

# Examining the Impact of Strategic Intelligence on Crisis Management Effectiveness at Jordanian Ministry of Health

Amer Mohammed Sultan

PhD Student of Management at the World Islamic Sciences and Education University (WISE)-  
Jordan

Email: amersultan88@hotmail.com

Dr. Khaled Mahmoud Al Shawabkeh

Associated Professor, Department of Management at the World Islamic Sciences and  
Education University (WISE) - Jordan

Email: Khaled.alshawabka@wise.edu.jo

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## Abstract

Strategic intelligence plays a vital role on crisis management effectiveness. The current study aims to examine the effect of strategic intelligence (SI) on crisis management effectiveness (CME) at Jordanian Ministry of Health. The present study adopted the quantitative method (descriptive-analytical method), and collected data from 266 employees working at Jordanian Ministry of Health. The study utilized SPSS V. 29 software to analyze the primary data and test the hypothesis. According to the findings, it turned out that the level of application of strategic intelligence at Jordanian Ministry of Health was moderate. At the same time, it was high in terms of crisis management effectiveness. Moreover, strategic intelligence has a significant positive impact on crisis management effectiveness. This study adds to the literature body and previous knowledge about strategic intelligence and crisis management effectiveness in various organizations, especially in a developing country like Jordan.

**Keywords:** Strategic Intelligence, Crisis Management Effectiveness, Jordanian Ministry of Health.

## Introduction

Contemporary organizations, including health organizations, are exposed to a set of challenges that affect and control their performance. These include technological challenges, globalization, and a host of political, economic, social, environmental, and other determinants, which have made them operate in a turbulent, unstable, and uncertain environment.

Crises are an inevitable part of any organization's life cycle, regardless of location, size, market, or sector. In early 2020, all organizations faced a new crisis caused by the COVID-19 pandemic. The rapid spread of the disease and its consequences for human health requires a rapid response from organizations to protect the health and safety of employees through physical distancing (Lukić et al., 2020).

Strategic intelligence has become an urgent necessity for business organizations at this time. So one can say with full confidence today that the identification & use of strategic intelligence can increase the competitiveness of an organization & make it stand out from other organizations, also it's necessary to respond to current situations and issues, as well as the growing need for well-experienced managers, so by using it, organizations are trying to make the use of information structures more efficient alongside their own goals resulting in the transformation of information from a limited operational mode into a new form that is easy to use for their managers (keikha et al., 2020).

The existing study has both scientific and applied importance; the scientific importance comes from the significance of the researched variables of strategic intelligence and crisis management effectiveness, while the applied importance comes from the significance of the study community represented by Jordanian Ministry of Health, which is the entity responsible for providing all forms of health care to the entire population of Jordan.

The main purpose of the current study is to examine strategic intelligence on crisis management effectiveness at Jordanian Ministry of Health. This study also aims to provide strong recommendations to health sectors, as well as, to decision-makers concerning the impact of strategic intelligence on crisis management effectiveness at Jordanian Ministry of Health.

## **Literature Review and Hypotheses Development**

### *Strategic Intelligence (SI)*

Strategic intelligence is a type of analysis needed to formulate plans and policies at various levels; organizational, national, and even international (MacDowell, 2009, 10). Strategic intelligence is a process or tool for collecting information that assists in gaining knowledge in decision-making through observation of the organizational environment, analysis of information, prediction, and planning of the future, and the ability to adapt to environmental changes (Abuzaid, 2017).

According to Gitelman et al. (2021), Strategic intelligence is a process which systematic and continuous, aimed at exploring trends and the market environment, using robust analytical systems that ensure the generation of knowledge and digital tools for long-term decision-making and the organization's readiness for the unpredictable challenges of the future. Paiuc et al. (2024) consider strategic intelligence as the organized gathering, analysis, and interpretation of information that is needed to support strategic planning & decision-making.

Sorour and Mohammad (2013) mentioned that many researchers have introduced various terms for strategic intelligence such as market intelligence, business intelligence, and competitive intelligence. In the same context, Waithaka (2016) added that strategic

intelligence represents a synergy between competitive intelligence, business intelligence, and knowledge management.

According to Cherniss and Goleman (2001), the importance of strategic intelligence manifested in the following: it contributes to changing the required works efficiently, identifying the field of competition within the organization framework, helping the organization to adapt to the environment, changes and pressures it causes, & in assisting in the process of rationalizing decision-making by providing appropriate information to the maker of it. The importance of strategic intelligence appears as a critical tool that helps managers take a set of proactive steps to enable them to reach competitive positions in the global environment, and leads to excellence by developing strategic solutions to complex business problems (Alhamadi, 2020). Strategic intelligence is also very important in achieving goals, maintaining organizations' standing, reading their future, & enabling leaders to sense available opportunities (Radi & Naffar, 2020).

