

# THE ROLE OF CRISIS AND DISASTER MANAGEMENT IN ADDRESSING THE CORONA EPIDEMIC AND ITS REFLECTION ON THE AVIATION SECTOR, TOURIST SITES AND ATTRACTING TOURISTS TO JORDAN

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### Abstract

The study aimed to identify the role of crisis and disaster management in addressing the Corona epidemic and its reflection on the aviation sector, tourist sites and attracting tourists to Jordan. The interview for data collection, and the study reached a number of results, the most prominent of which were: There is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for the role of crisis and disaster management in addressing the Corona epidemic and its reflection on the aviation sector, tourist sites and attracting tourists to Jordan, there is an effect Statistically significant at the level of significance ( $\alpha \le 0.05$ ) for the tactical reserve in addressing the Corona epidemic and its reflection on the aviation sector, tourist sites and attracting tourists to Jordan, and there is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for democratic participation in addressing the Corona epidemic and its reflection On the aviation sector, tourist sites, and attracting tourists to Jordan. and tourist sites and attracting tourists to Jordan, and there is a statistically significant effect at the significance level ( $\alpha \le 0.05$ ) of containment in addressing the Corona epidemic and its reflection on the aviation sector and tourist sites and attracting tourists to Jordan, and there is a statistically significant effect at the significance level ( $\alpha \le 0.05$ ). The role of Crisis and Disaster Management in addressing the Corona epidemic and its reflection on the aviation sector, tourist sites and attracting tourists to Jordan, the presence of an impact of the pandemic on the tourism sector.

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**Keywords**: crisis and disaster management, addressing the Corona epidemic, the aviation sector and tourist sites, attracting tourists to Jordan.

# 1. Introduction:

Tourism has played a major role in the development of communication, as the revenues of some countries from tourism have become more than their revenues from oil, which made many countries care about the issue of tourism because of its clear impact on creating rapprochement between different peoples.

The German Hunziker (1959 AD) defined tourism as: "A group of relationships and phenomena resulting from travel and temporary residence of a foreign person in a place, so that his stay is not linked to the achievement of profitable benefits" (Massad, 2010, p. 29).

(Abdul Latif, 2004, p. 59) showed that tourism is made up of several elements, and these elements overlap with each other and have different patterns that differ according to the place and type of tourism. Tourism is also of great importance in developing the economy and providing places where tourists can spend appropriate and happy times.

Today, the world faces many risks and challenges, which constitute a real threat to millions of people, and among these challenges and crises that the world faces is the crisis of wars, reconstruction, financing humanitarian aid, humanitarian law, displaced persons, electronic attacks, and the charitable use of technology, and perhaps the most prominent of these risks are epidemics, which have become imposing Political, economic and social challenges in various countries of the world, and this is evident through what the world is facing today in light of the outbreak and spread of the Corona epidemic (Covid-19).

A disaster is a natural or man-made event, sudden or expected, that greatly affects the course of normal life, which requires societies to take exceptional decisions to confront them with their own capabilities or through external assistance. As for a crisis, it is a period of instability, especially if that period involves danger. Or severe disturbance, as it is a situation or event that may lead to a sudden change in the surrounding environment and its consequences are severe and constitute a direct threat to security, order, lives and public funds (Abbas, 2018, p. 12).

Disaster management is an applied science that looks at monitoring and analyzing crises and disasters with the aim of improving procedures related to prevention, preparedness and confrontation, and



addressing their effects. They use their skills as well as special procedures in order to minimize losses (Al-Sakarneh, 2018, P 11).

The world is facing a Corona pandemic, and according to what the World Health Organization indicated, the emerging Corona virus (Covid-19) is spreading rapidly, and the number of people infected with it is increasing, with a noticeable increase in the number of deaths, and that the world is facing many challenges because of it, especially with regard to providing supplies. Medical, sterilization, provision of devices, and facing economic challenges, which created a state of shock and anticipation in the countries of the world due to the many risks that this dangerous epidemic may leave (WHO, 2019).

# 2. Study Problem

The Hashemite Kingdom of Jordan faces several risks due to the Corona virus pandemic, with the increase in the number of infections, the number of deaths, and the effects created by this epidemic, especially on the health and economic side, and the high cost of confronting the disease, especially in light of the disruption of many industrial, commercial and service sectors, and perhaps the most prominent effect was The aviation sector, tourist sites and attracting tourists to Jordan, in light of the disruption of tourism and aviation offices, tourist sites and the lack of tourists from other countries, which constituted a real crisis in Jordan. preventive measures in an attempt to find solutions to many pressing issues and problems, especially with regard to tourism, which was the most affected, so to what extent can this center adopt realistic and logical strategic solutions to confront the Corona virus pandemic and the impact of this pandemic on tourism in Jordan, as judging the results needs to a time that may last for a long time.

# 3. Objectives of the study:

The study aims to achieve the following:

- 1. A statement of what the emerging corona virus (Covid-19) is.
- 2. Clarifying what is meant by both disaster and crisis.
- 3. Statement of the reason for establishing the Crisis and Disaster Management Center in Jordan.

