education sciences

MDPI

Article

Navigating the Storm: A Qualitative Study of School Principals' Crisis Leadership Practices

Ludmila Zagoroui and María Jesús Rodríguez-Entrena *

Department of Didactic and School Organization, Faculty of Education, Campus Universitario de Espinardo, University of Murcia, 30100 Murcia, Spain; ludmila.zagoroui@um.es
* Correspondence: entrena@um.es

Abstract

This study explored the crisis leadership practices that school principals perceive as effective and examines how these practices align with an established crisis leadership model. Adopting a qualitative research design, the study is based on in-depth interviews with ten Israeli school principals, focusing on their experiences in managing crises. Data were analyzed using a deductive, directed content analysis approach, with the crisis leadership model serving as the primary coding framework, complemented by inductive coding to identify new themes emerged from participants' accounts. The findings revealed that principals enacted all seven overarching leadership constructs—compassion and care, openness and communication, adaptiveness, decisiveness, resilience and courage, consultation and collaboration and empowerment—through a combination of common strategies and customized, context-specific practices. Two further constructs emerged from principals' interviews that were not included in the original framework: operational and logistical preparedness and sensemaking and information verification illustrating how context-specific practices can extend an established model. The study highlights how crisis experiences can generate valuable professional learning and deepen understanding of leadership in challenging contexts. It also sheds light on the impact of crisis leadership on school communities and offers insights into the development of more responsive and context-sensitive leadership practices and models.

Keywords: crises; crisis leadership; school principals; crisis leadership practices

1. Introduction

Throughout history, humanity has endured numerous perilous situations, yet it seems we have never encountered challenges as intricate as those we face today. The complexity of navigating life is increasingly evident in every aspect of our daily lives. This is particularly true for leaders of organizations in general and school principals in particular. Today's educational settings, especially schools, operate amid significant challenges stemming from economic, cultural, and social instability, as well as rapid changes and geopolitical insecurity. In Israel this includes structural pressures such as the larger average class sizes and instruction hours alongside pronounced literacy and socioeconomic disparities (OECD, 2025). This study aims to understand the challenges the school principals faced and identify crisis leadership practices that helped them to navigate through the crisis events in these turbulent times. Crises differ in type and nature, and each demands its own leadership response. The Coronavirus pandemic has placed educational systems under a very challenging environment (Daniel, 2020; Harris & Jones, 2020; Nickerson & Sulkowski, 2021)

Check for updates

Academic Editor: Izhar Oplatka

Received: 10 August 2026
Revised: 21 September 2026
Accepted: 23 September 2026
Published: 1 October 2026

Copyright: © 2026 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license.

and revealed the school principals' lack of preparedness for crisis management skills and practices. A substantial body of research has examined leadership during the COVID-19 crisis, providing important insights into crisis management, but the complexities of school leadership in a wartime context call for additional consideration. The security-related conflict that erupted in 2023 created significant challenges for the Israeli educational system, requiring principals to adjust their leadership practices under conditions of insecurity and disruption. The war has triggered large-scale evacuations of students and staff, an abrupt shift to remote and later hybrid learning and establishment of temporary schooling frameworks for displaced communities (Bar-On & Schechter, 2026); principals have also had to secure shelters, adapt policies such as examination accommodations for displaced students and sustain learning continuity amid destruction, displacement and psychological distress (Alon & Schechter, 2026). Crisis situations require school leaders to move beyond traditional leadership practices, as previous approaches are no longer sufficient to meet the rapidly evolving challenges (Harris & Jones, 2020). They are losing their relevance, requiring innovative and creative responses. During the crisis, principals encountered external situations that demanded immediate action and led to significant shifts in their leadership roles and practices (Berkovich, 2023). Effective and strategic leadership practices play a critical role in mitigating risks and fostering solutions in times of crisis (Balasubramanian & Fernandes, 2022; Harris, 2020). Because this rapidly changing and unpredictable VUCA (volatility, uncertainty, complexity, ambiguity) environment is both unfamiliar and continues to evolve, present and future school principals must be prepared to recognize the core leadership practices and proven lessons that enable effective leadership (Brodie & Fraizer, 2018a, 2018b). Given the global challenges confronting schools, this study seeks to contribute to shedding light on the scholarly research and literature in the field of school leadership. This paper aims to identify the leadership practices of school principals that helped them to confront crisis events during a disruptive time. In line with the research objective, this study adds to the literature on principal crisis leadership by exploring how school principals navigated crises, events and uncertainty. The findings could offer valuable insights to researchers, educators, and policymakers on effective leadership strategies for facing school crises.

Despite the growing body of work, empirical accounts of how school principals lead specifically through security-related and compounding crises remain limited (Riggio & Newstead, 2023). This study addresses this gap by asking the following research questions:

RQ1: Which crisis leadership practices were effective in helping school principals navigate the high-pressure crisis situations?

RQ2: How do these practices align with and extend the constructs of the crisis leadership model proposed by Balasubramanian and Fernandes (2022)?

Answering these questions contributes both empirically, by documenting principals' lived practices, and theoretically, by testing the transferability of an existing measurement model to the educational setting.

2. Literature Review

In an era marked by unprecedented rates of change, one of the new challenges of a principal is responding to an abrupt, unexpected, and devastating event. Crisis leadership involves the actions leaders take to prepare for and manage unexpected crises, deal with the major consequences and learn from the insights generated by these disruptive events (Zhao & Jowett, 2022). Crises that affect the schools can disturb the sense of security, stability and well-being within schools often lead to trauma, threats, and loss (Smith & Riley, 2012). The rate of change raises doubts whether the leaders are adequately prepared for future disruptions and the opportunities and adversities that they will bring. It has

become evident that strategies effective in the past will not necessarily meet the demands of the future. In the current era marked by relentless geopolitical uncertainties, whether on a global scale or local contexts of social and security tensions, the role of education leaders becomes paramount (Glanz, 2021; Arar & Örücü, 2021). In 2020, a tipping point increased the complexity of the working environments within schools (St-Onge et al., 2022). A tipping point can be considered the last straw or an event that tipped a system over the edge, opening what complexity scholars' term "adaptive space", a window in which rigid systems loosen and become receptive to change (Uhl-Bien, 2021). This adaptive space exists only as long as the pressures generated by the crisis persist, requiring leaders to recognize and act on it while it remains open. COVID-19, for example, opened such a window across the globe with lasting consequences for how organizations including schools responded to disruption. In 2020, the world of education was changed forever (Li & Lalani, 2020). In these uncertain and turbulent times, school principals play a critical role in managing the complexities and sustaining innovative educational processes. Tokel (2018) emphasizes that effective crisis leadership requires "special and super skills" particularly in policy implementation and communication. In this context, Bagwell (2020) observes that the pandemic has been "rapidly refining schooling and leadership" (p. 32), pushing leaders to adapt while cultivating both organizational and personal resilience. At the same time, Netolicky (2020) highlights the multiple tensions faced by school leaders during the pandemic, including the challenge of balancing urgent decision-making with long-term outcomes. In recent years transformational and instructional leadership models have strongly shaped school leadership practices, enabling leaders to drive school improvement by implementing change (Grissom et al., 2021). Yet, crises demand a distinct strategy requiring a specialized set of attributes, competencies and practices (Hemmer & Elliff, 2020) particularly when unforeseen, unknowable and novel situations require leaders to adapt quickly, decide rapidly and mobilize resources on short notice (Riggio & Newstead, 2023). This shift compels educational leaders to re-evaluate their roles and approaches (Azorín, 2020; Hemmer & Elliff, 2020). Empirical research on crisis leadership has provided important insights into the ways principals managed during various natural disasters like tornadoes (Bishop et al., 2015; Goswick et al., 2018), human-made crises like school shootings (Brown, 2018) or armed conflict (Bar-On & Schechter, 2026). These studies highlighted the importance of offering care, making swift decisions, ensuring clear communication, fostering collaboration, and building trust and resilience, encouraging creativity and flexibility during the crisis. These findings align with the recommendations of Schechter et al. (2024), drawing on the crisis leadership literature, emphasize care, collaboration, effective communication, and te use of diverse staff expertise as central to leading during a pandemic. A recent qualitative meta-synthesis confirms that scholarly interest in crisis school leadership has grown markedly in recent years, while also pointing to a continued lack of integrated evidence across different types of crises (Bellibaş & Karaferye, 2025). Emerging work on principals serving as emergency shelter managers during natural disasters further illustrates how crisis leadership extends beyond the school walls into logistical and civic roles for which principals are rarely trained (Griffard et al., 2026). In addition to their role in managing crises, school principals play a crucial part in shaping the school environment which in turn affects the wellbeing of staff, the achievements of students and parental trust. Ecological systems theory provides a valuable perspective in this context. Recent studies that applied this approach to examine principals' roles reveal that their actions are influenced by interconnected layers, ranging from the immediate school community to the broader institutional and societal contexts (Elomaa et al., 2024). This ecological reframing of school leadership research from leader-centered models towards a "complex social ecology" of educational leadership, has gained renewed attention as principals increasingly navigate

pressures including economic shortfalls and war (Ylimaki & Gu, 2026). In this context, the school climate shaped by the principal functions as the central layer through which crisis leadership practices impact staff, students and parents rather than being a separate outcome disconnected from leadership behavior itself. This perspective is consistent with ecological critique of leader-centered crisis models developed later in this paper (Griffard et al., 2026). Contemporary models of leadership, such as distributed leadership, transformational, situational and adaptive leadership, include codified units of analysis, structures, and processes to respond to turbulent environmental conditions. As highlighted by Riggio and Newstead (2023), this response capacity is significantly enhanced by integrating charismatic leadership theory, cognitive resource theory and crisis management theory. While charismatic leadership leverages vision framing to maintain follower alignment and morale during acute shocks; cognitive resource theory optimizes how leader's intelligence and experience are deployed under high stress situations. Crisis management theory focuses on multi-phase resilience, including pre-crisis preparation, dynamic response, and post-event learning. Nevertheless, each leadership approach presents specific changes when applied to crisis management. Table 1 synthesizes the principal gaps and controversies identified across this body of literature and points out the present study's contribution.

