THE ROLE OF LEARNING ORGANIZATIONS IN CRISIS MANAGEMENT STRATEGY: A CASE STUDY

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Abstract

The problem of the paper focused on the role of the learning organization in the crisis management strategy, and the extent of the actual interest in both the learning organization and the crisis management and aimed at diagnosing and analyzing that and surrounding questions. The Statistical Package for the Social Sciences (SPSS) program was used to calculate the results and the correlation coefficient between the two main variables. The methodology was descriptive and analytical. The case study was followed by a questionnaire that was distributed to a sample of 31 teachers. The paper adopted a seven-dimensional model of systemic thinking that encourages questioning, empowerment, provision of advanced technologies, and strategic leadership (Daft, 2004). Also adopted the model (Pearson & Mitroff, 1993) by sensing early signs of the crisis, preparing and preventing it, then containing the effects, then restoring vitality and drawing lessons. And it came to conclusions, most notably the great interest in the concept of the learning organization by the research organization and its practices and the importance of knowledge sharing and management, as well as paying high attention to the use of information and communication technology (ICT) techniques, and that it is able to continue, adapt, develop, face crisis challenges and take firm measures for this purpose.

Keywords: Learning Organization, Knowledge Management (KM), Information and Communication Technology (ICT) Techniques, Crisis Management Strategy

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1. INTRODUCTION

There is increasing interest in learning organizations that have great capabilities to develop, change and adapt to the accelerating environmental factors and threats and to face the strategic emergent challenges, which have become one of the most prominent features of the current era, as this type of organization possesses the capabilities and techniques of acquiring and managing knowledge

and disseminating it among its members at various levels interactively through computing and networking represented in information and communication technology (ICT) to solve problems and undertake strategic crisis management. The problem of the study revolves around the following research questions:

RQ1: What is the extent of actual interest on the part of the researched organization in each of the learning organizations and the crisis management strategy and their respective dimensions?

RQ2: What is the role of the learning organization and its dimensions in the crisis management strategy and its dimensions in the researched organization?

RQ3: What is the summary of theoretical ideas regarding both the learning organization and the crisis management strategy?

The study aims to diagnose and analyze the role of the learning organization in the strategic undertaking of crisis management while taking note of the questions of the problem at hand, in addition to developing a theoretical framework according to a new approach to a summary of the basic ideas and concepts related to the two main study variables. Its importance derives from the importance of the combination of the independent (learning organization) and the respondent (crisis management strategy) variables and their dimensions. This also has practical importance for what the study provides in terms of diagnosis, conclusions, and treatments, as well as providing a rich information base for the research organization, Dijlah University College, which is an important academic institution in Iraq with a high reputation as well as other organizations and colleges.

The study touched on the correlation between learning organizations and crisis management, and focused on highlighting the knowledge gap from the angle of integration between the two variables, in a way that is distinct from previous studies, especially since it was conducted in critical crisis conditions, namely the COVID-19 pandemic, which had the most impact on the world as a whole and on educational institutions, schools, and universities And it had to intensify its concerted efforts to ensure the continuity of work in these compelling conditions, and to realize the implications and dimensions of that, theoretically and procedurally. One of the most prominent questions and problems of the study is the role of Dijla University College as a learning organization in the crisis management strategy and the extent of its actual interest. The management focuses on managing the crisis and its dimensions, sensing its development and the possibility of limiting its harmful consequences by applying the descriptive analytical approach, the case study, the advantages, and the history of the learning organization, which is the college in the conditions of the pandemic, and its contributions to holding seminars and workshops and preparing distance e-learning techniques, which greatly contributed to overcoming these obstacles.

The study used models by Marsik and Watkins (2003) and Daft (2004), a theoretical framework with regard to the foundations and dimensions of the learning organization (Pearson & Mitroff, 1993), and a summary of ideas related to crisis management strategy. Learning at Dijla University College and its practices create synergy between teachers and academic departments, the importance of dialogues, knowledge sharing and exchanging experiences, while playing a continuous and dynamic role in holding scientific workshops and seminars, especially through e-learning platforms in the conditions of the COVID-19 pandemic. The college always seeks to involve its affiliates in solving problems and performance dilemmas and enabling departmental boards to make decisions and it also pays great attention to the use of networked digital technologies. On a large scale, in addition to that, during the crisis, the college took necessary measures and measures to contain the crisis effects and face challenges.

The rest of the paper is structured as follows. Section 2 reviews the relevant literature. Section 3 analyses the methodology. Section 4 includes the results. Section 5 is the discussion and Section 6 is the conclusion.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1. Literature review

A literature review dealing with the same or some or part of the variables is of special importance in conducting scientific research to give the researcher a clear perception and farsightedness of the topic.

Weldy (2009) sought to uncover the correlation between the learning organization and the transfer of training as a learning strategy to improve the performance and competitiveness of the organization. The study was applied to 212 American companies in Alabama, and among its most prominent results is that there is a positive correlation between the learning and transformation organization for training. They are two basic factors to improve performance and competitive advantage.

The study of Davis and Daley (2008) examined the relationship between the dimensions of the learning organization, on the one hand, and the financial performance of some companies in terms of return on investment, the strength of revenues, and the percentage of sales, on the other hand. It was conducted on a sample of 2000 American companies in the fields of human resources and marketing, and a questionnaire was prepared and designed based on the dimensions of both main variables. It was found that there is a positive correlation between the dimensions of the learning organization and financial performance.

The purpose of Chang and Lee's (2007) research is to verify the relationship between leadership, organizational culture, and the operation of a learning organization, using a questionnaire of 134 related parties in Taiwan. The answers indicated that organizational culture positively affects the work of the learning organization and the activation of learning organizations has a significant positive impact on employee job satisfaction. With the increasing number of workers in the knowledge field in Taiwan, it is impossible for business managers to meet the demands of workers by traditional leadership methods. Rather, it is necessary to enhance skills in transformational leadership, encourage learning and innovation activities, develop the potential and capabilities of workers, and focus on training and learning activities, which is necessary to preserve talent.

