

خفة الحركة المنظمة و أثرها في فاعلية إدارة أزمة كورونا

د. سوسن عبدالله الشاعر* د. فراس علي الزعبي**

تاريخ وصول البحث: 2022/5/23م تاريخ قبول البحث: 2022/7/13م

الملخص

بعد انتشار جائحة COVID-19 على مستوى العالم، سعت جميع البلدان جاهدة لإدارة هذه الأزمة بشكل فعال للحد من أثارها. لذلك، حاولت هذه الدراسة توضيح أثر خفة الحركة المنظمة في فاعلية إدارة أزمة كورونا في المستشفيات الأردنية. تم توزيع استبانة إلكترونية على عينة بلغت (246) فرداً من الكوادر الطبية العاملة في المستشفيات الأردنية التي كانت تستقبل المرضى خلال فترة الجائحة. أشارت النتائج إلى وجود مستويات مرتفعة لمنغبرات الدراسة وهي خفة الحركة المنظمة وفاعلية إدارة الأزمات، كما أشارت النتائج إلى وجود تأثير لخفة الحركة المنظمة بأبعادها (تمكين العاملين، ثقافة التوجه بالربون، الهيكل العضوي، والتعلم المنظمي) في فاعلية إدارة أزمة كورونا بأبعادها مجتمعة (سرعة الاستجابة، الاتصالات وتدفق المعلومات، وحشد وتعبئة الموارد) في المستشفيات الأردنية، كما يوجد تأثير لخفة الحركة المنظمة في سرعة الاستجابة وفي الاتصالات وتدفق المعلومات وأيضاً في حشد وتعبئة الموارد، بينما لم يوجد لها تأثير في التعلم المنظمي، توصي الدراسة بزيادة التركيز على إشراك معظم العاملين، وليس فقط الكوادر الطبية في دورات متخصصة في إستراتيجيات إدارة الأزمات وذلك لتقليل المشكلات التي قد تواجهها بسبب تفاقم أزمة كورونا، كما يجب على المستشفيات التركيز على المزيد من الأدوات التي تعزز خفة الحركة المنظمة، مثل الاستثمار في تكنولوجيا المعلومات وأنظمة الاستشعار البيئي، مما يساعد على الاستجابة بشكل أسرع للتغيرات البيئية وأيضاً من خلال زيادة اهتمامها بالعاملين وتطوير مهاراتهم وخبراتهم.

ORGANIZATIONAL AGILITY AND ITS IMPACT ON CORONA CRISIS MANAGEMENT EFFECTIVENESS

Abstract

Considering the spread of the COVID-19 epidemic globally, all countries strive to manage this crisis effectively to reduce its effects. Therefore, this study seeks to clarify the impact of organizational agility on crisis management effectiveness in Jordanian hospitals. An electronic questionnaire was distributed to a sample of (246) medical staff working in Jordanian hospitals used to receive patients during the Coronavirus pandemic. In contrast, high coefficient values of study variables, namely, organizational agility and crisis management effectiveness were found. The results also indicated a significant impact of organizational agility in terms of their combined dimensions (employee empowerment, customer-oriented culture, organic structure, and organizational learning) on corona crisis management effectiveness in Jordanian hospitals as well as a significant positive effect of organizational agility on quick responsiveness, communication & information flow, and resource mobilization, in which at the dimensions (employee empowerment, customer-orientation culture, organic structure) the impact is significant, but not significant at the organizational learning dimension. The study recommends increasing the focus on involving most workers, not just medical personnel, in specialized courses in crisis management strategies to reduce the problems that may face due to the exacerbation of the Corona crisis. Also, the hospitals should focus on more tools that enhance organizational agility, such as investment in information technology and environmental sensing systems, which help to respond faster to environmental changes. also, by increasing interest in workers and developing their skills and expertise.

Keywords: Organizational Agility, Crisis Management, Corona (COVID-19) pandemic.

* أستاذ مساعد، قسم الإدارة- كلية المال والاعمال، جامعة العلوم الإسلامية.

**باحث.

1.Introduction

Organizational agility is the ability to flourish in a constantly changing business environment, which gives it the ability to develop and exploit competencies and capabilities internally and externally. It also helps them discover opportunities and threats in an environment that provides focused and rapid answers to all stakeholders by reshaping their resources, operations, and strategies (Conforto et al., 2015). The health sector is currently facing new challenges considering the global outbreak of the Corona pandemic. With other challenges such as competition, customer requirements, and medical technology growth, the pandemic forces all countries, including Jordan, to increase the amount of spending on this sector. Organizational agility was the key to adapting the health sector to changes (Vaishnavi et al., 2019).

The health sector worldwide is currently making great efforts to reduce the outbreak of COVID-19, which first appeared in Wuhan, Hubei Province, China. Because of the severity of the virus and its rapid spread globally, the World Health Organization declared a global health emergency on January 31, 2020. Then, on March 11, 2020, it was declared a pandemic worldwide (Dhama et al., 2020). Since then, the rapid global spread of the virus has led to a worrisome global health crisis, upon which the governments of many countries have taken severe measures to slow down the transmission and spread of the virus. At the same time, the public health approach, social spacing, has been widely applied. Also, regions and even countries were completely closed, which had economic consequences for various organizations and affected supply and demand, while demand in the health care sector had increased significantly (Kraus et al., 2020). Further, organizations will not be able to deal with this epidemic unless they manage the crisis effectively. They must have a general crisis management policy with a clear definition of a crisis as a severe threat that can disrupt organizational processes and create adverse outcomes such as deaths, injuries, financial loss, and destruction of reputation (Wut, 2019). Hence, the idea of the study examines organizational agility and its impact on Corona crisis management effectiveness in Jordanian hospitals.

