

## **A Framework for Evaluating the Role of Egyptian Ministry of Tourism in Tourism and Hospitality crises management**

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### **Abstract**

The research aimed to assess the impact of Egyptian Ministry of Tourism sectors' role on tourism and hospitality crises management and its outcomes. The research adapted a conceptual model of the crises management system's variables and outcomes. The conceptual model and hypotheses were then tested. This research followed descriptive analytical methodology by using a questionnaire tool. The study population was the managers and employees who work in four sectors of Ministry of Tourism and Egyptian Authority of Tourism Promotion. The distributed questionnaires were 165 as a sample of the study; only 135 questionnaires returned with a response rate of 81.8%. The valid questionnaires represented 66.2 % of the population (204). The study found that the application of crises management variables and outcomes in the Ministry of Tourism sectors are moderate. Moreover, operations team role, crises readiness and response, are first and second variables, whereas the media team role and crises reduction are the third and fourth variables respectively that have an influence on crises recovery. Furthermore, crises recovery has an influence on tourists' behavioral intentions to revisit Egypt, governments' satisfaction in foreign and Arab markets, and tourists' positive word of mouth communication about visiting Egypt respectively.

**Keywords:** Tourism & Hospitality Crises, Crises Management System, Tourism Authorities, Crises Management Outcomes

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### **Introduction**

A crisis is defined as "an undesired, often unexpected and timely limited process with uncertain possibilities to develop. It demands immediate decisions to influence the development of a destination again positively and to restrict the negative consequences" (Glaesser, 2006, p. 11). In contrast, disaster is a negative incident with clear inevitable result. Therefore, disasters have no hesitation towards evolution opportunities (Glaesser, 2006; Faulkner, 2001). Moreover, crises can be classified based on their duration to three categories. (1) Immediate crises: involve crises with very little or no warning in advance. The establishments are unable to examine a problem or provide a plan before a crisis strike. (2) Emergine crises: develop slower and may be stopped or restricted by actions of the establishments. (3) Sustained crises: may continue weeks, months or years (Ritchie, 2009). In addition, Peltomäki (2015) illustrated that tourism crises could be economic, political, terrorism, socio-cultural struggle, ecological, health, technological fail, and commercial crises.

The hotel industry represents the ideal environment for confirmed crises to evolve and escalate. When the guests eat, drink and sleep in the hotels, they are exposed to potential crises linked to food poisoning, fire, criminal damage, terrorists (McMullan, 2011). Tourism in Northland is poorly deemed in standing disaster management planning. Tourism action plan, adopted by 'Tourism Cluster', gives a guideline for tourism initiatives to complement the current Civil Defence plans. It increases value to the official disaster management efforts (Becken and Hughey, 2013). The international tourists' development by region is 6 % in Europe, and in 10 % South-America. The losses of international tourist arrivals are 12 % in North Africa and 8 % in the Middle East which lost an estimated 5 million international tourist arrivals (United Nations World Tourism Organization, 2012).

Terrorism influences whole destinations, tourist groups, and businesses. Negative publicity and exemplary travel advisories of governments often lead to prevent tourists from traveling to a destination that has been exposed to a terrorist attack. Security is a marketable value in tourism broadly due to safety is widely known as a vital variable for travelers to choose specified destination. So, security cycle comprises all parts of tourist tour in the destination from arrival to departure (Beirman, 2016).

### **Research Problem**

Tourism establishments bear external or internal crises of different magnitudes. There is a shortage of crisis management strategy with regard to a delayed response; deficiency of crisis connection strategies. The success of recovery marketing at national level is still evaluated (Ritchie et al., 2004). Thailand in 2004 had not a master plan for tsunami disaster management; governmental authority had not specific responsibilities. It also had ineffective cooperation among different institutions, lack of involvement of local and international non-governmental organizations. There is also shortage of information management (Moe and Pathranarakul, 2006). Mair et al. (2014) indicated that the important themes of post-disaster and post-crisis recovery for tourist districts comprise a lack of connection between stakeholders and media. It involves choosing the efficient marketing messages; loss in destination reputation, and the changes in tourist behavior after crises. Salman et al. (2017) stated that after January 25<sup>th</sup> 2011, political, economic and social instability occurred in Egypt that led to severe results in the hospitality and tourism industry. Thus, these crises decreased the occupancy percentages, reduced profit margins, discharged high number employee, and declined quality of products and services.

### **Research Aim and Objectives**

The research aim is to assess the impact of Egyptian tourism authorities' role on tourism and hospitality crises management system after terrorism and political crises and its outcomes. The current research concentrates on the terrorism crises that face Egyptian tourism industry. This aim is divided into two objectives: (1) the research evaluates the six phases of crisis management plan through four essential actions that should be taken before, during and after the crisis. These actions are reduction; readiness; response; recovery of tourism and hospitality crises. (2) The researcher also assesses the impact of crises recovery on the governments' support in tourism market sources; tourist behavioral intentions to revisit Egypt.

### **Significance of the Research**

Much research and conception are needed in the scope of crisis connection and theory to progress the understanding of these crises. The cost of evolving a crisis management strategy could be far less than the cost of not holding one and a vital issue to any crisis strategy is crisis communication (Ritchie et al., 2004).

## **Literature Review**

### **Crises in the Tourism and Hospitality Industry**

Tourism crises caused by human have much longer loss of trust and more negative results than natural crises (Glaesser, 2006). The challenge of overcome painful crises shows many issues for an organization's capability to adjust to variation (Page, 2007). Crises in the tourism industry change from small crises such as staff disease, staff challenges and malevolence to external variables such as natural catastrophe; terrorism. Natural crises and human induced crises continue often longer and have negative influences on the tourism industry (Ritchie, 2009). Furthermore, the scope of tourism crises differs significantly depending on the type of a crisis. There are six stages of these crises. The stages involves local directors and employees, corporations and organizations, national industry sectors, national authorities, industry sectors overseas and international governmental and nongovernmental agencies (Henderson, 2007).

### **Records of Terrorist Attacks on Tourist Targets**

During the 1970s, athletes at the Munich Olympic Games were killed in famous terrorist attacks, which were a turning point for terrorism (Mansfield and Pizam, 2006). Tourists were the targets of 269 of 40129 terrorist incidents between January 1968 and July 2009. These incidents killed 684 tourists and injured 1191 others. Moreover, the Bali incident in Indonesia in 2002 represented the worst incident of terrorism targeting tourists to date. It killed 202 and injured 300 tourists in the tourist destination. Furthermore, the most unstable tourist regions that exposed to terrorist attacks are Africa and the Middle East/Persian Gulf. Terrorist attacks that occurred for each tourism destination were 67 incidents. Western Europe is followed, with 59 terrorist attacks (Althnayan, 2012).

There were 25,621 people were killed in terrorist incidents in 2016 globally. The terrorist attacks number decreased between 2006 and 2016. About 14,371 terrorist attacks were estimated in 2006, while 11,072 terrorist attacks in 2016. Africa is the highest lethality region because of terrorist attacks in 2010. About 879 attacks were estimated on the continent and 2,137 people killed in these attacks. About 704 terrorist attacks were recorded in Europe and Eurasia and 355 people were killed (Statista, 2018). University of Maryland (2018) also displayed the number of terrorism incidents in Egypt that ranged from 50 in 2011 to more than 500 incidents in 2015 and decreased to 370 incidents in 2016.

### **The Economic Impact of Terrorism on the Tourism Industry**

Terrorism attacks have essential negative influence on tourists, the tourism industry, the local society, and the economy of the destination (Mansfield and Pizam, 2006). The influence of these attacks on tourists identifies their behavior to travel to secure countries (Seddighi et al., 2000; Lepp and Gibson, 2003). During the 1970s and 1980s, the decline of the tourists' number after attacks by Basque nationalists and separatists and other terrorist groups was 140,000 (Enders and Sandler, 1991). Enders et al. (1992) stated that between 1974 and 1988, the decline of tourism revenues in Austria, Italy and Greece was estimated to US\$ 4.538 billion, US\$ 1.159 billion and US\$ 0.77 billion respectively. In the same duration, they stated that Europe lost US\$ 16.145 billion due to terrorism incidents. Fleischer and Buccola (2002) found that the performance of the Israeli hotel industry between 1992 and 1998 was estimated a 1.27% loss of total revenue through this duration.

### **Tourism and Hospitality Crisis Planning and Preparedness**

Effective crisis planning needs hospitality and tourism establishments to share in platforms of knowledge to participate distributed information for efficient crisis readiness and responses

(RACHERLA & HU, 2009). Jia et al. (2012) proposed a frame of information system for tourism crisis management. The integration of artificial intelligence and web technologies that were implemented in the framework could combine, sort, save, and share the knowledge throughout the establishments in all phases of crisis. Paraskevas et al. (2013) found that practical knowledge alone could become problematic in tourism crisis as it did not permit elasticity and might guide to sub-optimal or inadequate response. It should be completed by behavioral information which could be both implied and evident. Pennington-Gray et al. (2011) found that half of the respondents mentioned that there was low proportion of documented plans concerning practices for visitors. Resource distribution had a major influence on whether an establishment would share in crisis planning and connection practices than did crisis expertise.

