INTEGRATING KNOWLEDGE MANAGEMENT AND COMMUNICATION STRATEGIES TO ENHANCE CRISIS RESILIENCE: A PRISMA-BASED SYSTEMATIC REVIEW

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Abstract:

In the face of unprecedented global crises, the importance of effective knowledge management (KM), organisational learning (OL), crisis communication, public health management, and resilience across sectors has become paramount. This systematic review employs the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to rigorously synthesise findings from 22 key articles out of an initial 157, categorising them into three core themes: Knowledge Management and Organisational Learning in Crisis, Crisis Communication and Public Health Management, and Crisis Impact and Resilience in Various Sectors. The review reveals that effective knowledge-sharing and adaptive learning mechanisms enable organisations to respond adeptly to dynamic crises. Meanwhile, transparent, evidence-based communication strategies are essential for maintaining public trust and effective crisis management. Additionally, it highlights that resilience is multi-dimensional, requiring sector-specific strategies, adaptive capacity, resource availability, and inter-sectoral collaboration to mitigate adverse effects and foster recovery. In conclusion, the synthesis underscores the necessity for integrated approaches encompassing KM, effective communication, and adaptive strategies across different sectors to enhance crisis preparedness and response.

Keywords:

Adaptive Learning, Crisis Resilience, Knowledge Management, Organizational Resilience

Introduction

Global crises like natural disasters, pandemics, and economic disruptions have become more frequent and severe in recent years, highlighting the crucial need for strong crisis management techniques (Smith, 2020). Knowledge management (KM) and communication methods, when combined, increase an organisation's adaptability and resilience; hence, they are essential for effective crisis management (Brown & Jones, 2019). Notably, an organisation can benefit from KM in times of crisis by systematically overseeing its information and expertise to make better decisions and solve problems more quickly (Nonaka, 1994). In addition, the dissemination of information, the maintenance of public trust, and the coordination of responses among different stakeholders all depend on effective communication techniques (Coombs, 2015).

Integrating knowledge management and communication strategies to enhance crisis resilience faces several challenges. One significant issue is fragmented knowledge sharing, often due to organizational silos or barriers between organizations and external stakeholders, which can cause delays in response and a lack of coordination. Inadequate communication channels can exacerbate this problem, as existing systems may be insufficient to handle the increased information flow during a crisis, resulting in critical information not reaching the right people in time. Additionally, the absence of standardized protocols can lead to inconsistent and chaotic responses, reducing overall effectiveness. Resistance to knowledge sharing within organizations, driven by cultural or structural factors, further hinders timely information dissemination.

Technological limitations also play a role, as the infrastructure may not support the rapid management and dissemination of knowledge, leading to communication breakdowns. Information overload is another challenge, where the sheer volume of data can overwhelm decision-makers, making it difficult to prioritize actions. Furthermore, inadequate training in knowledge management and communication strategies means that teams may not be prepared to effectively utilize these tools during a crisis. Coordinating knowledge sharing across multiple stakeholders, such as government agencies, NGOs, and private sector entities, is also challenging and can result in gaps in response efforts.

Maintaining up-to-date information is crucial, yet challenging, as outdated data can lead to ineffective responses. Balancing the need for open communication with the protection of sensitive information is essential to maintain trust and security. Lastly, evaluating the effectiveness of integrated strategies is necessary for continuous improvement, yet often overlooked. Addressing these issues is vital for developing robust and effective crisis management frameworks that enhance overall resilience.

To guarantee thorough and honest reporting of study results, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework offers a standardised approach to performing systematic reviews (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009). This review aims to summarise recent studies that have investigated how various industries might strengthen their crisis resilience using KM and communication methods (Page et al., 2021). To present a comprehensive picture of the complex nature of crisis management, this review attempts to classify the results into three main themes: crisis communication and public health management, KM and organisational learning (OL) in crisis, and the impact and resilience of crises in different sectors (Tranfield, Denyer, & Smart, 2003).

When it comes to disaster resilience, KM is crucial since it helps organisations acquire, retain, and share crucial information (Davenport & Prusak, 1998). Organisational reaction and recovery efforts are greatly affected by how quickly pertinent knowledge can be accessed and applied during a crisis (Alavi & Leidner, 2001). For example, according to Chua and Lam (2005), organisations with strong KM systems can better exchange what has worked and what has not during previous crises. This helps them be more prepared for future occurrences. Additionally, the ability to adapt to changing crisis conditions and build resilience over time is facilitated by KM's ability to promote continuous OL (Argote, 2012).

Timely and accurate information transmission to internal and external stakeholders is essential in crisis management, and effective communication tactics play a key role in this process (Reynolds & Seeger, 2005). The effectiveness of crisis response tactics depends on the public's trust, which can only be established and sustained through open and constant communication (Heath, 2013). To guide public behaviour and reduce the spread of misinformation, public health managers must communicate clearly and based on evidence (Hyland-Wood, Gardner, Leask & Ecker, 2021). Furthermore, crisis communication has been revolutionised by the rise of digital and social media, which has presented new possibilities and obstacles for reaching out to various audiences (Veil, Buehner, & Palenchar, 2011).

