Systematic Review

Review of Crisis Management Frameworks in Tourism and Hospitality: A Meta-Analysis Approach

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Abstract: Given the global impact of COVID-19 (SARS-CoV-2) on the tourism industry, crisis management has once again become a hot topic for research. This article reviews the state of the art in the existing literature on crisis management frameworks in tourism and hospitality through a meta-analysis approach. A total of 36 articles published in peer-reviewed journals between January 2000 and December 2022 were included in this review. The articles covered perspectives of different crisis events, including natural disasters, conflicts, weather-related events and pandemics. The findings show 14 key crisis management frameworks developed in past literature. These findings are critically reviewed, analysing their core concepts in each stage and highlighting their common elements and differentiating components. The study also recognizes the relevance of adopting a multi-perspective approach and proactive planning in crisis management for destinations and tourism organizations to achieve long-term resilience. Lastly, suggestions and directions for future research in this research field are pointed out.

1. Introduction

The tourism industry is extremely vulnerable to both internal and external shocks, placing tourism under constant threat [1,2]. The recent enduring COVID-19 pandemic has had a profound and far-reaching impact on tourism and hospitality on a global scale, prompting scholars' attention to studying strategies and actions to mitigate the devastating consequences of COVID-19 on tourism [3]. Crisis management comprises the actions, communications and measures regularly taken by organizations to prevent a crisis, mitigate the impacts caused by one and bounce back to normalcy [4]. Over the years, scholars have studied and produced substantial research related to crisis management in tourism and hospitality [5], from crisis preparedness and prevention and the description of crisis events, crisis impacts and crisis response and recovery to crisis communication, crisis resilience and crisis management, with multiple topics [6].

Reviews on past literature have been also published to consolidate the knowledge on crisis management. Mair, Ritchie and Walters [7] focused on the strategies of post-crisis recovery for tourism destinations. Ritchie and Jiang [8] used a thematic approach to review articles addressing all management stages of crisis. Jiang, Ritchie and Benckendorff [9] conducted a bibliometric analysis to identify the network structures of tourism crisis research. More recently, Wut et al. [10] concentrated on crisis management literature in the fields of tourism and hospitality. Leta and Chan [11] reviewed hospitality literature on crisis management from the perspective of service providers and stakeholders. Lastly,

Berbekova et al. [12] employed a thematic analysis to set future research directions for sensemaking in crisis management in tourism and hospitality.

Although the research on tourism crisis management continues to grow, recent studies [5,8] still highlight the importance of continuous testing and improving of crisis management frameworks to develop new theoretical knowledge and management strategies. As a result, the review conducted in this paper strengthens previous review articles by providing an in-depth examination of existing crisis management frameworks, thereby adding to a broader comprehension of their adaptability within the field of crisis management in tourism and hospitality.

The purpose of this article is fourfold and seeks to address the following questions:

(1) What are the main crisis management frameworks in the tourism and hospitality literature?
(2) To what type of crisis are crisis management frameworks applied?
(3) What are the research methodologies employed?
(4) What lessons can be drawn from existing crisis management frameworks and their applicability to the COVID-19 pandemic crisis?

The remainder of this paper is organised as follows. Section 2 reviews the literature regarding crisis in tourism and crisis management. Section 3 discusses the methodology used to conduct this study and explains the choice of systematic review analysis as the inquiry method. Section 4 presents the findings of the systematic analysis conducted on crisis management frameworks. Then, Section 5 discusses and compares the identified crisis management frameworks. Section 6 displays the study's conclusions and limitations, outlining directions for future research.

2. Literature Review

The concept of a crisis has been applied to different events in tourism, e.g., natural disasters, economic recessions, terrorist attacks, disease outbreaks, political instability, with literature lacking a consensual definition [11,13]. Typically described as adverse incidents, crises inflict negative effects on organizations' or destinations' activities [1]. Thus, a crisis in tourism can broadly be defined as a small or large-scale event that disrupts a well-organized operation, with unknown causes and effects that will impact the stability of the tourism industry [14]. However, some scholars disagree and distinguish the terms "crisis" from "disaster", according to the nature of the event. Unexpected events instigated outside the tourist system over which it has little control are called "disasters", while the term "crisis" is applied only to disruptive and internal events that are partially self-inflicted to the tourism system itself, such as an economic crisis [15].

As scholars do not always agree on the definition of "crisis", there may be some lack of accuracy in the literature and interchangeable use of terms [14]. By acknowledging this fact and for a broader scope, this study will use the term "crisis" to refer to both internal and external events and will review articles that have studied crisis and/or disasters.

Crises are non-linear and chaotic events [16] that impact tourism directly and indirectly with economic, political, social and environmental implications [17], according to their nature, scale and magnitude [18]. For instance, financial crises deteriorate the monetary capacity of tourism demand [15], while epidemic outbreaks may lead to travel restrictions and city lockdowns [19]. Moreover, health-related crises, including epidemic outbreaks, are more susceptible to adverse and negative media attention, making them more challenging to manage [20].

Due to the vulnerability of tourism and hospitality industries to crises, there has been a notable increase in crisis management research over the last two decades [9]. Before 2010, the primary focus of tourism crisis management research was centred on financial crises and idiosyncratic, one-off incidents, such as 9/11 and unforeseen oil shocks [21]. In the past decade, scholars have begun to turn their attention to environmental crises, approaching them through the lens of environmental sustainability, adaptation to uncertainty and resilience [22]. In the most recent period, COVID-19 has attracted the attention of scholars.