4. Clarifying the impact of the pandemic on the aviation sector, tourist sites, and attracting tourists to Jordan.



5. Statement of the policies and programs adopted by the Center for Crisis and Disaster Management in Jordan to confront the coronavirus pandemic.

6. Identifying the success of the Crisis and Disaster Management Center in Jordan in reducing the negative repercussions of the Corona virus pandemic on the aviation sector, tourist sites, and attracting tourists to Jordan.

7. Mentioning the solutions and suggestions that can be adopted to reduce the risks of the Corona virus pandemic on the aviation sector, tourist sites, and attracting tourists to Jordan.

# 4. The significance of study

The importance of the study comes from both theoretical and practical aspects.

### 4.1. First: Theoretical Importance:

The importance of the study emerges theoretically from the importance of the information that will be obtained with regard to the emerging Corona virus pandemic, and the strategy of the Crisis and Disaster Management Center in facing the crisis, especially with regard to the aviation sector, tourist sites, and attracting tourists to Jordan, as this study is the first study within the limits of knowledge. The researcher, which constitutes an addition to the Arab library.

### 4.2. Second: Practical Importance:

The importance of the study emerges from a practical point of view, as the following groups can benefit from it:

1. The researchers, by making the study a nucleus for other similar studies.

2. Those interested in issues of disasters and crises to learn about the best ways to face crises and disasters such as the emerging Corona Virus (Covid-19) pandemic, especially with regard to the aviation sector, tourist sites and attracting tourists to Jordan.

# 5. Study hypotheses:

Based on the study problem and its questions, the following hypotheses were formulated:



### 5.1. The first main hypothesis:

Ho1: There is no statistically significant effect at the level of significance ( $\Box \Box 0.05$ ) for the role of crisis and disaster management in addressing the Corona epidemic and its reflection on the aviation sector, tourist sites and attracting tourists to Jordan.

### 5.1.1. The first sub-hypothesis:

Ho1-1: There is no statistically significant effect at the level of significance ( $\Box \Box 0.05$ ) for the packaging reserve in dealing with the Corona epidemic and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

#### 5.1.2. The second sub-hypothesis:

Ho1-2: There is no statistically significant effect at the level of significance ( $\Box \Box 0.05$ ) for democratic participation in dealing with the Corona epidemic and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

# 6. Terminological and procedural definitions:

Crisis management methods: These are the operations that senior management resorts to when it is exposed to a crisis by choosing a strategy commensurate with the nature of the crisis (Abdullah and Hammoud, 2020).

**The tactical reserve:** It is the provision of a stock of materials and equipment that can be used in case organizations are exposed to a crisis (Al-Sakarna, 2018).

It is defined procedurally as: the ability of the Crisis and Disaster Management Center to possess a tactical reserve through which it can face the various crises it faces, and this dimension will be measured through the paragraphs of the questionnaire.

**Democratic participation:** It is the strategy that is based on trying to end the crisis in organizations by knowing its content and causes, and allowing all workers to participate in confronting it (Abdullah and Hammoud, 2020).

It is defined procedurally as: It is the participation of the Crisis and Disaster Management Center for workers in the search for solutions to the crises facing these banks after searching for their causes to confront these crises, and this dimension will be measured through the paragraphs of the questionnaire.



**Diverting the path:** It is the strategy that is used when organizations are exposed to a severe crisis, which cannot be stopped, by diverting their path to another field that is less threatening (Abbas, 2018).

It is defined procedurally as: the ability of the Crisis and Disaster Management Center to transform the course of the crises it faces through appropriate creative methods, and this dimension will be measured through the paragraphs of the questionnaire.

**Containment:** It is the process through which the crisis in organizations is limited to a limited scope, and frozen at one of the stages that can be absorbed and lose its strength (Al-Sakarna, 2018).

It is defined procedurally as: the ability of the Crisis and Disaster Management Center to contain the crises it faces so that it can lose its strength and get rid of it. This dimension will be measured through the paragraphs of the questionnaire.

**Fragmentation:** It is the strategy that relies on knowing all the details of the factors that cause the occurrence of crisis in organizations, by identifying potential benefits and conflicting frameworks, and then assessing the impact of the crisis for multiple solvable parts (Abbas, 2018).

It is defined procedurally as: the ability of the Crisis and Disaster Management Center to break up the crises faced by banks, making them solvable and trying to end them. This dimension will be measured through the paragraphs of the questionnaire.

# 7. The limits and limitations of the study:

Spatial boundaries: The sample of this study was limited to the Crisis and Disaster Management Center.

*Time limits*: This study was conducted in the year 2021-2022

**Scientific limits:** It was limited to a study on its subject, which is the statement of the role of crisis and disaster management in addressing the Corona epidemic, and its impact on the aviation sector, tourist sites, and attracting tourists to Jordan.