Hede's (2018) purpose is to identify how managers perceive potential crises occurring in Swedish municipalities and their practice of crisis management in all its stages. Four test papers were used to collect data: the first included a theoretical model showing the evaluation of managers' decisions and reactions in crises, the second paper included improving evaluation and developing learning through the experience of going through crises, and the third paper during which the process of analyzing preparations for facing the crisis was conducted through its perception, sensing, and alertness to its indicators. All this is explained through different psychological and conceptual theories to understand the driving forces to stimulate performance and confrontation measures, while the fourth paper focused on the necessary preparedness efforts in addition to emphasizing the personal central role of municipal work leaders as crisis managers and the importance of their strong moral influence on workers.

Kriyantono (2011) focused on crisis management approaches that were managed by the Indonesian government and companies during the catastrophic mudflow crisis in the Indonesian Siwarjo, including the means of communication and public relations programs that were conducted by officials in a timely manner and the efforts made to deal with the development of that crisis and the position of the Labindo Petroleum Company that was accused of responsibility due to extreme errors in the drilling and exploration operations, but the judiciary supported the opinions of experts in their explanations, which went so far as that an earthquake had caused the crisis that led to internal conflicts. The research is not to judge the extent of the company's responsibility but to show how the actors interacted in the crisis and the consequences. This is especially true for the victims. The study concluded by presenting a comprehensive view of the roots of this crisis, its development, the various reactions towards it, and the failure of the government and company procedures to deal with it promptly, especially in the transfer of reliable information, which left a wide climate of mistrust in addition to the conflict of interest between the company, the government, and the victims.

Hartmann (2011) conducted an in-depth study on crisis management in the hotel industry in Finland, to identify the behavior of hotel managers, workers, and stakeholders, especially investors, to increase their awareness and experiences about crises and to confront them, and to prepare and develop the necessary plans, especially in focusing on proactive planning towards the challenges and government restrictions and various environmental influences. It dealt with a broad conceptual framework related to crisis management, its definitions, how to use knowledge management (KM) and advanced information technologies for this, as well as legal compliance, corporate social responsibility, preparation of emergency plans, and the security work procedures set by the World Travel and Tourism Council. For all the information, the study used the method of conducting interviews with a number of hotel managers responsible for managing crises and some professional security officers.

Malik and Garg (2020) developed and tested a mediation model linking learning organization to employee resilience and work engagement. The study draws on the tenets of Fredrickson's (2004) broaden-and-build theory and conservation of resource theory for supporting the study results. So it used cross-sectional surveys of 300 information technology (IT) professionals in India. Structural equation modeling was used for the empirical test of the study hypotheses. Additionally, the study utilized Hayes and Preacher's (2014) mediation analyses to investigate the mediating effect of employee resilience on the relationship between learning organization and work engagement. The results revealed a significant relationship between variables of the study and shows that a learning organization positively affects employee resilience and work engagement. The findings suggest that employee resilience partially mediates the effect of a learning organization on work engagement. This study offers concrete insights to Human Resource (HR) managers for fostering employee resilience which in turn can play a key role in building a highly engaged workforce.

In their study, Le and Phi (2021) mentioned that COVID-19 has long-lasting impacts that require the hotel sector to revise and transform their businesses. The literature related to this area remains underdeveloped. Based on 219 articles collected from global media and integrated crisis management, this research note maps out "strategic responses" from this sector and suggests implications for hotels to address the evolving pandemic situation. Three modifications were proposed to refine and further develop a pandemic crisis management framework.

Murad et al. (2021) aimed to identify the crisis management strategies in five-star hotels in Jordan. Data for this study were collected from 50 managers of hotels. Questionnaires were distributed to the targeted sample. SPSS was used to analyze the data. The findings showed that the strategies used to manage crises are coping and response strategies; the most common strategy is the changing path strategy. This study offers new insights into crisis management in Amman hotels.

Törmänen et al.'s (2022) study introduced the organizational systems intelligence (OSI) scale, a measurement tool for learning organizations, and proposes the scale as a useful tool for human resource development. OSI provides a new perspective that links employees' perceptions of various seemingly mundane everyday practices with the organizationally desirable effects of a learning organization. The model suggests developmental perspectives that highlight micro-level behavioral, informal, interactional, and accessible-to-all aspects of the learning organization. Operating in the vernacular and focusing on human experience in organizations, the OSI perspective points to improvement possibilities among people in contrast to the structural manager level. It contributes to HR literature that explores developmental outcomes understanding from human experience in contrast to rank, or hierarchy. With its bottom-up logic, the model introduces an employee-level perspective of systems thinking in action into the field of HR. It is demonstrated that for perceived performance, the OSI scale performs equally well as the used dimensions of the learning organization questionnaire.

The presentation of previous studies contributes to identifying their methodologies and general frameworks and the theoretical enrichment of the current study, which was distinguished by its perspective on the intellectual and theoretical handling of the basic variables and their dimensions as well as focused on dealing with them. In light of the foregoing, this study focused on the integration between KM and crisis management in a way that distinguishes them from each other, especially as it was conducted in the conditions of the COVID-19 pandemic crisis, which had a profound impact on the world as a whole and educational institutions and universities.

In light of the foregoing, this study starts from the main hypothesis.

H1: The learning organization has a strategic role in crisis management.

The approach which is followed is the case study by preparing its own questionnaire according to the following. Firstly, the independent variable (learning organization), based on Marsik and Watkins's (2003) model and Daft's (2004) model, which includes seven dimensions, which emphasize encouraging dialogue and questioning, empowering workers, and providing advanced devices and techniques for sharing and exchanging learning experiences in addition to systemic thinking and making available continuous learning opportunities with the importance of strategic leadership with a visionary future. Secondly, the responsive variable (crisis management strategy) based on Pearson and Mitroff's (1993) model includes five dimensions summarized by sensing the early signs of the crisis, preparation, and prevention, then the phase of containing and limiting its effects and seeking to isolate it in addition to the activity and vitality recovery and then the learning phase and drawing lessons to deepen organizational expertise in facing threats and crises.

2.2. Theoretical framework

2.2.1. The learning organization

The learning organization is a smart, creative organization that accomplishes its tasks, solves performance dilemmas, deals with emergency variables and crises in exceptional ways, and empowers workers at all levels according to a networked structure that relies on the work team system that reproduces and manages KM and experiences, disseminates, generates and employs them strategically in developing the organization on adaptation and crisis management (Saeed et al. 2022). The learning organization undertakes the processes of acquiring, managing, transferring, and disseminating knowledge at all levels through discarding hierarchy by adopting ICT. It has been defined as an organization capable of adaptation, change, and continuous improvement to increase the ability to learn, grow, and fulfill its objectives (Daft, 2004; Abass et al., 2022). It is also the organization skilled in acquiring knowledge, transferring it, and employing it in work according to the new visions and knowledge (Bateman & Snell, 2002). It is also the organization that makes learning a dynamic process and responsibility for all employees to solve problems and transfer knowledge effectively and quickly (Garvin et al., 2008).