Table 1. Gaps and controversies in the crisis leadership literature and this study's contribution.

Literature/Source	Key Claim/Focus	Gap or Controversy	This Study's Contribution
Bishop et al. (2015); Goswick et al. (2018)—natural disasters; Brown (2018)—school shooting; Bar-On and Schechter (2026)—armed conflict	Empirical crisis leadership research spans diverse crisis types.	Findings are scattered among different crisis types lacking a cohesive analysis. The context of armed conflict is less studied compared to natural disasters.	Focuses specifically on a security/war crisis in the Israeli context adding needed depth to the thin armed conflict literature.
Hemmer and Elliff (2020); Riggio and Newstead (2023)	Crises demand a special set of attributes and competencies distinct from routine leadership.	The claim that crisis leadership is "distinct" is widely used, yet the specific practices that define this uniqueness are often not clearly articulated and remain unexplored.	Identifies concrete, observable practices principals used under crisis and empirically tests and extends the specialization claim with two new constructs.
Grissom et al. (2021)	Transformational and instructional leadership models drive routine school improvement.	These models are created for planned, incremental change, not the rapid adaption demands of acute crises.	Empirically demonstrates why crisis conditions require constructs distinct from transformational/instructional leadership.
Riggio and Newstead (2023)	Proposes integrating charismatic leadership, cognitive resource theory and crisis management theory to explain enhanced crisis response capacity.	The proposed theoretical integration is conceptually empirical and requires testing within specific contexts.	The emergent construct "sensemaking and information verification" offers empirical grounding for the cognitive resource/dynamic-response dimension this integration highlights.
Schechter et al. (2024)	Identifies care collaboration, communication and staff expertise as central to pandemic-era leadership.	These recommendations were derived specifically from pandemic conditions; their transferability to secure-driven crises was untested.	Tests whether these pandemic-derived themes hold under war/security crisis conditions, largely confirming them while also surfacing practices they do not capture.

Table 1. *Cont.*

Literature/Source	Key Claim/Focus	Gap or Controversy	This Study's Contribution
Bellibaş and Karaferye (2025)	Meta-synthesis notes growing scholarly interest but a continued lack of integrated evidence across crisis types.	Absence of an integrated cross-crisis theoretical framework in educational leadership.	Directly tests one established model's applicability across a different crisis type (A COVID-19-designed model applied to war) and proposes two extensions to help close the integration gap.
Griffard et al. (2026)	Principals serving as emergency shelter managers take on logistical and civic roles for which they are rarely trained.	Existing crisis leadership models emphasize interpersonal/behavioral constructs but largely omit the operational–logistical dimension of the principal's role.	Directly validated by this study's finding: the emergent construct "operational and logistical preparedness" empirically confirms the gap Griffard et al. identify.

A Measurement Model of Crisis Leadership

A measurement model of crisis leadership has been proposed by Balasubramanian and Fernandes (2022). This model comprises seven key constructs: compassion and care, openness and communication, adaptiveness, resilience and courage, decisiveness, consultation and collaboration, and empowerment. Table 2 below presents a visual representation of this crisis leadership model and the elements of each construct.

Table 2. Constructs of Crisis Leadership Measurement Model (Balasubramanian & Fernandes, 2022).

Constructs	Elements of the Construct
Compassion and Care	➢ Leader being an active listener to employees' concerns during the crisis. ➢ Leaders being empathetic to employees' concerns. ➢ Leaders' decisions centered on employees' needs and concerns. ➢ Employees' expressions of their concerns are encouraged.
Openness and Communication	➢ Employees being informed regularly of the crisis. ➢ Leaders' demonstration of transparency extensively.
Adaptiveness	➢ Leaders' ability to assess the evolving/changing crisis and set priorities. ➢ Bringing drastic organizational changes to overcome the crisis. ➢ Attempt of new and unconventional measures to overcome the crisis.
Resilience and Courage	➢ Ability to deal with crisis-induced stress. ➢ Ability to get bounced back from the setbacks faced during crisis. ➢ Demonstration of courage in dealing with the crisis. ➢ Shouldering the responsibility/accountability for the crisis.
Decisiveness	➢ Being resolute in decision making. ➢ Demonstration of a sense of urgency in dealing with crisis. ➢ Ability to make quick decisions. ➢ Providing clear directions for employees to deal with crisis. ➢ Having clear expectations from the employees in a crisis.
Consultation and Collaboration	➢ Consultation with others in decision-making during a crisis. ➢ Relying on internal specialists/experts to navigate a crisis. ➢ Relying on external specialists/experts to navigate a crisis.
Empowerment	➢ Encouraging creativity/innovativeness of employees during a crisis. ➢ Flexibility about employees' freedom/independence to handle a crisis. ➢ Ensure recognition of employees' contribution during a crisis.

To better understand the model, a theoretical overview of each of its constructs will be presented below. During a crisis, it is crucial to realize the effects of crises on the whole school community and to offer support and demonstrate understanding and be sensitive (Dirani et al., 2020). The support can be shown through care and interest in the mental and emotional states of students, teachers and parents. During a crisis, the focus should be strengthening staff confidence by providing understanding, support and encouragement rather than highlighting errors (Kaul et al., 2020). Compassion and care foster a feeling of unity. Research has shown that during a crisis, school leaders demonstrated care by recognizing staff stress, providing support and encouraging open expressions of worries and feelings (Geer & Coleman, 2014). Clear communication provides comfort for teachers, students and the whole school community in turbulent times. Effective crisis communication involves honesty and transparency, with messages that are clear and direct shared via multiple communication platforms (Dirani et al., 2020; Stoller, 2020). The importance of transparent and open communication in the time of crises is emphasized (Forster et al., 2020). It is crucial to have reciprocal and comprehensive communication channels that allow school leaders to deliver clear messages to their educational staff and parents, thereby preventing the spread of rumors or misinformation (Schechter et al., 2024). Addressing a swiftly changing nature of crisis events requires adaptive leadership due to the uncertainty and volatility of such situations. This means that leaders must engage in ongoing learning and adjust their responses accordingly (Dirani et al., 2020). During crises, it is crucial for leaders to adopt an agile and adaptable approach into their decision-making and operational strategies, applying critical thinking and proactive involvement (Dirani et al., 2020). Although crises prompt the leaders to focus on short-term survival, effective leadership requires keeping a long-term outlook embracing the development of new leadership practices and innovative approaches throughout and after the crises. For visionary leaders crises often serve as an opportunity to explore new strategies and innovative practices, ensuring that the resulting processes are more resilient and future oriented (Kaul et al., 2020). School principals need to demonstrate personal resilience, which involves both the process and the result of effectively adjusting to difficult situations, while simultaneously fostering resilience among students and teachers. Studies show that principals who demonstrate strong resilience have a greater capacity to rebound from challenging situations and crises, enhancing their effectiveness as leaders (Fletcher & Nicholas, 2016; Geer & Coleman, 2014). A resilient leader is someone who views failures as temporary obstacles that can be swiftly overcome. Rather than becoming paralyzed by stress, these leaders demonstrate bravery when faced with the complexity and ambiguity brought on by a crisis. Leaders must learn to operate under intense pressure while recognizing that rapid decision-making can lead to making mistakes (Stoller, 2020). Nevertheless, effective leaders quickly learn from these mistakes and recover with resilience. These leaders also demonstrate honesty and courage by acknowledging their mistakes and any failures that occur (Ahern & Loh, 2020). Decisive leadership is crucial in times of adversity, as it enables swift action grounded in a thorough understanding of the crisis (Forster et al., 2020). It also involves fostering collaboration and shared decision-making among school stakeholders to develop effective action plans for parents, students, and teachers (Sutherland, 2017). Within schools, collaboration among stakeholders is grounded in the organization's capacity for internal learning, a process that the pandemic has further strengthened by enhancing educational networking as a catalyst for innovation and reinforcing the importance of collaboration (Azorín & Fullan, 2022). By acknowledging the strengths of the staff, the school builds a collaborative community in which teachers support one another and share professional knowledge in response to ongoing needs (Stone-Johnson & Miles Weiner, 2020). During the pandemic, school leaders strengthened internal collaboration by creating formal structures, including spe-

cialized crisis leadership teams which are considered essential for effective crisis response (Alawawdeh, 2016; Williams et al., 2017). Encouraging an open learning culture enables principals to manage the new demands of crisis while utilizing the skills and knowledge of their staff (Harris & Jones, 2020; Rogers & Sabarwal, 2020). Crises call for supporting staff empowerment and providing an environment where open communication encourages sharing of innovative ideas without the fear of criticism (Forster et al., 2020). During a crisis, it is essential for leaders to create an environment that encourages learning from mistakes, experimenting and allowing staff to take calculated risks (Stoller, 2020). All these constructs emphasize the elements that help leaders perform more effectively during times of disruption and crisis. Although presented as seven discrete constructs, these dimensions of crisis leadership are conceptually interdependent rather than independent. Compassion and care together with openness and communication function as a relational foundation that builds the trust necessary for effective consultation and collaboration. Adaptiveness and decisiveness represent the model's active dimension; adaptiveness enables leaders to reframe and adjust to a changing situation while decisiveness translates that adjusted understanding into timely action. Resilience and courage operate as an enabling condition that sustains the leader's capacity to perform the other constructs under prolonged strain rather than as a discrete action in itself. Finally, empowerment functions as a distributive outcome, expanding the trust built through care and communication into the wider organization by granting others the confidence and autonomy to act. Figure 1 depicts these relationships schematically.



Figure 1. Relationship among seven constructs of crisis leadership model.