The COVID-19 pandemic has had a profound effect on global tourism [23], with severe social and economic repercussions such as travel bans, layoffs and business shutdowns [24]. The COVID-19 virus has had a far more prolonged and complex impact on the tourism and hospitality industries than any other crisis [5], requiring stricter containment strategies than in previous epidemic outbreaks due to its global scale, extended duration, level of uncertainty and capacity for viral mutation [25]. The growing frequency and complexity of such crises highlight the pivotal role of crisis management for destinations, tourism and hospitality organizations [26].

In an environment of unpredictability that characterizes disruptive events such as COVID-19, crisis management emerges as primary tool to help restore normalcy [4,27]. The purview of crisis management encompasses crisis prevention, preparedness, response and revision. Over the years, many studies have addressed research into the response and recovery phases by investigating the impacts and assessing the effectiveness of strategies. However, less attention has been given to studies regarding crisis prevention and preparedness [8].

The survivability of tourism and hospitality industries rely on competent crisis management strategies, both for organizations and destinations [28] and must encompass reactive and proactive procedures [29]. By acknowledging the significance of crisis management for the tourism and hospitality industries, a number of crisis management frameworks have been developed in the literature to provide guidance [30]. These frameworks tend to assist practitioners in mitigating crises, while providing a roadmap for policymaking [31]. Furthermore, throughout the years, scholars have attempted to tailor crisis management frameworks to cater to specific crisis events [8]. Despite the increasing volume of publications, the literature on crisis management remains fragmented and lacking cohesion [1]. Therefore, it is relevant to investigate the frameworks developed in the literature and understand the extent of their contributions.

3. Materials and Methods

Conducting periodic reviews of existing research to find new contributions to knowledge is key for the advancement of the field [32]. A systematic review is a distinct method for carrying out periodic reviews of existing literature by detecting the available studies, synthesising data and identifying and evaluating contributions to clearly understand what has already been studied and is already known [33]. Systematic reviews are the most consistent form of research review due to their precise [34] and transparent method to reduce bias and bring harmony to the field of research [35]. Thus, this systematic literature review applied the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA), a method that allows breaking the literature review process into a four-phase flow diagram: (1) identification of connected articles through databases, (2) records screening, (3) eligibility assessment of full-text articles and (4) included studies for analysis [36].

Two international databases were used in this review—Web of Science™ Core Collection and Scopus. This choice of using two databases not only made it possible to cover several fields and add a multidisciplinary perspective, but also allowed the expansion of the research and reduces the scope of bias in journals indexed exclusively in one of the databases [37]. The keywords used to identify relevant articles were "tourism" OR "hospitality" AND "crisis management framework" OR "disaster management framework" in the title, abstracts and keywords in an iterative process to search for a greater number of articles, regardless of the nature of the crisis and industry focus. To appraise a wider spectrum of perspectives on the topic, the search was not restricted to tourism and hospitality journals only. This phase identified a total of 642 records published before 10 December 2022 (Figure 1). The papers identified were then screened for duplicates, and 83 duplicate articles were removed. A pool of 197 articles was also excluded since they were books, book chapters, conference reviews and proceedings or non-English material. In the eligibility phase, the titles, abstracts and full texts of the articles were reviewed and examined to ensure they were relevant to the focus of this study [6]. A total of 326 articles were excluded,

as they could not answer this paper's research questions for the following reasons: (i) not exploiting or applying any crisis management framework in their study; (ii) focusing only on one element of crisis management (i.e., crisis communications); or (iii) the study purpose is not aligned with the research topic under analysis. Lastly, a final set of 36 articles was considered suitable and included for subsequent analysis.
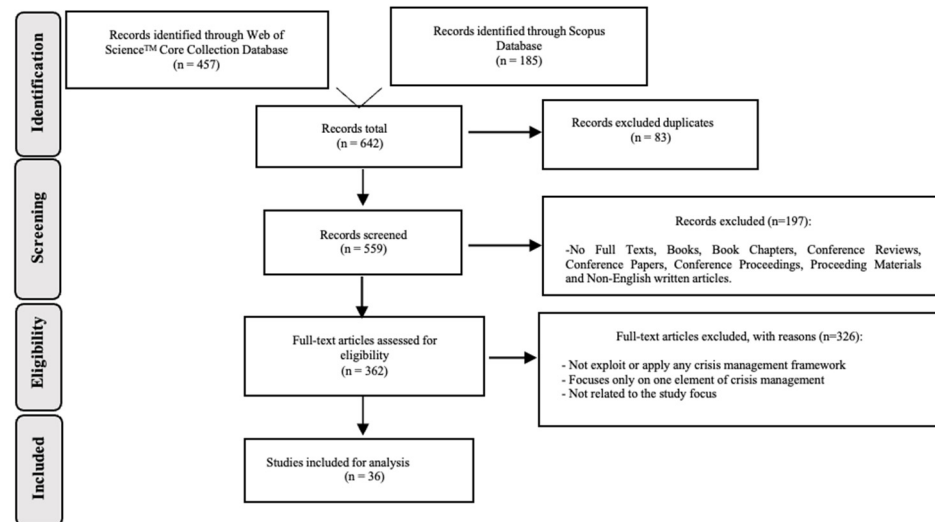

Figure 1. The PRISMA study flow.