1. Study Problem

In light of the global spread of the COVID-19 epidemic, organizations have been forced to reshape themselves or re-engineer their work to increase their ability to deal with and respond to changes (Alzoubi et al., 2011). By that, organizational agility is becoming increasingly necessary for contemporary organizations to survive (Mao et al., 2020). The inability of these organizations to deal with changes exposes them to many difficulties and threatens their survival. Changes have become the main feature of organizations, including the health system, whose managers cannot modify the organization according to the health system's goals unless they implement the change. Given the importance of health organizations, especially hospitals, in ensuring and maintaining community health, and the fact that treatment is a sensitive and vital issue in light of the spread of the epidemic, health organizations must be flexible, responsive, and able to adapt to changes in order to survive (Pazhouhan et al., 2019). Besides, crisis management and business continuity have become increasingly critical as it indicates how organizations deal with sudden events. The primary purpose of crisis management is to provide a framework that enables the organization to deal efficiently and effectively in times of emergency and maintain the continuity of the organization during and after the crisis by designing a business continuity plan appropriately designed to accommodate the change and business needs of organizations exposed to crises (Faisal et al., 2020). However, during the COVID-19 pandemic, most countries declared a state of emergency and designed a crisis management cell. This study's problem is represented by an important question: **What is the impact of organizational agility on Corona crisis management effectiveness?**

1.1. Study Importance and Contribution

The current study's importance comes from the importance of the variables that it deals with in light of the rapid environmental changes during the Coronavirus's global outbreak. It also tries to clarify the need for organizational agility that helps develop ideas, methods, innovation, access to the unique knowledge, and increase organizations' ability to adapt and accept change. Furthermore, take advantage of it and address the problems that it may face. Moreover, crisis management's effectiveness helps in dealing with the global crisis

that all countries face in light of the outbreak of the COVID-19 epidemic and helps activate the relationships, frameworks, skills, cooperation, participation, and the ability to develop administrative decision-making. Further, the study expresses itself in the practical field, showing how Jordanian hospitals are currently dealing with the Coronavirus's global crisis. Besides, it is trying to provide new research content in organizational agility on crisis management effectiveness due to the lack of research and studies that collectively dealt with these issues.

1.Literature Review

A literature review on organizational agility indicates many factors that contribute to achieve organizational agility. These factors are a rapid response to environmental changes, flexible organizational structure, organizational authority, consistency and harmony, knowledge-based regulation, training, technology, professional engineering, and talent management. (Pazhouhan et al, 2019). Many researchers have studied the organizational agility in the health sectors and their effects in reducing costs and organizational effectiveness and facing sudden environmental changes (Vaishnavi et al, 2019). Mao et al. (2020) study indicated that there is a positive impact of information technology on organizational agility and that the density of information modifies this effect positively.

While the results of another study by Melián et al. (2020) indicated the importance of the human resources in intensive care units in achieving organizational agility and raising hospital performance.

On the other hand, Pazhouhan et al. (2019) study showed a positive effect of emotional intelligence on organizational agility in the healthcare sector and the need to lay the foundations for improving organizational resilience by paying attention to emotional intelligence .While a study by Vaishnavi et al. (2019) showed that the availability of organizational agility helps hospitals to provide the requirements and resources necessary for the process of change, respond quickly, and improve the quality and diversity of services provided to retain customers, and to maintain a competitive advantage. Another study by Mahmoudi and Talarposhti (2018) evaluated hospital performance in light of the

organizational agility approach's availability showed a strong positive relationship between the availability of organizational agility and hospitals' effective performance. Mandal (2018) shows that hospitals can develop organizational agility by focusing on human capital; this is expected to increase the hospital staff's ability to generate innovative ideas and process specialized knowledge. Another study indicated that organizational agility is one of the five competencies required to promote service innovation in the health care field (Akenroye & Kuenne, 2015).

On the other hand, it was pointed out that it is necessary to compare traditional plans and methodologies based on organizational agility to identify and categorize critical success factors and develop A model suitable for emergencies (Ahimbisibwe et al, 2015). In the same context, Ghodrati and Zargarzadeh (2013) highlighted the organizational agility in hospitals in Iran to verify increased strategic preparedness for crises.

In crisis management, wut (2019) studied the effectiveness of crisis response in public hospitals as a case study in Hong Kong and clarified the importance of defining a strategic position towards crisis management. At the same time, Gabrielli et al. (2019) showed that environmental uncertainty increases organizational failure risk. Therefore, crisis management's organizational dimension must be taken into account because of its crucial role in managing it effectively. The study also indicated the importance of organizational practices based on an appropriate organizational culture that manages crises effectively. Bedawd (2019) showed that crisis management effectiveness is affected by the operations strategy. Therefore, it is necessary to pre-plan the crises using modern methods. In the same context, Bhaduri (2019) indicated that organizational culture and leadership have a significant role in managing crises effectively by supporting the organization towards recovery from crisis and also in supporting recovery and organizational learning in the post-crisis phase.