The concept of a learning organization originally came in the book entitled "The Fifth Discipline: Art and Practice of Learning Organization" (Senge, 2011), first published in 1990. It pursues systems thinking and a participatory vision and adopts team building and teamwork as a network structure by giving more flexibility and freedom of thought to workers to push them towards establishing open-minded models and new methods of learning, knowledge acquisition, and innovation (Abass et al., 2022). Senge (2011) has defined it as an organization that continuously raises its capabilities and energy levels in order to shape its future, as it can skillfully predict environmental variables and respond to them and the requirements of readiness and face their complexities and ambiguities.

It is also known as the organization that continuously develops its capabilities in group learning, using knowledge and technology effectively, and enabling workers at all levels to participate in solving problems and organizing production processes (Marquardt, 2002). It is also an organization that continuously develops adaptive capabilities and its members play active roles in diagnosing and solving work-related problems and dilemmas (Robbins, 2001, p. 272). While it is known as an organization that seeks collective and individual orientation toward the learning process to achieve development and growth and to the satisfaction of the stakeholders in the organization (Dixon, 1993), it is also an organization that deals with learning always in the context of practicing experiences and drawing experiences and knowledge from it for continuous development and improvement of business and adopting promising strategies (Songe-Møller & Bjerkestrand, 2012).

The companies and organizations that are unable to keep pace with the new changes and circumstances, especially through organizational learning methods, improving quality and distinguished performance, cannot survive and must leave, as survival is decisive for a learning organization that is able to understand the process of adaptation intelligently and a renewed participatory skill (Al-Khoury et al., 2022).

The widespread use of advanced ICT, in addition to the fundamental changes in working methods and the need for innovation, has brought about profound fundamental changes in the foundations of business competition in addition to that knowledge has become one of the most vital assets of wealth and the productive process, which requires keeping pace with its acquisition, dissemination, and generation with high collective skills by resources. Efficient humanity has become the focus of the strength and vitality of the organization, which critically justifies the emergence of learning organizations and the adoption of advanced models of strategic learning processes to go along with that (Thomas & Allen, 2006).

One of the most prominent justifications for the shift towards learning organizations is the necessity to achieve high levels of performance, continuous improvement of quality, achieving sustainable competitive advantage, satisfying the needs of customers, managing successful change and adaptation processes, coordinating and organizing the committed workforce, and revealing

the facts, with the importance of keeping pace with contemporary global developments (Senge, 1995).

While Marquardt (2002) focused on the importance of technological and knowledge developments, the transformations of the global economy and business in a radical way, and the effects of accelerated globalization on the competitiveness of companies as well as the increase in customer requirements with changing employee expectations and roles.

Opinions regarding the characteristics of the learning organization vary through its smart and unconventional dealings with advanced technologies ICT and keenness on learning and dialogue and adoption of open mental models and creative thinking methods based on KM.

There are four main activities that characterize the learning organization, which are solving problems in an organized manner, learning from their accumulated experiences and those of other organizations, dealing with new approaches, and spreading knowledge in its zone and its entity quickly and skillfully (Wheelen & Hunger, 2011).

Also, an important feature is anticipating future changes with the ability to adapt to them, investing in human resources, and attracting them in a better way, and developing the process of continuous improvement on all levels and components (Marquardt, 2002).

Marsik and Watkins (2003) see the necessity of providing continuous learning opportunities for workers, encouraging dialogue, questioning and feedback, establishing systems for sharing and managing knowledge, experiences, and learning, empowering workers and engaging them in a future visionary direction, and the importance of an organic link with the external environment, and above all, the importance of strategic leadership in support of corporate learning, collectively and individually, and the unlimited encouragement of group learning and information sharing.

Some believe that the most prominent characteristics of a learning organization (Dobson & Tosh, 1998) are the following: the contextual practice of learning, the readiness to accept change and cope with environmental challenges, empowering workers and engaging them in solutions and decision-making, and adopting an open culture that supports creativity and challenges risks.

According to Daft (2004), a learning organization is characterized by five basic characteristics:

1) Leadership that carries out non-traditional roles, most notably the care and support of employees and enabling them to participate in solutions and decision-making, building a common vision, testing mental models, confirming systems thinking through the organic relationship with the environment, and making and designing the strategy and policies.

2) The network structure is based on self-managed teams and synergistic teamwork that allows communication between all levels using ICT technologies and eliminates the traditional superiority of senior management as in the hierarchical structure that blocks the sharing of experiences and the sharing process.

3) An adaptive culture based on transparency, openness, and continuous improvement of work.

4) Strategic learning allows for high flexibility of mobility and strategic work, as this type of learning gives an unprecedented impetus to the development of the renewable emerging strategy.

5) Knowledge demand through its acquisition from the external environment, especially competitors, to confirm the survival and development of the organization and build its sustainable competitive advantage as well as generate knowledge, reproduce it and enrich it.

The researchers of the learning organization, most notably Senge (2011), have been interested in system thinking, which is a fundamental pillar of strategic learning, as it emphasized that it is an approach based on the integration of the part with the whole through a series of circles that are organically linked to the internal environment of the organization and the external environment and society and interact with it as the organization is part or a sub-system of that whole entity that intertwines each other with influence. Of course, the concept of business sustainability was launched from this standpoint through an informed view of the future within the framework of a powerful strategic direction that learns from experiences and accumulated experiences to increase the ability to predict future changes and sense the risks, threats, and crises and prepare for them.

2.2.2. Models and dimensions

Researchers have designed several models of learning organization to reflect their attitudes. Perhaps, among the most prominent of those models that include the dimensions of a learning organization are the following models.

1) Senge's (2011) model. It includes a) systems thinking, b) mental models, c) shared vision, d) group learning, and e) personal perfection.