Human limits: The study was limited to workers in the Crisis and Disaster Management Center.

As for the determinants of the study, they are represented in some obstacles that contributed to the impact on the completion of the research, such as the Corona pandemic and communication with the study sample.



# 8. Theoretical framework:

Tourism has played a major role in the development of communication, as the revenues of some countries from tourism have become more than their revenues from oil, which made many countries pay attention to the issue of tourism because of its clear impact on creating rapprochement between different peoples (Al-Khudairi, 1999).

The current era has become full of crises, and the question is no longer whether the crisis will come or not? Rather, the question became what does the organization do when the crisis comes? It will inevitably come at some point, but it is noted that many leaders do not recognize this fact, as they believe that their organizations are immune from crises and that no crisis, whatever it is, can harm the organization or surprise it at a time when the crisis is already within its fabric. and its structure. Organizations of all kinds face many challenges and rapid changes, which contribute to the occurrence of various crises in terms of their types, severity, and their effects on the results of business organizations in terms of economic and financial terms, and on the ability to survive and adapt to the environment in which they operate (Al-Serafi, 2018, 12).

tourism:

Researchers and thinkers differed in defining tourism, and the following is a review of a number of definitions that dealt with tourism:

Where the World Organization for Tourism (OMT) (Al-Najjar, 2020, p. 34) defined it as: "a concept intended for recreational trips and all activities that the tourist undertakes to satisfy his inclinations." Tourism was also defined as between (Massad, 2010, p. 61) as: "one of the phenomena Social and humanitarian, through which a person moves from one place to another for a specific period to achieve multiple goals such as entertainment, treatment, and other things.

The researcher concludes by defining tourism according to the dictionaries' point of view as the movement of individuals to various places in search of entertainment and other things.

In terms of terminology, tourism was defined as: "one of the phenomena in this era that arose due to people's need for entertainment, pleasure, and the discovery of new places" (Al-Sukkar, 2019, p. 22).

Al-Khudairi defined it as: "One of the economic activities through which individuals move to multiple destinations for various periods of time in order to achieve certain goals." (Al-Khudairi, 1999, p. 16).



The German Hunziker, "1959 AD, defined tourism as: "A set of relationships and phenomena resulting from travel and temporary residence of a foreign person in a place, so that his stay is not linked to the achievement of profitable benefits" (Massad, 2010, p. 29).

The researcher believes that the previous definitions considered tourism as an overlapping activity between many different sectors.

### **8.1.** Tourism Components:

There are several components that tourism focuses on, as indicated by: (Tilli, 2014, p. 1):

**Natural factors:** This refers to the topography, climate, beaches, reserves, forests, and historical and religious places in a country.

Accommodation and reception service: This is done by placing tourists in hotels and hotel apartments and providing them with sleeping and eating services.

**Various services:** including the provision of a tour guide, the presence of a tourist company, food places, travel agencies, and so on.

**Transportation service:** by providing buses, ships and other means that facilitate the process of transporting tourists.

**Infrastructure services:** through suitable infrastructure in hotels and tourist places, such as the provision of fresh and pure water.

**Systematic plans:** by preparing marketing strategies for tourism and creating laws that protect tourists and tourist places.

### **8.1.1.** Importance and features of tourism:

(Abdul Latif, 2004, p. 59) showed that tourism is made up of several elements, and these elements overlap with each other and have different patterns that differ according to the place and type of tourism. Tourism is also of great importance in developing the economy and providing places where tourists can spend appropriate and happy times.

### **8.1.2.** Characteristics of tourism service:

There are several characteristics of the tourist service as mentioned (Mubarak and Khaled, 2019, p. 154), namely:



- 1. Providing tourism services in the presence of clients.
- 2. The process of providing the service takes place in its place and time.
- 3. The inability of the tourism product to be transported and stored.
- 4. Lack of flexibility in tourism offers.
- 5. The possibility of exchanging one element for another, such as exchanging a bus for a train.

### **8.1.3.** Tourism patterns:

There are several types of tourism referred to by (Massad, 2010, p. 45):

1. Domestic tourism:

It is the tourism that individuals practice in their country in search of their comfort and recreation, and to get acquainted with the tourist places in their country, and this does not require a visa to travel.

There are several benefits achieved by the state from domestic tourism, which are:

Creating many opportunities for the unemployed, which reduces poverty and unemployment.

Investment in tourism and hotels.

- Supporting the local economy through tourism.

- Developing citizens' thinking and culture about tourism.

Reducing citizens' fatigue and increasing their productivity.

- Developing tourist areas and increasing material incomes.

There are several factors affecting domestic tourism referred to by (Sukar, 2019), as follows:

1. The high cost of tourism areas in Jordan, which reduces the number of tourists.

2. The lack of interest of many individuals in the government's efforts to develop tourism.

3. The small number of tourist hotels and restaurants, with the high costs of access to them, which are often not commensurate with the incomes of individuals.