3. Research Method

To explore and analyze the leadership practices of school principals, a qualitative phenomenological research design was adopted in the Israeli context. Research questions aimed at gaining an in-depth understanding of individual practices and behaviors are particularly suited to qualitative approaches (Merriam & Tisdell, 2016). Phenomenological research seeks to examine how individuals experience a shared phenomenon and how they interpret the meaning of those experiences. This approach enables the identifica-

tion of commonalities across participants' perspectives, providing a rich and nuanced understanding of a collective experience (Ataro, 2020). To analyze the empirical data, a directed qualitative content analysis approach (Hsieh & Shannon, 2005) was selected. This approach was chosen because it allows researchers to structure and focus analysis while still permitting new, context-specific categories to emerge from principals' accounts. This dual capacity makes the approach uniquely suited to examine how principals' practices align with, confirm and extend beyond the pre-existing framework.

In this study, the focus is on understanding how school principals experienced and enacted leadership during periods of disruption and crisis.

3.1. Context

The Israeli school system serves over two million pupils across more than 5560 K–12 schools. About 76% of students attend schools in the Jewish sector and 24% in the Arab sector. Israel is characterized by pronounced socio-economic disparities, ranking among the OECD countries with the highest levels of income inequality, as reflected in its Gini coefficient. These inequalities are mirrored in the education system, where students from central regions consistently outperform those from peripheral areas, largely due to socio-economic factors. Despite policy initiatives aimed at supporting disadvantaged populations, international comparative studies indicate that achievement gaps continue to widen (Dadon-Golan et al., 2019).

The system operates under a centralized governance model in which the Ministry of Education defines curricula, standards, assessment frameworks, and teacher employment policies. All schools must follow a national core curriculum, with limited flexibility to specialize in areas such as arts or sports. In recent years, however, efforts have been made to increase school autonomy, granting principals greater control over budgeting and the selection of supplementary learning programs.

3.2. Participants and Procedure

To fully capture the phenomenon, the study aims to include enough participants to reach data saturation (Merriam & Tisdell, 2016). Following this guidance, the present study employed purposive sampling with clear criteria and maximum variation, resulting in a sample of ten participants. Three main criteria were used to select participants. First, professional identification by district superintendents as having demonstrated effective management during the COVID-19 pandemic and regional crises; second, institutional diversity across school types, socio-economic contexts, religious sectors and school sizes; and third, participants' voluntary willingness to join the study. The sampling strategy combined professional diversity with variation across school contexts, mitigating potential sampling bias while capturing a broad range of principals' experiences and responses to crisis. After proceeding with the analyses to verify the saturation of the information, it was found that the information offered by the 10 leaders in many questions coincided; so, it was decided not to expand the sample and to stay with those 10 participants whose characteristics are described in the following Table 3. Prior to the study, necessary steps were taken to ensure ethical compliance. Participants were informed about the study's nature and purpose, and that their participation was voluntary. To ensure anonymity, the principals' names were excluded and replaced with ordinal numbers alongside their titles.

Table 3. Demographics of the participants.

Principal No.	Gender	Seniority	Level	School SES	School Size
Principal 1	Male	11 years	6y high school	Lower-medium	740
Principal 2	Female	2 years	Elementary school	Middle	840
Principal 3	Female	15 years	6y high school—Arab	Upper-medium	760
Principal 4	Male	23 years	6y high school	Upper-medium	1820
Principal 5	Female	7 years	6y high school—religious Jewish	Middle	510
Principal 6	Female	12 years	High school	Upper-medium	470
Principal 7	Male	19 years	Boarding school	Lower-medium	310
Principal 8	Female	3 years	Regional School	High	1840
Principal 9	Male	11 years	Elementary school	Lower-medium	810
Principal 10	Female	17 years	Adjoining junior high school	Upper-medium	350

Note: SES = Socioeconomic status; school size based on the number of students enrolled. SES classification: School socioeconomic status (SES) was determined using the Ministry of Education's official Nurture Index, an administrative measure of the socioeconomic and cultural background of student population that is used to allocate differential ("Nurture Basket") funding to schools serving more disadvantaged populations (Blass, 2022). The index comprises ten deciles where Decile 1 represents schools serving students with the strongest socioeconomic backgrounds and Decile 10 represents schools serving students with the weakest socioeconomic backgrounds and the greatest need for additional support. Thus, the direction of the Nurture Index is inverse to the conventional interpretation of SES: higher Nurture deciles indicate greater socioeconomic disadvantage. For descriptive purposes, the ten Nurture deciles were grouped into five descriptive bands: low SES (deciles 1–2), lower-medium SES (deciles 3–4), middle SES (deciles 5–6), upper-medium SES (deciles 7–8) and high SES (deciles 9–10). These categories were created by the researchers for descriptive presentation and do not present official Ministry of Education categories. None of the ten participating schools fell into the lowest band; so, only four bands appear in Table 3. Elementary school—a primary-level institution, providing foundational education from grades 1–6. Adjoining junior high school—a lower secondary school from grades 7–9. 6y high school—a six-year high school that integrates lower and upper secondary school within one institution. Boarding school—a school in which students live on campus during the academic term, combining education with residential life. Regional school—a school serving students from multiple communities and localities, often established to pool resources across small and rural areas and is administrated at a regional level.

3.3. Data Collection

A semi-structured interview was used as a tool for gathering data. Semi-structured interviews are valued as a key data collection method because they create a relaxed and spontaneous environment for participants to share their experiences, facilitating data analysis, validity checks, and triangulation (Creswell, 2014). Demographic and background information for each principal (Table 3) was collected separately, prior to the interview session. The interview protocol included twenty semi-structured questions, validated by expert judgment. Data were collected through both in-person and online semi-structured interviews, each lasting approximately 30–50 min, which were audio-recorded for subsequent verbatim transcription and analysis.

3.4. Data Analysis

To identify the practices that school principals used to navigate through the crises, this study employed a directed qualitative content analysis approach (Hsieh & Shannon, 2005). Deductive research is known for its structured and systematic nature and focuses on theoretical and empirical efforts on specific concepts to enhance understanding (Fife & Gossner, 2024). A key benefit of deductive research over inductive research on the same subject is that it begins with a clear perspective and concepts, making it more organized, focused, and efficient in testing existing knowledge while offering a more profound exploration of existing theories, enabling researchers to refine and expand theory. Consequently, our research was guided by a well-defined model proposed by Balasubramanian and Fernandes (2022), which draws from the literature on school leadership during various crises and

includes seven core constructs. This model was adopted as the coding framework for the present study for several reasons. First, the Balasubramanian and Fernandes (2022) model is sufficiently broad to encompass the leadership practices, thereby expanding the school crisis literature across diverse contexts (Bellibaş & Karaferye, 2025). Second, the model answers calls for greater attention to crisis-specific leadership behaviors rather than relying primarily on general leadership theories adapted to crisis context (Riggio & Newstead, 2023). Third, its seven constructs are applicable across different types of crises, making the model well suited to the present study. Finally, it aligns clearly with contemporary conceptualizations of crisis leadership that emphasize context-specific practices and behaviors (Riggio & Newstead, 2023). Adopting a directed content analysis approach (Hsieh & Shannon, 2005) the constructs of Balasubramanian and Fernandes (2022) served as our initial predetermined coding scheme. The analysis proceeded in three primary stages. In the first stage, we concentrated on identifying all practices during the crisis for each principal individually. In the subsequent stage, we organized all the practices mentioned by the principals and sought to identify themes of practices that were common among different principals. In the third stage, we aligned the shared themes identified in the previous stage with the crisis leadership model. Finally, following Hsieh and Shannon's (2005) protocol for directed content analysis, data segments that could not be categorized within the existing seven constructs were isolated into an unclassified category and analyzed inductively. This process allowed us to test the original model while remaining open to unexpected empirical insights, ultimately revealing two additional themes that extend the model within this specific context. To illustrate this process concretely: a statement such as Principal 4's account that "during uncertainty, demonstrating genuine care is as vital as any policy; our teachers and students need to feel seen and supported" was first coded at the level of a specific practice ("showing empathy"); in the second stage this practice was grouped together with similar statements from other principals (e.g., cultivating optimism, emotional intelligence, cultivating a sense of family) into a common theme; and in the third stage, this theme was aligned with the pre-existing construct of Compassion and Care from the Balasubramanian and Fernandes (2022) model. Practices that did not correspond to any of the seven constructs were isolated and grouped inductively into new categories. For example, a statement such as Principal 6's account that "at first, nobody knew what was happening and my first priority was simply gathering shifting information and trying to figure out what this crisis actually meant for our school before taking actions" did not fit the original constructs. This practice was initially coded as "interpreting ambiguous crisis signals" and subsequently categorized under the new emergent practice of sensemaking. Coding was conducted by a single primary coder; further to enhance the trustworthiness of the analysis in the absence of independent double-coding, peer debriefing was employed as the main trustworthiness check. Coding decisions and emerging themes were discussed with a colleague not involved in the study, whose questions and feedback helped test and refine our interpretations. Figure 2 illustrates the three-step coding process, applied consistently to every practice identified across ten interviews, before each of the resulting constructs was described in turn.

Each dimension is illustrated with verbatim evidence from the interviews, indicating the number of participants who referred to it, and is ordered from the most frequently mentioned to the least frequently mentioned. This structure supports a systematic interpretation of the data and helps address the research questions, which seek to examine the leadership practices that proved useful for managing the crisis. It is important to note first that research findings show that all the respondents have experience leading in times of crisis and uncertainty. All the principals reported having faced considerable challenges ranging from natural disasters and pandemics to social unrest, economic downturns, and

geopolitical uncertainties, both at global and local levels of security tension. In this context, most school principals also stated that they had not received any crisis management training and expressed the need to be better prepared to face times of uncertainty and crisis.