Moreover, Ghazi (2017) study found an effect of strategic planning processes in managing crises and the method of confrontation and cooperation, containment. At the same time, Marshall (2015) explained the importance of the two stages preparing for the crisis and discovering the crisis. He considered them one of the necessary stages to reduce

the crisis's effects. On the other hand, Anttila (2014) study showed that organizational learning is necessary to manage crises for development and provide suitable tools for managing crisis effectively. Alternatively, Sawalha et al. (2013) examined crisis and disaster management in Jordanian hotels. They investigated cultural factors that affected the broader adoption of crisis and disaster management best practices in Jordanian hotels and explained how organizational culture affects the broader adoption of best crisis management practices. Finally, Mostafa et al. (2004) showed a positive relationship between strategic planning and preparedness for crisis management. The long-term strategic direction is essential in crisis management effectiveness and indicates that the strategic direction is necessary to diagnose and interpret the crisis effectively.

1.Theoretical Background & Study Hypotheses

1.1.Organizational Agility

Adapting to unexpected changes led to the agility concept (Alzoubi et al, 2011). Organizational agility has become a significant driver for all contemporary organizations to survive in a tricky business environment (Yang & Liu, 2012). The organizational agility model is a new concept that embodies the most appropriate organizational situation given current developments (Pazhouhan et al, 2019).

Since the agility concept has been presented for the first time in a report from the Iacocca Institute, it attracted many organizations that realized the importance of quick and cost-effective responses to the environment's requirements. However, it is difficult to determine whether the organization is agile because the agility measures differ because of the multiple dimensions and ambiguities in the concept (Yauch, 2011).

In the same context, organizational agility can be defined as a way to deal with external and internal changes that cannot be expected. Hence, organizations need to be flexible and timely respond (Vaishnavi et al, 2019). Again, it is defined as the successful application of competitive rules such as speed, flexibility, innovation, and quality by integrating reconfigurable resources and best practices in a knowledge-rich environment to provide proactive products in a rapidly changing environment (Alzoubi et al, 2011). On the flip

side, organizational agility refers to the successful exploration of competitive strategies, including speed, quality, and the ability to innovate. Therefore, organizational agility is a comprehensive strategy based on strategic capabilities and then incorporated into a new ability to adapt to sudden and unexpected changes in the business environment (Yang & Liu, 2012). It should also be noted that organizational agility expresses the organizational capacity level that enables the organization to discover and seize the opportunities for innovation and competitive work. This ability is the basis for success for the current organizations in managing uncertainty and instability. It is rooted in change and adaptation, which covers the interactive and proactive dimensions of dealing with opportunities and environmental threats (Mao et al, 2020). Therefore, the concept of organizational agility relates to two interrelated approaches: (1) knowledge of why a rapid response to external challenges must be met (2) identification of parts of the operating system that must be combined with changes to work more efficiently (Cegarra & Martelo, 2020). However, definitions of organizational agility differ in the literature; these organizations can respond quickly and flexibly to environmental changes (Yauch, 2011).

Agility can be measured in four dimensions: always learn, create the future, adapt quickly, and anticipate opportunity (Ulrich & Yeung, 2019), while six dimensions were used to measure organizational agility in another study, which are learning and change, innovation, strategy, leadership, and management and culture (Gunsberg et al, 2018), As for this study, the following four dimensions were adopted in measuring organizational agility based on the previous studies (Alzoubi et al, 2011; Hassan & AL-Anee, 2018), which dealt with Organizational agility and in proportion to the study environment study:

1-Employee Empowerment: Today, organizations are increasingly seeking to improve competitiveness by empowering their workers by enhancing their skills in participation and decision-making in the workplace. Also, by organizing self-managed teams to enhance employee empowerment (Jo & Park, 2016). Further, employee empowerment means giving workers enough authority, resources, and freedom, which will enable them to serve the organization effectively and deal with sudden situations; this leads to raising the organization's ability to exploit opportunities. Thus, the organizations 'adoption of the

empowerment strategy effectively enhances organizational agility and effectively responds to environmental changes (Hassan & AL-Anee, 2018).

2- Customer-Oriented Culture: The customer orientated culture indicates the extent to which the organization understands its target customers to offer them the highest value. Thus, it can achieve a competitive advantage and superior performance (Chu et al., 2016). Accordingly, customer-oriented culture aims to develop long-term relationships with customers. This leads to increasing their loyalty and thus raising the profitability of the organization through a proper understanding of customers, their motivations, and needs, and whenever organizations adopt organizational agility properly Whenever it seeks to develop relationships with customers and build a solid base for them (Hassan & AL-Anee, 2018).

3- Organic Structure: An organic structure is best suited to deal with or adapt to a turbulent environment because it is characterized by a high level of flexibility, allowing organizations to deal with these disorders and changes (Cruz & Camps, 2003). The organizational structures are characterized by flexibility, decentralization, flexible monitoring, teamwork, and comprehensive information exchange. Depending on the first dimension, empowerment, organizational agility needs to be organic structures in order to be able to respond to environmental changes in a flexible and fast way (Hassan & AL-Anee, 2018).

4- Organizational Learning: Organizational learning is defined as the process of acquiring behaviors, knowledge, skills, and new values at the organizational, team, and individual levels, which leads to the enhancement of the ability to respond to changes quickly (Alkasasbah, 2016), and it is as a change process that occurs over time to improve procedures Through knowledge and better understanding (Park & Kim, 2018). The benefits of organizational learning are reflected positively in enhancing organizational agility and raising organizations' ability to deal with new conditions and internal and external variables and raising their innovative capabilities (Hassan & AL-Anee, 2018).