4. Individuals' reluctance to invest in the tourism field.

5. The government's lack of wide interest in developing tourist places.

2- Regional tourism:

It means that individuals travel to other countries, such as one of the Arab countries, and it is characterized by the low material cost due to the short distance, and the presence of inexpensive means of transportation (Al-Khudairi, 1999, p. 12).

3- Foreign (international) tourism:

It is the travel of individuals to foreign countries with different political, social and economic systems. (Sukkar, 2019, p. 11) indicated that the tourist must have a passport and must obtain a visa to travel to that country.

This tourism may be for the sake of entertainment, work, or financial gain, without the tourist having a permanent residence.

There are several pros and cons of individual tourism, which are:

Negative tourism: It is the travel of a person to another region, which requires spending hard currency, which affects the balance of payments in the country in which he resides.

Positive tourism: It attracts a number of foreign tourists from other countries, which increases the country's income from hard currency (Massad, 2010, p. 33).

### 8.1.4. Tourism patterns in Jordan:

#### First: medical tourism in Jordan

Medical tourism in Jordan is of great importance, as many tourists come from different countries of the world for treatment in many tourist places in Jordan.

Many definitions of medical tourism have appeared, including the definition that shows that medical tourism is what some tourist sites provide in terms of therapeutic service in mineral waters or other appropriate sites for that (Bazzo, 2006, p. 63).

The researcher believes that there are many therapeutic tourist sites in Jordan, including the Dead Sea, where tourists can recover from a number of diseases, especially skin ones, due to the salinity of the



Dead Sea. Through the high temperatures of the water, individuals can treat many diseases, which prompted the Jordanian government to provide these areas with distinguished services, including clinics, hospitals, and so on (Massad, 2010, p. 23).

#### Second: religious tourism

There were several definitions of religious tourism, including "a tourist activity that aims to visit sacred or religious places somewhere, whether inside or outside the country" (Bazzazou, 2006, p. 68).

(Sukar, 2019, p. 37) classified the tourist sites in the Hashemite Kingdom of Jordan into:

1. Islamic religious tourism sites, including: the shrines of the Companions, may God be pleased with them.

2. Christian religious tourism sites, including: Mount Nebo in Madaba and churches.

#### Third: conference tourism

(Bazzazo, 2006, p. 19) pointed out that conference tourism has become one of the distinctive types of tourism in all countries of the world, and Jordan has witnessed a great development in the field of conference tourism due to its political, economic and social status, and this is reflected positively on the percentage of hotels, tourist places and other related services.

#### 8.2. The concept of crisis management

An individual, group, organization, society, or state is exposed to embarrassing and painful situations at times, and this embarrassment increases whenever those situations are ignored and neglected, so that in some cases it reaches the loss of work or even life. This situation is characterized by what The following (Akhyarhom, 2013, 14):

1. A permanent position: which is through the constant and present danger, if the future remains unknown.

2. Negative: There are negative and non-material effects of risk.

3. General: by means of a comprehensive risk surrounding all properties under the same circumstances.

4. Increase: Where new risks arise that were not in the past.



Also, the possibility of addressing these situations at different levels means that there is a crisis that requires addressing it, and the best way to address it is to manage the crisis, within the methodology of dealing with the crisis, through planning, implementation, follow-up, and feedback in the light of preparations, knowledge, awareness, awareness, and available capabilities. prevailing management skills and styles (Al-Azzawi and Jawad, 2010, 3).

Crisis management refers to how to face and overcome a crisis, through the use of a scientific management method. To avoid the negatives resulting from it and enhance the positives.

Crisis management is also defined as: "purposeful activities that are based on research; to obtain the necessary information; to enable management to predict the locations of the crisis that is expected, and to create an appropriate climate; in order to deal with it, by taking measures to control and confront the expected crisis (Al-Said, 2020, 11).

Sami (2020, 79) believes that crisis management is "distinguished administrative operations, as it is exposed to a sudden event, and requires rapid decisive actions consistent with the development of the crisis, then the crisis management has the authority to lead, influence and direct the event according to the requirements of matters."

#### **8.2.1.** Crisis stages:

The crisis goes through several stages, which can be summarized as follows (Hassan, 27, 2020):

- Formation stage: the stage of emergence of the causes of the birth of the crisis, and this stage may be long or short, and depends on the circumstances and procedures of acceleration, slowing down, or termination.
- Birth stage: the emergence of the crisis on the surface of events.
- The stage of escalation and expansion: the crisis begins to attract attention due to the widening of its circle, the depth of its impact, and the escalation of its pace.
- The explosion stage: the stage in which the crisis can no longer be contained.
- Maturity stage: the crisis reaches the maximum level of impact and violence, and it may settle at that level for a long or short period, depending on the nature of the crisis, its management, and its parties.



• The stage of recession: the beginning of the decline or disappearance of the crisis by regaining control over events and situations.

### **8.3.** Corona pandemic:

The world is facing many problems and disasters, whether natural or epidemic, wars or crises, which causes members of society to suffer from psychological, health and social problems, especially with regard to the outbreak of the Corona virus, which has become a great threat to societies in all countries (Al-Sharmani, 2019).

