2025

NIGERIAN JOURNAL OF SOCIAL PSYCHOLOGY

Online ISSN: 2682-6151 Print
ISSN: 2682-6143

Volume 8, Issue 1, 2025

Editor-in-Chief
Prof. S.O. Adebayo
Managing Editor
Prof. B.E. Nwankwo

Published by
Nigerian Association of Social Psychologists
www.nigerianjsp.com

AI-ENHANCED CRISIS MANAGEMENT IN SCHOOLS: A PSYCHOLOGICAL IMPACT AND ASSESSMENT FRAMEWORK FOR RESILIENT LEADERSHIP

[1]Gloria Chineze Osegbue
[2]Ifunanya Nkechi Ohamobi
[3]Ngozika Ijeoma Ekwe
Faculty of Education
Chukwuemeka Odumegwu Ojukwu University Igbariam Campus, Anambra State, Nigeria
Email: [1]gc.osegbue@coou.edu.ng[2]in.ohamobi@coou.edu.ng[3]ngozikanigerwest@gmail.com
ORCID ID:[1]https://orcid.org/0009-0005-1516-3827[2] https://orcid.org/0009-0004-0902-0830

[4]Caroline Ochuko Alordiah
Faculty of Education, University of Delta Agbor, Delta State, Nigeria
Email: caroline.alordiah@unidel.edu.ng
ORCID ID: https://orcid.org/0000-0002-2917-9302

Abstract
Crisis management in schools is crucial for maintaining the safety and well-being of students, staff, and parents during emergencies. The rise in crises like natural disasters, violence, and mental health issues highlights the need for effective systems. This paper introduces the Crisis Intelligence for Resilient Education (CIRE) Model using the psychological and assessment framework, which integrates Artificial Intelligence (AI) with crisis management strategies to improve preparedness, decision-making, and psychological support. The CIRE Model includes proactive risk assessment, early warning systems, and resource allocation to help school leadership respond effectively. AI technologies, such as predictive analytics and machine learning, enhance decision-making by identifying threats early, optimising resources, and ensuring real-time communication. While AI plays a significant role in crisis management, resilient leadership remains vital in managing crises and supporting long-term recovery. Implementing AI systems requires careful planning, integration with school protocols, and consideration of ethical issues like data privacy. Schools must invest in ongoing training for staff and students to ensure proper use of AI tools. Ethical guidelines and policies should be established to govern AI use, especially regarding mental health data. Continuous updates to AI systems based on feedback are necessary. The paper emphasises adopting AI-driven tools tailored to schools' needs. It stresses the importance of professional development and clear policies to ensure AI's ethical and effective use in crisis management. The recommendations made on this expository paper include the need for school leaders to invest in developing and implementing AI-driven crisis management tools that can help identify potential crises, provide real-time alerts, and facilitate swift response and recovery. Secondly, that Government should provide training and support for administrators and staff to develop resilient leadership skills, enabling them to effectively manage crises, prioritize student well-being and foster a culture of resilience.

Keywords: ***Crisis Management, School Crisis, and Resilience Leadership.***

Introduction

Crisis management in schools is no longer a reactive measure, but a proactive imperative. The ever-present threat of bullying, substance abuse, mental health crises, natural disasters. Violent incidents, and pandemics demands that educational institutions be equipped to respond swiftly and effectively. The psychological and emotional well-being of students, teachers, and staff hang in the balance. Effective crisis management is not just about mitigating harm, but also about fostering a culture of resilience, trust, and hope. By prioritizing crisis preparedness, schools can transform potential tragedies into opportunities for growth, healing, and renewal. The methodical collection of procedures, plans, and tactics that educational institutions create to anticipate, address, and recover from unanticipated

crisis that impact the school community is known as crises management in schools (Johnson, 2023).
Bullying, substance abuse, natural catastrophes, violent incidents, medical crises, and social unrest are a few examples. These can disturb the educational setting and seriously jeopardise the health of students, faculty, and parents (Alordiah et al., 2023; Grissom, 2021). To minimise the disruption to academic activities and provide the required support to individuals affected, the school must be able to continue operating both during and after such occurrences. This is so because no child can perform very well academically if he or she does not feel secured in school and no teacher can teach effectively when his or her security is not assured to an extent (Manafa &Ohamobi,2021). Effective crisis management is crucial in several important ways (Chatzipanagiotou, 2023). It is essential to guarantee the security, safety, and welfare of parents, teachers, and students, all of Whom are crucial school community members. Protecting everyone and addressing urgent risks as soon as feasible are the main goals during a crisis. Similarly, proficient crisis management reduces interruptions to the flow of Education, allowing students to resume their studies as soon as they are safe. Additionally, it offers crucial mental health assistance during and after crises, assisting people in managing the psychological and emotional damage these situations frequently cause. In furtherance, preserving the general resilience and morale of the school community depends on creating a stable and encouraging learning environment, especially during difficult times (Elbedour et al., 2020).