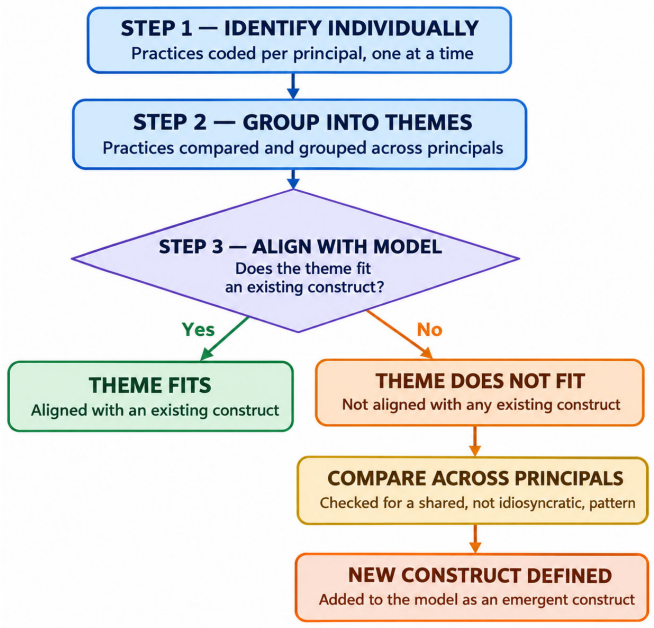


Figure 2. Three-step coding process.

4. Results

Whether faced with pandemics, armed conflict, or rapid global changes, school principals are called upon to make swift decisions, maintain stability, and support their communities through emotional and organizational upheaval. These moments expose the true character and capacity of leadership. The responses of the school principals offer critical insights into what it means to lead with strength and humanity when certainty is no longer guaranteed.

RQ1: Which crisis leadership practices were effective in helping school principals navigate the high-pressure crisis situations?

RQ2: How do these practices align with and extend the constructs of the crisis leadership model proposed by Balasubramanian and Fernandes (2022)?

The findings below address these two questions. The seven constructs summarized in Table 4 respond directly to RQ1 by documenting the practices principals enacted while the two emergent dimensions—operational and logistical preparedness and sensemaking and information verification—respond to RQ2 by showing how principals' practices extended the original model beyond its seven constructs.

Table 4. School principals' leadership practices as responses to crisis (N-10).

Themes–Constructs	Codes–Practices
Compassion and Care (n-10)	Showing empathy Cultivating optimism Emotional Intelligence Cultivating a sense of family
Openness and Communication (n-10)	Practicing openness Communicating transparency Fostering interpersonal communication

Table 4. *Cont.*

Themes–Constructs	Codes–Practices
Adaptiveness (n-9)	Flexibility Responding with agility Situational awareness Generating creativity Problem solving
Resilience and Courage (n-8)	Strategic thinking Acting courageously Strengthening students and teachers by cultivating their sense of self-efficacy
Consultation and Collaboration (n-8)	Teamwork Developing trust Delegation Creating connections between the teachers, stakeholders and broader school community
Empowerment (n-7)	Providing autonomy Recognizing and nurturing leadership at all levels Encouraging staff's innovation
Decisiveness (n-7)	Balancing urgency with thoughtful judgment Providing clear guidance for staff and students
Operational and Logistical Preparedness (n-7)	Inspecting physical infrastructure Running emergency and evacuation drills Establishing pre-arranged emergency communication protocols Cross-training staff for backup emergency roles
Sensemaking and Information Verification (n-6)	Filtering rumor and unverified information Sense-giving to enable independent staff decisions Cross-referencing with official sources Translating ambiguous information into concrete actionable guidance

4.1. Compassion and Care

Interviews with school principals reveal that showing care is not just an interpersonal trait but a strategic leadership approach that builds resilience in the school community. Principals reported that by actively expressing empathy, understanding individual needs, and offering emotional support, they were able to maintain trust, stabilize the learning environment, and empower teachers to effectively face unprecedented challenges. The study highlights that compassion and care are vital elements of adaptive leadership, allowing schools to manage crises while maintaining engagement, well-being, and organizational unity. In a crisis, all school leaders implemented key strategies based on emotional intelligence, leading to heightened sensitivity and enhanced interpersonal bonds. School principals dealing with crises consistently stress that empathy and compassion are crucial for effective leadership. By developing emotional intelligence, principals can identify and address the emotional needs of both students and staff, thereby building resilience within the school community. "*During uncertainty, demonstrating genuine care is as vital as any policy or plan; our teachers and students need to feel seen and supported*" (Principal 4). Others emphasized the importance of empathy in decision-making: "*By understanding the experiences of teachers and students, I can lead the school with both empathy and strategy*" (Principal 7). In times of crisis, most school principals emphasize the significance of nurturing a family atmosphere within the school community, so that both students and staff feel supported, connected, and appreciated. "*We strive to function like a family—everyone looks out for one another, and that sense of belonging helps us navigate uncertainty together*" (Principal 1). Another

practice that strengthens the bonds within school community is fostering optimism that allows staff and students to stay hopeful and focused despite difficulties. "*Optimism is contagious; when I demonstrate a positive attitude, it inspires the whole school to view challenges as opportunities*" (Principal 8). By combining care and support with optimistic leadership, principals establish a resilient school culture where individuals feel emotionally secure, motivated, and empowered to adapt during crises.

4.2. Openness and Communication

In addressing the challenges posed by the COVID-19 pandemic, school principals report that they encountered an unprecedented need to communicate effectively with their school communities. Communication became an essential tool for school principals. Their duties were perceived as sharing information and implementing well-defined procedures. This was achieved through ongoing engagement with parents and teachers, ensuring support and attentive listening for those who needed it. School principals leveraged multiple communication platforms including social media, newsletters, emails and phone calls to accomplish these goals. With the outset of the security-related crisis, similar communication demands intensified around informing families about evacuations, relocations and temporary schooling arrangements. "*In times of crisis, communication is not just about giving information—it's about giving reassurance*" (Principal 1).

All the principals reported that they turned regular newsletters, updates, and announcements to detail new protocols, learning strategies, guiding principles, and upcoming events. As one principal noted, "*Every week I sent a newsletter that described all the things we did and all the things we were going to do*" (Principal 10). This communication not only kept the school community informed but also promoted openness, building trust in leadership and reassuring stakeholders that the situation was being managed with care. Meanwhile, some principals chose a more selective approach, limiting external messaging to prevent unnecessary concern or discussion. "*Sometimes less is more. I focus on the right messages, delivered at the right time, so people feel informed and reassured without being burdened by unnecessary details*" (Principal 5). These leaders concentrated their communication mainly on interactions between teachers and students, emphasizing that openness in leadership does not always require sharing every detail externally, but rather ensuring clarity, honesty, and responsiveness where it is most important. Thus, all the school principals appeared transparent in their actions during the crisis and stayed connected with the school community throughout the crisis.

4.3. Adaptiveness

All the 10 school principals were required to adjust their leadership styles and behavior to address all the challenges and meet the needs of both their staff and students. Adaptiveness emerged as a defining characteristic of how principals navigated the uncertainty of crisis situations. Faced with rapidly shifting conditions, unclear guidelines, and unprecedented challenges, principals relied on flexibility, improvisation, and continuous learning rather than rigid adherence to traditional procedures. They emphasized that effective leadership demanded adaptability, allowing them to modify plans, schedules, and teaching methods in response to swiftly changing situations. One principal remarked "*We had to reevaluate everything—from lesson plans to staffing—almost daily*" (Principal 5). Making swift decisions, reallocating resources, and adjusting routines while preserving the school's essential functions demanded agility. School principals had to maintain a clear understanding of rapidly evolving conditions, interpret signals of change, and anticipate possible disruptions. Situational awareness meant constantly monitoring the external environment (e.g., shifting government regulations, health directives, or community needs) while also

staying attentive to internal school dynamics such as teacher fatigue, student engagement, or resource shortages. During the security-related crisis adaptiveness extended beyond an immediate response to encompass the rapid reorganization of schooling structures and practices. The flexibility enabled schools to maintain continuity of learning while addressing emerging safety, emotional and logistical needs. "*I had to keep my eyes on everything (. . .. . .) because each sign told me where to act next*" (Principal 10). Additionally, principals highlighted the significance of fostering creativity and encouraging innovative solutions. One hundred percent of principals reported that their creativity increased during the pandemic and the number of initiatives that they promoted was much higher than in regular times. Principal 6 made a significant pedagogical reorganization creating new teacher-devised domains of study. Another principal introduced a new role—a "co-homeroom teacher"—who helped the existing homeroom teacher as an assistant because the workload for a classroom teacher was enormous during crises. Several principals reported that they created virtual "coffee clubs" not only for delivering information but also for exchanging ideas and sometimes just for small talk. Not only school principals demonstrated their creativity but also the teachers. Finally, problem-solving was identified as a crucial skill for adaptive leadership. Principals reported that complex and unprecedented challenges required systematic analysis, collaboration, and resourcefulness. One principal reflected, "*Every day brought a new challenge. Solving problems quickly and well became the basis of how I run school*" (Principal 2). Collectively, these findings suggest that adaptive leadership during crises is multifaceted, combining flexibility, agility, situational awareness, creativity, and problem-solving.