The World Health Organization has issued a brief note dealing with aspects related to mental health and psychosocial support during the outbreak of the new Corona virus (2019) in an attempt to support individuals in facing this dangerous disease (issued by the World Health Organization (2019) regarding aspects related to mental health and psychosocial support during the novel coronavirus outbreak).

The memorandum defines psychosocial support as: "any type of domestic or external support aimed at promoting or protecting psychosocial well-being and preventing and treating mental health issues" (www.who.int/emergencies/diseases/Novel-Corona virus, 2019.).

As it is known that any epidemic, whatever it is, such as the emerging corona virus, it is natural for individuals to feel fear and anxiety, and this can be summarized as follows (Al-Sharmani, 2019):

1. Fear of infection, disease and death.

2. Avoid receiving medical care in health facilities for fear of contracting the virus.

3. Fear of losing livelihoods, inability to work during the isolation period, and fear of being expelled from work.

4. Fear of social exclusion that the individual is placed in quarantine because of his association with the disease.

5. Individuals feel that they are unable to protect the people close to them.

6. Fear of separation from loved ones and caregivers due to quarantine regulations.

7. Feelings of helplessness, boredom, depression and loneliness during isolation.



### **8.4.** *Literature review*

The study of Al-Gharabawi and Mahmoud (2020) The aim of the study was to reveal the attitudes of the respondents towards the availability of the crisis management system in the various stages (individually and collectively) with its dimensions (early warning, preparedness and prevention, damage containment, activity recovery, learning) at Ibn Al-Atheer Hospital in Mosul Governorate, the analytical descriptive approach was used. The study population consisted of all employees at Ibn Al-Atheer Hospital in Mosul Governorate, and the sample consisted of (47) individuals from the study community. After statistical treatment, the study concluded that there is a crisis management system in Ibn Al-Atheer Hospital in the city of Mosul, and that there are no statistically significant differences in the reality of the practice of the stages of crisis management in the hospital from the point of view of the sample members due to demographic variables. The study recommended the need to train workers by sending them to external courses and indoor.

The study of Abdullah and Hammoud (2020) The study aimed to reveal the reality of crisis management in higher education organizations with its dimensions (the planning process for crisis management, the decision-making process in crisis management, the communication process in crisis management, and the information process in crisis management) through a prospective study on a university Iraqi Tikrit. The analytical descriptive approach was used. The study population consisted of all employees at the Iraqi University of Tikrit, and the study sample consisted of (92) individuals. After conducting the statistical treatment, the study concluded that the university under study is interested in the characteristics of the robust design adopted by the research in the university, and that the university pays more attention to its ability and capabilities to make adjustments and changes in the administrative and leadership process. The study recommended the need to find appropriate methods to detect crises.

Mezal Study (2020) The study aimed to find out the impact between the crisis management strategy and its dimensions (the strategy to break up the crisis, the strategy to contain the crisis, and the strategy to empty the crisis) in improving the organizational performance in its dimensions (effectiveness and efficiency) in the public companies affiliated to the Iraqi Ministry of Foreign Affairs. The analytical descriptive approach was used. The study population consisted of all employees in the companies under study, while the sample consisted of (280) individuals, and the questionnaire was used as a tool for collecting the study. After conducting the statistical analysis, the study concluded that crisis management strategies directly affect organizational performance in the companies surveyed. The study recommended the need to find appropriate methods for detecting crises.



# 9. Methodology and procedures

In the following, the researcher reviews the methodology and procedures by stating the study methodology, the community, the sample, the tool, and the statistical methods used.

### 9.1. Study methodology:

The field survey was relied upon in the process of collecting data and filling out the questionnaire for this study, and this study is considered an applied study, and this study is illustrative in terms of purpose, because it seeks to link the cause with the effect.

### 9.2. Data collection sources:

Primary sources: the questionnaire whose validity and reliability were confirmed.

Secondary sources: Refer to previous studies published in conferences and peer-reviewed journals on the subject of the research, in addition to books, reports and websites that implicitly or explicitly dealt with the subject of the study, whether in whole or in part, although the researcher could not find any previous study published in the language. Arabic has dealt with the subject of the research explicitly or implicitly, even if the study sample or the time of its conduct has changed.

### 9.3. The study population and its sample:

The study population consisted of all workers in the Center for Crisis and Disaster Management in Jordan, whose number is (2130) individuals, according to the statistics of the center in the year 2020/2021. Year 2020-2021.

### 9.4. Study tool:

The researcher prepared the study tool, which is the questionnaire and the interview, in the light of a number of previous related studies, such as the study of Abdel Qader (2017) and the study of Dahani (2018).