Researchers and management specialists have differed in defining strategic intelligence. Based on Sheri et al., 2021; Alnajjar & Alharaizeh, 2020; Gupta, 2019; Maccoby & Scudder, 2010. The researchers utilized the strategic intelligence dimensions: future vision, foresight, partnership, motivation, and system thinking.

**1. Future Vision:** It is an expression of the dynamic of the enterprise, where it has come from & where it is going, in that sense, it can remain implicit (unsaid), it exists whether it is made explicit or not, so it is better made explicit, if only to motivate those who flesh out and implant the strategy. (White, 2004, 55). Kennedy et al. (2020, 35) explained the organization's vision as what the organization hopes to become in the future, it highlights the values & aspirations that lay at the heart of the organization, although vision statements have the potential to inspire for each of employees, customers, & other stakeholders, also vision statements are relatively rare & good visions are even rarer.

**2. Foresight:** According to Miles and Keenan (2002, 14), foresight means a systematic, participatory process, involving and building visions for the medium-to-long-term future & gathering intelligence, it aims to mobilize joint actions and inform present-day decisions. While Kuosa (2014, 17) views foresight as showing a whole spectrum of future alternatives and asking "what if" regarding each alternative, so it does not seem to predict, therefore it is considered a systematic process for assessing the probability of each alternative's actualization, & for saying something comprehensive and grounded about the options available in the different cases.

**3. Partnership:** It means the ability of organizational managers to establish partnerships to strengthen capabilities between competing or non-competing organizations, to reduce conflict or strife, and improve performance, where all parties are committed to agreed goals through improved communications and enhanced cooperation among alliance parties in all activities and Fields (Maccoby, 2004). Partnership can be defined as the ability to develop productive relationships, including a team with colleagues who have complementary skills; it is the ability to develop & sustain productive partnering relationships is a key quality on which leaders build effective leadership teams (Maccoby, 2015, 77).

**4. Motivation:** It can be described as the activities and actions that leaders take to influence employees by stimulating their motivations, desires, and needs to satisfy them and make them ready to provide the best performance to achieve the goals of the organization (Al-

Ameri & Al-Ghalbi, 2008). The definition of motivation is powering people to achieve performance within high levels & overcoming barriers to change, it is the driver of guidance, control, and persistence in human behavior (Tohidi & Jabbari, 2012).

**5. System Thinking:** Systems thinking is a system for seeing wholes, it's a framework for seeing interrelationships instead of objectives, for seeing patterns of change instead of static snapshots, it's a set of specific tools and techniques, it's also a set of general principles (Senge, 2006). While Arnold and Wade (2015) pointed out that strategic intelligence is a set of synergistic analytic skills used to improve the capability of understanding & identifying systems, predicting their behaviors, and adjusting them to produce desired effects, so these skills work together as a system.

#### *Crisis Management Effectiveness (CME)*

A crisis can be defined as a major unpredictable event that has potential negative results, this event and its aftermath may significantly damage an organization and its employees, services, products, reputation, & financial condition (Barton, 1993, 2). The term crisis usually refers to an unexpected & uncertain situation, that is dominated by tension and insecurity and which may concern the individual, family, organization, business, society, institutions, or the international environment (Nteka, 2021).

Özcan (2021, 20-21) created a summary table for the most important characteristics of crises, as follows: Uniqueness, uncertainty, Unexpectedness, unstable time, threats, time limitation, high level of anxiety, transnational, high politics, dynamic and chaotic processes, difficult to manage, and finally, crisis causes four complexities: political complexities, Institutional complexities, Temporal complexities, and Informational complexities.

According to Mitroff et al. (1996), there are five main reasons for the occurrence of crises: technology, human factors and human error, organizational structure; the closure of communication channels between different organizational levels; reasons related to organizational culture; such as false beliefs that a crisis is impossible; and reasons related to the values and trends of top management and their ability to make the right decisions at the right time.

Mitroff (1994) defined crisis management as a series of ongoing, interrelated assessments or audits of kinds of crises and forces that can pose a major threat to a company's main services, products, manufacturing processes, employees, communities, and environment. According to Abu Farah (2009, 60-61), crisis management is a continuous dynamic process, involving highly effective and responsive actions and behaviors, whose goal is to identify, diagnose, plan, confront, control, and then address the crisis.