Moreover, the realization of Finnish hoteliers towards crisis management is positive and that they are aware of its importance to their business. Although independent hotels have not a crisis management plan, the approach and the attitude are towards such a plan (Hartmann, 2011). Commitment and awareness of managers provide essential resources and efficient training to reduce losses, and relieve the impacts of hazards. Finally, organizational single- and double-loop learning from the crisis help hospitality professionals to know hospitality management contingency framework, improve proactive plans, assess a strategy's efficacy, embrace, and apply new strategies to resolve emergencies (AlBattat and Mat-Som, 2013).

### **Crises Management Practices in Tourism and Hospitality Industry**

A strategic, comprehensive and proactive approach to crisis management in the tourism industry is needed. It can be embraced by (1) improving proactive investigation and planning, (2) applying strategies while crises or catastrophes occur, (3) and assessing the efficacy of crises management strategies to assure continual improvement of them (Ritchie, 2004).

Furthermore, the effective crisis management in Northern Ireland hotels comprises of crisis team; crisis audit; crisis plan; and training (McMullan, 2011). Recovery of terrorism in crisis model depends on the engagement of most stakeholders has shown to be effective (Althnayan, 2012). In addition, there are no statistical significant variances in the applying of various operational practices of crisis management in the restaurants, according to different F&B premises, business organizations' types, and ownership frame. Majority of practices were applied reactively. Proactive strategies are complicated to apply globally, as the implement of internal variables to effectively resolve the external crisis often rely on external variables (legislation, marketing offer, politic situation etc.). They restrict managerial capabilities to apply internal variables. Furthermore, F&B managers do not know how to effectively overcome the financial crisis. It may be because of the shortage of researches and professional guidelines to effectively overcome the crisis (Kukanja & Planinc, 2013).

Furthermore, the 9/11 terrorist attacks have sudden and negative influence in decline the U.S. hotels' occupancy, and averages briefly followed occupancy decreasing. The impacts of the financial crisis in 2008 continue longer to develop, but are less outstanding and obviously well treated by most hotel managers. The U.S. hotels recover hastily, during four months of each crisis. New York's luxury hotels recognize the crises, but they are capable of recovery (Kosová & Enz, 2012). In addition, the economic crisis and global competition may have led Spanish hotels to reduce prices and monitor internal costs. The technological disorder exerts an important moderating impact on the relation between invention and hotel performance and that it neutralizes the negative influence of the crisis on hotel execution. Furthermore, when the management perceived the crisis impact on their business, it has significant negative effect on their marketing consequences (Campo et al., 2014).

On the other hand, bed bug invasions are a major health crisis that leads to economic and reputational losses to hotels extending from negative comments and claims, to lawsuits. The suggested frame is action-oriented and adapts the criteria of an efficient plan of crisis management. It concentrates on utilizing social media in crisis management, considering the role of controlling and messaging (Lui et al., 2015). Furthermore, most hotels are only ready to invest in the planning and applying a structured crisis management after occurrence of a crisis situation. Still, the cost of applying a constructed crisis management is higher than the prospect financial influence of a crisis. If a constructed crisis management exists, a critical image campaign might promote the perception. The presence of a detailed crisis management plan is considered the most effective crisis management tools (Zech, 2016).

Shehawy and ragab (2017) investigated top management practices of the travel agencies in Egypt during crises. They found that marketing practices should be applied because the top management focused on co-marketing with airlines and hotels. The management provided offers with special rates, targeted new market segments, and promoted new products. Also, the practices related to government enhancement were one of the most important crisis management practices to be applied, such as long-term government support, and an installment payments convention (e.g. taxes, loans). Moreover, the results indicated that travel agencies type (A, B, or C) and ownership form (national, international, or partnership) were the main features affecting travel agencies practices during crises.

### **Crisis Management Model in Tourism and Hospitality Industry**

Faulkner (2001) illustrated that applying the framework for investigating and analyzing of tourism disasters makes the model to be examined, filtered, and supplies additional insights into the characteristics of tourism disasters. Huang et al. (2007) explained Faulkner's (2001) tourism crisis management planning model. This model includes six phases which are displayed as follows:

- **Pre-event Phase:**

At this phase, the tourism authorities should plan for the worse situations for crisis management. (a) They examine current resources for treating a disaster, determine tasks and make decisions. (b) They identify a contingency list of all concerned tourism establishments' contacts. (c) They train the procedures.

- **Prodromal Phase:**

The disaster is pressing, but has not occurred. For an earthquake, this duration may be very short and give no time for readiness. The tourism authorities should compose a team to support the tourism industry in recovering from the natural catastrophe by a sound crisis management plan.

- **Emergency Phase:**

This phase means the influences of the disaster is felt and action is taken to rescue people and organization. The tourism authorities should take the responsibility and collaborates with all tourism sectors to recover destination image in identified time. The crises team should represent all possible tourism industry groups.

- **Intermediate Phase:**

When the short requirements of the people influenced must be handled to returning substantial services. In the tourism case, the aim at this point is to reduce the conversion of negative influence in particular areas and prevent expanding these impacts from the place to another place as quickly as possible.

- **Long-Term (Recovery) Phase:**

Faulkner (2001) also agreed with Beirman (2016) that special interest should also be taken to restore major tourist markets return to the destination. Thus, intensive marketing efforts should concentrate on these countries. The media in these countries should be supplied with accurate knowledge about destination's recovery and also re-emphasize their pre-booked convention or tours by the media spokesperson.

- **Resolution Phase:**

The final phase is the restoration to normality or transformation to better position. How well country responds to the disaster and how quickly it recovers from it will have a long-term impact on visitors' perceptions of the destination (Huang & Ralston, 2001). Thus, the destination must obviously and repeatedly illustrate to the international society its recovery situation and also ensure the public that they are working aggressively to return to normal position.

### **Essential Actions of Tourism and Hospitality Crises Management Model**

Four substantial actions are required in the six stages of crisis management plan before, during and after the catastrophe (Wilks and Moore, 2004; Beirman, 2016). These actions are explained as follows:

- **Reduction:**

Decreasing prospect influence is the most vital matter in a crisis management plan. SWOT analysis is required to decrease the probability of a crisis.

- **Readiness:**

Organizations demand to assess their crisis occurrence and improve strategic, tactical and connection plans. Crisis team must orderly investigate crisis management plans, manage crisis response, train and frequently obtain crisis management proficiency. Crises team requires being effectively prepared for the crises' influences and pressure.

- **Response:**

Loss surveillance in lives and assets is confirmed. The crisis connection plan should be proactive and assure involving stakeholders in tourism industry. The spokespersons must provide the knowledge to the media in a crisis therefore; it can be credible and arranged. Communication employees must be trained to handle the media and press issues. The communication list of local and international media, telephone lines, and fax machines or a mass email account should be kept to inform the media the updated recovery process of the destination in a timely manner. The authoritative website should have the update and accurate information about the destination; therefore, prospect visitors can obtain this information (Luhrman, 2005).

- **Recovery:**

The effectiveness of crisis management plan can be measured by three manners: (1) The quick response of establishment to resume entire business procedures; (2) The extent to which business retrieve to pre-crisis status; and (3) The level of crisis-impedance occurred since the crisis. That is, how the experiences educated have been participated to continued readiness to prevent future crises (Wilks and Moore, 2004; Beirman, 2016).

### **The Role of Egyptian Ministry of Tourism in Crisis Management**

There are four sectors of Ministry of Tourism that have role in tourism and hospitality crisis management. They involve (1) Minister Affairs Sector, (2) Planning, Research and Training

Sector, (3) Tourism & Hotels Establishments Sector, and (4) Tourism companies sector and tour guides, and Egyptian Authority for Tourism Promotion. (1) Minister Affairs Sector includes (a) Public Administration of Information and Statistics. This administration (1) collects, analyzes touristic data obtained from different sources, and provides information for Tourism Ministry's sectors. (2) It also provides the World Tourism Organization with touristic statistics of Egypt. Minister Affairs Sector also involves (b) Public Administration of Support Decision Making. (1) It participates in tourism conferences, and promotes decision-making. (2) It studies tourism crises (economic crises, terrorist attacks, food safety, and accidents of tourists) and recommends solutions for these problems. (3) It coordinates between tourism authorities to overcome the crises. (4) It also analyzes tourism statistics and prepares reports of it. Minister Affairs Sector also encompasses (c) Public Administration of Media Communication. (1) It issues press releases on the tourism sector, and covers touristic events of the Ministry in media. (2) It organizes field visits for press sector to recognize tourist areas. (3) It prepares periodic meetings between Minister and specialized writers to inform ministry's plans and achievements. Minister Affairs Sector also comprises (d) Public Directorate of International Relations. (1) It organizes international seminars in coordination with the World Tourism Organization. (2) It prepares to celebrate World Tourism Day and attends meetings of the International Tourism Alliance. (3) It prepares tourism agreements, and protocols between Egypt and different countries (Ali et al., 2018).

The second sector is Planning, Research and Training Sector. It embraces (a) Public Administration of Planning and Follow up. This administration (1) prepares studies of future needs for the tourism sector. (2) It analyzes data to predict tourism demand to Egypt. (3) It prepares survey of touristic services in the tourist destinations to develop these services. (4) It studies the plans of Egyptian Authority for Tourism Promotion and Public Authority for Tourism Development. This sector also includes (b) General Directorate of Tourism Research. This administration (1) prepares researches to improve tourism sector performance. (2) It publishes the Journal of Tourism Researches. (3) It implements the tourism plan. (4) It coordinates with the research bodies, universities and colleges of tourism and hotels (Ali et al., 2018).