### 9.5. Validity of the study tools:

For the purposes of testing the validity of the two tools of the study, it was presented to a group of academic arbitrators with specialization in a number of Jordanian universities at the rank of professor and associate professor, in order to identify the validity of performance to help the researcher address the problem of the study, as well as to ensure the integrity of its language, and the consistency of its paragraphs with the objectives of the study For the purpose of knowing their opinions and benefiting from their experiences, and to ensure the appropriateness of the wording of the paragraphs



linguistically, the content of the questions and the extent of their comprehensiveness and coverage of the subject in question, and to make any other observations they deem appropriate, whether by deletion, addition or change, and the researcher took into account the observations of the arbitrators.

### **9.6.** The stability of the study tools:

The stability of the two tools used to measure the variables included in the questionnaire was confirmed by calculating the value of Cronbach's Alpha Cofficient, where the result is statistically acceptable if its value is greater than (0.70), and the closer the value is to (1) one signifier. This has higher stability scores for the study tool.

## 10. Results

The researcher reviews the results of the study after extracting the results and then analyzing them using the SPSS program, as follows:

Description of the characteristics of the study sample

This part of the study aims to show the frequencies as well as the percentages of the personal characteristics of the respondents, which is related to the first part of the questionnaire. The following is an illustration of the sample answers.

### 10.1. Gender:

Category	Repetition	Repetition
Male	148	%69.5
Female	65	%30.5
Total	213	100%

Table 1. Frequencies and percentages determined for the study sample by gender

The results of Table (1) showed that (69.5%) of the study sample were males, and they numbered (148) individuals, followed by (30.5%) of the study sample were females, numbering (65) individuals, and this is an indication that most of the study sample came from Males, because the nature of the work in the Crisis and Disaster Management Center requires male employees. This can also be attributed to the nature of Jordanian society based on customs and traditions and the reduction of female employment, especially in sectors where it is difficult for them to work.



## 10.2. The age

Category	Repetition	Repetition		
Less than 30 years old	58	%27		
30 to less than 40 years old	83	%38.5		
40 to less than 50 years old	46	%22		
50 years and over	26	%12.5		
Total	213	100%		

Table 2. Frequencies and percentages of study sample individuals by age

The results of Table (2) showed that (38.5%) of the respondents for the study ranged from 30 to less than 40 years of age, numbering (83) individuals, followed by (27%) whose age ranged from less than 30 years, and their number was (58) individuals, followed by (22% range in age from 40 to less than 50 years, and their number is (46) individuals, while (12.5%) range in age from 50 years or more, and their number is (26) individuals. This can be attributed to the fact that the Crisis and Disaster Management Center must contain Many workers to carry out the required tasks in a timely manner.

### **10.3.** Academic qualification:

Table 3. Frequencies and percentages of study sample members according to academic qualification

Category	Repetition	Repetition		
High School	11	%5.3		
Community college diploma	7	3.5%		
Bachelor's	154	72%		
Master's	13	6%		
Ph.D	28	%13.2		
Total	213	100%		



The results of table (3) showed that (72%) of the study sample had academic qualifications with a bachelor's degree, and their number was (154) individuals, and the lowest category was for the community college diploma category, and their number was (7) individuals with a percentage of (3.5%), and this is consistent with the nature of work Putting jobs at the center of crisis and disaster management, where you need a variety of qualifications, and this requires at least a bachelor's degree.

### **10.4.** Test the study hypotheses

In this part of the study, the hypotheses were tested, as the first main hypothesis was subjected to standard multiple linear regression analysis, while the sub-hypotheses emanating from it were tested, the second main hypothesis and the third main hypothesis were simple linear regression analysis, and the fourth hypothesis was subjected to path analysis.

### 10.4.1. The first main hypothesis

Ho1: There is no statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for the role of crisis and disaster management in addressing the Corona epidemic and its reflection on the aviation sector, tourist sites and attracting tourists to Jordan.

Table 4. The results of examining the role of crisis and disaster management in dealing with the Corona epidemic, and its impact on the aviation sector, tourist sites, and attracting tourists to Jordan

dependent variable	Model Summery						Coefficient					
	R	R <sup>2</sup>	F	Sig. F	D f	Statement	В	Standar d error	Beta β	Т	Sig. T	
Crisis manageme						tactical reserve	.151 0	.0550	.189 0	2.74 3	.007 0	
nt methods	.809 0	.654 0	92.33 5	.00 0	4	Democratic participatio n	.162 0	.0670	.194 0	2.40 9	.017 0	
						containmen t	.274 0	.0690	.295 0	3.96 2	.000 0	
						path	.240	.0550	.265	4.32	.000	



			conversion	0		0	9	0
			atomizing	.162 0	.0670	.194 0	2.40 9	.017 0

Table (4) indicates that there is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for the role of crisis and disaster management in addressing the Corona epidemic, and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan through the value of F, which is equal to (92.335), and significant at the level of significance ( $\alpha \le 0.05$ ), which also represents the significance of this model at a degree of freedom (4), and the correlation coefficient was (R = 0.809), which indicates the existence of a relationship between the two variables, and the value of R2 equal to (0.654) indicates that the method of managing crises by removing them has explained what Its percentage is (65.4%) of the variation in dealing with the Corona pandemic.