4.4. Resilience and Courage

Principals characterized resilience as both a personal process and a professional responsibility, a continuous ability to adjust, recover, and lead others through uncertain times. One principal remarked, "I realized that if I panicked, it would affect everyone else. I had to remain strong, even when I didn't have all the answers" (Principal 5). Resilient principals perceived challenges as temporary challenges rather than something that is impossible to solve, demonstrating emotional strength, resilience and determination. Principal 4 shared that celebrating small wins helped them move forward with more optimism and determination. Another principal noted that weekly newsletters with gratitude greetings motivated his staff and boosted confidence and self-efficacy. Principals highlighted that when teachers felt confident and believed in their own capacity to handle difficulties and make meaningful contributions, the whole school community became more resilient and optimistic. Principal 4 reflected that the teachers need to feel that they can manage the situation and they have the ability. Principal 1 fostered the staff's self-efficacy by making it clear that "the teachers can feel free to try out new things and it's ok to fail or make mistakes." Principals noted that crises taught them to face fear, confusion, and exhaustion with calmness and resolve. As one participant expressed, "There were daily moments of uncertainty, but I learned to pause, make the best decision possible, and move forward". Courage was another significant aspect of resilient leadership. Principals recounted having to make tough decisions—regarding health protocols, staffing, and instructional messages—without complete information. Nevertheless, they displayed honesty and moral courage by admitting mistakes and learning from them. One principal shared, "There were moments when I had to admit I was wrong. I think being open about it helped the staff trust me more (. . .) it is ok . . .we are all human." For several principals courage took on a more acute form once the security situation escalated as they had to remain composed and stable while personally facing the same physical danger as their staff and students.

4.5. Decisiveness

Practices such as balancing urgency with thoughtful judgment and providing clear guidance for staff and students were coded individually, grouped into a shared theme and aligned in the third stage with the construct of Decisiveness. Decision-making emerged as one of the most critical leadership practices during times of crisis. Most principals reported using this practice. Principal 9 claimed that his staff looked to him for direction, support and reassurance amid uncertainty and that demanded to make decisions quickly and clearly. Principals emphasized that taking decisive actions helped with organizational stability and strengthened relationships; they minimized doubts, reinforced accountability, and ensured the school continued to operate smoothly despite ongoing disruptions. Principal 5 remarked, "*Teachers and parents wanted to know that someone was in control. Even when I didn't have all the answers, making a decision, any decision was better than standing still.*" They saw the ability to make tough decisions—often with incomplete information—as a moral duty of leadership. Principal 3 noted that when she demonstrated confidence even when the decisions were made under pressure, it reduced uncertainty and fostered trust. During the security crisis, the decisiveness was tested mostly sharply in life-safety situations such as deciding within minutes whether to move students to shelters. During crises, a rapidly changing environment requires flexibility. Principal 3 remarked that all the decisions she made were based on the information and knowledge she had and every time the situation changed, she had to adapt. Principals stressed the importance of balancing swift action with adaptability, taking into consideration that decisions might need to change as circumstances evolved. Because of the ever-changing nature of the crises all the principals discussed the role of reflective learning in enhancing their decisiveness over time. They described learning from mistakes, analyzing outcomes, and using feedback to refine future decisions. "*Every crisis decision was a lesson. Sometimes we got it right, sometimes not—but each time, we became sharper and more confident*" (Principal 1). As one principal summarized, "Being decisive doesn't mean having all the answers—it means having the courage to lead while you're still finding them."

4.6. Consultation and Collaboration

A key practice that emerged during the crisis was fostering teamwork to provide mutual support. Principal 2 noted, "We quickly understood that no one could manage this situation alone. Every teacher needed to contribute to the solution." Principals reported forming small working groups or task-oriented groups to solve emerging issues, distribute responsibilities, and foster collective problem-solving. This shared responsibility helped maintain motivation and strengthened a sense of unity among the staff. As another principal observed, "The more we collaborated, the more resilient we became" (Principal 8). Trust emerged as a significant outcome of collaborative consultation. Principals cultivated trust by keeping communication channels open and appreciating teachers' professional insights. Regular staff meetings, both virtual and in person, provided opportunities for teachers to express concerns, share experiences, and help shape the school's priorities. Principal 6 remarked, "*I always consult my team before making any major decision. Even when I had to make the final call, they knew their input was valued.*" This transparent approach enhanced mutual respect and fostered a culture where teachers felt heard, supported, and updated. Decisive yet collaborative principals also practiced delegation as a means to distribute leadership. They viewed it as a chance to empower teachers and middle leadership. School principals explained that delegating responsibilities could only be effective if teachers felt empowered and trusted to carry out their roles with autonomy. "*Delegating tasks wasn't about offloading work; it was about giving others the opportunity to lead*" (Principal 9). Delegation allowed staff members to take ownership of projects, such as organizing remote learning

schedules or student welfare initiatives, which in turn boosted confidence and professional development. "*By appointing teachers with strong digital skills to mentor others, we ensured no one was left behind in the transition to online learning. (. . .). Now we are doing the same with implementing AI in the teaching process.*" (Principal 2). Another aspect of collaborative leadership involved establishing and maintaining connections with stakeholders and the broader community. Principals emphasized their efforts to with parents, local authorities, and community organizations to ensure coordinated support for students. One principal recalled, "*We collaborated closely with the municipality and parents' committees. It helped us find solutions faster and made everyone feel part of the effort.*" These partnerships provided not only logistical and material support but also emotional reassurance, reinforcing a collective sense of purpose and shared resilience across the community.

4.7. Empowerment

Principals considered empowerment essential for maintaining motivation, creativity, and adaptability in a volatile environment. During uncertain times, especially when transitioning between in-person and remote learning, principals emphasized trust in teachers' expertise. One principal noted, "I told my teachers: you know your students best—use your judgment. My role was to remove barriers, not to control every move." This autonomy cultivated a sense of professional agency and accountability. Principals observed that when teachers were trusted to make pedagogical decisions, they felt more motivated and responsible for student outcomes. As another principal expressed, "I tried to give teachers the space to act, even if that meant making mistakes." Several principals spoke of identifying teachers who showed initiative, resilience, or strong relational skills, and then supporting them in taking on different leadership roles. One principal explained, "I looked for people who could take charge in specific areas and trusted them completely." By investing in teachers' leadership development, principals created a sustainable structure of shared responsibility. As one principal summarized, "If the school leadership depends only on me, it collapses. Together—the school becomes resilient." All the principals reported that they tried to encourage innovation and creativity among staff. The principals described how the crisis circumstances caused teachers to develop new teaching methods, technological tools, and community initiatives and they supported experimentation and considered mistakes as opportunities for learning. One principal shared, "I encouraged teachers to try new ideas, even if they failed (. . .) but it's how we grow." Another emphasized the importance of evaluation and recognition: "Every time someone came up with a new approach that worked, I made sure the whole staff knew about it." Principal 10 summarized her role saying the following: "*I realized that in a crisis, my role was not to control but to enable.*"

4.8. Operational and Logistical Preparedness

This construct emerged from accounts that fell outside the seven pre-existing constructs of the Balasubramanian and Fernandes (2022) model, which evaluates leadership action during a crisis but does not address proactive planning, drills, risk mitigation or infrastructure readiness undertaken before. Principals describe this preparedness as the foundation that made in-the-moment decisiveness and adaptiveness possible at all. As one principal explained: "You cannot be effective and decisive during a rocket siren if your physical and structural foundation is broken. Long before any crisis hits my job as a principal to build logistical infrastructure: stocking medical kits, inspecting shelters, running relentless drills. We train our staff so thoroughly that when the siren sounds muscle memory takes over. Being prepared beforehand is what creates the mental space for leadership during actual crisis event" (Principal 3). This account indicates that execution-level constructs such as Decisiveness and Adaptiveness rest on a prior layer of readiness

such as inspecting shelters and rehearsing emergency routines that the original model treats as external to leadership rather than as a leadership practice in its own right.

4.9. Sensemaking and Information Verification

A second construct that did not correspond to the existing model concerns the leader's critical role in filtering and interpreting unverified information under extreme uncertainty. While the model addresses Openness and Communication (outward dissemination) and Consultation (inward expert gathering) it omits the distinct practice of sensemaking, the cognitive and operational ability to filter panic, rumors and noise from real and legitimate threats thereby translating chaotic, conflicting information into a clear, cohesive plan of action. One principal vividly illustrated this process: "In the first hours of a crisis, you are hit by a tsunami of unverified information, panicked messages, social media rumors and unconfirmed reports. If a leader reacts to every piece of noise. The whole school community collapses into chaos" (Principal 9). Principal 4 reported: "I couldn't be in 30 classrooms at once during an emergency. Sensemaking wasn't just for me to understand the situation. I was about sense-giving. By clearly explaining why we were taking certain precautions, my teachers understood the logic and could make right time-critical decisions in their own classes without waiting for my approval."

5. Discussion

Crisis leadership has evoked significant scholarly interest with a focus on leaders' crisis management practices (Chatzipanagiotou & Katsarou, 2023; Striepe & Kafa, 2025). This study aimed to empirically investigate the leadership practices of school principals during crisis and uncertainty, following a measurement model of crisis leadership (Balasubramanian & Fernandes, 2022). The study's findings, which transformed the broad constructs into specific practices, reveal that school principals implemented the seven practices included in the model and found them to be effective, and they also expand the model by adding two new leadership constructs for crisis management. This research contributes to a deeper understanding of school leadership in the face of uncertainty and crises. Table 5 summarizes each construct's key finding, its aligned literature and whether it confirms nuances or extends the original model before the detailed discussion of each construct below.

Table 5. Summary of discussion findings by construct.