In addition, the third sector is Tourism and Hotel Establishments Sector. It comprises Public Administration of Control and Inspection of Fixed, Floating Hotels, and Resorts. (1) It inspects on hotels to ascertain the service quality in Greater Cairo other governorates. (2) It examines the complaints received from different hotels. (3) It participates with the Egyptian Federation in training hotel employees.

In addition, the fourth important sector is Tourism Companies and Tour Guides Sector. It embraces Public Administration of Follow up the Performance of Tourism Companies and Programs. (1) This administration issues approvals of outbound, inbound and domestic tourism. Furthermore, Egyptian Authority for Tourism Promotion (1) develops a comprehensive assessment of the available tourism attractions in Egypt. (2) It develops the tourism promotion plans and programs. (3) It carries out all means of tourist attractions to Egypt internally and externally by all ways to increase the growth rates in the international tourism movement to Egypt. (4) It also provides marketing assistance and cooperation with tourism companies and establishments. The research concentrated on Central Administration of International Tourism due to its role in promoting touristic attraction of Egypt externally (Ali et al., 2018).

### **Research Framework**

According to a thorough literature review, an innovative and integrated crisis management model has been conducted to reduce, prepare, response, construct media and operational logistic team to recover the loss due to tourism and hospitality crises. The current model

adapted from Moe and Pathranarakul (2006). They suggested an integrated approach that could be adopted to disaster management in Thailand. This approach included both proactive and reactive strategies. The proactive conception needed to determination of crisis. Based on the crisis determined, the activities of: (1) reduction, (2) readiness, and (3) response are involved in the phases of forecasting and caution. The reactive conception included evaluating influences and its levels. Depending on the level of effects from catastrophes, response and recovery actions can accomplished for warning, contingency rescue, reform, and reconstruction stages in the catastrophe management. Thus, the influence evaluation is critical for effective applying of the disaster management. Risk determination and evaluation are normally managed by the crisis team in tourism and hospitality authorities at all levels.

In addition, to recover the physical assets of the disaster region instantly, more attention required to be confirmed on media connections to monitor the secondary influence on destination image (Huang et al., 2007; Mair et al., 2014). Therefore, the researcher suggested "crisis media team" as a new variable to be involved in current proposed framework. Furthermore, the contingency stage involved the safety and felicity of tourists and staff, contingency infrastructural maintenance, response on enquiries from relatives of victims by the incident, and media connections to reduce damage to the destination image (Standing Committee for Economic and Commercial Cooperation of the organization of Islamic Cooperation, 2017). The operations team is responsible for the tasks of emergency phase (Beirman, 2016). Therefore, the researcher suggested this variable in current proposed framework.

The destination can simplify tourism recovery from crises through reassuring prospect tourists of the region safety, redeveloping the employment of the destination to assist local tourism and hospitality industries recover their business (Huang et al., 2007). Therefore, the researcher suggested recovery has a positive impact on governments' satisfaction in market source, tourist behavioral intentions to revisit Egypt, and their word of mouth communication to promote visiting Egypt. Thus, the proposed conceptual model was displayed in the following section.

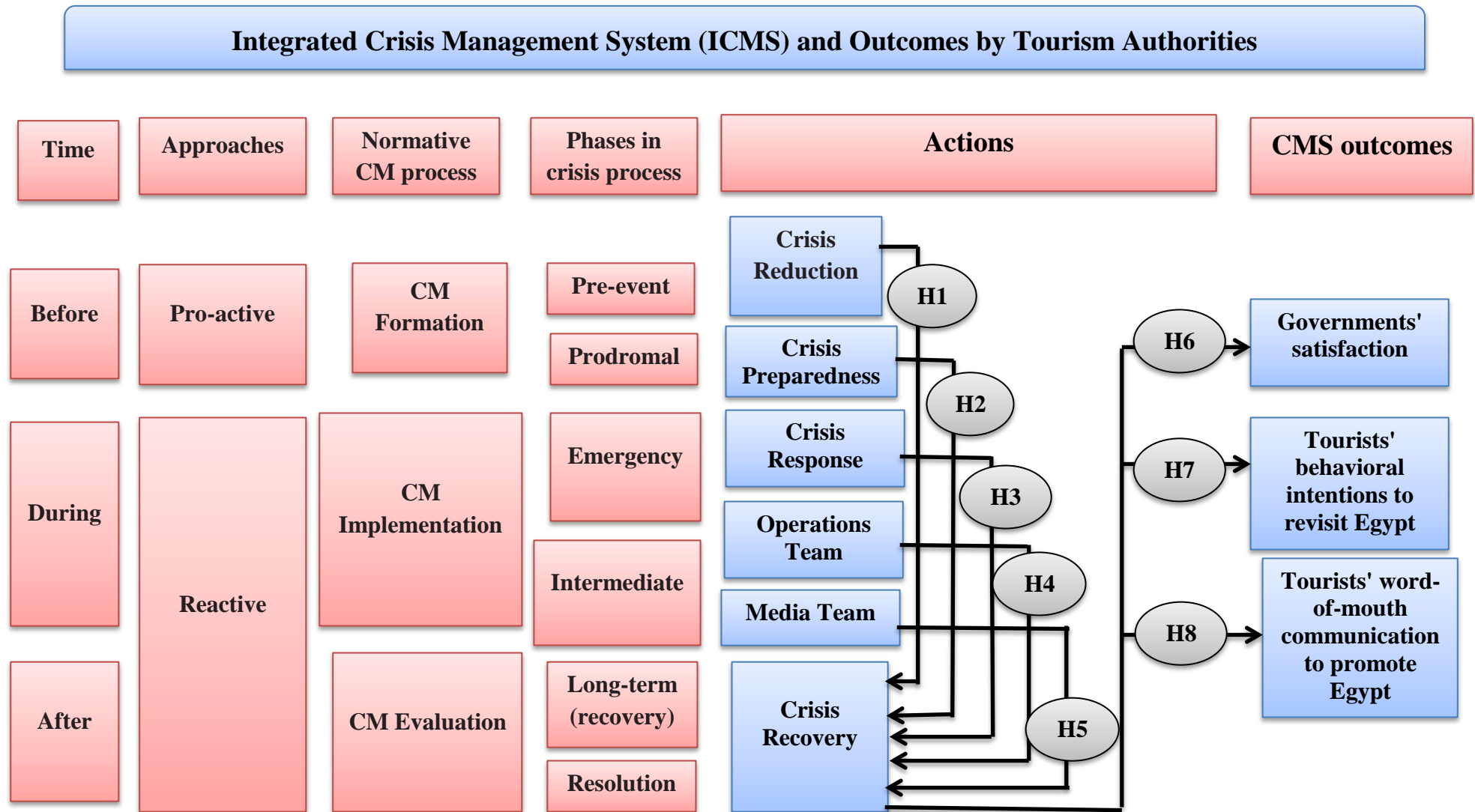
### **Hypotheses**

The research hypotheses were supposed through literature review as follows:

- H1.** The crisis reduction by tourism and hospitality governmental authorities affects positively on crisis recovery.
- H2.** The crisis readiness by tourism and hospitality governmental authorities affects positively on crisis recovery.
- H3.** The crisis response by tourism and hospitality governmental authorities affects positively on crisis recovery.
- H4:** The role of operations team of tourism and hospitality governmental authorities affects positively of crisis recovery.
- H5.** The crisis media team role of tourism and hospitality governmental authorities affect positively on crisis recovery.
- H6.** The crisis recovery of tourism and hospitality industry affects positively on governments' satisfaction in foreign and Arab markets.
- H7.** The crisis recovery of tourism and hospitality industry affects positively on tourists' behavioral intentions to revisit Egypt.
- H8.** The crisis recovery of tourism and hospitality industry affects positively on tourists' word of mouth communications about visiting Egypt.



Figure 1. Conceptual Framework



The proposed model adapted from Faulkner (2001), Moe and Pathranarakul (2006), Huang et al. (2007), Mair et al. (2014), Beirman (2016), Committee for Economic and Commercial Cooperation of the organization of Islamic Cooperation (2017) **Note:** "CM" means crises management

## **Methodology**

The current research conducted a survey research strategy through the use of questionnaire. Saunders et al. (2016) explained that the questionnaire is a single data collection technique that is known a mono method quantitative study. It examined the relationships between variables, which are measured numerically and analyzed using a range of statistical and graphical techniques. The questions are expressed clearly so they are understood in the same way by each participant.