The importance of crisis management, as seen by Mustafa (2015), lies in a set of activities within a particular form of enterprise management to prevent controlling actions that may jeopardize or impede the existence of the enterprise, add the main duty of the crisis management is to get drawn the enterprise from the crisis & enables it in further activity by a longer period. In the same context, Borzan (2021, 26) pointed out that the task of crisis management is to minimize the adverse effects of a serious crisis using limited resources under severe time constraints, and although controlling and controlling those damages is the most obvious aspect of crisis management, its true essence goes far beyond (Firefighting).

Crisis management effectiveness is about recognizing the state of your crisis, taking action to correct the situation, and being open to new information, perspectives, and alternative interpretations (Regester & Larkin, 2005, 163). Masa'deh et al. (2018) defined crisis management effectiveness as a management style that deals with crises, attempts to predict them, makes plans to deal with them during a crisis and then recovers, resumes activity, works, and learns, ensuring that goals are maintained in times of crisis.

Putra (2009) sees the basic idea of effective crisis management as not to stop disasters from happening, but the overarching goal is to "contain the damage as much as possible and prevent loss of life and property". According to Asad et al. (2022), crisis management effectiveness means how strongly the organization is able and committed to its social responsibility, and its morals, and not going off course in case things get worse, and when the crisis escalates and matures, they going to have to be prepared for that.

According to Al-Yasiri & Mohammad, 2022; Hasan et al., 2022; Özcan, 2021; Abu Farah, 2009; Elsubbaugh et al., 2004; crisis management effectiveness has three dimensions as follows: Rapid response, communication and information flow, and resource mobilization and implementation.

**1. Rapid Response:** It's known as the rapid response required by decision-making. Fast-paced and precarious to achieve a positive and sound outcome (Tritz, 2001). It means working to select the appropriate alternative from a set of alternatives and doing so in the light of certain criteria, including the feasibility of implementing decisions within the limits of the possibilities available in a crisis and time constraints and acceptance of the experiences of the workers in the organization, simplicity, and clarity to be able the decision-making process is the most important issue in crisis management, as it is the most important part of the process, a process that requires a uniquely qualified leadership, that has the knowledge, the ability, and the foresight to lead the way forward (Olsson & Verbeek, 2018).

**2. Communication and Information Flow:** Alkhedery (2002, 250) mentioned crisis management needs to How much information is appropriate, and to follow up immediately on the consequences of crisis events and the behaviors of their parties and the outcomes of these behaviors, and then the Opening up channels of communication with the other party helps achieve that goal. They consider a cornerstone of any organization under normal conditions, and are increasingly important in crises, as the breadth of the social impact of a crisis, especially with the significant shortage of information flow and its sources, leads to severe pressure on the decision-maker (Salman & Mahawi, 2016).

**3. Resource Mobilization and Implementation:** It includes all activities aimed at providing both resources and material and moral support at the right time and place, providing the necessary requirements to address situations, dealing with the causes and factors causing crises, providing capabilities and reserves, creating multifunctional task forces, achieving the effective use of capabilities, and allocating available resources in emergencies and critical situations; to respond to threats and manage crises effectively (Elsubbaugh et al., 2004). It also refers to the ability to organize the resources of the organization and its capabilities and to organize and prepare them to be directed when needed, taking into account the economy in the consumption of those resources, as well as not neglecting to exploit them when necessary (Ahmad & Jabbar, 2021).

*Relationship between Strategic Intelligence and Crisis Management Effectiveness*

Several studies addressed the relationship between strategic intelligence & crisis management effectiveness as Saad and Abd El-latif (2023), where the study was applied in the four and five star hotels in Luxor and Aswan governorates in Egypt, which aimed to test the impact of strategic intelligence with its various dimensions (prospective, system thinking, future vision, motivation, and partnership) on the effectiveness of crisis management. The study's results appeared the strategic intelligence dimensions were adopted by the investigated hotels, which enabled them to manage crises remarkably, they also highlighted a significant relationship between strategic intelligence and crisis management effectiveness. The study presented many recommendations, the most important of them to increase the interest of hotels in studying how to leverage strategic intelligence & employ it to enhance the effectiveness of hotel crisis management, in addition to provide everything that would enhance strategic intelligence and crisis management in those hotels.