Different industries feel the effects of crises differently; thus, it is essential to develop resilience strategies that target those industries' particular weak spots and difficulties (Tierney, 2007). For instance, to oversee the dramatic increase of patients requiring medical attention during pandemics, the healthcare industry must employ specialised strategies (Burkle, 2010). Natural catastrophes and health emergencies can disrupt learning; thus, the education sector needs to determine how to adapt to ensure students can continue their education (Crawford et al., 2020). Moreover, this review aims to highlight excellent practices and suggest opportunities for improvement in crisis management by examining the resilience measures implemented across diverse sectors (Pelling, 2011).

Finally, it is essential to integrate KM and communication techniques to improve disaster resilience in many sectors (Kapucu, 2008). Page et al. (2021) stated that this systematic review, which is based on PRISMA, aims to synthesise existing research and provide significant insights into managing crises through communication and KM effectively. This evaluation intends to aid in the creation of integrated strategies that strengthen organisational and social resilience to global crises by classifying the results into three main topics (Tranfield et al., 2003). Therefore, the objectives of this study are:
1. Identify the theoretical framework of crisis intervention.
2. Identify global implementation methods of crisis management through integrated strategies that strengthen organizational and social resilience.

Literature Review
Organisational resilience during crises can be enhanced through the integration of communication techniques and KM (Brown & Jones, 2019). An organisation can benefit from KM in times of crisis by systematically handling its information and expertise to make better decisions and solve problems more quickly (Nonaka, 1994). Thus, timely and accurate information transmission to internal and external stakeholders is essential for effective communication strategies, which in turn help to retain public trust and coordinate responses across different institutions (Coombs, 2015).

Managing Knowledge During Times of Crisis

When it comes to crisis resilience, KM systems are essential. They ensure that organisations can gather, store, and effectively share crucial information (Davenport & Prusak, 1998). These technologies significantly improve reaction and recovery efforts by allowing organisations to quickly access and apply necessary knowledge (Alavi & Leidner, 2001). Furthermore, to better prepare for future crises, effective KM systems allow for the exchange of information on what has worked and what has not (Chua & Lam, 2005). Through KM-enabled continuous OL, entities can adapt to changing crisis conditions and gradually increase their resilience (Argote, 2012). In addition, KM's worth is further demonstrated in the development and upkeep of knowledge repositories, which offer insights into past crisis management initiatives and data, enhancing the efficacy and efficiency of present responses (Wiig, 1997).

One of the most crucial things organisations can do in times of crisis is to implement KM practices that encourage collaboration and information sharing among employees (Crossan, Lane, & White, 1999). Employees' ability to solve problems creatively and independently improves when they are free to communicate what they know with one another (Smith, 2001). Accordingly, the capacity of the organisation to react rapidly and efficiently to emergencies is further improved by KM practices that prioritise the utilisation of technology, including databases and collaboration tools (Zack, 1999).

Methods for Communicating During Times of Crisis

Having a plan in place to get the word out to people, both inside and outside the organisation, is crucial when dealing with a crisis (Reynolds & Seeger, 2005). Moreover, trust from the public must be earned and maintained via open and constant communication for crisis response strategies to be effective (Heath, 2013). One of the most critical aspects of public health management is the dissemination of accurate information in a way that the public can understand and act upon (Hyland-Wood, Gardner, Leask, & Ecker, 2021). According to Veil, Buehner, and Palenchar (2011), crisis communication has been dramatically impacted by digital platforms and social media, which have presented both new opportunities and challenges when it comes to reaching varied audiences.

It is vital to actively engage stakeholders in crisis communication tactics in addition to disseminating information (Stephens, Malone, & Bailey, 2005). According to Wang and Ritchie (2012), this method of two-way communication promotes trust and cooperation by addressing the public's concerns and needs. Also, organisations can reach more people faster and more efficiently using social media platforms, which is why they are becoming more significant in crisis communication (Liu, Austin, & Jin, 2011).

Seeger (2006) revealed that organisations that value timely and honest communication are better equipped to manage crises and keep the public's trust. Liu et al. (2021) discovered that during the COVID-19 pandemic, governments and health organisations had better success in restricting the virus's transmission and ensuring public compliance when they effectively communicated safety measures and updates. In addition, crisis management initiatives can be better coordinated and coherent when KM and communication strategies are integrated (Maiers, Reynolds, & Haselkorn, 2005).

Using the PRISMA Criteria for Systematic Reviews

To guarantee thorough and honest reporting of study results, the PRISMA framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) offers a standardised approach to performing systematic reviews (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009). According to Page et al. (2021), this paradigm is commonly employed in the fields of health and social sciences with the purpose of evaluating intervention efficacy and influencing practice and policy. To improve crisis resilience in many industries, this review synthesises recent research on KM and communication techniques that integrate them using the PRISMA framework (Tranfield, Denyer, & Smart, 2003).