Based on the above, the first main null hypothesis is rejected and the alternative hypothesis is accepted:

There is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for the role of crisis and disaster management in addressing the Corona epidemic and its reflection on the aviation sector, tourist sites and attracting tourists to Jordan

### 10.5. The first sub-hypothesis

Ho1-1: There is no statistically significant effect at the level of significance ( $\Box \Box 0.05$ ) for the packaging reserve in dealing with the Corona epidemic and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

Table 5. The results of testing the impact of the tactical reserve in dealing	with the	Corona virus
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Depende nt		odel mery	ANOVA			Coefficient					
variable	R	R2	F	Sig.	Df	Stateme nt	В	Standar d error	Beta	Stateme nt	В
Addressin g the Corona virus	0.69 8	0.48 8	188.37 9	0.00	1	Back-up method	0.80 9	0.059	0.69 8	13.725	0.00 0



Table (5) indicates that there is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) of the tactical reserve in dealing with the Corona epidemic, and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan through the value of f equal to (188.379), and significant at the level of significance (188.379).  $\alpha \le 0.05$ ), which also represents the significance of this model at a degree of freedom (1), and the correlation coefficient was (r = 0.698), which indicates the existence of a relationship between the two variables. Its percentage is (48.8%) of the variation in dealing with the Corona virus.

Based on the foregoing, the first sub-null hypothesis is rejected, and the alternative hypothesis is accepted:

There is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for the packaging reserve in dealing with the Corona epidemic, and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

### **10.6.** The second sub-hypothesis

Ho1-2: There is no statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for democratic participation in dealing with the Corona epidemic and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

Depende nt	Model Summery		ANOVA			Coefficient					
variable	R	R2	F	Sig.	Df	Statement	В	Standar d error	Beta	Stateme nt	В
Addressi ng the Corona virus	0.66 9	0.44 7	160.31 2	0.00	1	style of democrati c participati on	0.77 5	0.061	0.66 9	12.661	0.00 0

*Table 6. The results of testing the impact of the democratic participatory method in dealing with the Corona virus* 

Table (6) shows that there is a statistically significant effect at the level of significance ( $\Box \Box 0.05$ ) for the democratic participation in addressing the Corona epidemic and its reflection on the aviation



sector, tourist sites and attracting tourists to Jordan through the value of F and equal (160.312), and significant at the level of significance (Sig = 0.000), which also represents the significance of this model at the degree of freedom (1). The correlation coefficient was (r = 0.669), which indicates the existence of a relationship between the two variables. The R2 value equal to (.4470) indicates that the democratic participation method by excluding it explained (44.7%) of the variation in dealing with the Coronavirus.

Based on the foregoing, the second sub-null hypothesis is rejected, and the alternative hypothesis is accepted:

There is a statistically significant effect at the level of significance  $\alpha \leq 0.05$ ) for democratic participation in dealing with the Corona epidemic, and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

Discuss the results and recommendations

In the following, the researcher reviews the discussion of the results of the study and presents the most important recommendations in the light of the results, as follows:

# 11. Discuss the results

### 11.1. First: the results of the descriptive analysis

1. The results of the descriptive analysis of crisis management methods showed that there is an average level of crisis management methods for dimensions (the tactical precautionary method, the democratic participation method, the path analysis method, the containment method, and the fragmentation method), where the democratic participation method came in the first place in terms of relative importance, and in In the second place came the path analysis method in terms of relative importance, in the third place in terms of relative importance came the fragmentation method, in the fourth place came the containment method in terms of relative importance, and in the fourth place came the containment method in terms of relative importance, and in the last place came the tactical precaution method in terms of relative importance.

2. The method of democratic participation came in the first place, and the reason for this may be that the application of methods of democratic participation enhances participation by all by perceiving crisis problems and trying to develop constructive solutions to crises in a way that can solve or reduce them, so that the Crisis and Disaster Management Center can avoid problems you constantly encounter.



3. In the second place came the path analysis method, as this can be attributed to the Iraqi banks facing many crises, and for this they are diverting the course of these crises to other courtesies so that they can reduce the seriousness of these crises, and this requires the concerted efforts of all workers in order to reduce From the seriousness of these crises so that the center does not face difficulties and crises that it may not be able to face.

4. In the third place came the method of fragmentation, and the reason for this is that the Crisis and Disaster Management Center, when it faces a crisis, works to break it down into small parts so that it can solve it and reduce the pressure of the crisis when it is unified, and the Crisis and Disaster Management Center identifies the potential benefits and expected risks so that You can face crises in the center, by evaluating them and defining the appropriate framework for a solution.

5. In the fourth place came the containment method, and this can be attributed to the crisis and disaster management center tracking the course of the crisis, so that it seizes the appropriate opportunity to take an appropriate step through which it can limit these crises and freeze them at one stage so that this crisis is contained or ended in general And in the last place came the tactical precautionary method, and this can be attributed to the fact that the Crisis and Disaster Management Center is always surrounded by a strategic stock through which it can face crises by adopting a constructive and appropriate strategy that enables it to face crises constantly.