Al-Asmari (2022) study focused on the effect of strategic intelligence with its combined dimensions (future vision, foresight, system thinking, motivation, and partnership) on crisis management in the banking sector in the Kingdom of Saudi Arabia, specifically in the Asir region, and knowing the extent to which the employees of those banks are aware of the concept of strategic intelligence in achieving crisis management. The study results showed a statistically significant impact of strategic intelligence on crisis management, and the research banking sector applies both strategic intelligence and crisis management to a high degree. The study made several recommendations including the need to develop forward-looking plans to achieve better excellence in facing future crises, as well as motivating employees in the research banking sector to obtain professional certifications in strategic intelligence and crisis management, and finally working to disseminate the importance of strategic intelligence factors in modern ways that ensure staff saturation.

On the other hand, Nagy (2022) study that sought to analyze the effect of strategic intelligence (partnership, future vision, system thinking, motivation, and foresight) on crisis management effectiveness (organizational effectiveness, information system effectiveness, communication system effectiveness, and economic effectiveness) in some of the central university libraries in Egypt. The results of the study indicated that the level of strategic intelligence in the sample universities was high, whereas the effectiveness of crisis management in these universities was moderate, the study also showed a clear and significant impact of strategic intelligence on crisis management effectiveness in those libraries. Finally, the study made several recommendations, the most important of which was to emphasize the teaching of strategic intelligence and crisis management effectiveness subjects within the prescribed subjects (library and information center management), and also to pay attention to strategic intelligence for its impact on crisis management effectiveness and give it more research and study.

Based on the study problem & its questions, and to achieve the objectives of the study, the following hypotheses were formulated:

**Main hypothesis (Ho1):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for strategic intelligence with its dimensions (future vision, foresight, partnership, motivation, and system thinking) on crisis management effectiveness at Jordanian Ministry of Health.

The following sub-hypotheses emerge from the main hypothesis:

- **1<sup>st</sup> sub-hypothesis (Ho1.1):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for future vision on crisis management effectiveness at Jordanian Ministry of Health.
- **2<sup>nd</sup> sub-hypothesis (Ho1.2):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for foresight on crisis management effectiveness at Jordanian Ministry of Health.
- **3<sup>rd</sup> sub-hypothesis (Ho1.3):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for partnership on crisis management effectiveness at Jordanian Ministry of Health.
- **4<sup>th</sup> sub-hypothesis (Ho1.4):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for motivation on crisis management effectiveness at Jordanian Ministry of Health.
- **5<sup>th</sup> sub-hypothesis (Ho1.5):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for system thinking on crisis management effectiveness at Jordanian Ministry of Health.

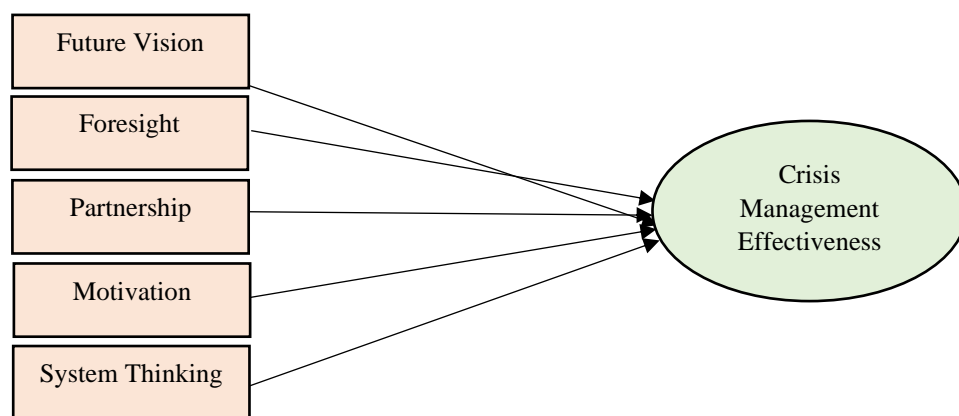


Figure 1. *Research framework.*

**Source:** Prepared by the researcher depending to the following sources:

**Independent Variable:** (Sheri et al., 2021; Alnajjar & Alharaizeh, 2020; Gupta, 2019; Maccoby, 2015; Maccoby & Scudder, 2010).

**Dependent Variable:** (Al-Yasiri & Mohammad, 2022; Hasan et al., 2022; Özcan, 2021; Abu Farah, 2009; Elsubbaugh et al., 2004).

## Methodology

### *Research Design*

The study used the quantitative analytical approach, to suit the purpose of the study related to the impact of strategic intelligence on crisis management effectiveness at Jordanian Ministry of Health. Variable testing in this study used SPSS V. 29 software.