4. Results

This section provides an in-depth analysis of the profile of the studies under review and methodologies used and details all crisis management frameworks found.

4.1. Studies, Journals and Authors

Figure 2 shows the distribution of 36 publications referring to crisis management frameworks in 5-year periods, from 2000 to 2022. Publication numbers increased, particularly in the last decade with the occurrence of more severe natural disasters and COVID-19. Considering how the tourism industry has been and is being heavily impacted by COVID-19, 18 out of 36 articles on crisis management frameworks were published in the last three years.
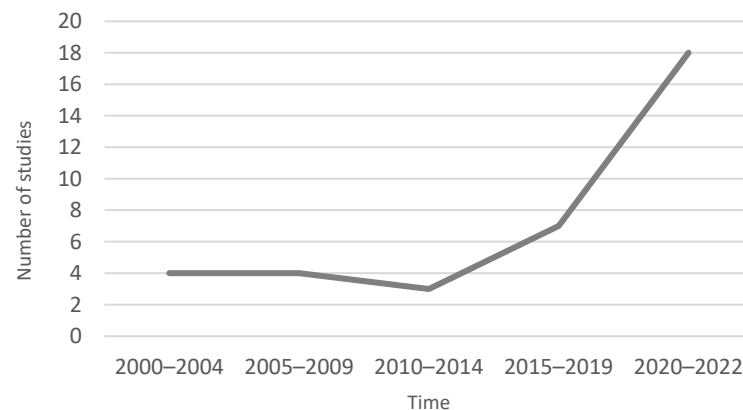
Figure 2. Studies related to crisis management frameworks in literature over time (n = 36).

The results display that 22 (61.1%) of the articles under study came from six journals, all with a high H-index rate (Appendix A). *Tourism Management* published seven articles; *Annals of Tourism Research* had three studies, *Current Issues in Tourism*, *International Journal of Hospitality Management*, *Journal of Travel and Tourism Marketing* and *International Journal of*

Tourism Research had three studies each. The others came from 14 different journals, with a publication rate of one article per journal.

Tourism-focused journals were preferred (n = 23, 63.9%) to hospitality-related journals (n = 4, 11.1%) or hospitality and tourism-related journals (n = 2, 5.6%). Journals from other disciplines were also chosen but with less expression (e.g., *Communications*, *Journal of General Management*, *Geographia Technica*, *Journal of Destination Marketing and Management* and *Journal of Park and Recreation Administration*). Location was studied for the country of the journal in which the articles were published. Most journals are Europe-based (n = 27, 75.0%), with British journals being the most predominant (n = 24, 66.7%), followed by American-based ones (n = 7, 19.4%).

Regarding authorship, the majority of studies had two authors (n = 14, 38.9%) or three authors (n = 13, 36.1%). Four-person authorship (n = 4, 11.1%) and single-person authorship (n = 5, 13.9%) were less represented. The most productive scholar was Brent W. Ritchie (n = 7, 19.4%) from Queensland University in Australia, who published two articles as first author, four articles as second and one as fourth author.

4.2. Type of Crisis and Type of Study Analysed

The type of crisis investigated by each article reviewed can be divided into eleven types: conflict, COVID-19 pandemic, cyclone, earthquake, forest fire, health-related crisis, political crisis, shipping accident, tsunami, multiple natural disasters events and multiple crises (Appendix B). Based on the findings, a large volume of studies has investigated natural disaster crises rather than human-induced or health-related crises.

Empirical studies prevailed in the pool of articles, accounting for around 39% (n = 14). Most studies conducted a case study approach to researching a specific crisis, e.g., [38,39], or a particular tourism destination, e.g., [40,41]. A small sample surveyed several cases of crises that affected a particular tourism region [17,42] or researched a particular type of tourism, such as the passenger shipping industry [43].

Conceptual studies (n = 6, 16.7%) used literature, principles and concepts of other studies or adapted frameworks from previous studies to generate new crisis management frameworks. Pennington-Gray [30] and Faulkner [15] developed conceptual frameworks for natural disaster events; Agustan et al. [44], Jiang, Ritchie and Verreynne [45], and Ritchie [26] developed conceptual frameworks for all crisis events; and Reddy et al. [46] developed a conceptual framework exclusively for armed conflict events.

Eight studies (22.2%) were classified as mixed studies, as they not only created or adapted a framework, but were also applied to a case study, e.g., [47,48].

Lastly, review articles (n = 8, 22.2%) followed distinct approaches to analyse crisis management in tourism and hospitality literature, pointing out some frameworks to deal with crises. Ritchie and Jiang [8] applied a thematic approach to review risk, crisis and disaster management, while Berbekova et al. [12] used a thematic approach to analyse literature concerning crisis management in tourism and hospitality. Mazurek [49] followed a conceptual approach to overview the literature on crises and proactive risk management in tourism, and Leta and Chan [11] carried out a review on crisis management in hospitality. A narrative approach was taken by two studies to analyse post-crisis recovery [7] and crisis management strategies for tourist destinations [42]. Estevão and Costa [50] adopted the PRISMA method to review crisis management practices in tourist destinations during natural disaster crises, and Wut et al. [10] used the same technique to review crisis management practices in the hospitality and tourism industry.