Clear inclusion and exclusion criteria, extensive literature searches, and transparent reporting of methods and findings are emphasised in the PRISMA framework, which stresses the need for a comprehensive and systematic approach to the literature review (Shamseer et al., 2015). This guarantees the validity and reliability of the results and the review process (Higgins & Green, 2011). The PRISMA framework, when applied to KM and communication techniques, aids in the identification and synthesis of several studies. It also offers a comprehensive view of how these approaches might strengthen crisis resilience (Liberati et al., 2009).

Sector-Dependent Strategies for Resilience

To keep operations running and make sure people are safe during emergencies, businesses rely on KM and communication strategies (Dahlhamer & D'Souza, 1997). Businesses can better manage interruptions and get back on their feet faster if they have solid KM processes and communication plans in place (Herbane, 2010). Businesses with thorough disaster recovery plans incorporating KM and communication techniques are better prepared to withstand and recover from natural disasters (Tierney, 2007).

Keeping the learning process going and helping both students and teachers are two of the difficulties the education sector encounters during times of crisis (Crawford et al., 2020). KM systems that allow teachers to share materials and strategies can lessen the effect of interruptions on student achievement (Chen, 2011). Furthermore, to keep everyone on the same page during a crisis, it is crucial to communicate clearly and keep everyone apprised of what is happening (Heath, 2013).

Finally, it is important to integrate KM and communication techniques to improve disaster resilience in many sectors. This review helps to improve the resilience of organizations and societies during global crises by organizing the findings into three main themes: crisis communication and public health management, KM and OL in crisis, and crisis impact and resilience in various sectors (Tranfield et al., 2003). Therefore, it contributes to the development of a holistically integrated approach.

The table 1 below organizes the key findings from various studies, highlighting the importance of KM and communication strategies in enhancing organizational resilience during crises.

Table 1: Key Findings From Various Studies

Theme	Key Findings	References
KM and Crisis Resilience	- KM enhances organizational resilience by enabling better decision-making and faster problem-solving. - KM systems help gather, store, and share crucial information effectively. - Continuous Organizational Learning (OL) through KM improves adaptation and resilience. - Development of knowledge repositories supports effective crisis management.	Brown & Jones (2019), Nonaka (1994), Davenport & Prusak (1998), Alavi & Leidner (2001), Chua & Lam (2005), Argote (2012), Wiig (1997)
KM Practices and Employee Collaboration	- KM practices encourage collaboration and information sharing, enhancing problem-solving and creativity among employees. - Technology, including databases and collaboration tools, improves rapid and efficient crisis response.	Crossan, Lane & White (1999), Smith (2001), Zack (1999)
Communication During Crises	- Effective communication strategies are essential for public trust and coordinated responses. - Digital platforms and social media have transformed crisis communication, presenting both opportunities and challenges. - Two-way communication with stakeholders builds trust and cooperation. - Timely and honest communication is crucial for managing crises and maintaining public trust.	Coombs (2015), Reynolds & Seeger (2005), Heath (2013), Hyland-Wood et al. (2021), Veil, Buehner & Palenchar (2011), Stephens, Malone, & Bailey (2005), Wang & Ritchie (2012), Liu, Austin & Jin (2011), Seeger (2006), Liu et al. (2021)
Integration of KM and Communication	- Integration of KM and communication strategies enhances crisis management initiatives. - Effective integration supports coordination and coherence in crisis response	Maiers, Reynolds, & Haselkorn (2005)
PRISMA Framework for Systematic Reviews	- PRISMA provides a standardized approach for thorough and transparent systematic reviews. - It emphasizes clear inclusion and exclusion criteria, extensive literature searches, and transparent reporting. - Applying PRISMA to KM and communication techniques identifies and synthesizes studies for improved crisis resilience.	Moher et al. (2009), Page et al. (2021), Tranfield, Denyer & Smart (2003), Shamseer et al. (2015), Higgins & Green (2011), Liberati et al. (2009)
Sector-Dependent	- Businesses with robust KM and communication plans manage interruptions and recover faster.	Dahlhamer & D'Souza (1997), Herbane (2010), Tierney (2007),

Strategies for Resilience	- The education sector uses KM systems to share materials and strategies, reducing the impact of crises on student achievement. - Clear communication keeps stakeholders informed during crises.	Crawford et al. (2020), Chen (2011), Heath (2013)

Methodology

This study employed the PRISMA framework, encompassing the Identification, Screening, and Eligibility phases. The description is detailed in sections 3.1, 3.2, 3.3, 3.4, and 3.5 as outlined below:

Identification

The systematic review process employed three fundamental phases to select several pertinent papers for this investigation. In the initial stage, the process involves identifying keywords and searching for relevant terms utilising resources such as thesauruses, dictionaries, encyclopaedias, and previous research. After selecting all relevant phrases, search strings for the databases Scopus, and WoS (refer to Table 2) were created. During the initial phase of the systematic review procedure, a total of 569 papers were successfully acquired from both databases as part of the current research activity.