1.1.Crisis Management Effectiveness

A crisis is defined as an abnormal situation that represents a high risk to the business and can develop into a disaster if it is neglected or mismanaged. Therefore, it may end in disaster (Sawalha et al., 2013). The definition of a crisis refers to events that represent a turning point for better or worse in a way that affects the organization's continuous functions, the achievement of its goals, or its ability to survive. Here, determining the dimensions of the crisis is an essential step in determining the appropriate strategy for crisis management (Faisal et al., 2020), this means that the crisis collectively affects many individuals at the same time and is dealt with by community organizations and institutions, and this requires the cooperation of all (Brandebo, 2020).

On the other hand, crisis management is defined as an ongoing process to prevent or limit adverse outcomes that involve activities before, during, and after a crisis (Brandebo, 2020). It can be expressed through the extent of awareness and experience of decision-makers. It is critical to make decisions in light of the unusual circumstances according to the available capabilities to reduce losses and deal with difficult situations, whether in private or government organizations (Bedawd, 2019). Organizations must understand the nature and the impact of crises to manage it effectively (Bhaduri, 2019). The effectiveness of crisis management is a mixture of skills, concepts, cost, experiences, time, qualification, training, guidance, and the provision of everything necessary to enable organizations to avoid crises or deal with them to reduce their effects and damages (Bedawd, 2019). At the same time, an understanding of crisis management best practices, and their implementation begins by recognizing that crises consist of three stages; The pre-crisis phase, the crisis phase, and the post-crisis phase (Sawalha et al., 2013). crisis management is a challenge for organizations as the way in which crisis management activities are developed and activated have great importance in facing and overcoming a crisis, the activities, and relationships experienced during a crisis can be a catalyst to reshape an organization so that it is more prepared to face a future crisis effectively (Donelli, 2022), so three dimensions are used to measure crisis management effectiveness:

1-Quick Responsiveness: The quick responsiveness to the crisis is represented in making quick decisions that are accurate and comprehensive in a short time and under exceptional circumstances in order to achieve positive results (Bedawd, 2019), since crises happen suddenly, proactive preparations, effective planning, and setting the appropriate strategy for the situation must be undertaken to reduce the harmful effects of crises in the short and long term and deal with them better through effective decisions made by managers (Almutairi & Alkshali, 2020).

2-Communication and Information Flow: Crises can happen anytime, anywhere, but dealing with a crisis requires good communication because the rate of success in reducing damage often depends on effective communication (Almutairi & Alkshali, 2020), where communication has a significant role in managing crises through the flow of information internally and externally using formal and informal communication channels and providing members of the crisis team and decision-makers with appropriate information at the right time and highlights the importance of communications through rapid response to situations, events, and surprises (Bedawd, 2019).

3- Resource mobilization: The crisis management effectiveness depends on making the necessary resources available, identifying and reinforcing strengths, addressing weaknesses, preparing all material and human capabilities and technical requirements, and providing everything necessary to manage the crisis effectively (Bedawd, 2019), Further at this point comes the importance of strategic inventory of resources and determining the available one's resources flexibility, and the organizational paths for the movement of these resources at the appropriate speed, as the currently available resources, constitute a strategic reserve necessary for effective crisis management (Almutairi & Alkshali, 2020). Many organizations in developing countries have suffered and are facing crises that threaten their continuity and survival. The increase and diversity of crises have led to an increased awareness of the importance of addressing them through continuous preparedness and building integrated readiness, as the crisis represents a dangerous phenomenon if it occurs in the whole world (Sakarneh. 2021), such as the Corona crisis.

Therefore, organizations must quickly and effectively confront by reshaping themselves, raising their ability to deal with and respond to changes, and increasing the focus on organizational agility.

According to the above, the following Hypotheses were developed:

- H₀1: There is no significant impact of organizational agility on their combined dimensions (employee empowerment, customer-oriented culture, organic structure, and organizational learning) on corona crisis management effectiveness.
- H₀2: There is no significant impact of organizational agility on quick responsiveness.
- H₀3: There is no significant impact of organizational agility on communication and information flow.
- H₀4: There is no significant impact of organizational agility on resource mobilization.

A conceptual model was designed depending on the study hypothesis, as shown in Figure.1

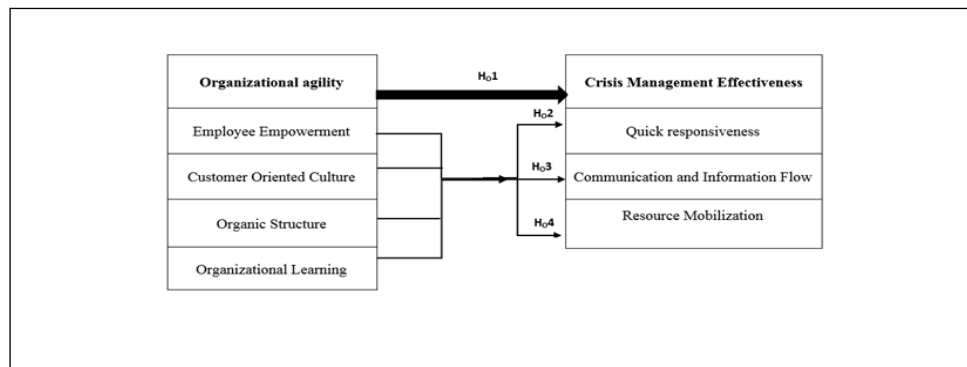


Fig 1. The conceptual model

1.Method

Depending on what was presented by the researchers in the theoretical framework of scientific theories, studies, and previous research in the area of interest in the study's subject, this part came to describe the study methodology and statistical methods that were

followed to achieve the goals of the study. This part also shows the study population and sample and shows the statistical methods used in the data processing.