4.3. Methodological Design of Previous Research

Table 1 depicts the type of approach and data collection methods used to investigate crisis management frameworks in tourism and hospitality. Qualitative approaches were dominant in our review (n = 34, 94.4%). All review and conceptual studies (n = 14, 38.9%) used literature as their primary source of data collection. Four articles (11.1%) used a variety of secondary data in their studies, such as operational information, financial statistics or

government response reports. For example, Paraskevas and Quek [51] used archival data from Hilton Hotels to identify correlations between Hilton's actions before the Cuban revolution and modern-day concepts of crisis management.

In relation to primary sources of data, semi-structured interviews were the most popular means of data collection (n = 9, 25.0%). The samples of interviewees were mostly hospitality and tourism owners or senior managers (e.g., [47,52,53]), destinations management and emergency organizations (e.g., [42]) or key tourism stakeholders [38,54,55]. Interviews were also paired with on-site observation and/or secondary data. Secondary data were acquired from diverse channels such as government reports, tourism policy plans and organizational surveys (e.g., [56,57]); content analysis from newspaper articles (e.g., [41]); public information found on corporate websites and company-related press-releases (e.g., [39,58]); and printed material provided by interview respondents (e.g., [17]).

Quantitative approaches were less dominant, summing only two studies (5.6%). Racherla and Hu [59] conducted a survey to gain the perceptions of senior managers about crisis management, while Wu et al. [40] employed geospatial data to measure the potential risk of severe weather on Oklahoma State Parks.

Table 1. Analysis by research methodology (N = 36).

Approach	Method	N. Studies	Studies
Qualitative	Interview	9	[38,42,43,47,52–55,60]
	Interview + secondary data	4	[17,41,57,58]
	Interview + on-site observation	1	[61]
	Interview + on-site observation + secondary data	2	[39,56]
	Literature	14	[7,8,10–12,15,26,30,42,44–46,49,50]
	Secondary data	4	[48,51,62,63]
Quantitative	Survey	1	[59]
	Geospatial data	1	[40]

4.4. Crisis Management Frameworks in Tourism and Hospitality

Of the 36 articles analysed, 14 crisis management frameworks were found, corresponding to the total of conceptual and mixed articles previously identified in Table 2. The literature recognizes that it is crucial to anticipate crises to be able to manage them properly in the future [64]. Thus, over time, scholars have produced different crisis management frameworks for the tourism and hospitality industry by incorporating theories and concepts from diverse disciplines (Table 2).

Faulkner [15] drew the first natural disaster management framework exclusively for the tourism industry, grounded on previous literature on crisis management, chaos theory and a comparative study of natural disasters that had occurred in the past. Faulkner's tourism disaster management framework was based on the phases of a crisis evolution in a destination, counting six sequential phases: "pre-event, prodromal, emergency, intermediate, long-term (recovery) [and] resolution" [15] (p. 144). In each phase, the author describes key elements of risk assessment, actions and strategies to be taken for an efficient crisis management. Scholars have used Faulkner's framework to study several crisis events. Miller and Ritchie [41] applied it to the outbreak of Foot and Mouth disease in the UK. Prideaux [63] tested the Australian government's response to the impacts of three unrelated crises that severely affected the industry in 2001: the collapse of HIH Insurance, the September 11th terrorism attack and the bankruptcy of Ansett airline. Niininen et al. [43] adapted the framework to the Greek passenger shipping industry to measure the level of crisis preparedness of the industry after two famous incidents (Superfast III and Express Samina). Gani et al. [42] explored the level of preparedness and recovery strategies adopted by tourism stakeholders in two destinations in India during natural disaster crisis. Derham et al. [52] employed Faulkner's framework to the 2004 Indian Ocean Tsunami by studying the response of Australian-based tour operators to the crisis. Permatasari and Mahyuni [60]

used it to study the measures taken by the senior leaders of a new hotel in Bali during COVID-19.

Table 2. Differentiating elements of each crisis management framework (N = 14).

Study	Elements
[15]	Key prerequisites and ingredients of effective crisis management strategies.
[26]	A strategic and holistic framework with a component of flexibility, evaluation and strategy modification when necessary.
[62]	Risk amplification and stigmatization.
[57]	Dynamic roles of various stakeholders (emergency organizations, tourism organizations and tourism businesses) throughout all phases of a natural disaster crisis event.
[59]	Component of knowledge management strategy and feedback loop.
[30]	The coupling of actors and destination impacts to each crisis phase.
[44]	Integration of knowledge management by incorporating the use of GIS.
[55]	Collaborative approaches to build resilience of entire destinations and tourism businesses within.
[48]	Crisis assessment; safety of employees, customers and property ensured; self-saving and business activation and revitalization.
[46]	The role of vulnerability and resilience in driving the adaptive capacity of post-conflict destinations to adopt a transitory 'Phoenix' phase of initial recovery.
[58]	GPS strategy by taking agile, adaptive, resilient and innovative measures.
[47]	Influential antecedents shape responsive and reactive operational measures from owners-managers in response to the on-going COVID-19 pandemic to ensure business continuity.
[61]	Crisis-coping and post-recovery strategies amongst small and medium-sized hospitality and tourism firms.
[56]	Resilience as a dynamic and cyclical process, linked to each crisis management stage through three steps of dynamic capabilities.