## **Population and Sample of the Research**

The target population of the research is the four sectors of Egyptian Ministry of tourism and Egyptian Authority for Tourism Promotion. The research concentrated on 12 specified administrations in these sectors because they play a role in tourism and hospitality crisis management as mentioned above in literature review (Ali et al., 2018). The research concentrated on (1) Minister Affairs Sector which encompassed (a) Public Administration of Information and Statistics; (b) Public Administration to Support Decision Making; (c) Public Administration for Media Communication; (d) Public Directorate of International Relations. These administrations contained four managers and 43 employees. (2) Planning, Research and Training Sector also involved (a) Public Administration of Planning; (b) Public Administration of Follow up; (c) General Directorate of Tourism Research. These administrations also contained three managers and 29 employees. (3) Tourism and Hotel Establishments Sector included three Public Administrations of Control of (a) Fixed Hotels; (b) Floating Hotels; (c) Resorts. These administrations involved three managers and 24 employees. Moreover, (4) Tourism Companies and Tour Guides Sector embraced (a) Public Administration of Follow up the Performance of Tourism Companies and Programs. This administration involved one manager and 22 employees. Finally, the study focused on Egyptian Authority for Tourism Promotion that comprised (a) Central Administration of International Tourism. This administration included three managers and 72 employees. The total number of managers and employees in these administrations were 204 (14 managers and 190 employees) (General Secretariat Sector of Egyptian Ministry of Tourism, 2018). The sampling frame for any probability sample is a complete list of all the cases in the target population from which your sample will be drawn (Saunders et al., 2016). The sampling frame encompassed of the workforce in these administrations which were 204 managers and employees

A simple random sample was used. In a finite population, the sample size is determined by using the Yamane's formula. This formula is  $n=N/(1+N*e^2)$  where (n) is the sample size, (N) is the population size =204 managers and employees, and (e) is the level of precision = 0.05. The minimum sample size required from size of the current target population given a 95 per cent confidence level for 5 % margin of error is 135 cases.

## **Instrument**

Drawing from a comprehensive review of the relevant literature, the operationalization of the measurement indices of the current study's main constructs were based on: (1) existing, well-validated measurement scales from relevant empirical studies adapted to the Ministry of Tourism sectors' context; (2) five-point Likert scale, multiple-item indices. In an attempt to maximize their potential validity and comparability with relevant previous studies, all the research constructs and their measures were drawn and adapted from existing, well validated measurement scales that will be mentioned later for each construct. The questionnaire was then reviewed by five managers in Ministry of Tourism sectors and two academic professors in the hospitality industry to assure the content validity. The questionnaire included demographic characteristics of the respondents which included gender, age, and educational

level. It also involved work experience, the sector of Ministry of Tourism the respondents work, and management level of the respondents in these sectors. Three questions about types of crises that face tourism and hospitality industry, the existence of effective system for managing these crises, and the existence of communication protocol during crises among sectors of Ministry of Tourism. Questionnaire encompassed nine variables. They are Crisis reduction, crisis preparedness, crisis response, operations team, media team, and crisis recovery. They involved Governments' satisfaction in foreign and Arab markets about applied crisis management system, tourists' behavioral intentions to revisit Egypt after applying the crisis management system, and tourists' word of mouth communication to promote visiting Egypt after applying crisis management system.

### **Data Collection**

The data were collected via questionnaire from 135 randomly sample selected managers and employees who work in four sectors of Ministry of Tourism and Egyptian Authority for Tourism Promotion. This sample represented to 66.2 % of the population. The questionnaires were distributed from August to October 2018. Of the 165 distributed questionnaires, 140 questionnaires were returned. They were divided into 135 valid 5 non valid questionnaires. The valid questionnaires represented to 81.81 % of the distributed questionnaires.

### **Data analysis**

The questionnaire analysis was conducted by SPSS program (version 22), the collected data were processed and analyzed. Descriptive statistics were first conducted to profile respondents' demographic characteristics. Simple linear regression analyses were conducted to identify the impact of crises management variables on crises recovery of tourism and hospitality industry. It also applied to determine the influence of crises recovery on crises management system outcomes. One way Anova was also conducted to identify the differences between managerial sectors in crises recovery. The reliability of the constructs scale was conducted by Cronbach's Alpha. It is useful for identifying the internal consistency of the scale constructs.

### **Results and Discussion**

#### **Data Validity**

The researcher distributed the questionnaire to a number of professors in tourism and hospitality management and managers in Ministry of Tourism sectors to validate the questionnaire regarding to readability, ability to measure the research variables, and format. They are experts in the field of the research. Then, the questionnaire was updated and refined to reflect the responses of the respondents. Furthermore, the experts were interested in questionnaire and interacted with the researcher that adds to its validity.

#### **Data reliability**

The reliability test of the measure refers to stability and consistency of the various items of the questionnaire. Therefore, this test identifies reliability through examining the internal consistency of the questionnaire items. Cronbach's Alpha is one of the metrics that is used to measure a scale's reliability, in which its index ranges from 0.0 to 1.0. The researchers should target a value closer to 1.0, as Alpha value proves that the research instrument is consistent. In social sciences, the threshold value of 0.7 is acceptable.

**Table 1: Cronbach's Alpha value for Tourism and Hospitality Crisis Management System and its Outcomes**

Variables	Cronbach's Alpha value	No. of Items
Crisis Reduction	0.91	8
Crisis Readiness	0.96	13
Crisis Response	0.73	10
Operations team role	0.93	9
Media team role	0.78	6
Crisis recovery	0.96	15
Governments' satisfaction of crisis management system	0.90	5
Tourists' behavioral intentions after applying crisis management system	0.90	5
Tourists' word of mouth communication after applying crisis management system	0.94	3

In table 1, Cronbach's alpha metric was used to measure consistency and reliability of the research's constructs. Cronbach's alpha value of all constructs of the questionnaire ranges from 0.73 to 0.96. These values are acceptable values for each construct, where Cronbach's Alpha value is acceptable if it is more than 0.7.

**Table 2: Demographic Characteristics of the Respondents**

Variables		Frequency	Percentage (%)
<b>Gender</b>	Male	68	50.4
	Female	67	49.6
<b>Total</b>		135	100 %
<b>Age</b>	between 21 and 30	18	13.3
	Between 31 and 40	49	36.3
	Between 41 and 50	33	24.4
	More than 50	35	25.9
<b>Total</b>		135	100 %
<b>Years of experience</b>	Less than 5 years	12	8.9
	5-10 years	48	35.6
	more than 10 years	75	55.6
<b>Total</b>		135	100 %
<b>Educational level</b>	Bachelor	78	57.8
	Diploma	18	13.3
	Master	25	18.5
	PhD	14	10.4
<b>Total</b>		135	100 %

Table 2 displays the demographic characteristics of the research through four variables. They are age, gender, years of experience, and educational level. The first variable (gender) reflects that males are equal to females that represent 50 % of the respondents for each one. The second variable (age) refers to the age categories of the respondents. The "31-40" represents the highest percentage (36.3 %), and the "above 50" represents the second level which reached to 25.9 % of the respondents. The third variable concerns about the years of experience in the work and reflects that more than half (55.6 %) of the respondents spent more than 10 years. Furthermore, 35.6 % of the respondents spent 5-10 years, while 8.9 % of the respondents spent less than 5 years. The fourth variable (educational level) refers to the educational background of the respondents. More than half (57.8 %) of them got bachelor

degree, while 13.3 % of them had diploma. The respondents who got master and PhD degree of the respondents were 18.5 % and 10.4 % respectively.

**Table 3: Descriptive statistics of the Respondents' Occupational Data**

Respondents occupational data		Frequency	percentage
<b>Managerial sector Total =135 (100%)</b>	Tourism Minister Affairs Sector	34	25.2
	Planning, Research and Training Sector	18	13.3
	Tourism & Hotels Establishments Sector	31	23
	Tourism companies sector and tour guides	29	21.5
	Egyptian Authority for Tourism Promotion	23	17
<b>Managerial level Total =135 (100%)</b>	Top management	29	21.5
	Supervision	35	25.9
	Operational	71	52.6

Table 3 shows that the employees of Tourism Minister Affairs Sector represent the first sector of the respondents (25.2 %). The employees of Tourism & Hotels Establishments Sector are the second sector of the respondents (23 %), while the employees of the Tourism companies sector and tour guides represent the third sector of the respondents (21.5 %). The employees of the Egyptian Authority for Tourism Promotion and Planning, Research and Training Sector are the fourth (17 %) and fifth (13.3 %) sector of the respondents respectively. The results reflect the variety of the respondents who are related to tourism and hospitality crises management in the Ministry of Tourism sectors. Furthermore, the research also targeted the different managerial level of these sectors to represent the research population and examine the research aim. The employees of operational, supervision, and top management level represent 52.6 %, 25.9 %, 21.5 % of the respondents respectively.