Crisis management in this study is the proactive and strategic process of anticipating, assessing, and mitigating threats while mobilizing resources, communicating effectively to minimize harm, which could be effectively done with the use of AI. Artificial Intelligence (AI) is one of the new technologies that can improve crisis management in educational institutions, because AI technologies offer real-time data, predictive analytics, and decision support, they can completely transform how crises are handled (Liou, 2014). School administrators can respond more quickly and intelligently to these tools, which are particularly important in high-stress scenarios. Many educational institutions around the world and are investing in information technology (IT) and are actively promoting computer aided instructions (Enwereji etal ,2022). Artificial Intelligence (AI) can help by examining patterns and signals from several data sources, it can also help with early threat detection and enable prompt solutions (Gainey, 2009). AI also improves resource allocation in times of crisis by effectively distributing personnel, supplies, facilitates communication, provide support services, develop customised intervention strategies, and guaranteeing that parents, employees, and students receive timely and accurate information (Wiedermann et al., 2023). The ability of AI to perform various functions will definitely require the application of Crisis Intelligence for Resilient Education Model (CIRE).

The Crisis Intelligence for Resilient Education (CIRE) Model offers a thorough, AI-powered, and psychologically informed approach to crisis management in schools. The framework is intended to help school administrators create resilient leadership practices, apply AI-powered solutions, and guarantee that the entire school community receives ongoing psychological support. With an emphasis on reducing harm, promoting recovery, and boosting long-term resilience, the CIRE Model seeks to equip schools to manage crises successfully by combining AI technologies and psychological insights. This approach promotes a proactive, adaptable, and all-encompassing crisis management plan that gives equal weight to short-term needs and long-term rehabilitation.

Understanding School Crises

School crises refers to a sudden, unexpected, and potential traumatic event or situation that disrupts the normal functioning of a school and affects the physical, emotional, or psychological well-being of students, teachers, or staff. School crises in this study is any event, whether natural or man-made, that significantly interrupts the educational process, causing harm or treat to students and staff in the school. Although schools are essential for children's growth and welfare, they are also susceptible to crises that can interfere with regular operations and seriously jeopardise the safety, mental health, and educational continuity of students, faculty, and the community. Developing successful crisis management techniques requires an understanding of the various kinds of crises that might impact schools. Development can be initiated and managed properly in such a way as to give attention to continuity and preservation as people explore explicit available resources to the enlargement of their existence (Osegbue & Nnubia, 2020). Managing education in Nigeria today seems to be a big task as effective management of school most likely brings efficiency and quality in the school (Manafa et al., 2020)

Types of School Crises

a. **Natural disasters** are among the most catastrophic problems that schools may encounter. These include hurricanes, floods, earthquakes, and other extreme weather conditions that can jeopardise the lives of students and staff, destroy school property, and interfere with instructional activities. Schools frequently require significant repairs following natural disasters, and resuming regular operations can be logistically challenging. Natural disasters not only cause physical harm but also have an impact on the emotional and psychological health of those affected, necessitating the need for trauma recovery services and mental health care (Potter et al., 2020).
b. **Violence and threats** - These can include threats of terrorism, bullying, gang violence, and school shootings. Violent episodes frequently result in long-term psychological stress in addition to immediate safety concerns. In school, violence can erode the institution's reputation by fostering a culture of dread. Plans for crisis management must address the psychological effects of violence, such as trauma and post-traumatic stress disorder (PTSD), and they must put prevention measures in place to lessen the chance that such crises will ever arise (Albahri et al., 2024).
c. **A pandemic or health emergency** - Schools may encounter another significant crisis type: a pandemic or health emergency, such as the COVID-19 pandemic. CIVID-19 pandemic is a health crisis that has devastated most countries of the world (Osegbue, 2022). Widespread illness among students and staff can result from health-related emergencies, which not only interfere with regular school operations but also raise questions about public health and safety. Pandemics can have a serious negative impact on mental health, leading to increased anxiety, despair, and social isolation. Schools need to be ready to help their communities' emotional and psychological health at these times. Schools must have flexible preparations for preserving educational continuity in remote or hybrid modes and procedures for the ultimate return to in-person instruction, as the COVID-19 epidemic has shown (Mallik, 2023).
d. **Staff or student mental health issues** – this issue can cause disruptions to school operations and have a detrimental effect on the environment as a whole. Issues like suicidal thoughts, self-harm, or emotional collapses might occur and need to be addressed right away. Identifying and addressing mental health crises can be more challenging, especially when people choose not to seek treatment or when schools lack the resources necessary to support students dealing with mental health issues. Untreated mental health conditions like anxiety or depression can have long-term

