

Studies with Dimensions of Learning Organization Questionnaire – Research Study

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Abstract. In the learning organization concept the learning is realized on organizational level, employees work together, and the goal of the organization is same as the goal of all employees. The learning organization concept has become the subject of many studies over the years. The tool mostly used for measuring the learning organization is the Dimensions of Learning Organization Questionnaire (DLOQ). The DLOQ was translated and used in more than 14 languages during past years. However, in the Czech Republic, only one study with DLOQ in IT sector was conducted in 2018. To determine the further direction of studies in the Czech Republic, the comparison of carried out studies is needed. The research study of 30 studies with DLOQ was conducted. It was found, that the three most popular sectors are: education sector, banking and healthcare. With regard to the current situation in the Czech Republic is recommended to provide next study at high schools (private and public) and to include both students and professors into the study.

Keywords: Learning Organization, DLOQ, Dimensions of Learning Organization.

1 Introduction

For organizations, knowledge as a source of competitiveness is bottomless. Knowledge in society is considered to be one of the most important way of production, learning as a most important process in terms of sustainable competitive advantage [14]. The learning organization supports both individual and organizational learning, employees share their vision of goals with their colleagues and their personal goals are in line with the organization's goal. Employees are expected to learn, plan actions, solve problems, and assess risks [23, 46].

Learning organizations have several common elements. These are leadership and management, culture, communication systems, information and knowledge, learning levels [6].

The Dimensions of Learning Organization Questionnaire, written by Marsick and Watkins, can be used to measure learning organizations. These authors define 6 action requirements (empowering people for a common vision, supporting query and dialogue, promoting collaboration and team learning, creating opportunities for continuous learning, connecting the organization to the environment, creating systems for

capturing and sharing learning), and basic features to make it possible to evaluate the current state of the organization (the difference between the current and the desired state of the organization). The six action requirements have become the basis for the seven dimensions that characterize the culture of the learning organization. These 7 characteristics are: continuous, collaborative, connected, collective, creative, codified and capacity building. The six action requirements have become the basis for the seven dimensions that characterize the culture of the learning organization [16, 18, 24].

Table 1. Seven dimensions of learning organization [16, 24].

Dimension	Definition
D1: Create continuous learning opportunities	Learning is designed so that people can learn by working; opportunities for continuing education and growth are provided.
D2: Promote inquiry and dialogue	People have the ability to think reasonably so that they can express their opinions; people have the ability to listen and examine the opinions of others; organisation culture supports polling, feedback and experimentation
D3: Encourage collaboration and team learning	The work is designed to use a group approach to different ways of thinking; groups are expected to learn and work together; co-operation is appreciated by the organisation culture and is rewarded.
D4: Create systems to capture and share learning	Both old and new shared learning support systems are created and integrated into the organisation and are available to employees.
D5: Empower people toward a collective vision	People are involved in creating, owning and implementing a common vision. The responsibility is moved closer to decision-making so that employees are motivated to learn what they're responsible for.
D6: Connect the organisation to its environment	Helping people to see the impact of their work on the whole business. People watch the environment and use information to adapt workflows. The organisation is linked to its communities.
D7: Provide strategic leadership for learning	Model of leaders, champions and learning support. Leaders use strategic learning to support business results.
KEY RESULTS	
Financial performance	The state of financial stability and resources is available for growth.
Knowledge performance	Improving learning and knowledge products and services (core indicators of intellectual capital).

The DLOQ was translated into more than 14 languages during last years and for its use it is necessary to validate the questionnaire first. The validation rests in use of two independent translators and in calculating the Cronbach's alpha for each dimension optimally [45].

In the Czech Republic, only a few studies have been done so far on the issues of the learning organization. Among the more extensive, we can talk about Adamec's work in 2012, which looked at how aspects of the learning organization are being adopted in the Czech Republic, focused on the learning of managers and executives [3]. Other work that dealt with the Learning Organization was created in 2014. This work focused on applying the concept of a learning organization in a public administration organization [15]. In a particular transport company, two years later, the relationship between corporate culture and the learning organization was explored [38]. In the Czech Republic, we would find many other smaller studies that the learning organization is interested in, but none of the above studies is quantitatively comparable to foreign results. To improve the validity of the results, it is necessary to use a learning organization measurement tool that is used globally and is objectively evaluable. Such a tool is the DLOQ questionnaire by Marsick and Watkins. Until now, only one study has been conducted in the Czech Republic using the DLOQ questionnaire at the turn of 2017/2018 [48]. This study was focused on employees in the IT sector according to CZ Nace: [28]

- J - Information and communication activities
 - 62.0 - Information technology activities
 - 62.01 - Programming
 - 62.02 - Information technology consultancy services
 - 62.03 - Management of computer equipment
 - 62.09 - Other activities in the field of information technology

The question arises as to which other sectors in the Czech Republic should be targeted to make the results as comparable as possible to foreign studies and to provide a coherent picture of the status of learning organizations in the Czech Republic.

The aim of this article is to identify other research sectors based on research, in which it would be appropriate to repeat the DLOQ study by Marsick and Watkins.

2 Methodology

Based on an article review, an overview of studies dealing with the issues of learning organizations using the DLOQ questionnaire was created. The studies were searched through the Web of Science web site and through the Wiley Online Library. The shortcut of the "DLOQ" questionnaire was chosen as the keyword. As basic search criteria, year 2006 and later was chosen by Web of Science. The information obtained from the individual studies was then made more transparent in the table, data processing was carried out using Microsoft Word 2016 and Microsoft Excel 2016.