Ritchie [26] delineated a strategic and holistic view to crisis management, suited to natural disaster and human-induced crises, by considering the need for public and private sector managers to plan and limit the impacts of a crisis. The author's framework respects the crisis anatomy proposed by Faulkner [15] and offers a strategic management over three stages: the development of crisis prevention and planning; strategic implementation to limit the impacts and control the crisis; and crisis resolution, evaluation and feedback enabling future crisis prevention and development of anti-crisis planning strategies for tourism destinations and organizations. Nevertheless, Ritchie [26] claims that the need for flexibility, feedback loops, evaluation and potential modification of strategy implementation must be considered at all stages of the process, depending on the unique attributes of each crisis (type, scope and duration) and the stakeholder's response to it. Novelli et al. [39] employed Ritchie's [26] framework to study the strategic process of managing health crises in a developing country context, analysing how the Gambian government and tourism sector responded to the "Ebola-induced tourism crisis". From an anticipating perspective of crisis phenomena, Ritchie's [26] framework was also employed by Wu et al. [40] to analyse the potential risk of severe weather crises in Oklahoma state parks (e.g., tornados, lightning) and to design mitigation measures and recovery strategies for state-level administration. Chan, Nozu and Cheung [54] and Chan, Nozu and Zhou [38] applied Faulkner's [15] and Ritchie's [26] frameworks to collect the tourism stakeholder perspectives on crisis management and destination resilience in the face of earthquake events in Japan.

Another crisis management framework was created specifically for the tourism industry in Taiwan to be able to efficiently manage natural disaster crises [62]. By studying the 21 September 1999 earthquake, the authors noted that while the physical impact caused by the earthquake was short-lived, the impact on the tourism economy was proportionately greater due to a large drop of inbound tourism in the region. Huang et al. [62] proposed a more comprehensive integrated crisis management framework, coupling Faulkner's [15] crisis management guidelines to Ichinosawa's [65] risk amplification and stigmatization model to control both physical and secondary impacts simultaneously. Thus, the incorporation of Ichinosawa's [65] risk amplification and stigmatization model was made in four sequential phases, namely (1) sources of stigma, (2) stigma formulation, (3) stigma

ripples and effect and (4) stigma mitigation [62], to understand the engines and impacts of risk-induced stigmatization process, control physical and secondary impacts and stimulate a positive effect on tourism recovery in the long-term using sound crisis management practice.

By examining Kelowna's long-term recovery from a vast forest fire in Canada, Hystad and Keller [57] distanced themselves from the tendency to assess crisis management from a buttoned-up perspective. Instead, the scholars came up with the destination tourism disaster management framework, a cyclic frame with a top-down method to access the interactions of various stakeholders—emergency organizations, tourism organizations and tourism businesses—during the four stages of a natural disaster crisis: (1) pre-disaster, (2) disaster, (3) post-disaster and (4) resolution. Hystad and Keller [57] recognized that stakeholders play different and dynamic roles over time, allowing for on-going review, revision and improvement of existing crisis management plans.

The integration of knowledge management principles into crisis management leads to the development of another framework for knowledge-based crisis management [59]. The authors merged Faulkner's [15] six stages of crisis to Ritchie's [26] strategic crisis management phases, adding three key knowledge management strategies. Knowledge acquisition, creation and storage must occur during crisis prevention and planning, while the strategic implementation phase of crisis management must integrate knowledge retrieval, dissemination and application. In addition, the post-crisis phase integrates resolution, evaluation and feedback processes through knowledge internalisation and feedback for future crisis prevention [59]. Racherla and Hu [59] claimed that by following this process, tourism and hospitality organizations could improve the gain and sharing of critical information, improving their response to any type of crisis.

Pennington-Gray [30] produced the destination disaster impact framework to comprehend the different actors and impacts of natural disaster crisis on tourist destinations, stimulating the destinations for crisis planning and impact mitigation plans. By following a linear flow from a pre-crisis state to emergency and recovery, this framework listed six categories of impacts in natural disaster crises borrowed from Lindell [66]: (1) built environment, (2) social/psychological, (3) cultural, (4) political/economic, (5) technological, (6) natural environment. Additionally, it also identified the set of actors involved in the pre-crisis stage (e.g., emergency managers, urban planners or the hospitality industry) and those who must respond in the aftermath (e.g., government, medical fields, the hospitality industry or tourists). Pennington-Gray's [30] framework was used, for example, by Fung et al. [53] to examine a disease outbreak in the Metropark Hotel group in China.

Agustan et al. [44] framed a crisis management framework specifically for urban tourism destinations, considering risks in urban areas as complex, varied, but connected. Therefore, the scholars combined Faulkner's [15] crisis framework and Mistilis and Sheldon's [67] knowledge management framework, adding the spatial geographical information system (GIS) as a tool to promote response synergies and share of information between emergency command centres, policy makers and tourism stakeholders at all phases of a crisis.

In light of viewing tourism destinations as complex systems vulnerable to crisis, a framework was developed to manage the recovery and development of post-conflict destinations by Reddy et al. [46]. The authors determine that a destination's vulnerability comprises three distinct elements—(1) exposure, (2) sensitivity to impact, (3) adaptive capacity. These elements take post-conflict destinations to an interim phoenix phase, in which their ability to adapt and recover from crises are enhanced to become more resilient.