**Table 4: Descriptive statistics of Tourism and Hospitality Crises Management System**

Tourism and hospitality crises management system		Yes		No	
		Freq.	%	Freq.	%
<b>Types of crises that face tourism and hospitality industry</b>	Terrorism	106	78.5	29	21.5
	Crime	14	10.4	121	89.6
	Financial	48	35.6	87	64.4
	Political	48	35.6	87	64.4
	Physical accidents	11	8.1	124	91.9
	Food Safety	24	17.8	111	82.2
	Health	3	2.2	132	97.8
	Weather	6	4.4	129	95.6
	Natural disasters	10	7.4	125	92.6
	Equipment failure	7	5.2	128	94.8
	Cultural barriers	14	10.4	121	89.6
		<b>Freq.</b>	<b>%</b>	<b>Freq.</b>	<b>%</b>
<b>Tourism authorities have crises management system</b>		56	41.5	79	58.5
<b>Tourism authorities have communication protocols during crises</b>		88	65.2	47	34.8
<b>Ministry of Tourism have communication protocol internally and externally during crises</b>	National government	32	23.7	103	76.3
				<b>Continued</b>	

<b>Table 4: Continued</b>					
	Ministry of Interior	58	43	77	57
	National emergency management agency	5	3.7	130	96.3
	Ministry of Foreign Affairs	35	25.9	100	74.1
	Tourism Minister Affairs Sector	59	43.7	76	56.3
	Planning, Research and Training Sector	22	16.3	113	83.7
	Tourism & Hotels Establishments Sector	27	20	108	80
	Tourism companies sector and tour guides	38	28.1	97	71.9
	Egyptian Authority for Tourism Promotion	25	18.5	110	81.5
	National media	23	17	112	83
	International media	19	14.1	116	85.9

Table (4) displays types of crises that encounter tourism and hospitality industry. Terrorism is the first crisis. It represents 78.5 % of the respondents. Financial and political crises are the second crises, where they represent 35.6 % of the respondents for each one. Food safety and crime represent the third and fourth ones, where they represent 17.8 % and 10.4 % of the respondents respectively. Therefore, they are the vital crises for tourism and hospitality industry. Other types of crises have less influence on tourism and hospitality industry. These crises represent 10.4 % for cultural barriers, 8.1 % for physical accidents, 7.4 % for natural disasters, 5.2 % for equipment failure, 4.4 % weather, and 2.2 % for health. On the other hand, less than half of the respondents (41.5 %) mentioned that tourism and hospitality authorities have crises management system. It means that Ministry of Tourism and its sectors may have not an integrated crises management system to apply in case of crises mentioned above. Thus, 58.5 % of the respondents do not aware about the system existence or the team who is responsible for applying crises management system.

In addition, 65.2 % of the respondents mentioned that Ministry of Tourism has a communication protocols with internal sectors during crises. It has protocol with Tourism Minister Affairs Sector as the first one that represents 43.7 % of the respondents. It also has a protocol with Tourism & Hotels Establishments Sector, Egyptian Authority for Tourism Promotion, and Planning, Research and Training Sector, as the last sectors that represent 20 %, 18.5 %, and 16.3 % of the respondents respectively. It reveals that Ministry of tourism should improve cooperation with these last sectors to monitor hotel sector and resolve its crises, promote Egyptian tourism destinations to inbound tourists, and prepare tourism researches and plans. Externally, Ministry of Tourism has a communication protocol with Ministry of Interior, as a first organization that it represents 43 % of the respondents. In contrast, it has less communication with Ministry of Foreign Affairs, National, and International media, where communication with these organizations represents 25.9 %, 17 % and 14 % respectively. Therefore, the Ministry of Tourism should improve the communication with these last organizations to present the applied crises management actions for foreign governments through the Ministry of Foreign Affairs and media. It also leads to mitigate the negative impacts of crises and inform foreign governments the official role of Egyptian government.

**Table 5: Means of Tourism and Hospitality Crises Management System's Variables and Outcomes**

N= 135			
Crisis management variables	Mean	Std. Deviation	Level
Crises reduction	3.19	0.89	Moderate
Crises readiness	3.00	0.99	Moderate
Crises response	3.16	1.05	Moderate
Operations team role	3.21	0.88	Moderate
Media team role	3.04	1.05	Moderate
Crises recovery	3.20	0.87	Moderate
Crisis management outcomes			
Governments' satisfaction in foreign countries	2.88	0.91	Moderate
Tourists' behavioral intentions to revisit Egypt	3.10	0.96	Moderate
Tourists' word of mouth communication about Egypt	3.26	1.02	Moderate

Table (5) presents the means and standard deviations of the tourism and hospitality crises management variables, where the means range between 3.00-3.21. The variable "operations team role" ranks first with a mean =3.21 and standard deviation=0.88. In contrast, the "Crises readiness", ranks last with a mean=3.00 and the standard deviation = 0.99. It refers to the reactive actions which are taken by tourism and hospitality authorities after crises occurrence. This result agreed with Kukanja and Planinc (2013) who indicated that majority of operational practices to manage crises in restaurants were applied reactively. It may be because of the shortage of researches and professional guidelines to effectively overcome the crisis. Moreover, the means of crises management outcomes range from 2.88-3.26, where, the "tourists' word of mouth communication about Egypt" ranks first with a mean = 3.26 and standard deviation = 1.02. The "governments' satisfaction in foreign countries of applying the crises management system" ranks last with a mean=2.88 and standard deviation = 0.91. It means that applying crises management system leads to tourists' positive word of mouth communication about Egypt firstly. It leads to Tourists' behavioral intentions to revisit Egypt secondly. Thirdly, it leads to Governments' satisfaction in foreign countries. It is noted that the means' attitude of all crises management variables and outcomes is neutral, because means' values range from 2.60-3.39 in five-point Likert scale (Abd El-Fatah, 2018). It reveals that the application of crisis management variables, in the Ministry of Tourism sectors is moderate. Therefore, the crises management outcomes are also moderate. These results disagreed with Todman-Lewis (2017) who revealed that tourism and hospitality practitioners might benefit from preparing crisis plans, creating relationship with crisis leaders and teams, and participating with the media. These procedures enhanced favorable perception and tourists' behavior of traveling. In addition, These results also disagreed with Tse et al. (2006) who indicated that majority of Hong Kong restaurants have succeeded in making profit under the reverse influence of the SARS outbreak, meanwhile the cost decreasing and revenue promotion strategies. However, the current results agreed with Ritchie at al. (2004) who found that the response of British Tourist Authority to the foot and mouth outbreak and its influence on tourism industry was restricted in part due to a shortage of readiness, the speed, and intensity of international media coverage. The practices were reactive including contradiction key messages to stakeholders, partly because of shortage of information at the national level. Recovery marketing was restricted because of the period of disease outbreak.

**Table 6: Simple Linear Regression of Tourism and Hospitality Crises Management Variables on Crises Recovery**

Crises management variables (independent)	Tourism and hospitality crises recovery (dependent)									
	R <sup>2</sup>	F	Sig.	T	Sig.	Beta	Unstandardized coefficients			
							B	Std. Error	Constant	Std. Error
Crises reduction	0.39	84.4	0.01	9.18	0.01	0.62	1.14	0.12	19.02	3.29
Crises readiness	0.52	142.7	0.01	11.95	0.01	0.72	0.72	0.06	19.55	2.51
Crises response	0.52	145.9	0.01	12.08	0.01	0.72	0.90	0.07	19.71	2.48
Operations team	0.65	244.0	0.01	15.62	0.01	0.80	1.31	0.08	10.10	2.52
Media team	0.49	129.4	0.01	11.38	0.01	0.70	1.44	0.13	21.66	2.46

As depicted in table (6) operations team role is the first variable has influence on crises recovery by 65 %. The regression equation is "crises recovery = 10.10+1.31 × operations team". Therefore, hypothesis four was proved positively. Moreover, crises readiness and crises response are the second variables have an influence on crises recovery by 52 % for each variable. The regression equations of these variables are "crises recovery = 19.55+ 0.72 × crises readiness", "crises recovery = 19.71 + 0.90 × crises response". Therefore, hypotheses two and three are proved positively. These results agreed with Wilks and Moore (2004) Beirman (2016) who stated that organizations demand to assess crisis occurrence and improve strategic, tactical and connection plans. Crisis team must orderly investigate crisis management plans, manage crisis response, train and frequently obtain crisis management proficiency. Crises team required being effectively prepared for the crises' influences and pressure. Huang and Ralston (2001) also agreed with the previous results who illustrated that how well country responds to the disaster and how quickly it recovers from it will have a long-term impact on visitors' perceptions of the destination. Furthermore, the media team role is the third variable has influence on crises recovery by 49 %. The regression equation is "crises recovery = 21.66 +1.44 × media team role". Therefore, the hypothesis five is proved positively. These results agreed with Huang et al. (2007) and Mair et al. (2014) who mentioned to recover the physical facilities of the disaster area promptly, more attention needed to be emphasized on media communications to control the secondary impact on destination image and reputation. The media communication procedures were explained in review by Luhrman (2005). Finally, crises reduction is the fourth variable has influence on crises recovery by 39 %. The regression equation is "crises recovery = 19.02 + 1.14 × crises reduction". Thus, hypothesis one is proved positively. These results agreed with Wilks and Moore (2004) Beirman (2016) who explained that decreasing prospect influence was the most vital matter in a crisis management plan. SWOT analysis was required to decrease the probability of a crisis. Therefore, the results emerged from table 5 and 6 are the main contribution of the research. It refers that crises operations team, crises readiness, response, and media team role have greater influence than crises reduction on crises recovery.



**Table 7: Simple Linear Regression of Tourism and Hospitality Crises Recovery on Governments' Satisfaction in Foreign and Arab Markets**

	Governments' satisfaction in foreign and Arab markets									
	R <sup>2</sup>	F	Sig.	T	Sig.	Beta	Unstandardized coefficients			
							B	Std. Error	Constant	Std. Error
<b>Tourism and hospitality crises recovery</b>	0.40	87.6	0.01	9.36	0.01	0.63	0.22	0.02	3.87	1.17

From the results in table (7), crises recovery has influence on governments' satisfaction in foreign and Arab markets by 40 %. The regression equation is "governments' satisfaction in foreign and Arab markets = 3.87 + 0.22 × crises recovery". Therefore, hypothesis six is proved positively. This result disagreed with Ritchie at al. (2004) who found that the response of British Tourist Authority to the foot and mouth outbreak and its influence on tourism industry was restricted in part due to a shortage of readiness, the speed, and intensity of international media coverage. This result agreed with Huang et al. (2007) who found that establishing a crisis management plan facilitated tourism recovery from negative occurrences. Recovery occurred via protecting and rebuilding a positive destination image, reassuring potential visitors of the safety of the area, and re-developing the functionality of the destination to help local travel and tourism industries recover their business.