This study used A) the descriptive approach, a set of procedures in an integrated way to describe the researched phenomenon, relying on all facts and data, classifying, treating, and analyzing it adequately and accurately to extract its significance and reach results generalizations about the phenomenon or problem. B) The inferential approach: It is a method that relies on selecting a sample from a population and then analyzing and interpreting the collected data to reach generalizations and inferences on what is broader and more significant than this sample. This approach is based on identifying what the collected numbers mean and extrapolating them, and knowing their significance, rather than just describing them and their interpretation as in the descriptive approach.

Jordanian hospitals used to receive patients during the COVID-19 pandemic were chosen. There are six hospitals distributed in three regions in the north, central, and south (<https://www.moh.gov.jo/>) during the year 2020, and the study population consisted of doctors working in those hospitals; their number is approximately 1724 doctors. The researchers took a simple random sample of (322) doctors. An electronic questionnaire was designed through Google Drive and distributed via social media & WhatsApp to doctors whose numbers were available. where (246) questionnaires were received valid for analysis representing the final study sample.

1.Results

Results of the table (1) indicate the values of (Pearson Correlation) for the dimensions of the independent variable, where all of them are less than (0.80); this indicates that the dimensions of the independent variable are devoid of the problem of high multi-linear correlation (Gujarati, 2004, 359). Thus, this shows the result of constructive honesty. On the other hand, the values of (Cronbach Alpha) ranged between (78.1% -91.2%), which are values greater than (70%). Also, the mean for all items was at a high level, and there is no dispersion in the standard deviation.

Table 1: Reliability, Mean, Std. and Correlation

Variables	Alpha	Mean	Std.	EE	COC	OS	OL
Employee Empowerment (EE)	0.875	3.710	0.671	1.000			
Customer Oriented Culture (COC)	0.850	3.768	0.690	.694**	1.000		
Organic Structure (OS)	0.781	3.840	0.610	.775**	.740**	1.000	
Organizational Learning (OL)	0.871	3.730	0.653	.670**	.750**	.773**	1.000
Organizational Agility (OA)	0.861	3.770	0.680				
Crisis Management Effectiveness (CME)	0.912	3.810	0.590				
Quick Responsiveness (QR)	0.866	3.840	0.681				
Communication and information flow (C&LF)	0.898	3.700	0.550				
Resource Mobilization (RM)	0.910	3.780	0.631				

H₀1: There is no significant impact of organizational agility on their combined dimensions (employee empowerment, customer-oriented culture, organic structure, and organizational learning) on corona crisis management effectiveness.

Table 2: Simple Regression of Organizational Agility on Crisis Management Effectiveness

Dep.	Model Summery		ANOVA			Coefficient					
	R	R ²	df.	F	Sig	IND.	B	S.R	Beta	T	Sig.
Crisis Management Effectiveness	.844	.712	1	603.330	0.00	OA	1.009	.041	.844	24.563	.000

Table (2) indicates the relationship between organizational agility and corona crisis management ($R=.844$), where the value of (F) was (603.330) at the level of significance ($Sig.=0.000$); this means that there is a significant impact between the two variables, and organizational agility explained (71.2%) of the variance in corona crisis management. Accordingly, organizational agility has a significant impact in terms of its combined dimensions (employee empowerment, customer-oriented culture, organic structure, and organizational learning) on corona crisis management effectiveness. Thus, this is in line with the study of Ghodrati and Zargarzadeh (2013).

H₀₂: There is no significant impact of organizational agility on quick responsiveness.

Table 3: Multiple Regression of organizational agility on quick responsiveness

Dep	Model Summery		ANOVA			Coefficient					
	R	R ²	DF	F	Sig.	IND	B	S.R	Beta	T	Sig.
Quick Responsiveness	.839	.703	4	142.821	.000	EE	.263	.059	.263	4.446	.000
						COC	.247	.056	.421	4.411	.001
						OC	.588	.075	.537	7.794	.000
						OL	.134	.071	.116	1.898	.059

Table (3) indicates that the correlation coefficient ($R = .839$) shows the relationship between the dimensions of organizational agility and quick responsiveness. The value of (F) is 142.821; this means a significant effect exists between the two variables ($\text{Sig.}=0.000$). Organizational agility was found to explain 70.3% of the variation in quick responsiveness. At the same time, the table shows that all the values of (t) at the dimensions (employee empowerment, customer-orientation culture, organic structure) are significant with a level of significance less than ($\text{Sig.}=0.05$), except organizational learning came with a level of significance greater than ($\text{Sig.}=0.05$) Maybe because there is no organizational memory that dealt with this kind of pandemic in advance. Thus, there is a significant impact of organizational agility on quick responsiveness in Jordanian hospitals. Accordingly, this is in line with the study of Vaishnavi et al. (2019).

H₀₃: There is no significant impact of organizational agility on communication and information flow.