Filimonau and De Coteau [55] added a layer to crisis management by proposing the collaborative destination and natural disaster crisis management framework. The authors show that the tourism destination and businesses must adopt proactive collaborative actions (e.g., innovation, adaptability or human resources) in order to become more resilient to crisis. The framework was then empirically tested using a case study of a Caribbean destination affected by a range of natural disaster events [55].

More recently, Jiang et al. [56] developed a dynamic resilience framework for crisis management, helping tourism organizations acquire resilience based on three dynamic capability steps: sensing, seizing and transforming. Considering resilience as an on-going and dynamic process, the framework displays key resilience elements (e.g., information monitoring, product adaptation, industry innovation) that must be linked to each crisis management stage (before, during and after) by employing a trial and error process to preserve the competitiveness and resilience of tourism organizations.

COVID-19 Crisis Management Frameworks

With COVID-19 harshly impacting tourism, scholars are focusing their attention on how to effectively manage the COVID-19 pandemic. A COVID-19 crisis management framework was specifically created to help small and medium-sized tourism and hospitality businesses facing the COVID-19 pandemic [61]. The framework follows a three-state timeline—(1) occurrence, (2) recovery, (3) resolution—displaying all crisis-coping strategies and recovery strategies adopted by small and medium-sized tourism and hospitality businesses in Ghana [61]. Similar research was conducted in Pakistan to assess how hospitality businesses were coping with COVID-19, outputting a framework for crisis management in small and medium-sized hospitality businesses [47]. The framework identifies influential factors (e.g., lack of crisis anticipation, product and experience trade-off) that have shaped different reactive and resilient measures (e.g., operational cost-cutting, preventive measure, innovative promotions) to safeguard businesses continuity during the pandemic [47].

On the other hand, Hao et al. [48] reviewed the impact of COVID-19 on China's hotel industry and introduced the COVID-19 management framework, a framework that followed Faulkner's [15] six phases of crisis management. In addition, it lays out four sequential principles—(1) disaster assessment; (2) safety of employees, guests and property; (3) self-saving; (4) business revitalization—and well-defined anti-pandemic strategies to be implemented by hotels during COVID-19.

The air transportation sector was also severely affected by the COVID-19 pandemic. By analysing how the air travel services sector of Dubai responded to COVID-19, Bodolica et al. [58] shaped a GPS framework for crisis management in air transportation. This framework follows a three-step strategy—(1) guard against failure, (2) potential innovative change and (3) shape the future of air-travel—spurring the implementation of agile, innovative and resilient measures to better manage the effects of COVID-19.

5. Critical Discussion

The findings of this study illustrate how the crisis management literature has evolved over time, with each crisis event presenting an opportunity to deepen the knowledge and improve the preparedness of tourism and hospitality organizations and destinations. It is identified that most frameworks available in literature share common elements such as risk assessment, crisis planning, crisis communications and a collective mitigation response to the crisis, but vary in their conceptualisation and variables (Appendix C). It is interesting to note that these frameworks carry a positive view on crises, recognizing the importance of proactive planning across the tourist chain to drive the recovery and revitalize tourism in the aftermath [12].

In contrast to the point above, Figure 3 visually unveils the top 25 most cited keywords in the analysed articles concerning crisis management frameworks, via NVivo software (Version 11).

From a critical perspective, this easily underlines that even though the developed crisis management frameworks highlight the need for a proactive approach towards risk assessment and crisis preparedness, most studies still concentrate most of their attention on the impacts caused, the post-crisis phase and recovery strategies [8,10]. By engaging in crisis preparedness, organizations and destinations can expedite their return to normalcy after a crisis by leveraging insights from previous crisis experiences. This knowledge is

then integrated into an ongoing and adaptive strategic planning process, enabling them to effectively navigate similar crises in the future [8,68]. Despite the importance of crisis preparedness, research has demonstrated that most small tourism organizations often lack the necessary time and resources to allocate towards crisis planning [69]. As a result, crisis planning is perceived as being of limited relevance to their operations. Moreover, Parmenter [70] also found that the manager's leadership style and commitment to the process are key determinants of effective crisis planning, leaving proactive crisis planning at the discretion of managers. This points out the relevance of planning as a differentiator in post-crisis management, contributing to the preparedness of organizations and destinations and the development of more resilient policies for tourism and local communities [71].

Figure 3. Portrait of the 25 most cited keywords in the articles analysed (N = 36).

Three other important critiques should be drawn from the findings on pandemic-appropriate crisis management frameworks.

Firstly, tourism in the Anthropocene is threatened not only by sudden and unpredictable crises, but also by more predictable cause-and-effect events (e.g., pandemics, climate change). Chaos and complexity theory provide a multi-perspective view on crisis management by considering the non-linear and chaotic interactions intrinsic to the tourism system [15,17,26,72,73]. For instance, COVID-19 is distinguished by its complex context of a multifaceted nature and unprecedented magnitude, incorporating features of natural disasters, health crises and economic and tourism demand crises [5]. This growing complexity of crises highlights the need for more multidisciplinary approaches between crisis management and other disciplines, including medical sciences [16]. Thus, pandemic-appropriate crisis management frameworks (e.g., COVID-19) must also take an epistemological angle to incorporate specific crisis management strategies [41,74] through the development of preventive and control sanitary measures to protect the safety and health of tourists, tourism employees and residents [48,75].