The results of these studies agreed with the result of the study of Al-Qabati (2018), which concluded that the level of crisis management by Yemeni school principals was at a medium degree, and Kamam's study (2018), which indicated that there are medium levels of using crisis management methods in Egyptian five-star hotels.

#### 11.2. Discuss the first main hypothesis

Ho1: There is no statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for the role of crisis and disaster management in addressing the Corona epidemic and its reflection on the aviation sector, tourist sites and attracting tourists to Jordan.

Table (4) indicates that there is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for the role of crisis and disaster management in addressing the Corona epidemic, and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan through the value of F, which is equal to (92.335), and significant at the level of significance ( $\alpha \le 0.05$ ), which also represents the significance of this model at a degree of freedom (4), and the correlation coefficient was (R = 0.809), which indicates the existence of a relationship between the two variables, and the value of R2



equal to (0.654) indicates that the method of managing crises by removing them has explained what Its percentage is (65.4%) of the variation in dealing with the Corona pandemic.

Based on the above, the first main null hypothesis is rejected and the alternative hypothesis is accepted:

There is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for the role of crisis and disaster management in addressing the Corona epidemic, and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

This can be explained by the fact that the Crisis and Disaster Management Center, when dealing with the Corona virus, must follow all necessary methods and take precautions that enable the center to deal with the Corona pandemic.

### 11.2.1. Discuss the first sub-hypothesis

Ho1-1: There is no statistically significant effect at the level of significance ( $\alpha \leq 0.05$ ) for the packaging reserve in dealing with the Corona epidemic and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

Table (5) indicates that there is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) of the tactical reserve in dealing with the Corona epidemic, and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan through the value of f equal to (188.379), and significant at the level of significance (188.379).  $\alpha \le 0.05$ ), which also represents the significance of this model at a degree of freedom (1), and the correlation coefficient was (r = 0.698), which indicates the existence of a relationship between the two variables. Its percentage is (48.8%) of the variation in dealing with the Corona virus.

Based on the foregoing, the first sub-null hypothesis is rejected, and the alternative hypothesis is accepted:

There is a statistically significant effect at the level of significance ( $\Box \Box 0.05$ ) for the packaging reserve in dealing with the Corona epidemic, and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

This can be explained by the fact that the Crisis and Disaster Management Center, when dealing with the Corona virus, must have a tactical reserve that enables it to overcome the crisis so that this does not affect all sectors, especially the aviation sector, tourist sites and attracting tourists to Jordan.



### 11.2.2. Discuss the second sub-hypothesis

Ho1-2: There is no statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for democratic participation in dealing with the Corona epidemic and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan.

Table (6) shows that there is a statistically significant effect at the level of significance ( $\alpha \le 0.05$ ) for democratic participation in addressing the Corona epidemic and its reflection on the aviation sector, tourist sites and attracting tourists to Jordan through the value of F and equal (160.312), and significant at the level of significance (Sig = 0.000), which also represents the significance of this model at the degree of freedom (1). The correlation coefficient was (r = 0.669), which indicates the existence of a relationship between the two variables. The R2 value equal to (.4470) indicates that the democratic participation method by excluding it explained (44.7%) of the variation in dealing with the Coronavirus.

Based on the foregoing, the second sub-null hypothesis is rejected, and the alternative hypothesis is accepted:

There is a statistically significant effect at the level of significance ( $\alpha \leq 0.05$ ) for democratic participation in dealing with the Corona epidemic, and its reflection on the aviation sector, tourist sites, and attracting tourists to Jordan

This can be explained by the fact that the Crisis and Disaster Management Center, when dealing with the Corona virus, should follow the method of democratic participation by involving all groups in the process of dealing with the Corona pandemic, so that this does not affect all sectors, especially the aviation sector, tourist sites and attracting tourists to Jordan.

# 12. Recommendations:

In light of the results reached, and in light of the previous conclusions, the researcher presents a set of recommendations that can be used. The following is a presentation of these recommendations:

1. The need for the National Center for Crisis and Disaster Management to conduct future studies to determine the extent of the centers' success in facing the crisis, and what are the obstacles to failed crisis management, especially in the tourism and aviation sector and attracting tourists.



2. The need to ensure the presence of a strong private sector capable of managing a smooth travel experience that follows strict health and hygiene protocols and rebuilding travelers' confidence in Jordan as a tourist destination in general.

3. The need to adopt technological transformations at the level of the private and public sectors to provide a practical experience that takes into account social divergence, in addition to providing continuous support to the travel and tourism sector.

4. The need to develop sustainable and responsible practices, and to cooperate closely with other countries to ease restrictions imposed on travelers and allow growth and recovery.

5. The need to focus on revitalizing domestic tourism and demanding the integration of tourism culture with art to encourage generations towards tourism.

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