### *Sample and Data Collection*

The study population is composed of all employees who work at the Jordanian Ministry of Health (Ministry Center), who numbered (860), according to (ministry of health annual statistical book - 2023). Data was collected from (266) individuals by utilizing a simple random sample, based on (Sekaran & Bougie, 2016, 264). The researcher distributed the questionnaires as papers on the sample of the study and the responses were (100%) from the distribution tools, and Table (1) shows the demographical data for the participants.

Table 1  
*Demographic Characteristics for Participants.*

Gender	Frequency	Percentage
Male	124	46.6
Female	142	53.4
Total	266	1.00
<b>Age Group</b>		
Less than 30 years	18	5.4
30 years - less than 40 years	97	28.9
40 years - less than 50 years	115	34.2
50 years and more	36	10.7
Total	266	1.00
<b>Academic Qualification</b>		
Diploma	6	2.3
Bachelor	188	70.7
Master	63	23.6
Doctorate	9	3.4
Total	266	1.00
<b>Years of Experience</b>		
Less than 5 years	30	11.3
5 years - less than 10 years	90	33.8
10 years - less than 15 years	107	40.2
15 years and more	39	14.7
Total	266	1.00

Table (1) displays that the female category was the largest for the study sample, with a proportion of (53.4%), while the proportion of males was (46.6%). As for the age group of the study sample, the age group (40 years - less than 50 years) was in first place, next (30 years - less than 40 years), after that (50 years and more), and finally (Less than 30 years). Regarding academic qualifications, the first place goes to the bachelor's degree, next to the master's degree, then the doctorate, and finally the diploma. Finally, in terms of years of experience, class (10 years - less than 15 years) was first, next by class (5 years - less than 10 years), then class (15 years and more), and finally class (Less than 5 years).

#### *Study Tool*

The researcher relied on the questionnaire as a tool to collect the initial data from the study sample, in addition to guidance from similar sources and previous studies related to the study variables. A five-point Likert scale was utilized to measure the questionnaire items, which ranged between strongly agree (5) and strongly disagree (1). To measure the strategic intelligence variable, the following studies were referenced: Dajah & Nsor, 2024; Bani Yasin & Rababah, 2021; Sheri et al. (2021). The crisis management effectiveness has been measured by reference to the following studies: Albarouni, 2021; Al-shayal & Al-Jedaiah, 2021; Salman & Mahawi, 2016.



*Reliability*

Cronbach's alpha was used to measure the internal consistency and reliability of the variables. Reliability should be (0.60%) or higher to indicate internal consistency or acceptable convergence (Sekaran & Bougie, 2016, 290). According to Table (2), Cronbach's alpha for each strategic intelligence and crisis management effectiveness were (0.87) & (0.90) as respectively, so the reliability for them was good, and when we tracked the reliability of the strategic intelligence dimensions, we found that they ranged between (0.71 - 0.87), so it's been between acceptable and good of reliability.

Table 2

*Reliability coefficients / Cronbach's Alpha.*

Dimension	Items	No. of Items	Cronbach's Alpha
Future Vision	(1-5)	5	0.73
Foresight	(6-10)	5	0.86
Partnership	(11-15)	5	0.77
Motivation	(16-20)	5	0.87
System Thinking	(21-25)	5	0.71
<b>Strategic Intelligence (Total)</b>	<b>(1-25)</b>	<b>25</b>	<b>0.87</b>
<b>Crisis Management Effectiveness</b>	<b>(26-39)</b>	<b>13</b>	<b>0.90</b>
<b>Items Total</b>		<b>39</b>	

**Results***Descriptive Statistics*

The descriptive statistics results for the study variables are found in Table (3) below:

Table 3

*Descriptive Statistics*

No.	Dimension	Mean	Std. Deviation	Ranking	Relative importance
1	Future Vision	3.59	0.44	3	Moderate
2	Foresight	3.57	0.60	4	Moderate
3	Partnership	3.75	0.56	1	High
4	Motivation	3.41	0.68	5	Moderate
5	System Thinking	3.71	1.24	2	High
#	<b>Strategic Intelligence (Total)</b>	<b>3.59</b>	<b>0.44</b>	-	<b>Moderate</b>
#	<b>Crisis Management Effectiveness</b>	<b>3.89</b>	<b>0.51</b>	-	<b>High</b>

Table (3) displays the results of the descriptive analysis for the strategic intelligence & its dimensions, and crisis management effectiveness by using the mean and the standard

deviation. The results in Table (3) also indicate that strategic intelligence was practiced in the Jordanian Ministry of Health at moderate level, where the mean is calculated (3.59) and standard deviation (0.44). It illustrated also that there are moderate levels for all dimensions of strategic intelligence except partnership and system thinking, they came in high level. It also explored the highest for partnership with a mean (3.75) and a standard deviation (0.56), and the lowest motivation with a mean (3.41) and a standard deviation (0.68). Finally, the crisis management effectiveness implemented at Jordanian Ministry of Health was found at a high level, where the mean is calculated (3.89) and the standard deviation (0.51).