This wide-ranging perspective has the potential to allow us to comprehend the relationships, on the edge of chaos and interdependent, that form during a crisis [72] and the adaptive responses of the tourism destination or organization to overcome it [46]. To scope with the complexity and nature of crisis events, a more comprehensive incorporation of technology is imperative at all stages of crisis management [8,16]. For example, scenario planning [2], simulation and signal detection tools [76] can help develop emergency response plans or test evacuation routes for tourists [16]. The integration of GIS tools throughout the planning and response phases can leverage spatial analysis, visualization and informed decision making [16]. Furthermore, agent-based models can be used to gain new insights into how tourism stakeholders behave in response to external shocks [77,78].

In the same vein, research has shown that pandemics are more exposed to negative attention by media than other types of crises [20] due to the easy and quick sharing of (mis)information on social media [20,26]. As the old adage says, 'a lie can travel halfway around the world before the truth has put on its boots'. Therefore, the strategic use of social media in crisis communications becomes paramount to effectively managing and

facilitating decision making during outbreaks. The frameworks should incorporate key crisis communications measures by developing contingency communication plans during the pre-crisis phase; sharing accurate and up-to-date information on social media during the early-stage crisis; creating promotion and marketing campaigns to generate positive media coverage mid-crisis; and implementing crisis recovery marketing to repair the image of destinations and organizations and increase the perception of confidence in the after-crisis phase [20,48,61,79].

Secondly, tourism exhibits a non-linear and non-deterministic developmental path, marked by chaotic and disruptive crises from time to time. Also, crises by their very nature lack linearity [72]. However, crisis management frameworks have attempted to segment crisis management activities into distinctive phases by following a sequential and prescriptive approach [17]. While some frameworks identified six phases [15,26,44,48,62], others only recognized four [57] or just three [47,56,58,61]. Hence, there is still an ongoing debate among scholars regarding the specific number of phases involved [16].

On the other hand, recent frameworks are being tailored with a more holistic perspective to assess the complex life-cycle of crises and add elaborated and tangled elements of crisis management such as stakeholder collaboration, dynamic capabilities or resilience [55,56]. This supports the observation of Berbekova et al. [12] that crisis management frameworks can be catalogued into two main groups according to their approach to crisis: temporal assessment vs. holistic assessment of crisis events. Nonetheless, although it has been valuable to comprehend the sequential evolution of a crisis, this approach has presented certain limitations by assuming a strictly linear approach. Therefore, it is relevant that future research shifts attention towards extending the traditional crisis management framework to incorporate clusters of interconnected and interrelated activities, which can overlap or take place simultaneously [16].

Lastly, most studies focus on case studies of specific crisis events by adopting frames to examine the crisis management process. A total of 14 different crisis management frameworks for tourism and hospitality were identified. The findings revealed that Faulkner's [15] framework has been revised and improved by authors [80], while Faulkner's [15] and Ritchie's [26] crisis management frameworks have been the most applied to the study of different tourism crisis events. Although there is a growing trend towards developing frameworks with a more holistic perspective to capture the dynamic nature of crises, empirical validation of these newer frameworks remains limited [8]. Future research should prioritize the continuous testing and validation of these frameworks to ensure their effectiveness. Moreover, crisis management frameworks are still infrequently applied to health-related crises [9] and hospitality crisis management at the macro-level, supporting Leta and Chan's [11] research. These findings highlight the need for future research to seek a theoretical deepening of the nature and scale of each event under study to assist in its identification and successful management [8]. Once again, complexity theory may offer a valuable lens to understand the nature and scale of each crisis, as attempted by Reddy et al. [46].

On the other hand, a deeper theoretical understanding of the various typologies of crises in tourism can help to develop more resilient approaches [81] and action-oriented frameworks with practical and effective applications [16]. For example, Hao et al. [48] identified that the current pandemic has led many guests to prefer contactless digital service options in hotels to ensure service safety and reduce the risk of COVID-19 transmission. This finding could be used to scale up the digital transformation of hotels in the post-crisis period and increase resilience to future health-related crises.

Ultimately, a more sustained theoretical foundation will not only foster the development and refinement of frameworks but will also contribute to the generalization, adaptability and transfer of knowledge across different types of crises [8,16].

6. Conclusions

This study systematically reviewed the literature of crisis management in tourism and hospitality to overview the crisis management frameworks developed by scholars. The primary aim of crisis management frameworks is to offer valuable guidance and support to tourism stakeholders in all stages of a crisis event, from the pre-crisis phase to the actual crisis response and the subsequent recovery process [17]. Therefore, a total of 14 distinctive frameworks were identified and critically analysed above. A comprehensive overview of the major findings and the research methodologies employed in this area of study was provided. The study brought into focus the dynamic evolution of frameworks over time, demonstrating a remarkable shift from traditional sequential approaches to more integrated and flexible perspectives that attempt to recognize the inherent individuality of crisis events.

The analysis of the existing literature revealed a predominant focus on researching a specific type of crisis, mainly natural disasters. Scholars developed different crisis management frameworks to specific contexts and particular crisis events [8]. Unsurprisingly, there has been a surge in research dedicated to understanding the challenges posed by the COVID-19 pandemic and its impact on crisis management over the course of the last three years.