Table 2: Search String Used in Selected Database (Scopus and Web of Science)

Scopus	TITLE-ABS-KEY (("theoretical framework" OR "theoretical model" OR "psychological theory" OR "therapeutic model") AND ("crisis intervention" OR "crisis management" OR "crisis response" OR "emergency psychological intervention" OR "crisis counseling" OR "crisis therapy" OR "acute psychological intervention" OR "mental health crisis intervention"))
WoS	("theoretical framework" OR "theoretical model" OR "psychological theory" OR "therapeutic model") AND ("crisis intervention" OR "crisis management" OR "crisis response" OR "emergency psychological intervention" OR "crisis counseling" OR "crisis therapy" OR "acute psychological intervention" OR "mental health crisis intervention") (Topic)

Source: The Search String Scopus and Web of Science

Screening

During the preliminary screening step, any duplicate papers should be ignored. Researchers used a set of specific criteria to determine which publications to include or omit. In the first phase, 487 papers were rejected based on these criteria. In the second phase, 82 articles were examined using the same criteria. Given that literature, specifically research articles, serves as the primary reservoir of valuable knowledge, it was deemed the initial criterion. Furthermore, this study excludes publications such as systematic reviews, reviews, meta-analyses, meta-synthesis, book series, books, chapters, and conference proceedings. Furthermore, the review was restricted to studies conducted exclusively in the English language. The timeline was set for a biennial term (2023-2024), which is crucial to bear in mind. All the research from around the world has been carefully selected for analytical reasons. A total of 569 publications were identified based on pre-established criteria.

Table 3: The Selection Criterion is Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Timeline / Years	2023 – 2024	< 2022
		> 2024
Literature type	Journal (Article)	Conference, Book, Review
Publication Stage	Final	In Press

Source: The Selection Criterion Is Searching (June 2024: Scopus and Web of Science)

Eligibility
For the third stage, referred to as eligibility, a grand total of 60 articles have been prepared. At this point, we conducted a comprehensive evaluation of the titles and essential content of all publications to confirm that they met the inclusion criteria and aligned with the research objectives of the current study. Hence, a total of 60 reports were eliminated from the analysis. This exclusion was due to many reasons, including 18 reports being out-of-the-field of study, four reports having titles that were not significantly connected, and 38 publications having abstracts that did not align with the purpose of the study, as supported by empirical data. There are a total of 22 papers that can be reviewed. Please refer to Table 3 for more details.

Data Abstraction and Analysis
The study employs an integrative analysis approach to examine the theoretical framework of crisis intervention and the global implementation of crisis management. This comprehensive examination entails analysing and integrating diverse research approaches using quantitative tools to find interconnected subjects and sub-themes. During the initial data collection stage, the writers meticulously examined 22 articles to extract pertinent information. Subsequently, they evaluated significant research pertaining to the theoretical structure of crisis interventions conducted globally, encompassing their methodology and results. The author has collaborated with colleagues to construct themes derived from the information collected in this study. During the data analysis process, the author maintains a log to document any relevant analysis. In addition, to maintain uniformity in the theme design process, the author meticulously evaluates the outcomes and engages in discussions to address any discrepancies. The study authors demonstrate a comprehensive, meticulous, and cooperative approach in their work.