2) Daft's (2004) model. It includes five dimensions that the study benefited from in building its model, as follows a) horizontal structure, b) a culture of adaptation, c) collaborative strategy, d) participatory information, and e) enabling roles.

Daft (2004) emphasized that the design of the system in this way is capable of bringing about the transformation of the organization from a traditional, formal organization with mechanical, hierarchical, routine procedures to becoming an educated organization with qualitative performance capable of generating knowledge continuously and coping with challenges.

3) Marquardt's (2002) model. It consists of five dimensions, which are a) advanced technologies, b) collective learning, c) participatory knowledge, d) empowerment of workers, and e) collaborative organization.

4) Marsik and Watkins's (2003) model. It includes seven integral foundations and dimensions and is one of the most prominent models of the learning organization. The study adopted it procedurally in building its own model and questionnaire so that the dimensions of the independent variable (learning organization) are a) providing continuous learning opportunities, b) encouraging dialogue and inquiry, c) group learning and collaboration, d) empowering workers, e) providing digital technologies to share knowledge, f) systems orientation and thinking, and g) strategic leadership.

2.2.3. Crisis management strategy

The world has become a unified and interconnected entity politically, economically, administratively, socially, and informally, and its events, dilemmas, and problems are no longer isolated from each other, no matter how far apart. Globalization has made institutions and companies abandon their isolation and confinement, integrate into the larger fabric of the world and its dynamic movement, and push them towards a deep awareness and intense sense of the universality of the crisis, no matter how local. According to Webster's dictionary, crisis means "a turning point for better or worse in an acute disease or fever", or it is a turning point and a watershed moment in "an unstable or crucial time or of affairs in which a decisive change is impending" (Merriam-Webster, n.d.).

A crisis is an abnormal transformation process that organizations or societies undergo, carrying with them both opportunities and dangers, as it is an unforeseen problem that could lead to a disaster if not resolved and avoided adequately and quickly (Schermerhorn, 2008). It is also the situation that the organization faces and cannot deal with it routinely, and that results in uncommon pressures due to the impact of sudden changes (Booth, 2015). It is also a watershed point in unstable anxious situations that lead to undesirable outcomes if the concerned parties are unable and unwilling to contain them and ward off their risks (Isakowitz et al., 1998).

The word crisis is used interchangeably with a number of other terms, including disaster, business interruption, or emergencies (Swartz et al., 2010). Among its important definitions is a potentially occurring event, but it is of high impact that threatens the organization's continuity and performance and is characterized by ambiguity and overlapping causes with results and means of solution. This requires that firm and rapid decisions be taken (Pearson & Clair, 1998).

Crises are managed strategically within the framework of the strategic formulation and administrative functions represented in long-term proactive planning, organization, coordination, leadership direction, and continuous monitoring follow-up, as it is a department concerned with planning and moving the turning point to get rid of uncertainty and risk and provide the opportunity to control and control the organization's resources and destiny. Crisis management is a science that focuses on the application of ICT and administrative sciences to deal with extraordinary events that may harm the organization if not better to confront them.

It is known as programs and tools designed to assist managers and others to prepare for facing unexpected, high-impact events that threaten the safety and viability of the organization, through anticipation and preparation for various emergencies by assigning crisis management teams to develop the necessary plans to deal with potential emergencies (Schermerhorn, 2008).

The crisis is a prominent threat to the operations of the organization if it is not dealt with wisely and promptly, as it usually leaves negative and dire financial, moral, and security consequences on the entity of the organization and the stakeholders, and the related industry, so the crisis management designs to prevent or reduce these damages and losses (Coombs, 2007).

Usually, cognitive approaches to studying an organizational crisis are based on three basic assumptions. First, crises are evil and carry problems. They are very complex and ambiguous events and can play the interests of multiple parties against each other. The second assumption is that people are limited in their ability to process information during a crisis. The third assumption is that crises arise or emerge from the spiral of control because executives, managers, or operators have responded in an irrational, biased, and so on response to information processing and decision-making (Stubbart, 1987).

In order to deal with crises strategically and in unconventional forms, teamwork must be formed that includes a diverse group of experts and specialists with the support of the mobilization reserve, which represents an added preventive barrier to confront any potential breach, and the democratic participation method and the empowerment of workers in solutions and important decision-making. Schermerhorn (2008) has set six rules for managing crises, the most prominent of which are: uncovering the course of the situation and working in its light, respecting the time factor to hold the crisis when it is small, and showing some tactical setbacks awaiting better opportunities, respecting everything that is unfamiliar and new with an appreciation for the skeptics who see things differently, and being prepared to "fight fire with fire" when things go wrong for busy and distracting purposes.

It is known that chief executives and researchers traditionally focus on financial problems of performance and its development, but they pay marginal attention to the effective strategic management of crises facing the company, as the negative effects of organizational and productive activities are treated as accidental factors, but such crises are related to pollution and industrial accidents and production holidays and others are now taking an increasing trend after the consequences of many companies' crises have gone bankrupt or close to bankruptcy (Mitroff et al., 1987).

Usually, a crisis is examined and followed up through a chronological path to understand its evolution. One of the approaches looks at the crisis and summarizes it in four stages: the preconditions, the trigger event, the state of crisis and escalation, and after the crisis or aftermath.

The preconditions, the first stage, are summarized in that there are events that may be small that could interact before the crisis and then trigger them (Smith, 1990). This combination of events leads in the end to a prominent event, usually called the event trigger, which ignites and inflames the crisis (Roux-Dufort, 2009). For example, the triggering event of the Carbide Bhopal Crisis in India in 1984 was water leakage into a high-pressure tank. Then disaster struck.

The triggering event, the second stage, is the breaking point and firing event through which the crisis escalates and breaks the natural balance of the organization, after it was working normally before, but the preconditions and factors were forming and brewing under the surface, leading to a transformation by the triggering event that triggers and ignites the crisis (Crandall et al., 2013).

The third stage is the state of crisis and the escalation of the crisis resulting in great harm to the organization and the stakeholders concerned. The damage can be significant during this phase of the crisis and can have a severe impact on the organization's business continuity.

After the crisis, the fourth stage, when the acute phase of the crisis is over, the administration must turn back to what the state and the crisis event were and pick up from it the lessons related to the changes needed to prevent possible future repercussions (Smith & Elliott, 2007).