#	Construct	Key Finding	Citation	Status
1.	**Compassion and Care**	A strategic stabilizing approach, not merely a soft skill.	Dirani et al. (2020); Kaul et al. (2020); Geer and Coleman (2014); Mutch (2014); Ahern and Loh (2020).	Confirms
2.	**Openness and Communication**	Relational not just informational; selective transparency; urgency intensified for evacuation messages.	Dirani et al. (2020); Schechter et al. (2024); Kaul et al. (2020); Stoller (2020); Harris and Jones (2020); Bar-On and Schechter (2026).	Confirms
3.	**Adaptiveness**	Intensified into life-safety restructuring under security threat.	Dirani et al. (2020); Kaul et al. (2020); Heifetz et al. (2009); Harris and Jones (2020); Bar-On and Schechter (2026).	Confirms

Table 5. *Cont.*

#	Construct	Key Finding	Citation	Status
4.	**Resilience and Courage**	Courage became physically acute under threat; resilience built in others via self-efficacy.	Fletcher and Nicholas (2016); Alon and Schechter (2026); Stoller (2020); Ahern and Loh (2020); Geer and Coleman (2014); Mutch (2014); Hameli et al. (2025).	Confirms
5.	**Consultation and Collaboration**	Extended beyond school walls to parents, municipalities, community partners.	Sutherland (2017); Stone-Johnson and Miles Weiner (2020); Dirani et al. (2020); Haslam et al. (2020).	Confirms
6.	**Empowerment**	Deliberate shift from control to enablement, building capacity at all levels.	Stoller (2020); Harris and Jones (2020).	Confirms
7.	**Decisiveness**	Paired with ongoing reflection and revision; tested most sharply in minute-level decisions.	Forster et al. (2020); Kaul et al. (2020); Stoller (2020)	Confirms
8.	**Operational and Logistical Preparedness**	Pre-crisis readiness is a leadership practice, not an administrative task.	Riggio and Newstead (2023); Bar-On and Schechter (2026)	Extends the model
9.	**Sensemaking and Information Verification**	Filtering rumor from fact and "sense-giving" precede communication and consultation.	Riggio and Newstead (2023); Weick (1988); Maitlis and Sonenshein (2010)	Extends the model

Next, we will deepen the discussion of each of the nine dimensions presented in the leadership model for crisis management expanded with the contributions of this study.

First of all, the findings indicate that compassion and care are crucial components in crisis leadership aligning with Dirani et al. (2020) and Kaul et al. (2020) who highlighted the importance of emotional sensitivity and psychological support in turbulent times. Principals in this study regarded compassion not just as a mere soft skill but as a strategic approach that helped to stabilize the school community. Demonstrating care through empathy, personal communication and recognition of the students' and teachers' needs enabled principals to sustain trust and engagement even amid fear and uncertainty. This finding aligns with Geer and Coleman's (2014) and Mutch's (2014) claims that leadership sensitive to emotions promotes resilience and unity within educational settings. Actions such as personal check-ins by principals, expressions of gratitude or symbolic gestures (e.g., Birthday greetings during lockdown) served as points of connection and reassurance. These behaviors illustrate emotionally intelligent leadership. Moreover, nurturing a sense of family within the school community helped to turn isolation into a sense of belonging supporting earlier findings that caring leadership enhances both well-being and organizational cohesion (Ahern & Loh, 2020). The interviews reveal that both staff and student well-being were regarded as crucial.

Second, in line with previous research (Dirani et al., 2020; Schechter et al., 2024; Forster et al., 2020) this study emphasizes the critical role of the importance of clear, open and consistent communication during crises. Principals perceived communication as more than just sharing information; they considered it as an emotional and relational process aimed at providing reassurance, fostering trust and maintaining transparency. The use of multiple communication channels—newsletters, online meetings and personal messages—strengthened connections and reduced uncertainty. This supports Stoller's (2020) claim

that open communication maintained confidence and minimized misinformation during uncertain times. Notably, some principals adopted a selective communication strategy, emphasizing that openness does not require total exposure but rather thoughtful, honest dialogue with appropriate audience at the right moment. This nuance enhances the understanding that strategic openness in leadership, clarity and responsiveness are prioritized over the quantity of messages. The urgency the principals described in communicating with families was extended, once the security situation escalated to informing families about evacuation, relocation and temporary schooling arrangements paralleling accounts of principals coordinating displaced students and staff during armed conflict (Bar-On & Schechter, 2026).

Third, the study highlights that adaptiveness was a key characteristic of successful crisis leadership. All principals reported adjusting their leadership styles, strategies and pedagogical approaches to address the rapidly changing circumstances. This aligns with the theoretical perspectives of Dirani et al. (2020) and Kaul et al. (2020) who suggested that adaptive leadership involves agility, ongoing learning and an openness to reframe challenges dynamically. Adaptiveness assumed an acute form in life-safety situations as principals rapidly restructured schooling to accommodate evacuations, implement shelter routines and operate remotely. This aligns with recent research describing how school principals reorganize school operations under conditions of armed conflict (Bar-On & Schechter, 2026). Flexibility and situational awareness enabled principals to effectively navigate changing guidelines, staff availability and evolving student needs. They demonstrated agility by reorganizing schedules, relocating resources and trying out new teaching approaches illustrating the "learning while leading" principle of adaptive leaders (Heifetz et al., 2009). The creative initiatives mentioned, such as developing new study domains, virtual "coffee clubs" and team-based monitoring show how necessity can drive innovation. These findings support Harris and Jones (2020), who observe that crises can enable creativity and organizational learning when leaders foster openness and experimentation.

Fourth, the findings highlight that resilience and courage are interdependent aspects of crisis leadership. In line with Fletcher and Nicholas (2016) and Stoller (2020), principals regarded resilience as both a personal resource and a professional responsibility. Demonstrating calmness, optimism and forward-looking attitude even when feeling uncertain was perceived as crucial for modeling stability to staff. Courage became more pronounced as the security situation intensified, requiring principals to maintain composure and convey a sense of stability while confronting the same physical risks as their staff and students (Alon & Schechter, 2026). It was identified not as the absence of fear but as a moral strength amid uncertainty-making difficult decisions, admitting mistakes and learning from them. This aligns with Ahern and Loh's (2020) idea of authentic courage where being transparent about one's limitations enhances credibility and trust. The study shows that resilient leaders celebrated small wins, expressed gratitude and used positive communication to maintain morale, reflecting the role of psychological resilience described by Mutch (2014) and Geer and Coleman (2014). Thus, resilience was both an outcome and a process of reflective, emotionally grounded leadership. Another practice that was used by principals to build resilience is fostering staff's self-efficacy. Self-efficacy promotes empowerment and creates opportunities for meaningful work engagements (Hameli et al., 2025).

Fifth, decisiveness emerged as a hallmark of effective crisis leadership, supporting the findings of Forster et al. (2020) and Kaul et al. (2020) who emphasized the importance of rapid, confident decision-making in unpredictable situations. In this study, principals viewed decisiveness as both a stabilizing force and a moral duty—an expression of leadership courage in the face of ambiguity. The data suggested that decisive leadership strengthened trust and organizational coherence as parents and teachers looked for di-

rection and assurance. However, decisiveness was balanced with reflection: principals consistently reassessed previous decisions as new information emerged. This aligns with Stoller's (2020) argument that decisiveness and adaptability must coexist—leaders must act swiftly yet remain flexible enough to revise decisions as situations evolve. Therefore, reflecting learning became an integral component of decisiveness turning decision-making into a continuous learning process.

Sixth, the findings provide strong evidence that consultation and collaboration were key mechanisms for maintaining collective efficacy and organizational resilience. Principals actively fostered teamwork and shared leadership which is in line with the literature on distributed leadership (Sutherland, 2017; Stone-Johnson & Miles Weiner, 2020). Collaboration provided opportunities for teachers to exchange expertise, learn from each other and jointly developed solutions to new challenges. This shared approach not only distributed workload but also strengthened trust, a finding consistent with Haslam et al. (2020) who argued that shared leadership fosters collective resilience. Moreover, collaboration extended beyond the school to involve parents, municipalities and community partners, supporting the idea that crisis management is most effective when stakeholders are seen as co-leaders (Dirani et al., 2020). Through regular consultation and delegated authority, principals demonstrated that leadership in crises is not an individual act but a network process of co-construction and support.

Seventh, the construct of empowerment reflects a deliberate shift from control to enablement. As noted by Stoller (2020), principals provided teachers with autonomy, recognizing emerging leaders and promoting experimentation. Empowerment served as both a motivational and development mechanism to maintain morale and build capacity across all levels of the school body. Granting autonomy, teachers were able to exercise professional judgment and introduce innovations in their lessons, which fostered accountability and intrinsic motivation. Recognizing and fostering leadership potential at different levels aligns with distributed and transformational leadership theories which focus on shared responsibility for outcomes (Harris & Jones, 2020). Encouraging staff innovation also transformed the limitations of crises into opportunities for professional development and growth. Thus, empowerment not only improves staff competence but also reinforces organizational resilience.

Eighth, the construct of operational and logistical preparedness reflects a dimension of crisis leadership that the wider literature has generally located within crisis management rather than crisis leadership. Riggio and Newstead (2023) note that although planning, preparation and establishment of early detection systems are fundamental in managing crisis, this preparatory work has historically been treated as separate from leadership research and included within the crisis management literature that focuses on anticipating and preparing for different scenarios. They identify the boundary between crisis management and crisis leadership as an area still requiring theoretical clarification. The principals in this study did not experience this distinction; readiness activities such as inspecting shelters and running emergency drills were described not as an administrative task but as the direct preconditions for the in-the-moment decisiveness and adaptiveness that the Balasubramanian and Fernandes (2022) model states. This finding resonates with the recent study research on Israeli principals displaced by the same war who described improvising school infrastructure in hotels as a continuous and central leadership task rather than a one-time administrative response (Bar-On & Schechter, 2026). These findings suggest that under conditions of prolonged security threat operational and logistical readiness functions not merely as a precondition external to leadership but as a leadership practice in its own right.

Ninth, the construct of Sensemaking and Information Verification corresponds closely to a practice that Riggio and Newstead (2023), based on Weick's (1988) foundational work,

identified as one of five key competencies for crisis leadership. Sensemaking is the process whereby leaders connect cues and apply prior experience to establish an understanding of ambiguous and rapidly evolving stimuli. Weick (1988, p. 305) observes that crisis events defy interpretation and impose severe demands on sensemaking. Notably, sensemaking is absent from the seven constructs of the Balasubramanian and Fernandes (2022) model, which addresses the outward dissemination of information (Openness and Communication) and the inward gathering of expert input (Consultation and Collaboration) but not the interpretive work filtering rumor from verified fact that precedes both. Principals' accounts also extended this construct beyond individual sensemaking to what Maitlis and Sonenshein (2010) term sense giving, the sharing of one's sensemaking to create mutual understanding among followers. This practice therefore bridges a documented gap in general crisis leadership scholarship, extending beyond the specific contextual nuances of this study's sample.