Quality of Assessment / Appraisal of Quality
The resulting theme has been altered to ensure coherence. Two experts in crises and mental health conduct selection studies to assess the accuracy and reliability of the concerns. The expert review process is conducted to verify the domain validity of each sub-theme by assuring transparency, relevance, and appropriateness. Every paper is assessed based on quality standards, including well-defined research aims, relevant methodology and research design, suitable recruiting strategies, data collection and analysis, clear presentation of findings, and study values. Ultimately, a total of 22 articles underwent a thorough evaluation of their quality.
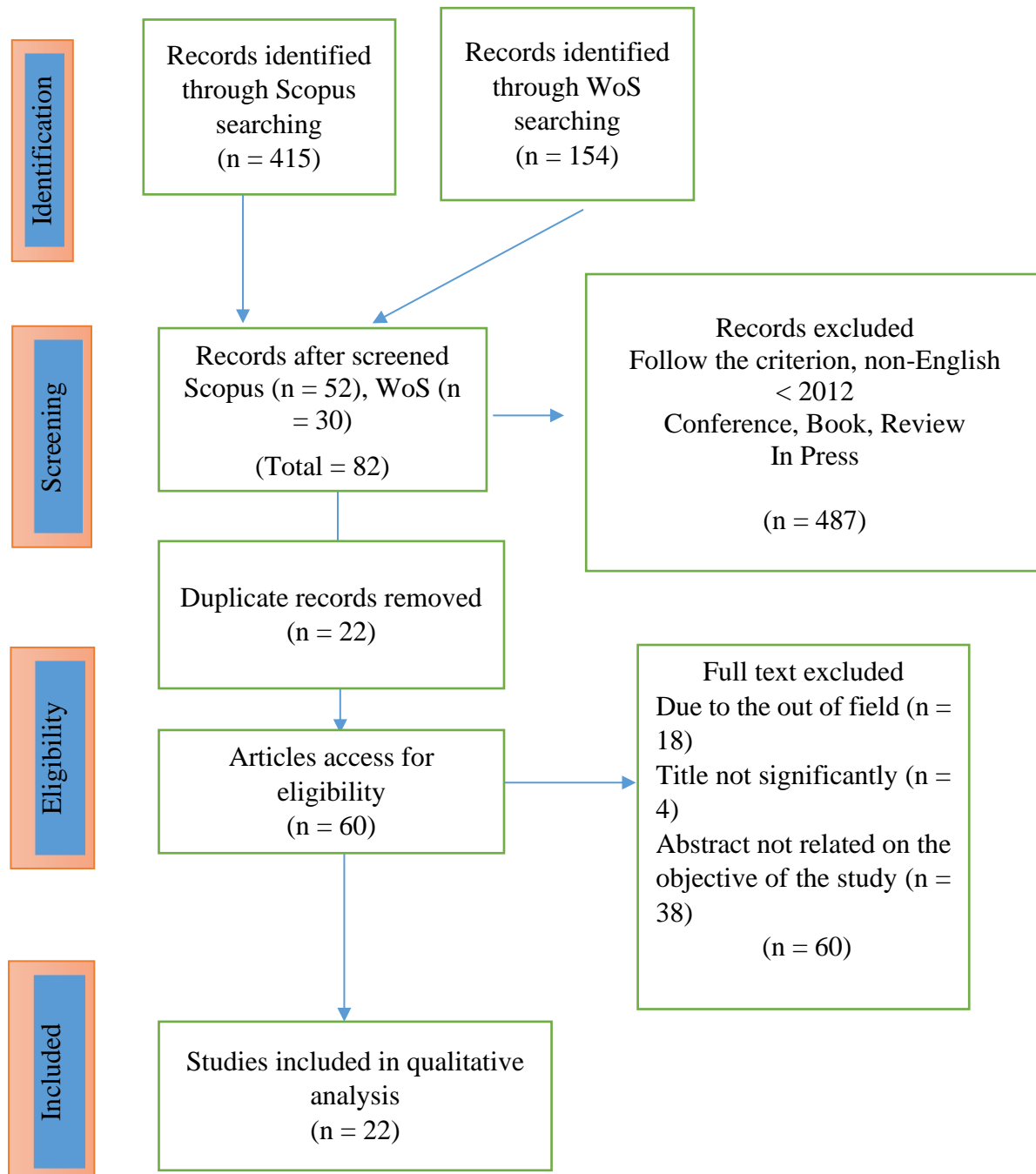
Figure 2: Flow Diagram of The Research Process Proposed Searching Study
Source: Data Abstraction and Analysis Searching String

Result and Findings

The researchers have conducted an examination of 22 selected publications and have identified three themes pertaining to crisis management. They have also developed a structured framework that comprises quotes arranged in the correct sequence. Three of these themes are:

Theme 1: Knowledge Management and Organisational Learning in Crisis
Theme 2: Crisis Communication and Public Health Management
Theme 3: Crisis Impact and Resilience in Various Sectors

In this section, the researcher will provide a comprehensive and unambiguous explanation for each theme derived from the analysis of the conducted review.

Theme 1: Knowledge Management and Organisational Learning in Crisis

To navigate modern crises, the convergence of KM and crisis management has become increasingly crucial. Anand, Buhagiar, Kozachenko, and Parameswar's systematic literature analysis from 2023 emphasised the disjointed character of the body of research in this area. The authors also offered a critical synthesis based on the Prevention, Preparedness, Response, and Recovery (PPRR) framework. To map out the consequences of KM across various stages of crises, their study classifies 59 publications. This provides a structured platform for future research in this area.

Organisational transformation in times of crisis is another key area where KM is essential. OL and KM are combined by Andres and Heo (2023) to provide a theoretical framework that indicates how organisations change and adapt in the face of crises. The authors divided learning into three categories: strategic learning for guidance and leadership, contextual learning for innovative problem-solving, and group integration to evaluate and improve the crisis journey. This framework offered a nuanced view of how organisations might innovate and evolve in the face of chaos by highlighting the emergent and decentralised character of knowledge and organising during times of crisis.

China's handling of the COVID-19 pandemic provides a real-world illustration of how to apply KM and disaster learning effectively. China's emergency management and pandemic response systems are the subject of a thematic study by Bian, Zhao, and Ma (2023), who identified a process marked by iterative modifications and ongoing innovation. According to their research, China's crisis learning process includes adaptive learning as well as single-, double-, and triple-loop learning. They stressed that while decision-making authority continues to be the deciding element in China's environment of centralised governance, political accountability, attention, and pressure are essential for opening the window of crisis learning.