Table 4: Multiple Regression of organizational agility on communication and information flow.

Dep	Model Summery		ANOVA			Coefficient					
	R	R ²	DF	F	Sig.	IND.	B	S.R	Beta	T	Sig.
Communication and information flow	.799	.639	4	106.655	.000	EE	.204	.068	.196	3.006	.003
						COC	.531	.042	.621	12.64	.000
						OC	.625	.086	.551	7.251	.000
						OL	.017	.081	.014	.210	.834

Table (4) shows that the correlation coefficient ($R = .799$) indicates the relationship between the dimensions of organizational agility & communications and information flow, where the coefficient of determination explained the percentage (63.9%) from the variation in communications and information flow, also the table showed that all the values of (t) at the dimensions (employee empowerment, customer-orientation culture, organic structure) are significant with a level of significance less than ($Sig = 0.05$), except organizational learning, which comes with a level of significance greater than ($Sig = 0.05$) Perhaps due to the lack of prior information to deal with the Corona pandemic; accordingly, there is a significant impact of organizational agility on communication and information flow in Jordanian hospitals. Thus, this is in line with the study of Mao et al. (2020).

H₀4: There is no significant impact of organizational agility on resource mobilization.

Table 5: Multiple Regression of OA dimensions on RM

Dep	Model Summery		ANOVA			Coefficient					
	R	R ²	DF	F	Sig.	IND	B	S.R	Beta	T	Sig.
Resource Mobilization	.793	.629	4	102.031	.000	EE	.161	.067	.158	2.392	.018
						COC	.489	.043	.458	11.37	.000
						OC	.580	.085	.523	6.789	.000
						OL	.081	.080	.069	1.006	.315

Table (5) shows that the correlation coefficient (R=.793) indicates the relationship between organizational agility and resource mobilization. The value of (F) was (102.031) at the level of significance (Sig.=0,000), meaning that the coefficient of determination explained (62.9%) of the variance in resource mobilization. Also, the table showed that all the values of (t) at the dimensions (employee empowerment, customer-orientation culture, organic structure) are significant with a level of significance less than (Sig = 0.05), except organizational learning comes with a level of significance greater than (Sig. =0.05) Possible because organizational learning alone is not enough, and resources must be provided, especially medical equipment, which most countries have suffered from a lack of availability, and this was one of the most important challenges of the corona pandemic; accordingly, there is a significant impact of organizational agility on resource mobilization in Jordanian hospitals.

6.Discussion

The researchers tried to highlight the impact of organizational agility on corona crisis management effectiveness in Jordanian hospitals. The study's empirical analysis found high coefficient values of study variables, namely, organizational agility and crisis management effectiveness, indicating that Jordanian hospitals are taking positive steps to deal with environmental data and adopt reaction measures. Nevertheless, the researchers believe that the reason behind that was that the Jordanian hospitals have human resources trained on crisis management and effective strategic planning to raise its ability to deal with

internal & external environmental changes quickly and flexibly. So this increases its ability to mobilize resources and facilitates the flow of information among the crisis management team members. The results also indicated a significant impact of organizational agility in terms of their combined dimensions (employee empowerment, customer-oriented culture, organic structure, and organizational learning) on corona crisis management effectiveness in Jordanian hospitals. From the researchers' point of view, it may be because the health sector has organizational capabilities that enable it to discover and seize market opportunities and respond to them proactively, and avoid threats and reduce their impacts. On the other hand, it must be noted that the preventive measures taken by the Jordanian state contributed to the success of managing the Corona crisis effectively and reducing losses to a minimum.

Moreover, the results showed a significant positive effect of organizational agility on quick responsiveness, communication & information flow, and resource mobilization, in which at the dimensions (employee empowerment, customer-orientation culture, organic structure) the impact is significant, but not significant at organizational learning dimension, where the researchers believe that Corona crisis management was an exceptional and new case facing organizations; thus, the organizational learning gives organizations skills, behaviours and attitudes that help them to deal with changes, but in the case of the Corona crisis organizational learning for a unit was not enough. They believe that the most significant role for it will be after the end of Corona crisis management by learning from it to manage similar crises in the future.

1.6 Recommendations

Depending on the study results, the researchers recommended the following:

- Jordanian hospitals should increase the focus on involving the majority of workers, not just medical personnel, in specialized courses in crisis management strategies to reduce the problems that may face them due to the exacerbation of the Corona crisis.
- It should also focus on adopting crisis management strategies on a broader scale than quarantine hospitals that include most of Jordan's public and private hospitals by forming a

specialized work team that holds training courses in modern methods appropriate to environmental developments.

-The necessity of evaluating crisis management's effectiveness periodically and continuously to rebuild crisis management effectiveness in line with each strategic stage's requirements and conditions through objective reports that clarify the actual situation of crisis management.

-The necessity of setting effective programs to assess the level of workers 'performance during the Corona crisis to enhance their strengths and address their weaknesses by adopting quantitative criteria that measure performance objectively away from bias and assessing workers' efforts, which enhances their performance.

-The hospitals should focus on more tools that enhance organizational agility, such as investment in information technology and environmental sensing systems, which help to respond faster to environmental changes. also, by increasing interest in workers and developing their skills and expertise.

-Finally, the researchers recommend applying the study variables to other sectors to prove Corona crisis management effectiveness in Jordan.

2.6Funding details

This paper is not funded by any organization.