#### *Testing Study's Hypothesis*

**(Ho1):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for strategic intelligence with its dimensions (future vision, foresight, partnership, motivation, and system thinking) on crisis management effectiveness at Jordanian Ministry of Health.

To test this hypothesis, the researchers used a multiple regression analysis, and the results are summarized in Table (4).

Table 4

*Multiple Regression Analysis Results for (Ho1).*

"Model Summary"		"ANOVA"			"Coefficients"			
R	R <sup>2</sup>	df	F	Sig*	Sub-Independent-Variables	Beta	t	Sig*
0.550	0.303	5	22.60	0.00	Future Vision	0.314	5.357	0.001
					Foresight	-0.054	-0.952	0.342
					Partnership	0.321	5.453	0.001
					Motivation	0.179	3.076	0.002
					System Thinking	0.032	0.573	0.567

\* Significant at a level of (0.05)

Table (4) illustrates ( $R = 0.550$ ), whereas ( $R^2 = 0.303$ ); which indicates that strategic intelligence emphasizes (30.3%) of the variance in crisis management effectiveness. ( $F = 22.606$ ) with ( $Sig = 0.001$ ) on ( $df = 1$ ), which indicates a significant regression. It is noticed from the table of coefficients: ( $Beta = 0.314$ ), ( $t = 5.357$ ), at ( $Sig. = 0.001$ ) for future vision which refers that the impact of this dimension is significant, and from foresight ( $Beta = -0.054$ ), ( $t = -0.952$ ), at ( $Sig. = 0.342$ ) which refers that the impact of this dimension is not significant, and from partnership ( $Beta = 0.321$ ), ( $t = 5.453$ ), at ( $Sig. = 0.001$ ) which refers that the impact of this dimension is significant, and from motivation ( $Beta = 0.179$ ), ( $t = 3.076$ ), at ( $Sig. = 0.002$ ) which refers that the impact of this dimension is significant, and finally from system thinking ( $Beta = 0.032$ ), ( $t = 0.573$ ), at ( $Sig. = 0.567$ ) which refers that the impact of this dimension is not significant.

This further rejected the zero (null) hypothesis and supported the study's first alternate hypothesis: There is a statistically significant impact at level ( $\alpha \leq 0.05$ ) for strategic intelligence (future vision, foresight, partnership, motivation, and system thinking) on crisis management effectiveness at Jordanian Ministry of Health.

Moreover, to test the impact of every dimension of strategic intelligence on crisis management effectiveness at Jordanian Ministry of Health; the first main hypothesis branches off into five sub-hypotheses, as follows:

**(Ho1.1):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for future vision on crisis management effectiveness at Jordanian Ministry of Health.

To test this hypothesis, the researchers used a simple regression analysis, and the results are summarized in Table (5).

Table 5

*Simple regression analysis results for (Ho1.1).*

"Model Summary"		"ANOVA"			"Coefficient"		
R	R <sup>2</sup>	df	F	Sig*	Beta	t	Sig*
0.388	0.150	1	46.647	0.001	0.388	6.830	0.001

Table (5) shows (R = 0.388), whereas (R<sup>2</sup> = 0.150); which indicates that future vision explained (15%) of the variance in crisis management effectiveness. (F = 46.647), with (Sig = 0.001) on (df = 1), (Beta = 0.388), (t = 6.830), at (Sig. = 0.001), and it is significant at level ( $\alpha \leq 0.05$ ).

Therefore, we reject a zero (null) hypothesis and support the study's first alternate hypothesis: There is a statistically significance impact at ( $\alpha \leq 0.05$ ) for future vision on the crisis management effectiveness at Jordanian Ministry of Health.

**(Ho1.2):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for foresight on crisis management effectiveness at Jordanian Ministry of Health.

To test this hypothesis, the researchers used a simple regression analysis, and the results are summarized in Table (6).