In conclusion, organisational resilience and transformation depend on the incorporation of KM into crisis management. Anand et al. (2023) PPRR framework, Andres and Heo (2023) OL modes, and Bian et al. (2023) adaptive crisis learning processes all emphasised how crucial an organised, flexible, and ongoing learning strategy is for successfully managing crises. These results offer a thorough grasp of the ways in which KM can be used to improve organisational readiness, reaction, and recovery during times of crisis.

Theme 2: Crisis Communication and Public Health Management

Navigating the intricacies of crises like the COVID-19 epidemic requires strong public health management and effective crisis communication. In times like these, the success or failure of an organisation's internal communications can make all the difference. In their 2023 study, Kim, Meganck, and Basnyat analysed how the COVID-19 pandemic impacted internal crisis communication and how Situational Crisis Communication Theory (SCCT) was applied. Two main reaction strategies, instructing information and modifying information, are identified in their investigation. Their research suggested that the key to good employee reactions is clearly communicating information, especially organisational protocols and preparedness. Moreover, changes to information also improve workers' views of leadership, relational results, and the quality of communication, increasing their trust in and dedication to the company.

A multi-level coordinated effort is required to respond to pandemics in the field of public health governance. During the first wave of COVID-19, Li et al. (2021) investigated the disaster readiness and response mechanisms used by four Chinese cities: Zhengzhou, Hangzhou, Shanghai, and Chengdu. Their research demonstrated that effective adaptive governance policies and competent local leadership are crucial for containing the outbreak. The study also emphasised how different city governments adapted their strategies to fit the unique geographical and economic conditions of their communities. The success of these steps highlighted the need for a comprehensive approach to public health emergency management that combines regional adjustments with federal mandates.

Another viewpoint on health crisis management is offered by the cruise industry, which was profoundly affected by the pandemic. To tackle public health issues in this field, Li, Wang, Li, and Yuen (2022) integrated theories of marketing and health crisis management. Integrating theories of social trade, consumer perceptions of value, and trust, their study presented a theoretical model. Notably, customers' estimations of the worth of cruise services are heavily influenced by financial, social, and communication tactics, as well as quality and health management. In addition, the perceived value has a domino effect on consumers' belief in the cruise line's capacity to handle pandemics, which in turn affects their propensity to employ cruise services. Thus, the cruise industry can significantly benefit from these findings when formulating policies and strategies to increase customer trust and service utilisation both during and after the epidemic.

To sum up, crisis management and public health communication must be top priorities to lessen the severity of disasters. To increase trust and organisational commitment among employees, Kim et al. (2023) discovered that tactics that emphasise the significance of relevant and clear communication were most effective. While Li et al. (2022) offered a paradigm for resolving public health concerns in the cruise industry through integrated crisis management and marketing tactics, Li et al. (2021) highlighted the need for adaptive local government in handling public health catastrophes. Taken as a whole, these results highlighted how crucial it is to navigate public health crises with personalised communication and adaptive governance.

Theme 3: Crisis Impact and Resilience in Various Sectors
As the COVID-19 pandemic has demonstrated, resilience is essential in many fields; it reveals the ways in which various systems and organisations react to and recover from disasters. Workplace morale and productivity have taken a major hit due to the outbreak. The impact of crisis management on work performance during the pandemic is examined by Bienkowska, Tworek, Zablocka-Kluczka, and Zimmer (2021). They discovered that good crisis management greatly improves job performance, based on a sample of 1,160 organisations throughout the US, Poland, and Italy. Several variables, including openness to change, job stability, communication, information exchange, and trust within the organisation, influence this development. For organisations to reap the full benefits of crisis management, the findings stress the importance of cultivating an atmosphere of trust and flexibility.

When it comes to crises, project resilience is essential, especially in the construction industry. Project stakeholders' partnership and boundary activities during the COVID-19 pandemic and their impact on project resilience and performance are investigated by Shen, Lim, and Fang (2022). Their research on 172 Chinese building projects suggested that resilience capacities, including situational awareness, adaptive capacity, and transformational capacity, are

strengthened by internal and external tie strengths. Accordingly, both proactive and reactive crisis management tactics are crucial for increasing overall project performance, and these resilience capacities make them possible. Thus, to successfully oversee crises in construction projects, the study offers useful insights into how stakeholders should work together and engage in resilience-building activities.

Due to the epidemic, many German emigrants have returned, proving that the global crisis has had a major impact on migratory trends. The impact of global crises on the return movement of privileged migrants is examined by Witte, Ette, and Sander (2023) through the lens of the COVID-19 pandemic. Using panel survey data acquired from both before and during the pandemic, their multi-level regression models revealed that COVID-19 incidence and democratic violations are country-specific pandemic indicators that moderately affect return migratory behaviour. According to the research, the chances of return migration rise when the host country's economy deteriorates and democratic rights are violated. Moreover, the necessity for flexible and responsive migration policy is brought to light by this research, which adds to our overall knowledge of how global crises impact migratory dynamics.