Other researchers dealt with the stages of the life cycle of the crisis and limiting it to the stage before the crisis expressed by the signs of its occurrence, the stage of its exacerbation, the stage of its management or containment, the stage that follows it, assessing its effects and drawing lessons from it (Albrecht, 1996). The crisis includes four stages: the emergence stage, the exacerbation stage, the addiction stage or the chronic crisis, and the resolution stage. It can pass through six stages: crisis avoidance, preparation for crisis management, crisis recognition, crisis containment, crisis resolution, and learning and lessons learned from it (Augustine, 1995). Among the models of crisis management is a model (Johnston & Stepanovich, 2001; Mhaibes & Mahmood, 2020) that includes three dimensions: planning to manage and contain the crisis, working to confront and deal with it efficiently, and finally learning from its lessons. However, one of the most important of these models is what the study adopted procedurally in building its own model and check-list, which is a model (Pearson & Mitroff, 1993) that includes five-phased dimensions represented by sensing and detecting early signs of the crisis, preparing and preventing to reduce the damage, contain the effects of the crisis and seek to isolate it. Preventing its spread by taking the necessary measures against it, and then restoring activity and vitality by restoring lost tangible assets and leaked human resources, after all that learning and drawing important lessons to deepen organizational experiences in the face of future crisis threats and dangers (Al-Janabi & Mhaibes, 2019).

On these bases, the dimensions of the responsive variable of the study (crisis management strategy) are as follows: a) sensing and detecting early signals, b) preparation and prevention, c) containing and isolating impacts, d) recovering activity and vitality, and e) drawing lessons and deepening experiences.

One of the most important technical practices in crisis management is the use of the Internet and IT technologies or ICT, especially through communicative websites. Six practices can be emphasized in this context, which are the inclusion of all traditional media relations materials on the website, the benefit from the interactive aspects that the site produces, giving details and clear information during the correspondence, and interactive answers supported with references drawn from the assistant managers. When necessary, more than one website can be created to suit the different orientations and interests of the stakeholders, in coordination with the media agencies, especially the officials concerned (Taylor & Kent, 2007).

Effective strategic planning in crisis management aims to identify early warning signals for the crisis that looms on the future horizon, and before it moves to the stage of acute and chronic crisis, then the rescue endeavors will end, and the organization is rarely able to recover and get rid of the damage of the crisis as this depends on the extent of its preparations and its response and learning from its failures and identifying weaknesses in parallel with its degrees of success in responding and returning to resume its functions in a dynamic and integrated manner (Paraskevas et al., 2013).

In sum, crises are characterized basically by the most prominent of which is the extreme surprise, the overlap between its causes and elements, the forces supporting and opposing, and the lack of ICT, and thus the lack of the information and data necessary for clarity of vision for the decision maker.

3. METHODOLOGY

The researchers conducted field interviews with the distribution of 31 questionnaires on an intended sample of 9 academic department heads of the college, which are Departments of Business Administration, Financial and Banking Sciences, Pathological Analysis, Arabic Language, Dental Industry, Media, Computer Technologies, Optics Techniques, Computer Science, Civil Engineering, Refrigeration, and Air-Conditioning Techniques, the head of the IT Department, 4 rapporteurs, and 3 heads of units, which are Performance Evaluation, Scientific Research, and Educational Guidance, in addition to some teaching professors during the period of conducting the case study in the college. The field interviews dealt with Dijlah University College in Baghdad descriptively for the period from October 1, 2020, to December 1, 2020, and used the advanced statistical technique SPSS to verify the validity of the hypothesis and extract the correlation coefficient between the two independent and responsive variables, with some statistical tools and methods required for the descriptive case study through the frequency distribution of the answers that were reinforced by interviews and the extraction of the weighted arithmetic mean, standard deviation, coefficient of variation (CV) and CV dispersion for comparison and analysis.

4. RESULTS

4.1. Independent variable (learning organization)

Table 1 shows the frequency distributions, means and weighted means, and the standard deviations related to the answers regarding the independent variable (*learning organization*) as it reflects a mean of 2.875 with a standard deviation of 0.025.

Encouraging dialogue and questioning: Table 1 showed a high mean for this dimension, 2.822 with a low standard deviation of 0.016, in addition to its first relative importance in terms of harmony and non-dispersion, especially with regard to the faculty deanship encouraging dialogue and feedback during workshops, seminars and lectures with a high degree of 2.838 above the mean. It results from the nature of the organization under research and its educational system aimed at increasing and upgrading knowledge through the exchange of

dialogues, which was confirmed by the study (Hede, 2018) that was previously addressed.

Group learning and cooperation: Table 1 showed a high mean for this dimension 2.741 with a low standard deviation of 0.016, in addition to second relative importance in terms of harmony and non-dispersion in relation to the two related questions that obtained a high mean of 2.806 and 2.741. Certainly, the principle of collective learning reflects the cooperation and coordination between the two sides of the educational process, the teachers and students in the organization under research to enrich and deepen the learning process.

Providing continuous learning opportunities: Table 1 showed a high mean for this dimension, 2.918 with a low standard deviation of 0.048, with relative importance in the third rank in terms of coherence and non-dispersion in relation to the establishment of workshops, scientific seminars, and lectures by the college, its departments and units, and what is related to the continuous education unit and its dynamic interactive activity through the e-learning platforms, by obtaining high weighted arithmetic mean for each of the two questions of 2.870 and 2.967, respectively. This topic indicates the conscious and keen orientation of the research organization towards the continuity and perpetuation of the teaching and learning process according to an approach that enriches knowledge for all.

Systemic orientation and thinking: Table 1 showed a high mean for this dimension 2.693 with a low standard deviation of 0.048 with relative importance in the fourth rank in terms of harmony and non-dispersion in relation to the two questions that obtained a mean of 2.645 and 2.741, respectively related to the college's effective participation in social and environmental activities and by holding distinctive sports, artistic and cultural events. Certainly, systematic thinking is a vital strategic direction resulting from considering the organization under research as an integral part of the social fabric and a basic link within the general environment with which it interacts in influence and influence. This indicates the interest of the research organization in this direction.