Table 6

*Simple regression analysis results for (Ho1.2).*

"Model Summary"		"ANOVA"			"Coefficient"		
R	R <sup>2</sup>	df	F	Sig*	Beta	t	Sig*
0.168	0.028	1	7.667	0.006	0.168	2.769	0.006

Table (6) shows (R = 0.168), whereas (R<sup>2</sup> = 0.028); which indicates that foresight explained (2.8%) of the variance in crisis management effectiveness. (F = 7.667), with (Sig = 0.006) on (df = 1), (Beta = 0.168), (t = 2.769), at (Sig. = 0.006), and it is not significant at level ( $\alpha \leq 0.05$ ). Therefore, we can accept the null hypothesis.

**(Ho1.3):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for partnership on crisis management effectiveness at Jordanian Ministry of Health.

To test this hypothesis, the researchers used a simple regression analysis, and the results are summarized in Table (7).

Table 7

*Simple regression analysis results for (Ho1.3).*

"Model Summary"		"ANOVA"			"Coefficient"		
R	R <sup>2</sup>	df	F	Sig*	Beta	t	Sig*
0.366	0.134	1	40.758	0.001	0.366	6.384	0.001

Table (7) shows (R = 0.366), whereas (R<sup>2</sup> = 0.134); which indicates that partnership explained (13.4%) of the variance in crisis management effectiveness. (F = 40.758), with (Sig = 0.001) on (df = 1), (Beta = 0.366), (t = 6.384), at (Sig. = 0.001), and it is significant at level ( $\alpha \leq 0.05$ ).

Therefore, we reject a zero (null) hypothesis and support the study's first alternate hypothesis: There is a statistically significance impact at ( $\alpha \leq 0.05$ ) for partnership on the crisis management effectiveness at Jordanian Ministry of Health.

**(Ho1.4):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for motivation on crisis management effectiveness at Jordanian Ministry of Health.

To test this hypothesis, the researchers used a simple regression analysis, and the results are summarized in Table (8).

Table 8

*Simple regression analysis results for (Ho1.4).*

"Model Summary"		"ANOVA"			"Coefficient"		
R	R <sup>2</sup>	df	F	Sig*	Beta	t	Sig*
0.372	0.138	1	42.296	0.001	0.372	6.504	0.001

Table (8) shows (R = 0.372), whereas (R<sup>2</sup> = 0.138); which indicates that motivation explained (13.8%) of the variance in crisis management effectiveness. (F = 42.296), with (Sig = 0.001) on (df = 1), (Beta = 0.372), (t = 6.504), at (Sig. = 0.001), and it is significant at level ( $\alpha \leq 0.05$ ).

Therefore, we reject a zero (null) hypothesis and support the study's first alternate hypothesis: There is a statistically significance impact at ( $\alpha \leq 0.05$ ) for motivation on crisis management effectiveness at Jordanian Ministry of Health.

**(Ho1.5):** There is no statistically significance impact at ( $\alpha \leq 0.05$ ) for system thinking on crisis management effectiveness at Jordanian Ministry of Health.

To test this hypothesis, the researchers used a simple regression analysis, and the results are summarized in Table (9).

Table 9

*Simple regression analysis results for (Ho1.5).*

"Model Summary"		"ANOVA"			"Coefficient"		
R	R <sup>2</sup>	df	F	Sig*	Beta	t	Sig*
0.206	0.042	1	11.656	0.001	0.206	3.414	0.001

Table (9) shows (R = 0.206), whereas (R<sup>2</sup> = 0.042); which indicates that system thinking explained (4.2%) of the variance in crisis management effectiveness. (F = 11.656), with (Sig = 0.001) on (df = 1), (Beta = 0.206), (t = 3.414), at (Sig. = 0.001), and it is significant at level ( $\alpha \leq 0.05$ ).

Therefore, we reject a zero (null) hypothesis and support the study's first alternate hypothesis: There is a statistically significance impact at ( $\alpha \leq 0.05$ ) for system thinking on crisis management effectiveness at Jordanian Ministry of Health.

### **Conclusion and Discussion**

The current study examined the effect of strategic intelligence on effectiveness of crisis management at Jordanian Ministry of Health. The study employed the SPSS V. 29 to analyze the data and test the hypotheses.

The results of the descriptive analysis of the strategic intelligence variable (future vision, foresight, partnership, motivation, and system thinking) showed that from the point of view of the Jordanian Ministry of Health employees, its level of importance was moderate, where it's mean is (3.59). Partnership was ranked first in terms of relative importance with a mean (3.75), next by system thinking with a mean (3.71), then by future vision dimension with a mean (3.59), after that foresight dimension with a mean (3.57), and finally motivation dimension with a mean (3.41).