**Table 8: Simple Linear Regression of Tourism and Hospitality Crises Recovery on Tourists' Behavioral Intentions to Revisit Egypt**

	Tourists' behavioral intentions to revisit Egypt									
	R <sup>2</sup>	F	Sig.	T	Sig.	Beta	Unstandardized coefficients			
							B	Std. Error	Constant	Std. Error
<b>Tourism and hospitality crises recovery</b>	0.44	102.9	0.01	10.15	0.01	0.66	0.25	0.02	3.74	1.20

As seen in table (8), crises recovery has influence on tourists' behavioral intentions to revisit Egypt by 44 %. The regression equation is "tourists' behavioral intentions to revisit Egypt = 3.74 + 0.25 × recovery". Therefore, the hypothesis seven is proved positively. This result agreed with Huang et al. (2007) and Mair et al. (2014) who revealed that crisis management was needed to retain the confidence of travelers and the tourism industry, and also to minimize the impact of a disaster on a destination.

**Table 9: Simple Linear Regression of Tourism and Hospitality Crises Recovery on Tourists' Word of Mouth Communication about Egypt**

	Tourists' positive word of mouth communication about Egypt									
	R <sup>2</sup>	F	Sig.	T	Sig.	Beta	Unstandardized coefficients			
							B	Std. Error	Constant	Std. Error
<b>Tourism and hospitality crises recovery</b>	0.25	44.22	0.01	6.65	0.01	0.50	0.12	0.02	4.14	0.88

Table (9) displays that crises recovery has influence on tourists' positive word of mouth communication about visiting Egypt by 25 %. The regression equation is "tourists' positive word of mouth communication = 4.14 + 0.12 × crises recovery". Therefore, the hypothesis eight is proved positively. The results emerged from table 7 to 9 are new contributions of the research. It can be noted from tables 7, 8, 9 that crises recovery has influence on tourists' behavioral intentions to revisit Egypt firstly by 44 %. It has impact on governments' satisfaction in foreign and Arab markets secondly by 40 %. Finally it has effect on tourists' word of mouth communication about Egypt. It means that tourism Authorities should convince the governments in foreign countries with the effectiveness of their crises management system. Then these governments encourage their citizens to revisit Egypt. These citizens promote Egypt through positive word of mouth communication.

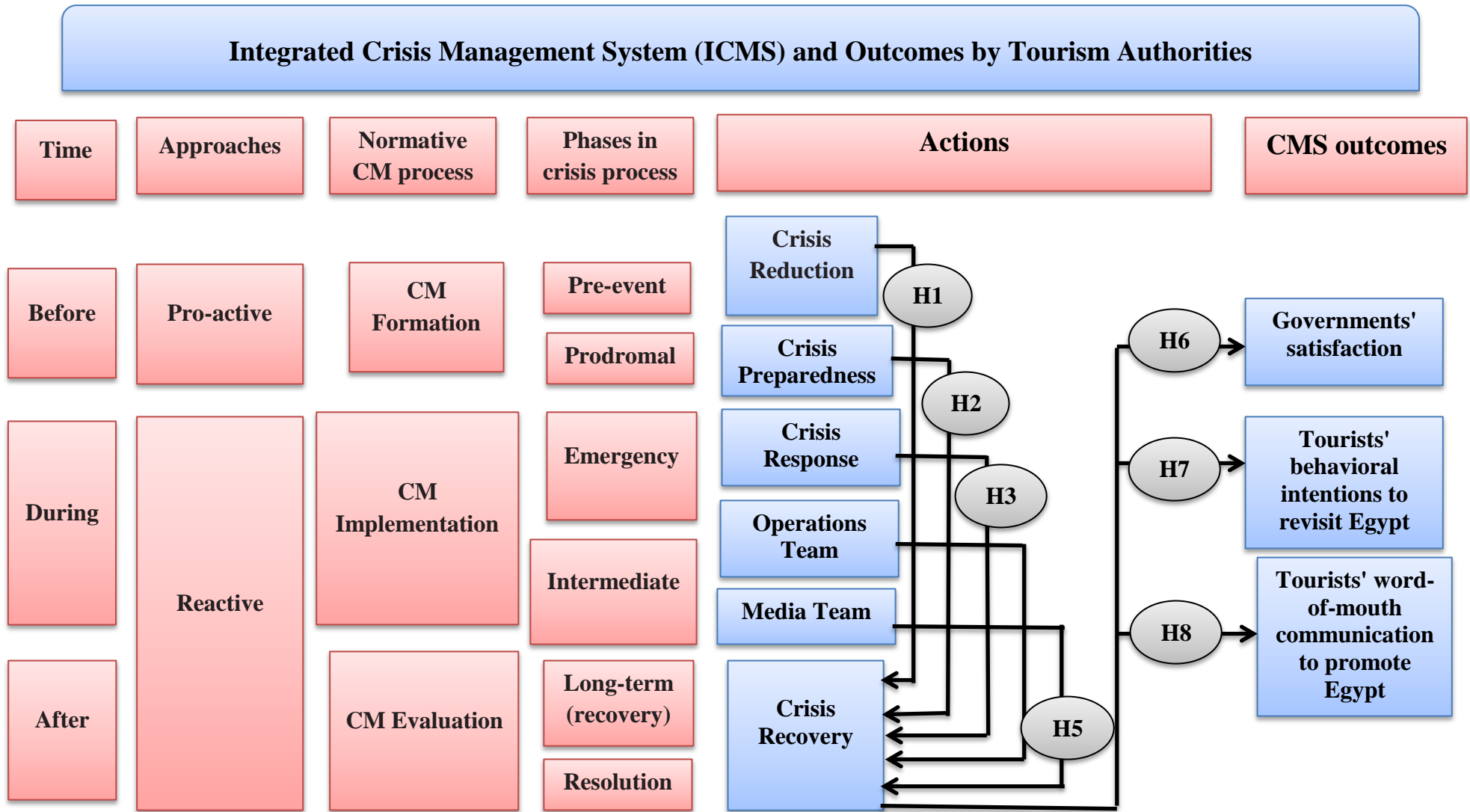
**Table 10: Differences between Managerial Sectors on Tourism and Hospitality Crises Recovery by One-Way Anova**

<b>Crises Recovery</b>	<b>Sum of squares</b>	<b>DF</b>	<b>Mean square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	1108.90	5	221.780	1.32	0.26
<b>Within Groups</b>	21748.03	129	168.59		
<b>Total</b>	22856.93	135			

Table 10 shows that there are no statistically significant differences between managerial sectors of Ministry of Tourism with regards to crises recovery, where p value=0.26. It is also a new contribution of the research.

Finally, the proposed model is empirically tested. Therefore, the Ministry of Tourism sectors can depend on it in resolving the tourism and hospitality crises. The researchers can utilize it in future studies of crises management. The empirical model is showed as follows:

Figure 2: Empirical Model



**Table 11: Constraints of Implementing Integrated Crises Management System in Egyptian Tourism Authorities**

Constraints	Frequency	Percentage (%)
Lack of crises planning and preparedness	25	18.51
Lack of efficient human resources	22	16.29
There is no crises management unit, organizational chart, and responsibilities of the crises team	19	14.07
Lack of communication, media, and marketing procedures during crises	14	10.37
Lack of crises reduction procedures	9	6.66
Lack of crises response procedures	7	5.18
Lack of information and communication technology and databases	6	4.44
Lack of crises recovery procedures	1	0.74
Respondents who not reply on this question	32	23.70
<b>Total</b>	<b>135</b>	<b>100 %</b>

Table 11 displays that the constraints encounter implementation of integrated management system of tourism and hospitality crises in Egyptian Ministry of Tourism are varied. Total number of the respondents on this question is 103 (76.30 %). The first constraint is "lack of crises planning and preparedness" that represents 18.51 % of the respondents. The responses include the proactive crises management plan is not exist, but the plan is reactive after the crises occur. This result disagreed with Pennington-Gray et al. (2011) who found that the majority of tourism establishments examined had a written crisis readiness plan which was updated yearly. Moreover, the scientific methodology does not also exist in the Ministry of Tourism. Top management does not convince of crises management, but the managers have the traditional thinking in crises management. There is no financial support for crises team to set proactive crises plan. "Lack of efficient human resources" is the second constraint which represents 16.29 % of the respondents. It involves that there is no qualified human resources are capable of resolve crises. The Ministry of Tourism does not depend on experts in crises management. Top management and staff do not have sufficient training and experience to manage tourism and hospitality crises. Top management does not give the opportunity for efficient employees to participate to crises management. This result disagreed with Hartmann (2011) who showed that the functions of employees are identified so that everyone realizes what to do in a crisis, and important phone numbers are determined. Todman-Lewis (2017) also stated that commitment and awareness of managers provide essential resources and efficient training to reduce losses, and relieve the impacts of hazards. Zech (2016) also found that crisis management trainings were also recognized by experts and all stakeholders surveyed as most efficient crisis management tool.