effects that include academic failure, school disengagement and negative consequences(Nickerson,2021).

e. **Social crises** – Social crises like rallies, strikes, and disturbances in the community can significantly affect how schools operate daily. Schools may become hotspots when outside social or political problems intensify due to larger social upheaval. Despite the surrounding disruptions, such crises necessitate cautious handling to maintain a safe, encouraging, and learning-friendly learning environment (Schechter et al., 2022).

Psychological Impact of Crises

Parents, employees, and students all have serious psychological repercussions as a result of crises. During times of crisis, students are especially susceptible, and their mental health may suffer significantly. Common psychological reactions to crises include anxiety, trauma, post-traumatic stress disorder (PTSD), and depression. These conditions can show themselves as behavioural changes, emotional instability, scholastic deterioration, and social disengagement, among other symptoms. Students who experience crises may find it difficult to thrive academically and socially in the long run, which is why early intervention and mental health care are essential (Smith, 2012).

Employees are not exempt from the psychological effects of crises. Due to their direct engagement in crisis management, teachers, administrators, and other school personnel frequently suffer from burnout, stress, emotional exhaustion, and trauma. In addition to their regular responsibilities, school employees are commonly expected to manage their stress and mental health while offering pupils emotional assistance. The emotional toll of crises can cause staff members to become disengaged, become less productive, and even develop long-term mental health problems if there are insufficient support networks in place (Kaizar & Alordiah, 2023a; Aslamiah et al., 2021).

Parents feel scared and distressed in times of crisis, especially if their children are directly impacted. It can be extremely difficult to support kids through horrific experiences while they manage their emotional struggles. Parents may feel more anxious about their kids' academic achievement, safety, and wellbeing. As part of a thorough crisis management strategy, schools must consider parents' psychological requirements and ensure that families have access to tools and support services to help them deal with the emotional difficulties they encounter (Williams et al., 2017).

Factors Influencing Crisis Response and Recovery

How well a school responds to and recovers from a crisis depends on several things. One of the most important aspects of crisis management is communication speed. How well the school community can react to a crisis is strongly impacted by how quickly and accurately information is disseminated. Managing rumours, outlining safety procedures, and offering emotional support to individuals affected can all be accomplished with prompt communication. During emergencies, technology, such as AI-powered communication tools, can improve communication's speed and effectiveness (Urick et al., 2021).

Another important component of crisis recovery is the availability of psychological and practical support services. Access to counsellors, support groups, and mental health specialists is essential for assisting parents, staff, and students overcome the fallout after a crisis. Furthermore, safety measures guarantee that schools are prepared to handle emergencies and keep a secure atmosphere. These measures which includes emergency planning procedures, security guards, and physical resources should be provided by the resilient leader (Nickerson, 2021).

Resilient leadership is crucial for navigating a crisis within the school community. School administrators must show that they are emotionally intelligent, flexible, and capable of making decisions under stressful situations. While keeping a laser-like focus on recovery and reconstruction activities, resilient leaders may offer direction, comfort, and support to both staff and students. A key element of long-term rehabilitation is the capacity to make wise choices and maintain composure under pressure (Wart, 2011).

Fernandes et al. (2023) observed that socioeconomic issues, can influence the wayschool community's response to and recovery from crises. Schools in areas with more poverty, less access to healthcare, or other socioeconomic vulnerabilities may have more difficulties during emergencies. It is essential to comprehend these differences to customise crisis management plans that cater to the unique requirements of the school community (Fernandes et al., 2023).