Consequently, results of the present study agrees with the result of Al-Halawani and Al-Riahi (2023) study, which aimed to assess the effect of strategic intelligence (motivation, partnership, future vision, system thinking) on strategic flexibility (Productive flexibility, and competitive flexibility) at industrial firms in Jordan, which found the level of strategic intelligence applied in these companies was moderate, also consistent with the result of Alruwaili (2023) study, which purposed to explore the strategic intelligence practice (system thinking, future vision, motivation, and partnership) of the heads of academic departments and its relationship to achieving organizational excellence (leadership excellence, subordinate excellence, and organizational culture excellence) from the point of view of faculty members at the University of Hail; it displayed the degree of strategic intelligence dimensions practices were moderate degree, and it similar to the result of Alzahrani (2021) study, which searched the impact of knowledge management process (generation knowledge, knowledge storage, knowledge sharing, and knowledge application) on strategic intelligence (system thinking, future vision, motivation, partnership, and foresight) at Qassim University, it explored the level of strategic intelligence was rated moderate.

The results of the descriptive analysis of the crisis management effectiveness variable from the point of view of ministry employees was high level of importance, where its mean is (3.89). This result aligns with the result of Fattah and Aboudi (2023) study, which sought to test the impact of organizational rigidity (adaptation and change, diversity, creativity, and experience) on the effectiveness of crisis management (communication and information flow, mobilization and mobilization of materials, and speed of response decision) at the University of Mosul, it concluded that the level of applied crisis management effectiveness at this university was high, and it similar to result of Hasan et al. (2022) study, which investigated the impact of strategic leadership (strategic personality, strategic thinking, strategic change, and strategic decisions) on crisis management effectiveness (response decision-making, communication & information flow, and gather & resource mobilization) in the Iraqi Ministry of Health, it concluded that the applied level of crisis management effectiveness was high degree, also it agrees with the result of Al-Yasiri and Mohammad (2022) study, which aimed to test the influence of strategic agility (strategic sensitivity, command unit, and

resource fluidity) on organizational crisis management effectiveness (rapid response, communication & information flow, and resource mobilization) in the Ministry of Administrative and Financial Affairs of the Interior Ministry in Iraq, it found the level of crisis management effectiveness was high degree,

Moreover, the current study reveals significant impact for strategic intelligence (partnership, motivation, foresight, system thinking, and future vision) on effectiveness of crisis management at Jordanian Ministry of Health, and this result is compatible with Saad and Abd El-latief (2023) study, which explored the effect of strategic intelligence (prospective, system thinking, motivation, partnership, and future vision) on crisis management effectiveness in five- and four-star hotels in Luxor and Aswan governorates in Egypt, and this study concluded the significant impact of strategic intelligence on crisis management effectiveness in the researched hotels, and it agrees with ALShibly et al. (2022) study, which examined the impact of strategic intelligence on crisis management in Jordanian telecommunications companies, it found that the Strategic intelligence has a statistically significant impact on crisis management in those companies, and finally it aligns with Nagy (2022) study, which investigated the impact of strategic intelligence (partnership, system thinking, motivation, future vision, and foresight) on crisis management effectiveness (organizational effectiveness, information system effectiveness, communication system effectiveness, and economic effectiveness) in some of the central university libraries in Egypt, and this study discovered the significant effect of strategic intelligence on effectiveness of crisis management at those libraries.

This study is intended to encourage employees and their managers in organizations in general and health organizations in particular to embrace strategic intelligence in their organizations, as it is critical to these organizations in improvement and development, and to enhance the ability to effectively address & respond to crises, which ultimately leads to the survival, prosperity, and progress of these organizations.

### **Recommendations**

According to the study results, the researchers suggest some recommendations, including the following:

- Increase interest in applying strategic intelligence at Jordanian Ministry of Health, and make it part of the ministry's culture; for its important role in preventing crisis, reducing their negative effects when they occur, and enhancing the whole performance.
- Conducting training courses for employees to acquire new skills and behaviors that necessary for how to use strategic intelligence in managing crisis effectively.
- Enhancing care for the ministry's management of crisis that it may be exposed to by providing modern and advanced means of transferring information, and monitoring all necessary resources.
- Establishing a specialized unit concerned with strategic intelligence and providing the necessary support for it.

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