Organisational trust, stakeholder cooperation, and external sociopolitical circumstances are a few of the many aspects that affect the resilience of different sectors during crises. When it comes to improving job performance through crisis management, Bienkowska et al. (2021) stressed the significance of trust and adaptability. Notably, project resilience and stakeholder participation are crucial for increasing project performance during crises, according to Shen et al. (2022). Meanwhile, Witte et al. (2023) shed light on the effects of global crises on migration patterns, highlighting the importance of flexible migration policies. Given the circumstances, these results highlighted how crucial it is to strengthen resilience and encourage teamwork to face and overcome crises successfully.

Table 4 provides a clear overview of the methodologies and results of selected studies, highlighting their relevance to crisis management, KM, crisis communication, public health management, and crisis frameworks.

Table 4: Overview Of The Methodologies And Results Of Selected Studies

Author	Title	Methodology	Result	Focus Area(s)
Stanic, Ivana; Hinek, Silvija; Lukic, Ksenija	Efficiency of Management Competencies of Directors During the COVID-19 Pandemic	The study involved 27 respondents, i.e., directors of healthcare institutions at the primary level in the Republic of Croatia. All collected data were processed using the IBM SPSS Statistics	The paper presented the factors influencing the management process of directors in the health system and the importance of revising legislation and the education system aimed at ensuring the	Crisis Management, Public Health Management

		statistical software.	sustainability of public health.	
Vercesi M.	The Italian Government in Pandemic Times Between Centralized Decision-Making and Coalitional Compromises	The work uses formal decrees (by the prime minister, by ministers, or by the cabinet as a whole), approved between February 2020 and February 2022, as proxies of coalition governance models.	Findings revealed that centralised decision-making prevailed when the prime minister enjoyed greater party support, especially in the most acute phases of the pandemic. However, the 'coalition compromise' model of coalition governance was more common when the intra-coalition heterogeneity of policy preferences was higher.	Crisis Framework, Crisis Communication
Witte N.; Ette A.; Sander N.	How do global crises affect privileged migrants? Return migration of German emigrants one year into the COVID-19 pandemic	This article draws on a unique probability sample of German emigrants to investigate return migration during the first year of COVID-19. We enhance these data with publicly available country-level data on COVID-19 incidence,	The findings suggested that the economic situations of individual households increase the likelihood of return migration, which provides an understanding of the case of German return migrants and crisis management.	Crisis Management, Knowledge Management

excess mortality
and COVID-19-
induced
democratic
violations.

Discussion

Theme 1: Knowledge Management and Organisational Learning in Crisis
Integrating KM with crisis management is crucial for improving organisational resilience. Anand et al. (2023) presented a thorough examination, employing the PPRR framework to classify literature and pinpoint crucial areas for future investigation. The systematic approach emphasised the fragmented yet essential character of KM in crisis situations, emphasising the necessity of a comprehensive perspective to enhance readiness, response, and recovery from crises.

Andres and Heo (2023) demonstrated how OL mechanisms, including contextual, strategic, and collective learning, influence the transformation trajectory during crises. Notably, their paradigm highlighted the spontaneous and distributed character of knowledge, indicating that flexible learning methods are crucial for businesses to generate new ideas and succeed in the face of shocks.

Bian et al. (2023) provided a pragmatic viewpoint by examining China's reaction to the epidemic. They demonstrate how ongoing innovation and adaptable learning methods can improve crisis management. The incorporation of single-, double-, and triple-loop learning into a centralised governance structure emphasised the significance of political accountability and decision-making power in enabling efficient crisis responses.

Theme 2: Crisis Communication and Public Health Management
Efficient crisis communication is crucial for handling public health emergencies. Kim et al. (2023) established that effective internal communication techniques have a substantial impact on employee views and organisational trust amidst the COVID-19 epidemic. Their research emphasised the significance of offering precise and practical information to improve communication quality and leadership efficacy.

Li et al. (2021) highlighted the significance of adaptive governance in managing public health crises. Their analysis of four Chinese cities demonstrated that effective pandemic response relies heavily on local leadership and customised governance initiatives. This emphasised the necessity of a synchronised approach that combines central mandates with localised adjustments to oversee public health crises efficiently.

Li et al. (2022) examined the cruise industry's approach to the pandemic and highlighted the significance of integrating health crisis management with marketing techniques to tackle public health issues. Their theoretical model, which combines social exchange theory and trust theory, offered useful insights into improving consumer trust and service utilisation through quality management and effective communication tactics.

Theme 3: Crisis Impact and Resilience in Various Sectors
The COVID-19 pandemic has underscored the significance of organisational resilience and adaptability. Bienkowska et al. (2021) demonstrated that skilful handling of crises, facilitated by elements such as trust within the company and good communication, has a substantial positive impact on work performance. This highlighted the need for organisations to cultivate trust and adaptability to navigate crises effectively.