Empowering workers: Table 1 showed a high weighted arithmetic mean for this dimension 2.580 with a low standard deviation of 0.064 and with relative importance in the fifth rank in terms of harmony and non-dispersion in relation to questions related to the involvement of staff in solving problems and performance dilemmas, and empowering the heads of departments, units, and department councils to contribute to making Important decisions and they obtained two parameters of 2,516 and 2,645, respectively, which indicates the high interest in this vital dimension by the college's board of directors and the deanship. It also indicates that the principle of empowerment and the involvement of the teaching staff in seminars and extended academic meetings is essential and circulated by the organization under research.

Strategic leadership: Table 1 showed a very good mean of 2.564 for this dimension with a moderate standard deviation of 0.113 and with relative importance in the sixth rank in terms of harmony and non-dispersion, and the two questions related to this dimension got two means of 2.677 and 2.451, respectively. It refers to the important strategic direction by the leadership of the organization under research in directing the various academic and educational activities to take their ranges in upgrading and development. This was confirmed by the study of Chang and Lee (2007) already addressed.

Providing digital technologies to share knowledge (ICT): Table 1 showed a mean, rising 2.709, with a moderately low standard deviation of 0.193, with relative importance, and ranked seventh in terms of harmony and non-dispersion, and the two related questions received two means of 2.903 and 2.516, respectively. These advanced network technologies have a vital role in communication, and the provision of their technical structure in the research organization indicates unequivocally the extent of the deep need for them and their vital functions in all the teaching and learning tasks they undertake, especially in the conditions of the COVID-19 crisis, which had negative repercussions in social distancing.

Table 1. Calculations related to the independent variable (learning organization)

Dimension	*Ques. No.*	*Yes Freq.*	*Neutral Freq.*	*No Freq.*	*Mean*	*Weighted mean*	*Standard deviation*	*Coefficient of variation (CV)*	*Relative importance*
Providing continuous learning	1	28	2	1	2.870	2.918	0.048	0.0160	The third
	2	30	1	0	2.967		0.049		
Encouraging dialogue and questioning	3	26	5	0	2.838	2.822	0.016	0.0056	The first
	4	25	6	0	2.806		0.016		
Group learning and cooperation	5	24	6	1	2.741	2.725	0.016	0.0058	The second
	6	23	7	1	2.709		0.016		
Empowering workers	7	17	13	1	2.516	2.580	0.064	0.0248	The fifth
	8	21	9	1	2.645		0.065		
Providing digital technologies for knowledge sharing (ICT)	9	28	3	0	2.903	2.709	0.194	0.0712	The seventh
	10	20	7	4	2.516		0.193		
Systematic orientation and thinking	11	21	9	1	2.645	2.693	0.048	0.0178	The fourth
	12	24	6	1	2.741		0.048		
Strategic leadership	13	22	8	1	2.677	2.564	0.113	0.0440	The sixth
	14	16	13	2	2.451		0.113		
Learning organization						2.875	0.025	0.0873	

4.2. Responsive variable (crisis management strategy)

Table 2 related to the responsive variable (*crisis management strategy*) and its dimensions, as it obtained a high mean of 2.442 and a standard deviation of 0.088 low.

Drawing lessons and deepening experiences: Table 2 showed a high mean for this dimension

2.773 with a low standard deviation of 0.032 and with first relative importance in terms of harmony and non-dispersion. This refers to the deepening of experiences and benefiting from the experiences and lessons of the research organization during the crisis it is going through as stated in Hartmann' (2011) study which was dealt with in the previous literature.

Containing and isolating the effects: Table 2 showed a high mean for this dimension 2.612 with a low standard deviation of 0.064 and with second relative importance in terms of harmony and non-dispersion. This refers to preventive methods and mechanisms to reduce the impact of the crisis and contain its negatives and damages by the organization under research.

Recovering activity and vitality: Table 2 showed a high mean for this dimension 2.515 with a low standard deviation of 0.096 and with a third relative importance in terms of harmony and non-dispersion. The restoration of vitality by the organization under research is due to its great capabilities in managing the crisis and the efficiency of its mechanisms in extracting relevant lessons.

Sensing and detecting early signals: Table 2 showed a high mean for this dimension 2.596 with a low standard deviation of 0.177 and with a relative importance of the fourth before the last in terms of harmony and non-dispersion. The two related questions obtained two means of 2.419 and 2.774. The capabilities of the organization under research in detecting and sensing the early signs of the crisis are due to its advanced mechanisms, especially its computer, network, informational tools, and vigilance towards environmental variables and threats.

Preparation and prevention: Table 2 showed a mean of the moderate height of 2.290 with a low standard deviation of 0.161 with a fifth and final relative importance in terms of harmony and non-dispersion. The second question related to a low weighted mean of 2.129. This is because the organization under research pays tangible attention to the means of preparing for an emergency and potential environmental issues caused by crises to prevent and contain their damages and threats as stated in the study (Kriyantono, 2011) which was dealt with in the previous literature.

Table 2. Calculations related to the responsive variable (crisis management strategy)

Dimension	*Ques. No.*	*Yes Freq.*	*Neutral Freq.*	*No Freq.*	*Mean*	*Weighted mean*	*Standard deviation*	*Coefficient of variation (CV)*	*Relative importance*
Sensing and detecting early signals	15	15	14	2	2.41	2.596	0.177	0.0681	The fourth
	16	26	3	2	2.774		0.178		
Preparation and prevention	17	16	13	2	2.451	2.290	0.161	0.0703	The fifth
	18	8	19	4	2.129		0.161		
Containing and isolating the effects	19	18	12	1	2.548	2.612	0.064	0.0245	The second
	20	23	6	2	2.677		0.065		
Recovery of activity and vitality	21	14	16	1	2.419	2.515	0.096	0.0381	The third
	22	20	10	1	2.512		0.097		
Drawing lessons and deepening experiences	23	23	8	0	2.741	2.773	0.032	0.0115	The first
	24	25	6	0	2.806		0.033		
Crisis management strategy						2.442	0.088	0.0362	

4.3. Hypothesis test

We conducted a t-test for one sample to infer the significance of the answers and the paragraphs to verify the validity of the study hypothesis using the SPSS statistical technique, and the result was as follows. In Tables 3 and 4, it appears that the significance level sig. (2-tailed) = 0.000 which is smaller than the significance score of 0.05 it is within the confidence interval of 0.95 and confirms that the answers and dimensions are significant. It confirms the hypothesis of the study on the role of learning organizations in the crisis management strategy.