3.6Disclosure statement

There is no conflict of interest.

4.6References

- Ahimbisibwe, A., Cavana, R.Y. & Daellenbach, U. (2015). A contingency fit model of critical success factors for software development projects: a comparison of agile and traditional plan-based methodologies", *Journal of Enterprise Information Management*, 28 (1), 7-33. <http://dx.doi.org/10.1108/JEIM-08-2013-0060>.
- Akenroye, T.O., & Kuenne, C.W. (2015). Key competencies for promoting service innovation: what are implications for the health sector. *The Innovation Journal*, 20(1), 1-21.
- Alkasasbah, Muhammad (2016). The impact of talent management and organizational learning on Zain's sustainability. *Jordanian Journal of Business Administration*, 12(1), 93-110.
- Almutairi, M., & Alkshali, S. (2020). The Effect of Human Resource Flexibility on Crises Management Effectiveness in Kuwaiti Contracting Companies. *International Journal of Scientific & Technology Research*, 9(6).
- Alzoubi, A., Al-otoum, F. J., & Albataineh, A. K. (2011). Factors Associated Affecting Organizational Agility Product Development. *IJRRAS*, 9(3), 503-516.
- Anttila, U. (2014). Human security and learning in crisis management. *Journal of Humanitarian Logistics and Supply Chain Management*, 4 (1), 82-94. **Error! Hyperlink reference not valid.** DOI: <https://doi.org/10.1108/JHLSCM-04-2013-0014>
- Bedawd, Ibtisam I. H. (2019). Components of operations strategy and their role in enhancing the effectiveness of crisis management (An exploratory study of managers' opinions in the Badush Cement Expansion Plant). *TANMIYAT AL-RAFIDAIN*, 38(123), 89-104. doi: [10.33899/tanra.2019.163342](https://doi.org/10.33899/tanra.2019.163342)
- Bhaduri, R.M. (2019). Leveraging culture and leadership in crisis management. *European Journal of Training and Development*, 43(5/6), 554-569. <https://doi.org/10.1108/EJTD-10-2018-0109>
- Brandebou, Fors M. (2020). Destructive leadership in crisis management. *Leadership & Organization Development Journal*, 41(4), 567-580. <https://doi.org/10.1108/LODJ-02-2019-0089>
- Cegarra, J.-G., & Martelo S. (2020). The effect of organizational memory on organizational agility: Testing the role of counter-knowledge and knowledge application. *Journal of Intellectual Capital*, 21 (3), 459-479. <https://doi.org/10.1108/JIC-03-2019-0048>
- Chu, Z., Wang, Q., & Lado A.A. (2016). Customer orientation, relationship quality, and performance: The third-party logistics provider's perspective. *International Journal of Logistics Management*. 27 (3), 738-754. <https://doi.org/10.1108/IJLM-08-2013-0093>
- Conforto, E.C., Amaral, D.C., da Silva, S.L., Di Felippo, A., & Kamikawachi D.S.L. (2016). The agility construct on project management theory. *International Journal of Project Management*, 34 (4), 660-674.
- Cruz, S., Camps, J. (2003). Organic vs. Mechanistic Structures: Construction and Validation of a Scale of Measurement. *Management Research*, 1 (1), 111-123. **Error! Hyperlink reference not valid.** <https://doi.org/10.1108/15365430380000521>.
- Daellenbach, U. (2015). A contingency fit model of critical success factors for software development projects: a comparison of agile and traditional plan-based methodologies. *Journal of Enterprise Information Management*, 28(1), 7-33. DOI: [10.1108/JEIM-08-2013-0060](https://doi.org/10.1108/JEIM-08-2013-0060).