Crisis management research will likely continue to be a hot topic for the foreseeable future, as the rate of new pandemics is expected to increase in the Anthropocene [82]. As we progress towards increasingly intricate events such as pandemics and environmental crises, it becomes crucial to establish a stronger theoretical foundation for research in crisis management. A complexity-based perspective presents a road map for a more comprehensive understanding of crisis management and planning by moving beyond the traditional sequential approaches [46]. This integration will drive the refinement of crisis management frameworks with a more action-oriented lens and bolstering their resilience to crises of varying natures and scales.

Additionally, this study offers valuable practical insights for both scholars and practitioners. Considering the relevance of crisis preparedness in crisis management, one recommendation for both scholars and practitioners is to keep developing proactive crisis planning plans. A better integration of technology at all stages of crisis management is another recommendation. Technological tools can help tourism organizations and destinations to incorporate effective contingency plans in the pre-crisis period, facilitate information sharing via social media during the crisis and aid post-crisis recovery. Lastly, it is important that scholars and practitioners use their empirical investigations to refine and improve existing crisis management frameworks, ensuring their generalisation and applicability to different crises in comparative and longitudinal studies, rather than single-case studies, to fortify the empirical results [7]. By continuously enhancing these efforts, transfer of knowledge will be facilitated across all stages of crisis, fostering the development of more resilient crisis management frameworks for the tourism industry in times of crisis.

The research findings of this study are subject to certain limitations that must be highlighted. First, the research process was limited to (i) articles available on Web of Science™ Core Collection and Scopus databases; (ii) articles published in English; and (iii) only to research or review articles. Secondly, the criteria used for the inclusion of articles to be analysed were restricted, possibly leaving out articles that did not contain the keyword framework but could cover other crisis management frames. Consequently, the possibility exists that some other valid findings may have been unintentionally left out. Therefore, future research may consider broadening the subject selection criteria or broadening the search criteria to relevant research published in other databases, in different languages, in other document formats and by including other complementary keywords in the literature search.

Appendix A

Table A1. List of Journals (N = 36).

Journal	No. Studies	H-Index	Country
Tourism Management	7	199	United Kingdom
Annals of Tourism Research	3	171	United Kingdom
Current Issues in Tourism	3	74	United Kingdom
International Journal of Hospitality Management	3	122	United Kingdom
International Journal of Tourism Research	3	58	United Kingdom
Journal of Travel and Tourism Marketing	3	73	United States
African Journal of Hospitality, Tourism and Leisure	1	11	South Africa
Asia Pacific Journal of Tourism Research	1	37	United Kingdom
Communications—Scientific Letters of the University of Zilina	1	21	Slovakia
Cornell Hospitality Quarterly	1	75	United States
European Journal of Tourism Research	1	16	Bulgaria
Geographia Technica	1	11	Romania
Journal of Destination Marketing and Management	1	39	United Kingdom
Journal of General Management	1	20	United Kingdom
Journal of Hospitality and Tourism Insights	1	70	United States
Journal of Park and Recreation Administration	1	-	United States
Sustainability	1	85	Switzerland
Tourism Analysis	1	36	United States
Tourism Review	1	32	United Kingdom
Worldwide Hospitality and Tourism Themes	1	20	United Kingdom

Appendix B

Table A2. Analysis by type of crisis and study (N = 36).

Total	Type	Empirical	Conceptual	Mixed	Review
1	Conflict	0	1	0	0
4	COVID-19	1	0	4	0
1	Cyclone	0	0	1	0
3	Earthquake	2	0	1	0
1	Forest fire	1	0	0	0
4	Health-related crisis	4	0	0	0
1	Political	1	0	0	0
1	Shipping accident	1	0	0	0
1	Tsunami	1	0	0	0
6	Natural disasters (multiple)	2	2	1	1
12	Crises (multiple)	1	3	1	7
36	Total	14	6	8	8

Appendix C

Table A3. The crisis management frameworks analysed (N = 14).

Framework	Phases			Components													Structure		Type of Crisis	
	Pre-Crisis	Crisis	Post-Crisis	Risk Assessment	Contingency Plans	Mid-Crisis Management	Crisis Communications	Evaluation and Review	Flexibility	Stigma	KM	GIS	GPS	SC	DC	RE	SE	CY	CS	ND
[15]	X	X	X	X	X	X	X	X									X			X
[26]	X	X	X	X	X	X	X	X			X						X		X	
[62]	X	X	X	X	X	X	X	X		X							X			X
[57]	X	X	X	X	X	X	X	X	X					X				X		X
[59]	X	X	X	X	X	X	X	X	X			X						X	X	
[30]	X	X	X	X	X	X	X	X									X			X
[44]	X	X	X	X	X	X	X	X	X		X	X					X		X	
[55]	X	X	X	X	X	X		X	X					X		X		X		
[48]	X	X	X	X	X	X	X	X									X		X	
[46]	X	X	X			X														
[58]		X	X			X							X				X		X	
[47]	X	X		X	X	X			X							X	X		X	
[61]		X	X			X	X	X									X		X	
[56]	X	X	X	X	X	X	X	X	X						X	X		X		X

Abbreviations: KM, knowledge management; GIS, geographical information system; GPS, three-step strategy; SC, stakeholders' collaboration; DC, dynamic capabilities; RE, resilience; SE, sequential; CY, cyclic; CS, all type of crisis events; ND, natural disaster crisis events only.

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