Table 3. One-sample statistics

Variable	*N*	*Mean*	*Standard deviation*	*Standard error mean*
Learning organization	31	2.8752	0.02516	0.00452
Crisis management strategy	31	2.4429	0.08857	0.01591

Table 4. One-sample test

Variable	*Test value = 3*					
	t	*df*	*Sig. (2-tailed)*	*Mean difference*	*95% confidence interval of the difference*	
					Lower	*Upper*
Learning organization	-27.608-	30	0.000	-0.12477-	-0.1340-	-0.1155-
Crisis management strategy	-35.021-	30	0.000	-0.55706-	-0.5896-	-0.5246-

4.4. The correlation between the two main variables of the study

The study conducted a Pearson correlation coefficient test to find the relationship between the two independent and responsive variables of the study by the SPSS program as follows.

Table 5 appears that the Pearson coefficient is 0.957 close to the correct one. It unambiguously indicates the high correlation between the independent variable *learning organization* with its dimensions and the responsive variable the *crisis management strategy* with its dimensions.

Table 5. Pearson correlation coefficient test

Pearson correlation coefficient test		*Learning organization*	*Crisis management strategy*
Learning organization	Pearson correlation	1	0.957**
	Sig. (2-tailed)		0.000
	N	31	31
Crisis management strategy	Pearson correlation	0.957**	1
	Sig. (2-tailed)	0.000	
	N	31	31

4.5. Regression analysis

The coefficient of determination is R-square. In light of the calculations of the advanced statistical program SPSS (Table 6), it was found that the test of the coefficient of determination R-square = 0.915, or the regression, which constitutes a significant impact by the independent variable (learning organization) on the responsive variable (crisis management strategy), and that the F-test equals 30.577, which is significant. This means that there are wide effects and repercussions for learning organizations on crisis management issues, especially with the advanced computer and network technical capabilities that these organizations have that allow them to have great capabilities for communication, environmental survey, exchange of information, and early sensing of crises in a way that prepares them to prepare for confronting them, limiting them, and avoiding their damages. And then extract lessons and experiences from them in order to contain the related threats and risks in the future.

Table 6. Regression — The coefficient of determination (R-square)

Model	*R*	*R-square*	*Adjusted R-square*	*Std. error of the estimate*
1	0.957[a]	0.915	0.885	0.25338

Note: a. Predictors: (Constant), learning organization.

4.6. Discussion

4.6.1. Establishment and development of Dijlah University College

A private academic institution of higher education of public benefit, established in Baghdad under an order issued by the Ministry of Higher Education and Scientific Research on October 27, 2004. It seeks to provide its educational services using modern scientific and technological methods and KM and that its curricula keep pace with the latest global developments and their applications for society. The college affirmed its responsibility towards society and the higher education sector as well as directed its strategic plan towards the future.

The College Board is the highest scientific and administrative body that undertakes the development of its scientific, educational, financial, and administrative policy in accordance with the set goals, and it consists of 21 members headed by the dean, assisted by an assistant for scientific affairs and another for administrative affairs, and it includes 16 heads of the academic department currently starting from the academic year 2020/2021 with representatives of the founding body, the faculty, and the decision of the faculty council. All the technical, procedural, and scientific infrastructure has been completed to transform the university college into a university with faculties of medical, engineering, administrative, scientific, and humanitarian specializations to serve the community and to be a center for innovation and creativity and to occupy a prominent position among higher education institutions with high quality and solid scientific foundations within international standards using modern technologies, especially ICT.

Among the most prominent of its directions is the provision of high-quality academic programs in the various stages of education in line with the scientific, technical, and administrative development at all local and global levels and the effective participation in the development of technologies and continuous improvement in the educational and research system through continuous cooperation with the bodies working in scientific and administrative specializations.

Moreover, the college is actively striving to transform into electronic administration, provide Internet services for the teaching staff, popularize methods of information circulation for them and students, increase areas of excellence and motivate the faculty members and administrative staff towards more excellence and creativity. The college makes its lectures available electronically on its website and interactively using digital electronic platforms.

The teaching staff of the college is constantly striving to maintain live communication with the electronic lecture system through the approved educational platforms by employing ICT for this educational purpose, in addition to the attendance lectures as decided by the ministerial directives and health safety instructions during the global COVID-19 pandemic crisis. The faculty also has electrical and electronic engineering laboratories, communications, air conditioning, refrigeration, optics, dentistry, pathological analyzes, mechanical workshops, refrigeration, air conditioning, a media studio, and a virtual court. In light of the data and information and based on the statistical foundations, the basic variables are presented and analyzed according to the answers to the questionnaire in two tables. The study conducted their mathematical calculations and discussed the results.

4.6.2. The means indications and hypothesis validation

In light of the previous results, it is clear that there is a high level of interest in learning and its dimensions at Dijlah University College and a wide interest in scientific dialogues, broadcasting climates of interactive discussion, and encouraging it by the deanship of the college, which was confirmed by the college documents, directives, continuous seminars, and mission. The deanship of the college and its senior management are keen to carry out and

organize collective learning and the importance of knowledge sharing and dissemination among college departments, units, and professors. Especially through the college's relevant interests, educational approach, and long-term strategic orientation in involving the faculty members and their inclusion in care and their involvement in the exchange and sharing of knowledge and scientific and educational experiences. This was confirmed by the high level of interest in the concept and axis of crisis management strategy and its dimensions in the academic organization and the priorities of the scientific departments and the deanship of the college. The college despite the darkest times of the spread of the COVID-19 epidemic and the great challenges this crisis posed to the educational process continued to perform its educational duties. Also, the college was able to compensate for the loss of educational competencies and some professors and the scarcity of human resources due to the crisis of this pandemic. In addition, Dijla University College, in light of the foregoing, has demonstrated its early expectations and interest in indicators of threats and risks, especially by collecting information related to academic and educational performance.

As for the validation of the hypothesis, the t-test of one sample indicated that the answers and the dimensions are significant, and it makes us accept the validity of the hypothesis of the study, which is the learning organization, has a strategic role in crisis management. With regard to the relationship between the study's main independent variable (*learning organization*) and responsive variable (*crisis management strategy*), it was found that there is a very strong correlation between them.