The third constraint is "there are no crises management unit, organizational chart, and responsibilities of the crises team" that represents 14.07 % of the respondents. It includes that crises management unit does not exist in the organizational chart of the Ministry of Tourism. The crises management system is not update. Crises management team and crises management guide do not exist. Crises management system is not effective to forecast the crises and resolve them. The fourth one is "lack of communication, media, and marketing procedures during crises" which represents 10.37 % of the respondents. The responses involve that the sectors in the Ministry of Tourism do not connected with internal and external stakeholders. This result disagreed with Pennington-Gray et al. (2011) who indicated that most establishments had direct connection with domestic contingency readiness agencies, but had less repeated communication with national agencies. Zech (2016) also found that active

stakeholders' engagement reduces crisis influence in all crisis phases. In addition, there is lack of advertising to Egypt correctly, therefore the foreign countries do not convince that Egypt is a safe destination. There is lack of marketing plan for tourism destinations in Egypt. The spokesperson of the Ministry of Tourism does not exist.

Furthermore, "lack of crises reduction procedures and response procedures" are the fifth and sixth constraints that represent 6.66 % and 5.18 % of the respondents respectively. In terms of leakage in crises reduction, Top management has a shortage of crises management awareness and does not inform crises management plan to employees. Top management has a shortage of awareness about tourism threats and its effects. "Lack of information and communication technology and databases" is the seventh constraint which represents 4.44 % of the respondents. It includes there is no complete database about past crises that encounter tourism destinations in Egypt. The accurate and sufficient information about crises does not exist. The updated technological applications do not applied in crises management. The last constraint is "lack of crises recovery procedures". It represents 0.74 % of the respondents. It involves that the results of crises recovery is not sufficient to convince tourists to revisit Egypt. Respondents who not reply on this question represent 23.70 %.

**Table 12: Suggestions for Implementing Integrated Crises Management System in Egyptian Tourism Authorities**

Suggestions	Frequency	Percentage (%)
Establishing crises planning and preparedness procedures	29	21.48
Hiring an efficient human resources	23	17.03
Establishing crises management unit, and responsibilities of the crises team	19	14.07
identifying crises response procedures	16	11.85
Establishing crises reduction procedures	7	5.18
Applying information and communication technology and databases	7	5.18
Determining communication, media, and marketing procedures during crises	7	5.18
Implementing crises recovery procedures	3	2.22
Identifying operations team role	2	1.48
Respondents who not reply on this question	22	16.29
<b>Total</b>	<b>135</b>	<b>100 %</b>

Table 11 shows that the suggestions of implementing integrated crises management system in Egyptian tourism authorities are important. There are 113 (83.70 %) respondents who respond on this question. The first suggestion is establishing crises planning and preparedness procedures, which represents 21.48 %. It includes identifying threats the encounter tourism and hospitality industry. Preparing an integrated and proactive plan through engagement the Ministry of Tourism sectors and experts to resolve different types of the crises is also included. Examining the tourism crises in other countries and how they recover them. It also involves organizing regular meetings among Ministry of Tourism sectors to investigate seasonal and expected crises. Providing financial resources for implementing crises plan is also included. The second suggestion is hiring efficient human resources in crises management team, which represents 17.03 %. It involves identifying the responsibilities of crises management team during crises, consulting experts in crises management, and training the human resources on crises management. Identifying integrated crises management team

that consists of related Ministry of Tourism' sectors, academics, practitioners, private sector is also included.

Establishing crises management unit is the third constraint, which represents 14.07 %. It includes establishing effective and integrated crises management unit, identifying crises team, and their responsibilities. Training crises team on crises management continuously. Establishing crises reduction procedures, using information and communication technology and databases, and determining communication, media, and marketing procedures during crises are the fourth constraints that represent 5.18 % for each one. Crises reduction procedures include identifying the negative impacts, collecting the information of tourism and hospitality crises. Increasing the awareness of crises management among employees and managers, establishing the database of past crises and scenarios of solving them are also involved. Furthermore, applying information and communication technology include establishing accurate and sufficient database of crises that face tourism and hospitality industry. Using technology and social media in crises management are also involved. Determining communication, media, and marketing procedures during crises also involve that efficient spokespersons should exist; the Ministry of Tourism should connect to governmental authorities to solve crises. Media team should use different media means internally and externally, connect to tourism promotion authority's offices in foreign countries. Setting plan for media communication during crises and promotion tourism destination after crises. The fifth suggestion is implementing crises recovery procedures that represent 2.22 %. They involve sustainable follow up of crises, marketing recovery procedures that taken tourism authorities for foreign countries. Incentives should be taken to promote tourists to revisit Egypt. The sixth suggestion is identifying operations team role that represents 1.48 % of the respondents. It includes providing operations team all authorities, financial and technical support to manage crises and make effective decisions.

### **Conclusion and Recommendations**

The research aimed to assess the impact of Egyptian tourism authorities' role on tourism and hospitality crises management system after January 25<sup>th</sup> 2011 and its outcomes. The research adapted a conceptual model of the crises management system's variables and outcomes. The conceptual model and hypotheses were then tested in a sample of managers and employees in Ministry of Tourism sectors by conducting a questionnaire. The study found that the application of crises management variables and outcomes in the Ministry of Tourism sectors are moderate. This shortage in applying crises management system was due to lack of crises planning and preparedness and lack of efficient human resources. There is no crises management unit, organizational chart, and responsibilities of the crises team and Lack of communication, media, and marketing procedures during crises. Moreover, operations team role, crises readiness and response, are first and second variables, whereas the media team role and crises reduction are the third and fourth variables respectively that has an influence on crises recovery. Furthermore, crises recovery has an influence on tourists' behavioral intentions to revisit Egypt, governments' satisfaction in foreign and Arab markets, and tourists' positive word of mouth communication about visiting Egypt respectively. There are many constraints encounter the Ministry of Tourism sectors in applying crises management system. Therefore, they provide vital suggestions to apply it effectively. Finally, the proposed model was empirically tested. Therefore, the Ministry of Tourism sectors can depend on this model in resolving the tourism and hospitality crises.

The Ministry of Tourism sectors should establish an integrated crises management system for maximizing the outcomes of crises management system. Ministry of Tourism should prepare an integrated and proactive plan through engagement the Ministry of Tourism sectors and

external experts to handle tourism and hospitality crises effectively. It should provide financial resources for applying crises management plan. It should establish integrated crises management unit, identify efficient crises team, their responsibilities, and consult experts to train this team. The Ministry of tourism should use information and communication technology and databases in crises management. It should determine communication, media, and marketing procedures during and after crises. Incentives should be taken to promote tourists to revisit Egypt. Finally, operations team should be provided all authorities, financial and technical support to manage crises and make effective decisions.

### Limitations and Further researches

The study was applied on Egyptian Ministry of Tourism sectors from August to October 2018 to assess their role on tourism and hospitality crises management and its outcomes. However, the future research can measure the impact role of tourism bureau in Red Sea, South Sinai, Luxor and Aswan etc. in tourism and hospitality crises management.

### References

- Abd El-Fatah, E. (2018). *Introduction to Descriptive and Inferential Statistics* by using SPSS. Available from: [http://site.iugaza.edu.ps/mbarbakh/files/2010/02/questionnaire\\_analyzis.pdf](http://site.iugaza.edu.ps/mbarbakh/files/2010/02/questionnaire_analyzis.pdf) (Accessed 5 November 2018).
- AlBattat, A. R. and Mat-Som, A. P. (2013). Emergency Preparedness for Disasters and Crises in the Hotel Industry. *SAGE Open*, 3 (3): 1-10.
- Ali, M., Lotfy, H., Slim, H. and Fawzy, H. (2018). *Guide of Egyptian Ministry of Tourism*, Cairo: General Secretariat Sector of Egyptian Ministry of Tourism.
- Althnayan, A. (2012). *Tourism and terrorism: A crisis management perspective an investigation of stakeholders' engagement in the context of Egyptian holiday destinations*. Doctoral dissertation. United Kingdom :University of Hull.
- Becken, S. and Hughey, K. F. d. (2013). Linking tourism into emergency management structures to enhance disaster risk reduction. *Tourism Management*, 36: 77-8.
- Beirman, D. (2016). *Tourism Risk, Crisis and Recovery Management Guide*. Available from <https://www.uts.edu.au/sites/default/files/20160329-Beirman-Risk-Crisis-Recovery-Tour-Wholesalers.pdf>, (Accessed 22 June 2018).
- Campo, S., Díaz, A. M. & Yagüe, M. J. (2014). Hotel innovation and performance in times of crisis. *International Journal of Contemporary Hospitality Management*, 26(8): 1292-1311.
- Enders, W and Sandler, T. (1991). Causality between transnational terrorism and tourism: the case of Spain, *Terrorism*, 14(1) 49-58.
- Enders. W; Sandler, T. and Parise, G.F. (1992). An econometric analysis of the impact of terrorism on tourism, *Kyklos*, 45(4) 531-554.
- Faulkner, B. (2001). Towards a framework for tourism disaster management. *Tourism Management*, 22 (2): 135-147.
- Fleischer, A. and Buccola, S. (2002). War, Terror and the Tourism Market in Israel”, *Applied Economics* 34, 1335-1343.
- General Secretariat Sector of Egyptian Ministry of Tourism. (2018). statistical report of personnel number in Tourism Ministry: Cairo.

