Organization Sciences*, 2(1), 88-115.
- Hung, R., Yang, B., Lien, B.Y.H., Mclean, G. and Kuo, Y.M. (2010). "Dynamic Capability: Impact of Process Alignment and Organizational Learning Culture on Performance", *Journal of World Business*, 45(3), 285-294.
- Hussein, N., Omar, S., Noordin, F. and Ishak, N.A. (2016). "Learning Organization Culture, Organizational Performance, and Organizational Innovativeness in a Public Institution of Higher Education in Malaysia: A Preliminary Study", *Procedia Economics and Finance*, 37(2016), 512-519.

- Jiménez-Jiménez, D. and Sanz-Valle, R. (2011). "Innovation, Organizational Learning, and Performance", *Journal of Business Research*, 64(4), 408-417.
- Kontoghiorghes, C., Awbrey, M. S., and Feurig, L.P. (2005). "Examining the Relationship Between Learning Organization Characteristics and Change Adaptation, Innovation, and Organizational Performance", *Human Resource Development Quarterly*, 16(2), 185-211.
- Kortsch, T. and Kauffeld, S. (2019). "Validation of a German Version of the Dimensions of the Learning Organization Questionnaire (DLOQ) in German Craft Companies", *Zeitschrift für Arbeits- und Organisationspsychologie*, 63, 15-31.
- Larson, Martin. (2008). "Analysis of Variance", *Circulation*, 117(1), 115-121, (retrieved from) 10.1161/CIRCULATIONAHA.107.654335.
- Leufvén, M., Vitrakoti, R., Bergström, A., Ashish K.C., Målqvist M. (2015). "Dimensions of Learning Organizations Questionnaire (DLOQ) in a Low-Resource Health Care Setting in Nepal", *Health Res Policy Sys*, 13,(6).
- Liao, Shu-hsien and Wu, Chi-chuan. (2009). "The Relationship among Knowledge Management, Organizational Learning, and Organizational Performance", *International Journal of Business and Management*, 4(4), 64-76.
- Manzoor, Quratul-Ain. (2012). "Impact of Employees Motivation on Organizational Effectiveness", *European Journal of Business and Management*, 3(1), 1-12.
- Marsick, Victoria J. and E. Watkins, Karen. (2003). "Demonstrating the Value of an Organization's Learning Culture: The Dimensions of the Learning Organization Questionnaire", 5(2), 132-151.
- Mascitelli, Ronald. (2000). "From Experience: Harnessing Tacit Knowledge to Achieve Breakthrough Innovation", *J Prod Innov Manag*, 17(3), 179-193.
- Murray, P. and K. Donegan. (2003). "Empirical Linkages Between Firm Competencies and Organisational Learning", *The Learning Organization*, 10(1), 51 - 62.
- Naranjo-Valencia, J.C., Jiménez-Jiménez, D. and Sanz-Valle, R.. (2016). "Studying the Links Between Organizational Culture, Innovation, and Performance in Spanish Companies", *Revista Latinoamericana de Psicología*, 48(1), 30-41.
- Omar, Marzunisham. (2021). "Transforming Organisational Learning in Challenging Times", BIS Central Bankers' Speeches, 1-3, (retrieved from) <https://www.bis.org/review/r210610g.pdf>, June 2021.
- Pokharel, P. Mohan and Choi, Sang Ok. (2013). "Exploring The Relationships Between The Learning Organization And Organizational Performance", *Management Research Review*, 38 (2), 126-148.
- Popper, M. and R. Lipshitz. (2000). "Organizational Learning: Mechanisms, Culture, and Feasibility", *Management Learning*, 31(2), 181-196.
- Qureshi, S., Kamal, M. and Peter, K. (2009). "Knowledge Networking to Overcome the Digital Divide". (in) edited by King, R. William. *Knowledge Management and Organizational Learning. Annals of Information Systems*, Vol 4. Springer, Boston, MA.
- Ramírez, A.M., Morales, V.J.G. and Rojas, R.M. (2011). "Knowledge Creation, Organizational Learning and Their Effects on Organizational Performance", *Inzinerine Ekonomika-Engineering Economics*, 22(3), 309-318.
- Ratna, R., Khanna, K., Jogishwar, N., Khattar, R., and Agarwal, R. (2014). "Impact of Learning Organization on Organizational Performance in Consulting Industry", *International Journal on Global Business Management Research*, 2(2), 1-11.
- Richard, J.P., Devinney, M.T., Yip, S.G. and Johnson, G. (2009). "Measuring Organizational Performance as a Dependent Variable: Towards Methodological Best Practice", *Journal of Management*, 35(3), 718-804.
- Schein, H. Edgar. (1985). "Defining Organizational Culture", *Classics of Organization Theory*, Vol. 3(1), 490-502.
- Senge, P.M. (1992). "Mental models", *Planning Review*, 20(2), 4-44.
- Song, Ji H., Joo, B.K. and Chermack, T. (2009). "The Dimensions of Learning Organization Questionnaire (DLOQ): A Validation Study in a Korean Context", *Human Resource Development Quarterly*. 20(1), 43-64.
- Trpkova-Nestorovska, M., Skerlavaj, M., Dimovski, V., Černe, M., Kekenovski, L. and Tevdovski, D. (2012). *The Organisational Learning Culture and Organisational Performance in Macedonian Companies. European Journal of International Management*. 5(6), 574-607.
- Snyder, M. William, and Cummings, G. Thomas. (1998). "Organization-Learning Disorders Conceptual Models and Intervention Hypothesis", *Human Relations*, 51(7), 873-895.
- Venkatraman, N. and Ramanujam, Vasudevan. (1986). "Measurement of Business Performance in Strategy Research: A Comparison of Approaches", *The Academy of Management Review*, 11(4), 801-814.
- Wang, L. Catherine, and Ahmed, K. Pervaiz. (2001). "The Role of Learning and Creativity in the Quality and Innovation Process", *University of Wolverhampton Management Research Centre WP*, WP 007/01.

- Wang, C.L. and P.K. Ahmed. (2003). "Organisational Learning: A Critical Review", *The Learning Organization*, 10(1), 8-17.
- Wang, L. Catherine, and Ahmed, K. Pervaiz. (2002). "Learning Through Quality and Innovation", *Managerial Auditing Journal*, 17(7), 417-423.
- Yang, B., K.E. Watkins, and V. Marsick. (2004). "The Construct Of The Learning Organization: Dimensions, Measurement, And Validation", *Human Resource Development Quarterly*, 15(1), 31-55.
- Yeung, Andy C. L., Lai, Kee-Hung and Yee, Rachel W. Y.. (2007). "Organizational Learning, Innovativeness, and Organizational Performance: A Qualitative Investigation", *International Journal of Production Research*, 45(11), 2459–2477.
- Zgrzywa-Ziemak, A. (2015). "The Impact of Organisational Learning on Organisational Performance", *Management Business Administration. Central Europe*, 23(4), 98-112.