3 Results and Discussion

Since 1993, when the Dimensions of Learning Organization Questionnaire was first published [44], a large number of studies have been conducted that deal with the concept of learning organization. However, not all of the studies use the DLOQ tool to measure the learning organization.

In total, 30 different studies from around the world were included in this study. Respondents in these studies are both employees across the company hierarchy, as well as managers and executives. To obtain optimal information on the status of the learning organization, it would be appropriate to include employees at all levels in the study as it has been shown that there is a difference in the organization's assessment among staff members and executive members [19, 21, 48].

Over the years, studies have been launched using DLOQ especially since 2011. The maximum number of studies focused on learning organizations in general can be seen in 1995 [4].

The most frequent studies were mainly in developing countries in Middle East, six studies were from the European Union. Only one study was conducted worldwide. The large number of studies in developing countries can be justified by efforts to achieve the best results and improve the functioning of local organizations, which could contribute to an overall improvement in the quality of life in these countries.

On average, each study involving about 200 respondents. The largest number of respondents participated in the studies in Taiwan and Thailand. In the case of a learning organization, the number of respondents is often limited by the focus of the study (e. g. addressing only managers and executives).

Table 2. Summary of studies.

Country	Year	Sector/Type of Respondent	No of Respondents
Czech Republic [47]	2018	Students of Information Management	20
Czech Republic [48]	2018	IT	201
Korea [37]	2018	Korean workforce-education schools	481
Lebanon [7]	2018	Lebanese firms	298
United Arab Emirates [34]	2018	Logistics, operations, finance, general management	254 firms
Canada [35]	2017	Public library	41
Estonia [42, 43]	2017	Universities	2 Universities
Poland [17]	2017	Cross-cultural	-
Russia [40]	2017	Professional college	340
Saudi Arabia [2]	2017	Education	91
India [19]	2016	Dental institution	236
India [20]	2016	Healthcare -hospitals	315
Iran [10]	2015	Sport organizations	110
Malaysia [27]	2015	Manufacturing companies	321
Nepal [21]	2015	Healthcare - hospital	135

Austria [11]	2014	Banking	143
Greece [9]	2014	Advertising agencies, newspapers, magazines, radio and tele. stations	163
Pakistan [36]	2014	Banking	65
Rwanda [25]	2014	Education	430
Thailand [31]	2014	Industry	576
Sri Lanka [12]	2013	Army	-
Iran [29]	2012	Universities	295
Turkey [39]	2012	Healthcare	243
US [13]	2012	Scenario planning	133
Worldwide Study [41]	2012	Business Schools	105 schools
Iran [33]	2011	Service firms, manufacturing companies	54 firms and companies
North Cyprus [5]	2011	Banking	140
Lebanon [16]	2009	IT, banking	227
Yemen [1]	2008	University libraries	198
Taiwan [22]	2006	Organizations promoting the concept of learning organization	679

The largest number of studies took place in the education sector. If we look at schools and their system more closely, we find that the principles of learning organization are often unintentionally applied (eg teamwork, staff consult with and find solutions). Schools as such have certain prerequisites for being a learning organization [30]. There are total of 64 public, state and private universities in the Czech Republic [26]. This fact provides a basis for the possible focus of a future study in the Czech Republic at universities. If both public and private higher education institutions were included in the study, the question is whether there is a difference between them. Based on a study conducted in the banking sector, the minimum difference between the private and the public sector can be expected [32].

From other sectors, the banking and healthcare sector is most often represented in the studies. In the Czech Republic there is a potentially suitable environment for banking research. An optimal number of respondents could be reached in this sector, as there are currently 46 banks and branches of foreign banks (excluding the Czech National Bank) in the Czech Republic [8]. With regard to the development of IT in recent years and its connection with banking, it is interesting to note that too many studies have not been conducted in this sector. A larger study was conducted in the Czech Republic with 201 respondents in 2018. This study focused on small and medium-sized enterprises in the IT sector. The results were quite surprising. Compared to different foreign studies from other sectors (with respect to the equivalent of studies abroad), the results were the same and higher [48].

The focus of future survey to healthcare is quite interesting in connection with the established system of lifelong education of healthcare workers in the Czech Republic. Given the need to continually replenish knowledge, healthcare facilities could be expected to have great prerequisites for being a learning organization. Surprising is the result of this research study, because the more focus on healthcare and its specific

sectors was expected. The most common respondents in healthcare were not only doctors, but also nurses and other medical staff. In the study from Nepal, significant differences were found between doctors and nurses in two dimensions [21]. Significant differences were observed between professions in other healthcare study too [20].

If we compare the conditions in the Czech Republic with regard to the number of potential respondents in each sector, it seems more appropriate to carry out another study in the education sector.

4 Conclusions

Based on the research of already published studies, it can be argued that the education sector is the most attractive field for studying the introduction of the learning organization concept. Due to the number of studies conducted in this sector, the value of the work can be increased by comparing with already completed studies with the same or similar parameters. In the Czech Republic, only one study has been carried out using the DLOQ questionnaire in the IT sector. With regard to the results of the search and the number of potential respondents, the focus of the strategy can be on the universities, healthcare and banking sector.

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