Beyond confirming the model's applicability to education, the findings extend it in several ways. Practices such as cultivating a sense of family, situational awareness and fostering self-efficacy were not named in the original framework and represent context-specific elaborations of its constructs. Within Resilience and Courage, principals described intentionally strengthening students' and teachers' efficacy as a practice in its own right, positioning resilience as something a leader actively builds in others, not only something a leader personally exhibits. Principals' selective, rather than exhaustive, communication also nuances the Openness and Communication construct, suggesting the effective crisis communication is calibrated to audience and timing rather than simply maximized. Finally, because the model was originally derived from general organizational data, its application here to an educational crisis during ongoing armed conflict offers an initial test of its boundary conditions, while leaving open whether the physical-safety dimensions raised in emerging war leadership research (Bar-On & Schechter, 2026) warrant an additional construct.

A critical synthesis of the empirical data reveals that while the baseline model of Balasubramanian and Fernandes (2022) accurately captures the real-time relational dynamics of crisis leadership, its conceptual framework remains fundamentally incomplete without accounting for the structural, cognitive and contextual dimensions in which school principals operate. Rather than functioning as an isolated set of concurrent behaviors, effective crisis leadership depends on an antecedent foundation of proactive Operational and Logistical Preparedness (n-7) and continuous Sensemaking and Information Verification (n-6). As the data demonstrate, execution-level constructs such as Decisiveness and Empowerment do not occur in a vacuum; they are directly enabled by pre-existing emergency infrastructure, rehearsal drills and leader's prior filtering of chaotic, unverified inputs into a shared operational mental model through "sense-giving". Griffard et al.'s (2026) ecological framework offers a perspective that challenges the baseline model's treating of leadership practices as decontextualized, internal vectors from leader to follower. The present findings share the same direction. Several of the identified practices were not purely individual acts but depended on the principal's position within a wider ecosystem, including the internal school organization (staff roles and routines), the school community (students, parents and teachers) and structures external to school (municipal authorities, security officers, Ministry of Education). These practices, however well-developed, are not sufficient on their own to manage crisis. Effective crisis leadership appears to be co-produced across the school organization, its community and the legal and institutional framework surrounding it. It is an insight that complements the leader-centered focus of the Balasubramanian and Fernandes (2022) model with a systemic perspective offered by ecological approaches to crisis management.

These findings not only add to theoretical knowledge but also provide practical insights for individuals tasked with aiding school leadership during crises and uncertain times. They span both broad, comprehensive strategic guidance and specific, actionable measures. At the individual level, for school principals, the findings suggest that practices such as conducting personal check-ins, maintaining selective yet transparent communication and engaging in structured peer consultation can be intentionally developed rather than left to improvisation. They also highlight that principals' own self-efficacy and reflective learning are as important to sustain as any single decision made in the moment. At the system level, for school districts, ministries of education and philanthropic organizations that support schools, the finding that most principals had received no crisis management training reveals a clear and actionable gap. These results can guide the design of professional development programs that build crisis leadership competences before the crisis occurs, rather than leaving principals to acquire them under pressure and that establish formal peer-support or debriefing networks in order not to leave principals in the extreme events in isolation. More specifically, training programs need to be designed not around a single crisis type but should focus on cultivating transferable capacities such as compassionate communication, adaptive problem-solving, decisive and reflective judgment that are applicable across a wide range of emergencies. More broadly, reflecting the comprehensive end of this range, the seven constructs identified here extend beyond the educational context. Organizations operating under sustained uncertainty, such as healthcare systems, municipal services and humanitarian or relief agencies may benefit from applying this framework to assess, develop and strengthen their own leaders' preparedness to navigate a storm.

6. Conclusions

In conclusion, this study set out to explore the crisis leadership practices that school principals perceive as effective and to examine how these practices align with and extend the model proposed by Balasubramanian and Fernandes (2022). Drawing on interviews with ten Israeli principals who led their schools through both the COVID-19 pandemic and an ongoing security-related crisis, the findings confirm the relevance of all seven leadership constructs of the model—compassion and care, openness and communication, adaptiveness, resilience and courage, decisiveness, consultation and collaboration and empowerment. However, the empirical evidence demonstrates that the original framework remains conceptually incomplete when applied to high-stakes educational environments. This study extends the model by introducing two empirically emergent constructs—Operational and Logistical Preparedness (n-7) and Sensemaking and Information Verification (n-6)—which capture critical leadership dimensions omitted by the original framework. The findings further reveal that a principal's individual practices are not sufficient on their own. Crisis leadership in schools is co-produced across the internal school system, its surrounding community and external institutional frameworks. The principals' experiences highlight that effective crisis leadership requires a dynamic balancing of emotional intelligence with decisiveness, compassion with strategic judgment and collaboration with accountability. These dimensions do not operate in isolation; rather they interact continuously, as care builds trust, communication fosters transparency, adaptiveness enables innovation, resilience sustains stability, decisiveness provides direction, collaboration strengthens unity and empowerment develops capacity, preparedness enables action, sensemaking restores order. In this way, the study addresses RQ1 by identifying the crisis leadership practices that proved effective for principals navigating high-pressure situations, and RQ2 by demonstrating that these practices both confirm and extend the constructs of the Balasubramanian and Fernandes (2022) model, offering both a contextually grounded understanding of

crisis leadership in schools and practical insights for those responsible for preparing and supporting principals to lead effectively through future crises.

7. Limitations and Future Directions

All participating principals were drawn from the same geographic region, which may limit the generalizability of the findings beyond the district. Nevertheless, the purposive sampling did capture some diversity in participants' gender, school level (elementary, middle, high school, regional, and boarding school), socioeconomic status and sector (secular, religious Jewish, and Arab schools). This diversity provides a degree of transferability, across school types and population even within one national context. Nonetheless, the small sample size (N = 10) and the absence of principals from other districts, regions or countries constrain how far the findings can be transferred beyond this setting. Future research should include a more diverse sample to enhance external validity. Additionally, further studies are needed to examine the long-term impact of ongoing conflict on education particularly, in relation to potential shifts in school leadership and roles. A further limitation concerns selection bias: principals were recommended by the superintendent as effective; so, the sample cannot speak to contrasting or less effective practices. This criterion matches the study's aim of identifying effective practices, but future research using more objective outcomes could help clarify which practices are distinctly linked to success.

Author Contributions: Conceptualization, L.Z. and M.J.R.-E.; Methodology, L.Z. and M.J.R.-E.; Validation, M.J.R.-E.; Formal analysis, L.Z.; Investigation, L.Z.; Data curation, L.Z. and M.J.R.-E.; Writing—original draft, L.Z.; Writing—review & editing, M.J.R.-E.; Supervision, M.J.R.-E.; Project administration, M.J.R.-E. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Ethics Committee of Informe de evaluación Comisión de Ética de Investigación (CEI), Universidad de Murcia (protocol code ACTA27/2025/CEI, with approval granted on 19 December 2025).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The original contributions presented in this study are included in the article. Further inquiries can be directed to the corresponding author.

Acknowledgments: During the preparation of this manuscript, the authors used AI tools (Claude Sonnet 5, Anthropic, San Francisco, CA, USA; ChatGPT-4, OpenAI, San Francisco, CA, USA) to assist with language editing and with generating the schematic diagrams in Figures 1 and 2. All AI-assisted output was reviewed, verified and edited by the authors who take full responsibility for the content, accuracy and interpretation of the final manuscript. The authors have reviewed and edited the output and take full responsibility for the content of this publication.

Conflicts of Interest: The authors declare no conflicts of interest.

References

Ahern, S., & Loh, E. (2020). Leadership during the COVID-19 pandemic: Building and sustaining trust in times of uncertainty. *BMJ Leader*, *5*(4), 266–269. [CrossRef]

Alawawdeh, S. (2016). The impact of creativity management in fighting the educational crisis in secondary schools in Palestine from the viewpoint of headmasters. *Journal of Education and Practice*, *7*(11), 98–105.

Alon, S., & Schechter, C. (2026). Wartime leadership: Leading schools in a war crisis. *Journal of Educational Administration and History*, *58*(3), 301–321. [CrossRef]

Arar, K., & Örücü, D. (2021). Rethinking educational leadership and policy in schools in challenging circumstances: Inter/intra-continental perspectives. *Leadership and Policy in Schools*, *20*(1), 1–5. [CrossRef]

Ataro, G. (2020). Methods, methodological challenges and lessons learned from phenomenological study about OSCE experience: Overview of paradigm driven qualitative approach in medical education. *Annals of Medicine and Surgery*, *49*(1), 19–23. [CrossRef]

Azorín, C. (2020). Beyond COVID-19 supernova. Is another education coming? *Journal of Professional Capital and Community*, *5*(3/4), 381–390. [CrossRef]

Azorín, C., & Fullan, M. (2022). Leading new, deeper forms of collaborative cultures: Questions and pathways. *Journal of Educational Change*, *23*(1), 131–143. [CrossRef]

Bagwell, J. (2020). Leading through a pandemic: Adaptive leadership and purposeful action. *Journal of School Administration Research and Development*, *5*(S1), 30–34. [CrossRef]

Balasubramanian, S., & Fernandes, C. (2022). Confirmation of a crisis leadership model and its effectiveness: Lessons from the COVID-19 pandemic. *Cogent Business and Management*, *9*(1), 2022824. [CrossRef]

Bar-On, Y., & Schechter, C. (2026). Agentic leadership during a war crisis: School principals displaced by war. *Educational Sciences*, *16*, 156. [CrossRef]

Bellibaş, M. Ş., & Karaferye, F. (2025). School leadership during times of crisis: A qualitative meta-synthesis. *International Journal of Educational Management*, *39*(5), 1389–1426. [CrossRef]

Berkovich, I. (2023). Effect of enabling and coercive bureaucracies and of perceived organizational support during the pandemic on teachers' intention to leave the profession. *Nordic Journal of Studies in Educational Policy*, *9*(2), 161–172. [CrossRef]

Bishop, W. E., Fifolt, M., Peters, G. B., Gurley, D. K., & Collins, L. (2015). Perceptions and experiences of K-12 educational leaders in response to the 27 April 2011 tornadoes. *School Leadership & Management*, *35*(2), 215–235. [CrossRef]

Blass, N. (2022). *Achievements in Israel's education system: An overview*. Available online: https://www.taubcenter.org.il/wp-content/uploads/2022/12/Education-Overview-ENG-2022.pdf (accessed on 21 September 2026).