- Dhama, K., Sharun, K., Tiwari, R., Sircar, S., Bhat, S., Malik, Y.S., Singh, K.P., Chaicumpa, W., Bonilla-Aldana, D.K., & Rodriguez-Morales, A.J. (2020). Coronavirus Disease 2019 – COVID-19. *Preprints 2020030001*. [doi:10.20944/preprints202003.0001.v2](https://doi.org/10.20944/preprints202003.0001.v2)
- Donelli, C.C., Fanelli, S., Zangrandi, A. and Elefanti, M. (2022), Disruptive crisis management: lessons from managing a hospital during the COVID-19 pandemic, *Management Decision*, 60 (13), 66-91. <https://doi.org/psut.idm.oclc.org/10.1108/MD-02-2021-0279>
- Faisal, A., Albrecht, J.N., & Coetzee, W.J.L. (2020). Renegotiating organisational crisis management in urban tourism: strategic imperatives of niche construction. *International Journal of Tourism Cities*, ahead-of-print. [doi:10.1108/IJTC-11-2019-0196](https://doi.org/10.1108/IJTC-11-2019-0196).
- Gabrielli, G., Russo, V., & Ciceri, A. (2019). Understanding organizational aspects for managing crisis situations: A comparison between military and civil organizations: Part II. *Journal of Organizational Change Management*, 33(1), 50-5. [doi:10.1108/JOCM-09-2019-0287](https://doi.org/10.1108/JOCM-09-2019-0287).
- Ghazi, K. (2017). The impact of strategic planning on crisis management styles in the 5- star hotels. *Journal of Tourism Research*, 17(18), 1-16.
- Ghodrati, H., & Zargarzadeh, Z. (2013). A study on the relationship between employee mental health and agility strategic readiness: a case study of Esfahan hospitals in Iran. *Management Science Letters*, 3 (4), 1095-1104.
- Gujarati, Damodar (2004). *Basic econometrics* (4th ed.) Washington, DC: McGraw-Hill.
- Gunsberg, D., Callow, B., Ryan, B., Suthers, J., Baker, P.A., & Richardson, J. (2018) Applying an organisational agility maturity model, *Journal of Organizational Change Management*, 31(6), 1315-1343. [doi:10.1108/JOCM-10-2017-0398](https://doi.org/10.1108/JOCM-10-2017-0398).
- Hassan, A., & AL-Anee A. (2018). (2018). The Role of Competitors Intelligent in Achieving the Dimensions of Agility business organizations: A Field Study in the AL-Hokamaa Company for Drugs Industry in Nineveh. *TANMIYAT AL-RAFIDAIN*, 37(117), 89-108. doi: [10.33899/tanra.2018.143120](https://doi.org/10.33899/tanra.2018.143120).
- Jo, S.J., & Park, S. (2016). Critical review on power in organization: empowerment in human resource development. *European Journal of Training and Development*, 40 (6), 390-406. [doi:10.1108/EJTD-01-2016-0005](https://doi.org/10.1108/EJTD-01-2016-0005).
- Kraus, S., Clauss, T., Breier, M., Gast, J., Zardini, A., & Tiberius, V. (2020). The economics of COVID-19: initial empirical evidence on how family firms in five European countries cope with the corona crisis. *International Journal of Entrepreneurial Behavior & Research*, ahead-of-print [doi:10.1108/IJEBR-04-2020-0214](https://doi.org/10.1108/IJEBR-04-2020-0214).
- Mahmoudi, G., & Talarposhti, M.A. (2018). An assessment of agility in selected hospitals of Mazandaran province, Iran. *Journal of Basic Research in Medical Sciences*, 5(3), 32-41.
- Mandal, S. (2018). Influence of human capital on healthcare agility and healthcare supply chain performance. *Journal of Business & Industrial Marketing*, 33 (7), 1012-1026. [doi:10.1108/JBIM-06-2017-0141](https://doi.org/10.1108/JBIM-06-2017-0141).
- Mao, H., Liu, S., Zhang, J., Zhang, Y., & Gong, Y. (2020). Information technology competency and organizational agility: roles of absorptive capacity and information intensity. *Information Technology & People*, ahead-of-print. [doi:10.1108/ITP-12-2018-0560](https://doi.org/10.1108/ITP-12-2018-0560).

- Marshall, John (2015). Rating the Cities: Constructing a City Resilience Index for Assessing the Effect of State and Local Laws on Long-Term Recovery from Crisis and Disaster. *Tulane Law Review*, 90(1), 35-74.
- Melián-Alzola, L., Domínguez-Falcón, C., & Martín-Santana, J.D. (2020). The role of the human dimension in organizational agility: an empirical study in intensive care units. *Personnel Review*, ahead-of-print. doi:10.1108/PR-08-2019-0456.
- Mostafa, M.M., Sheaff, R., Morris, M., & Ingham, V. (2004). Strategic preparation for crisis management in hospitals: empirical evidence from Egypt. *Disaster Prevention and Management*, 13(5), 399-408. doi:10.1108/09653560410568525.
- Park, Sunyoung & Kim, Eun-Jee (2018). Fostering organizational learning through leadership and knowledge sharing. *Journal of Knowledge Management*, 22(6), 1408-1423. <https://doi.org/10.1108/JKM-10-2017-0467>
- Pazhouhan, A., Rezaei, B., & Parno, M. (2019). The Relationship of the Components of Emotional Intelligence with Organizational Agility in the Healthcare Network. *Kermanshah Univ Med Sci*, 23(1), 1-9. doi: 10.5812/jkums.86873.
- Sawalha, h., Jraisat, I., & Al-Qudah, K.A.M. (2013). Crisis and disaster management in Jordanian hotels: practices and cultural considerations. *Disaster Prevention and Management*, 22 (3), 210-228. doi: 10.1108/DPM-09-2012-0101.
- Sakarneh, B. (2021). The Role of Training in Effectiveness Crisis Management. *International Journal of Recent Technology and Engineering*, 8 (5), 1069-1074. DOI: 10.35940/ijrte.E4936.018520.
- Ulrich, D., Yeung, A. (2019). Agility: the new response to dynamic change", *Strategic HR Review*, 18(4), 161-167. doi:10.1108/SHR-04-2019-0032.
- Vaishnavi, V., Suresh, M., & Dutta, P. (2019). Modelling the readiness factors for agility in healthcare organization: a TISM approach. *Benchmarking: An International Journal*, 26 (7), 2372-2400. doi:10.1108/BIJ-06-2018-0172.
- Wut, T. m. (2019). Crisis responses in public hospitals: case studies in Hong Kong. *Public Administration and Policy. An Asia-Pacific Journal*, 22(2), 100-110. <https://doi.org/10.1108/PAP-09-2019-0016>.
- Yang, C., & Liu H. (2012). Boosting firm performance via enterprise agility and network structure. *Management Decision*, 50(6), 1022-1044. DOI:10.1108/00251741211238319
- Yauch, C.A. (2011). Measuring agility as a performance outcome. *Journal of Manufacturing Technology Management*, 22(3), 384-404. <https://doi.org/10.1108/1741038111112738>