5. CONCLUSION

There is great interest in the concept of a learning organization in Dijlah University College and its practices, The spread of spiritual synergy between departments, units, and teachers, the importance of dialogue, knowledge sharing, and exchange of experiences at various levels, and the continuing education unit plays a dynamic and continuous role in holding scientific seminars and workshops through e-learning platforms, especially in crisis conditions, as in the current global COVID-19 crisis. The college actively and widely participates in social, cultural, sports and environmental events and activities, supports them financially, and provides them with sponsorship. The faculty staff and its members are involved in solving performance problems and dilemmas and empowering department heads, councils, and units in decision-making, as the College Board plays a strategic pioneering role in this through the high interest in the long-term future direction and the inclusion of teachers with sponsorship and knowledge sharing.

The college pays high and tangible interest in using advanced digital and communication technologies on the broadest scale that includes teachers and students as it is possible to communicate between them and provide lectures, seminars, and workshops through them interactively. Dijlah University College, especially during the severe crisis of the COVID-19 pandemic, proved its ability to continue, face the challenges of crisis and adapt to various circumstances in order to perform its educational and scientific tasks and mission. The college has taken firm necessary measures to contain and curb the crisis effects caused by this global health crisis, which has had severe economic, social, and health repercussions and damages. There is relatively low interest in assigning roles to the advanced faculty for prevention and avoiding pessimistic scenarios.

In light of the conclusions reached by the study, it can recommend the following. Consolidating the great interest that the college has set in the spirit of synergy, an atmosphere of dialogue, and knowledge managing and sharing. Emphasizing and consolidating the college's higher interest in the Continuing Education Unit and the Department of Information Technology, due to the technical, communication, and knowledge tasks ICT is distinguished and dynamic, especially in enabling scientific and educational interaction with students and teachers in the harshest crisis conditions. The involvement and empowerment of heads of departments, units, and teachers in solving and developing performance dilemmas should be established in steady steps and according to a strategic future outlook that includes deepening their coverage of sponsorship.

Sufficient attention should be paid to distributing roles among the advanced staff in the faculty to involve them in the burdens of preparations and prevention in the face of pessimistic crisis scenarios.

From the foregoing, it is clear that this paper is of vital importance for future research, as it dealt with the interrelationships between the learning organization and the crisis management strategy, their components, and dimensions, especially since the practical aspect of applying the paper was conducted in the conditions of a severe global crisis, namely the crisis of the spread of the COVID-19 pandemic, which clarified and confirmed the paramount importance of the responsive variable — crisis management strategy and the need of different organizations for its mechanisms and vital indications. Individuals, institutions, countries, and international organizations are involved.

The most prominent challenges and limitations that faced conducting the research are conducting the research in 2020 at the height of the crisis of the COVID-19 epidemic and the accompanying social distancing and major obstacles in movement and direct communication with others, especially with the university community of professors, students, and supportive officers, which made the study limited to a sample. It is limited and intended by professors and heads of departments and units, and did not expand to take other segments or to extend beyond the scope of the college to other colleges or other learning organizations. However, despite these circumstances, the intentional sample that was targeted through the distribution of 31 questionnaires was characterized by the response and openness to the questionnaire and its questions, in addition to the university communities, professors, and students dealing with digital electronic communication platforms, which overcame many barriers, and this was a good and acceptable solution to dealing with this crisis.

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APPENDIX

Table A.1. The independent variable (learning organization)

No.	*Dimensions*	*Quest. No.*	*Questions*	*Yes*	*Neutral*	*No*
1	Providing continuous learning	1	Does the academic organization hold educational workshops, seminars, and scientific lectures for its staff?			
		2	In the organization is there a unit concerned with continuing education?			
2	Encouraging dialogue and questioning	3	Does the deanship of the organization and the specialized units encourage dialogue and feedback during workshops, seminars, and lectures?			
		4	Does the lecturer accept questions and provide a positive atmosphere for scientific dialogues by the attendees?			
3	Group learning and cooperation	5	Does the spirit of cooperation prevail between the departments, units, and staff of the college?			
		6	Is there an emphasis by higher management on the principle of group learning and the importance of participating in it?			
4	Empowering workers	7	The higher management of the academic organization does it involve staff in solving problems and work and performance dilemmas?			
		8	Does the deanship enable the heads of departments, units, and departmental councils to contribute to making important decisions?			
5	Providing digital technologies for knowledge sharing (ICT)	9	Does the organization have an effective unit specialized in information technology?			
		10	The senior management of the organization: Does it allow and facilitate the use of the Internet and provide digital and computer equipment for this purpose?			
6	Systematic orientation and thinking	11	Is the academic organization actively involved in social and environmental activities?			
		12	Does the top management hold special sports, artistic and cultural events?			
7	Strategic leadership	13	In your opinion, does the senior management have a long-term future orientation?			
		14	Does the organization's staff, especially the teaching staff, enjoy comprehensive sponsorship by the senior management and involve them in sharing knowledge and experiences?			

Source: Marsik and Watkins (2003) and Daft (2004).

Table A.2. The responsive variable (crisis management strategy)

No.	*Dimensions*	*Quest. No.*	*Questions*	*Yes*	*Neutral*	*No*
1	Sensing and detecting early signals	15	Does the senior management pay early attention to indicators of risks and threats and their expectations?			
		16	Does the higher management collect information related to academic university work and cognitive performance?			
2	Preparation and prevention	17	Does the higher management set the necessary plans to confront and prevent potential damages and negatives?			
		18	Is there a distribution of roles on the advanced cadre in the academic organization to prevent pessimistic scenarios?			
3	Containing and isolating the effects	19	In your estimate, are there necessary measures to contain or reduce the effects of the crisis, taken or taken by the higher management?			
		20	In light of the current global epidemic crisis, COVID-19, have effective measures been taken by the top management to isolate and prevent its spread?			
4	Recovery of activity and vitality	21	Does the organization work to restore and renew the material and moral assets lost during the crisis?			
		22	According to your knowledge, did the top management seek and strive toward compensation for the loss of specialized and scarce human resources?			
5	Drawing lessons and deepening experiences	23	Are important lessons that have been produced by the epidemic crisis in order to deepen experiences and consolidate measures regarding possible future crisis scenarios?			
		24	Do you estimate that the academic organization is able to withstand and adapt to threats and learn from experiences to survive and continue to fulfill its mission?			

Source: Pearson and Mitroff (1993).