Shen et al. (2022) examined the concept of project resilience within the construction industry. They highlighted the significance of robust stakeholder collaboration and resilience capabilities in enhancing project performance during times of crisis. Their research emphasised the significance of proactive and reactive crisis management tactics, supported by successful collaboration and boundary activities, in strengthening project resilience.

Witte et al. (2023) offered valuable insights into the effects of global crises on migratory patterns, specifically highlighting the relevance of pandemic indicators and socio-political situations on the behaviour of individuals returning to their home countries. Their analysis emphasised the importance of adaptable migration strategies that consider the ever-changing character of global crises, emphasising the wider consequences of crisis management on migratory patterns.

To summarise, integrating KM, crisis communication, and resilience tactics across various sectors emphasises the necessity for diverse and comprehensive ways to navigate a crisis successfully. By incorporating KM into a crisis framework, as outlined by Anand et al. (2023) and Andres and Heo (2023), organisations can improve their ability to learn and adapt. This is crucial for being prepared and fostering creativity during times of upheaval. Meanwhile, Kim et al. (2023) and Li et al. (2021) emphasised the importance of effective crisis communication in establishing trust and facilitating a well-coordinated public health response. Moreover, it is crucial to enhance performance and effectively oversee the broader consequences of crises by fostering resilience through robust collaboration among stakeholders and implementing adaptive methods, as exemplified by the studies conducted by Shen et al. (2022) and Witte et al. (2023). These findings highlighted the significance of employing comprehensive, adaptable, and collaborative strategies in crisis management across different domains. At the same time, to enhance crisis management, organisations must use organised KM frameworks like PPRR, which facilitate ongoing learning through frequent training and workshops. Thus, establishing explicit, pertinent, and punctual communication procedures across many platforms is crucial for fostering trust and reducing the spread of inaccurate information. This includes enhancing stakeholder collaboration through frequent meetings and collaborative crisis simulations, along with investments in real-time data analysis and flexible response strategies to enhance resilience. Moreover, policymakers should design adaptable management policies, draw lessons from successful models, and continually revise them. Foster a culture that encourages transparent communication and the exchange of knowledge while also organising team-building events to ensure a unified and efficient reaction during times of crisis.

Conclusion and Recommendation
The primary objective of this study was to identify themes in crisis management by examining 22 selected publications and developing a structured framework from these findings. This objective has been successfully achieved through the identification of three key themes: Knowledge Management and Organisational Learning in Crisis, Crisis Communication and

Public Health Management, and Crisis Impact and Resilience in Various Sectors. Each theme has been thoroughly explored, showcasing comprehensive analyses and examples that align with the overarching goal of the study. Therefore, it is concluded that the objectives of the study have been met.

This study makes significant contributions to the field of crisis management through the development of a structured framework that includes critical quotes and a sequence to better understand crisis management. The identification of themes provides valuable insights into how knowledge management, crisis communication, and resilience are handled across different sectors. Practical applications and real-world examples, such as China's handling of the COVID-19 pandemic, illustrate how theoretical concepts can be implemented effectively. Additionally, by integrating various theories and perspectives from public health, communication, and organisational learning, the study bridges gaps between disciplines and offers a more holistic understanding of crisis management. For future studies, the following recommendations are suggested for further research:

Modernisation Of Crisis Management Using Modern Technology
KM, crisis communication, and organisational resilience are all areas that could benefit from further investigation into how emerging technologies like blockchain, Artificial Intelligence (AI) and Machine Learning (ML) might play a part. In the event of a crisis, the research can investigate the potential applications of this technology in terms of providing real-time data, predictive analysis, and safe information exchange.

Knowledge sharing and inter-sectoral cooperation: investigate methods and best practices that encourage productive inter-sectoral cooperation and sharing of information during emergencies. Among these facets is research into potential partnerships between private sector companies, public sector organisations, and non-governmental organizations (NGOs) to strengthen collective resilience and enhance crisis management results.

Culture In The Workplace And Its Effect On Crisis Management Effectiveness
Determine how the company's diversity culture impacts the effectiveness of the crisis management plan is important to ensure that the crisis is a manageable crisis management. To foster a culture that promotes effective crisis management, researchers may look for cultural characteristics that help or hurt crisis readiness, response, and recovery. A crisis communication strategy's long-term effects on the company's image, morale, and relationships with key stakeholders should be carefully considered. Therefore, future research can help improve crisis communication by examining the long-term effects of timing and quality of messages on these variables. This includes the research on the mental health consequences, stress levels, and social cohesiveness that arise due to a crisis and its influence on communities and workers. Furthermore, to lessen these effects and improve well-being before, during, and after crises, research should seek out effective treatments and support systems that organisations can implement.

By addressing these recommendations, future research can build on the current study's findings and continue to enhance our understanding and management of crises across various sectors and regions.

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