Brodie, V., & Fraizer, L. (2018a, August 5–9). *Thriving through empathy in a volatile, uncertain, complex, and ambiguous world* [Conference presentation]. International Academic Conference on Business, International Clute Conference, San Francisco, CA, USA. Available online: https://victoriakbrodie.com/2018/08/04/thriving-through-empathy-in-a-volatile-uncertain-complex-and-ambiguous-world/ (accessed on 20 September 2026).

Brodie, V., & Fraizer, L. (2018b, March 19–20). *VUCA leadership competencies in complex global environment* [Conference presentation]. International Organization of Social Sciences and Behavioral Research Conference, New Orleans, LA, USA. Available online: https://victoriakbrodie.com/2018/03/19/vuca-leadership-competencies/ (accessed on 20 September 2026).

Brown, C. H. (2018). The role of leadership in surviving a school shooting. *Journal of Cases in Educational Leadership*, *21*(2), 3–14. [CrossRef]

Chatzipanagiotou, P., & Katsarou, E. (2023). Crisis management, school leadership in disruptive times and the recovery of schools in the post COVID-19 era: A systematic literature review. *Education Sciences*, *13*(2), 118. [CrossRef]

Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.

Dadon-Golan, Z., BenDavid-Hadar, I., & Klein, J. (2019). Revisiting educational (in)equity: Measuring educational Gini coefficients for Israeli high schools during the years 2001–2011. *International Journal of Educational Development*, *70*, 102091. [CrossRef]

Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, *49*(1), 91–96. [CrossRef]

Dirani, K. M., Abadi, M., Alizadeh, A., Barhate, B., Garaz, R. C., Gunasekara, N., Ibrahim, G., & Majzun, Z. (2020). Leadership competencies and the essential role of human resource development in times of crisis: A response to COVID-19 pandemic. *Human Resource Development International*, *23*(4), 380–394. [CrossRef]

Elomaa, M., Eskelä-Haapanen, S., Pakarinen, E., Halttunen, L., & Lerkkanen, M. K. (2024). Elementary school principals' work from the ecological systems perspective: Evidence from Finland. *Educational Management Administration & Leadership*, *52*(5), 1231–1251. [CrossRef]

Fife, S. T., & Gossner, J. D. (2024). Deductive qualitative analysis: Evaluating, expanding, and refining theory. *International Journal of Qualitative Methods*, *23*(1), 16094069241244856. [CrossRef]

Fletcher, J., & Nicholas, K. (2016). What can school principals do to support students and their learning during and after natural disasters? *Educational Review*, *68*(3), 358–374. [CrossRef]

Forster, B. B., Patlas, M. N., & Lexa, F. J. (2020). Crisis leadership during and following COVID-19. *Canadian Association of Radiologists' Journal*, *71*(4), 421–422. [CrossRef]

Geer, G., & Coleman, H. V. (2014). Servant leadership and school crisis management. In R. Selladurai, & S. Carraher (Eds.), *Servant leadership: Research and practice* (pp. 114–133). IGI Global.

Glanz, J. (2021). Ethical leadership in times of crises. In J. Glanz (Ed.), *Crisis and pandemic leadership: Implications for meeting the needs of students, teachers, and parents* (p. 125). Rowman & Littlefield.

Goswick, J., Macgregor, C. J., Hurst, B., Wall, P. J., & White, R. (2018). Lessons identified by the Joplin School Leadership after responding to a Catastrophic Tornado. *Journal of Contingencies and Crisis Management*, *26*(4), 544–553. [CrossRef]

Griffard, M. R., Davis, C. R., & Ceja-Rodriguez, M. (2026). Managing in a storm of chaos: The ecology of school principals' crisis management. *Educational Evaluation and Policy Analysis*, *48*(1), 214–237. [CrossRef]

Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How principals affect students and schools: A systematic synthesis of two decades of research*. Available online: http://www.wallacefoundation.org/principalsynthesis (accessed on 20 September 2026).

Hameli, K., Ukaj, L., & Çollaku, L. (2025). The role of self-efficacy and psychological empowerment in explaining the relationship between emotional intelligence and work engagement. *EuroMed Journal of Business*, *20*(2), 378–398. [CrossRef]

Harris, A. (2020). COVID-19—School leadership in crisis? *Journal of Professional Capital and Community*, *5*(3/4), 321–326. [CrossRef]

Harris, A., & Jones, M. (2020). COVID-19 school leadership in disruptive times. *School Leadership and Management*, *40*(4), 243–247. [CrossRef]

Haslam, S. A., Reicher, S. D., & Platow, M. J. (2020). *The new psychology of leadership: Identity, influence and power*. Routledge. [CrossRef]

Heifetz, R., Grashow, A., & Linsky, M. (2009). The practice of adaptive leadership: Tools and tactics for changing your organization and the world. *Personnel Psychology*, *63*(1), 255–258. [CrossRef]

Hemmer, L., & Elliff, D. S. (2020). Leaders in action: The experiences of seven Texas superintendents before, during, and after hurricane Harvey. *Educational Management Administration & Leadership*, *48*(6), 964–985. [CrossRef]

Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*, 1277–1288. [CrossRef]

Kaul, V., Shah, V. H., & El-Searg, H. B. (2020). Leadership during crisis: Lessons and applications from the COVID-19 pandemic. *Gastroenterology*, *159*(3), 809–812. [CrossRef]

Li, C., & Lalani, F. (2020, April 29). *The COVID-19 pandemic has changed education forever. This is how*. World Economic Forum. Available online: https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning (accessed on 20 September 2026).

Maitlis, S., & Sonenshein, S. (2010). Sensemaking in crisis and change: Inspiration and insights from Weick 1988. *Journal of Management Studies*, *47*(3), 551–580. [CrossRef]

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

Mutch, C. (2014). The role of schools in disaster preparedness, response and recovery: What can we learn from the literature? *Pastoral Care in Education*, *32*(1), 5–22. [CrossRef]

Netolicky, D. M. (2020). School leadership during a pandemic: Navigating tensions. *Journal of Professional Capital and Community*, *5*(3/4), 391–395. [CrossRef]

Nickerson, A. B., & Sulkowski, M. L. (2021). The COVID-19 pandemic as a long-term school crisis: Impact, risk, resilience, and crisis management. *School Psychology*, *36*(5), 271–276. [CrossRef]

OECD. (2025). *Education at a glance 2025: Israel country note*. OECD Publishing. [CrossRef]

Riggio, R. E., & Newstead, T. (2023). Crisis leadership. *Annual Review of Organizational Psychology and Organizational Behavior*, *10*, 201–224. [CrossRef]

Rogers, H., & Sabarwal, S. (2020). *The COVID-19 pandemic: Shocks to education and policy responses*. World Bank. Available online: https://www.worldbank.org/en/topic/education/publication/the-covid19-pandemic-shocks-to-education-and-policy-responses (accessed on 20 September 2026).

Schechter, C., Da'as, R., & Qadach, M. (2024). Crisis leadership: Leading schools in a global pandemic. *Management in Education*, *38*(4), 164–171. [CrossRef]

Smith, L., & Riley, D. (2012). School leadership in times of crisis. *School Leadership & Management*, *32*(1), 57–71. [CrossRef]

Stoller, J. (2020). Reflections on leadership in the time of COVID-19. *BMJ Leader*, *4*(2), 77–79. [CrossRef]

Stone-Johnson, C., & Miles Weiner, J. (2020). Principal professionalism in the time of COVID-19. *Journal of Professional Capital and Community*, *5*(3/4), 367–374. [CrossRef]

St-Onge, C., Ouellet, K., Lakhal, S., Dubé, T., & Marceau, M. (2022). COVID-19 as the tipping point for integrating e-assessment in higher education practices. *British Journal of Educational Technology*, *53*(2), 349–366. [CrossRef]

Striepe, M., & Kafa, A. (2025). School leadership during the COVID-19 crisis: A scoping review of empirical research. *Journal of Educational Administration*, *63*(1), 48–62. [CrossRef]

Sutherland, I. E. (2017). Learning and growing: Trust, leadership, and response to crisis. *Journal of Educational Administration*, *55*(1), 2–17. [CrossRef]

Tokel, A. (2018). Assessment of crisis management skills of secondary school administrators. *Quality & Quantity*, *52*(1), 901–912. [CrossRef]

Uhl-Bien, M. (2021). Complexity and COVID-19: Leadership and followership in a complex world. *Journal of Management Studies*, *58*, 1400–1405. [CrossRef]

Weick, K. E. (1988). Enacted sense making in crisis situations. *Journal of Management Studies*, *25*(4), 305–317. [CrossRef]

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, *11*(2), 733–769. [CrossRef]

Ylimaki, R. M., & Gu, Q. (2026). Guest editorial: The complex social ecology of educational leadership: Reframing research on successful school principalship. *Journal of Educational Administration*, *64*(3), 277–280. [CrossRef]

Zhao, C., & Jowett, S. (2022). Coach leadership in a crisis context: Investigating effective coach behaviors during the COVID-19 pandemic with a process view. *Frontiers in Psychology*, *13*, 1061509. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.