- Glaesser, D. (2006). *Crisis management in the tourism industry*. Oxford: Elsevier Inc.
- Hartmann, J. (2011). *Crisis Management of the Hotel Industry in Finland*. Available from: [https://www.theseus.fi/bitstream/handle/10024/40611/Hartmann\\_Jana.pdf?sequence=1](https://www.theseus.fi/bitstream/handle/10024/40611/Hartmann_Jana.pdf?sequence=1) (Accessed 1 May 2018).
- Henderson, J. (2007). *Tourism crises. Causes, consequences & management*. Oxford: Elsevier Inc.
- Huang, Y. C., Tseng, Y. P. and Petrick, J. F. (2007). *Crisis Management Planning to Restore Tourism after Disasters: A Case Study from Taiwan*. Available from: [https://www.researchgate.net/profile/Yung\\_Ping\\_Tseng/publication/232951271\\_Crisis\\_Management\\_Planning\\_to\\_Restore\\_Tourism\\_After\\_Disasters/links/0f3175342c302eb89c000000.pdf](https://www.researchgate.net/profile/Yung_Ping_Tseng/publication/232951271_Crisis_Management_Planning_to_Restore_Tourism_After_Disasters/links/0f3175342c302eb89c000000.pdf) (Accessed 7 October 2018).
- Huang, Y.C. and Ralston, L.S., (2001). How a Crisis Marketing Plan can Help Taiwan Recover its Tourism Industry After the 1999 Earthquake, Conference proceedings of the 32<sup>nd</sup> TTRA (Travel and Tourism Research Association) Annual Conference, Florida, Fort Myers.
- Jia, Z., Shi, Y., Jia, Y. and Li, D. (2012). A Framework of Knowledge Management Systems for Tourism Crisis Management. *Procedia Engineering*, 29: 138 – 143.
- Kosova, R. and Enz, C. A. (2012). The Terrorist Attacks of 9/11 and the Financial Crisis of 2008: The Impact of External Shocks on U.S. Hotel Performance. *Cornell Hospitality Quarterly*, 53(4), 308–325.
- Kukanja, M. and Planinc, T. (2013). The Response of the Restaurant Industry to the Financial Crisis. *EKON. MISAO PRAKSA DBK. GOD XXII*, 1: 39-56.
- Lührman, D. (2005). *Crisis guidelines for the tourism industry*. Available from: [http://www.world-tourism.org/market\\_research/recovery/Crisis\\_and\\_Disaster\\_Management\\_Guidelines.pdf](http://www.world-tourism.org/market_research/recovery/Crisis_and_Disaster_Management_Guidelines.pdf) (Accessed 15 October 2018).
- Lepp, A. and Gibson, H. (2003). Tourist Roles, Perceived Risk and International Tourism, *Annals of Tourism Research*, 30 (3) 606-624.
- Mansfeld, Y. and Pizam, A. (2006). *Tourism, Security and Safety: From Theory to Practice*. Oxford: Elsevier Ltd.
- Mair, J., Ritchie, B. W. and Walters, G. (2014). Towards a research agenda for post-disaster and post-crisis recovery strategies for tourist destinations: a narrative review. *Current Issues in Tourism*, 19(1): 1-26.
- McMullan, C. (2011). *Crisis management: Towards a model of good practice for small to medium sized hotels*. Available from: [http://doras.dcu.ie/20913/1/Crisis\\_Management\\_in\\_Hotels.pdf](http://doras.dcu.ie/20913/1/Crisis_Management_in_Hotels.pdf) (Accessed 1 May 2018).
- Moe, T. L. and Pathranarakul, P. (2006). An integrated approach to natural disaster management: Public project management and its critical success factors. *Disaster Prevention and Management*, 15(3), 396-413.
- Paraskevas, A., Altinay, L., McLean, J. and Cooper, C. (2013). Crisis Knowledge in Tourism: Types, Flows and Governance. *Annals of Tourism Research*, 41: 130-152.



- Peltomäki, S. M. (2015). *Crises in the Tourism Industry and their Effects on different Generations*. Available from: <https://www.theseus.fi/bitstream/handle/10024/89038/Crises%20in%20the%20tourism%20industry%20and%20their%20effects%20on%20different%20generations.pdf?sequence=1> (Accessed 14 June 2018).
- Pennington-Gray, L. P., Thapa, B., Kaplanidou, K., Cahyanto, L. and McLaughlin, E. (2011). Crisis Planning and Preparedness in the United States Tourism Industry. *Cornell Hospitality Quarterly*, 52 (3): 312-320.
- RACHERLA, P. and HU, C. (2009). A Framework for Knowledge-Based Crisis Management in the Hospitality and Tourism Industry. *Cornell Hospitality Quarterly*, 50(4): 561-577.
- Ritchie, B. (2009). *Crisis and disaster management for tourism*. Bristol: Channel View Publications.
- Ritchie, B. W. (2004). Chaos, crises and disasters: a strategic approach to crisis management in the tourism industry. *Tourism Management*, 25(6):669-683.
- Ritchie, B. W., Dorrell, H., Miller, D. and Miller, G. A. (2004). Crisis Communication and Recovery for the Tourism Industry: Lessons from the 2001 Foot and Mouth Disease Outbreak in the United Kingdom. *Journal of Travel & Marketing*, 15(2-3): 199-216.
- Salman, D., Tawfik, Y., Samy, M. and Artal-Tur, A. (2017). A new marketing mix model to rescue the *hospitality* industry: Evidence from Egypt after the Arab Spring. *Future Business Journal*, 3(1): 47-69.
- Saunders, M., Lewis, P. and Thornhill, A. (2016). *Research methods for business students*. England: Pearson Education Limited.
- Seddighi, H, R., Nuttall, M. W. and Theocharous, A. L. (2000). Does cultural background of tourists influence the destination choice? An empirical study with special reference to political instability, *Tourism Management*, 22(2) 181-191.
- Shehawy, Y. and ragab, A. M. (2017). Crisis Management Actions in the Egyptian Travel Agencies: A Managerial Perspective. Available from: [https://www.researchgate.net/publication/318646326\\_Crisis\\_Management\\_Actions\\_in\\_the\\_Egyptian\\_Travel\\_Agencies\\_A\\_Managerial\\_Perspective](https://www.researchgate.net/publication/318646326_Crisis_Management_Actions_in_the_Egyptian_Travel_Agencies_A_Managerial_Perspective) (Accessed 21 September 2018).
- Singh, A, S. and Masuku, M, B. (2014). Sampling Techniques & Determination of Sample Size in Applied Statistics Research: An Overview. *International Journal of Economics, Commerce and Management*, 2 (11): 1-22.
- Standing Committee for Economic and Commercial Cooperation of the organization of Islamic Cooperation. (2017). *Risk and Crisis Management in Tourism Sector: Recovery from Crisis in the OIC Member Countries*. Available from: <https://iccia.com/sites/default/files/library/files/Risk%20and%20Crisis%20Management%20in%20Tourism%20Sector.pdf> (Accessed 2 November 2018).
- Statista. (2018). *Number of casualties due to terrorism worldwide between 2006 and 2016*. Available from: <https://www.statista.com/statistics/202871/number-of-fatalities-by-terrorist-attacks-worldwide/> (Accessed 29 September 2018).
- Todman-Lewis, C. V. (2017). *Strategies for Crisis Preparedness of Tourist Destinations*. Doctoral dissertation. Minneapolis, Minnesota: Walden University.

- Tse, A. C. B., So, S. and Sin, L. (2006). Crisis management and recovery: how restaurants in Hong Kong responded to SARS. *International Journal of Hospitality Management*, 25(1): 3-11.
- United Nations World Tourism Organization. (2012). *International tourism to reach one billion in 2012*. Available from: <http://media.unwto.org/en/press-release/2012-01-16/international-tourism-reach-one-billion-2012>, (Accessed 14 March 2018).
- University of Maryland. (2018). *Terrorism Fatalities* (Global Terrorism Database), Available from: <https://www.start.umd.edu/gtd/> (Accessed 27 September 2018).
- Wilks, J., and Moore, S. (2004). *Tourism Risk Management for the Asia Pacific Region: An Authoritative Guide for Managing Crises and Disasters*. Available from: [https://www.apec.org/-/media/APEC/Publications/2004/12/Tourism-Risk-Management-for-the-Asia-Pacific-Region-An-Authoritative-Guide-for-Managing-Crisis-and-D/04\\_twg\\_risk\\_management\\_report.pdf](https://www.apec.org/-/media/APEC/Publications/2004/12/Tourism-Risk-Management-for-the-Asia-Pacific-Region-An-Authoritative-Guide-for-Managing-Crisis-and-D/04_twg_risk_management_report.pdf) (Accessed 15 October 2018).
- Zech, N. M. (2016). *Crisis Management within the Hotel Industry – a Stakeholder Relationship Management Approach*. Doctoral dissertation. Riga: University of Latvia