Resilient Leadership in Crisis Management

To ensure that difficulties are handled calmly, with well-informed decisions, and with an emphasis on preserving the wellbeing of all parties involved, resilient leadership is essential in helping a school community navigate crises. The ability to manage uncertainty while creating a secure and encouraging atmosphere is exhibited by resilient leaders who maintain composure and resourcefulness in the face of adversity. They are essential to ensuring that the school community not only makes it through a crisis but also bounces back and strengthens on the other side. The capacity to successfully lead and mentor a community through a crisis's intricacies and emotional upheaval is a component of resilient leadership. It is typified by making well-informed decisions while retaining emotional equilibrium and serenity. To assist others in controlling their emotions and create an atmosphere of psychological safety, these leaders must have the rare capacity to remain composed under challenges. To ensure that people feel understood and supported during the crisis, this leadership style embraces challenging circumstances with clarity and empathy rather than ignoring them or responding rashly. The way a community handles hardship and bounces back is greatly influenced by resilient leaders (Tokakis, 2018). This study sees resilient leadership as a dynamic ability to absorb, recover, and rediscover organizational strength in the midst of crisis, chaos or disruption.

Key Characteristics of Resilient Leaders

Several key characteristics define resilient leaders, which is essential for navigating crises effectively.

- **Emotional Intelligence**: Resilient leadership is characterised by emotional intelligence, which includes identifying and controlling one's emotions and those of others, particularly under pressure. Emotionally intelligent leaders can remain composed in the face of ambiguity, which helps keep parents, employees, and students' emotions in check. They can recognise when others are experiencing emotional difficulties and provide the right kind of assistance, whether by noting the emotional toll of the circumstance, guiding someone to counselling options, or having a consoling chat. Resilient leaders provide a healthy environment for the entire school community to process and recover by controlling their own emotions and acknowledging the emotional needs of others (Tamim, 2025; Alordiah, 2020).
- **Adaptability**: Crises are dynamic and frequently change quickly, necessitating adaptability and quick thinking. Resilient leaders must be flexible enough to change their plans and tactics when conditions change. They must realise that in times of crisis, strict adherence to pre-established plans might not always be feasible or

efficient. Rather, flexible leaders keep their minds open to new information, review their goals, and modify their strategies as necessary. This adaptability allows the school to continue serving the community's urgent and evolving needs, whether redistributing resources, changing communication tactics, or rearranging the curriculum to put safety first (Dückers, 2017).

- **Decisiveness**: In times of crisis, prompt and immediate decision-making is frequently required. Resilient leaders can make well-informed decisions Even when time and information are limited. Being decisive does not mean making snap decisions; rather, it refers to the ability to evaluate the information at hand, consider all pertinent aspects, and act with assurance. Meaning that effective leaders should be pragmatic in their decision-making and follows the process of clearly defining objectives, gathering relevant information, evaluating options of considering alternatives, weighing Pros & Cons, monitoring progress and making adjustment (Osegbue & Ohamobi, 2025). These leaders base their decisions on the greatest facts because they recognise that inaction or postponed decisions might cause more harm. Being decisive helps students and staff feel supported and clear about what to do next by reducing uncertainty and fostering confidence within the school community (Ramos et al., 2021).
- **Communication**: Another essential quality of resilient leaders is their ability to communicate in a clear, open, and sympathetic manner. People need knowledge and reassurance during a crisis, and leaders must be able to deliver both. In addition to conveying crucial information, effective communication entails doing so in a sympathetic and intelligible manner. By giving regular and reliable updates, resilient leaders communicate in a way that lessens uncertainty and anxiety. They actively listen to the worries of parents, teachers, and children, and they honestly and sympathetically address these worries. In times of uncertainty, open communication builds trust and makes the school community feel valued and included (Dhandapani, 2024)
- **Vision**: Despite crises, resilient leaders have a clear vision for the future. This foresight enables them to concentrate on long-term rehabilitation and reconstruction initiatives, assisting the school community in overcoming the crisis's immediate obstacles. Visionary leaders recognise that the crisis is just one part of the school's history and that the recovery process must concentrate on re-establishing normalcy, re-establishing trust, and ensuring the educational environment is better prepared to face obstacles in the future. By keeping an eye on the future, resilient leaders assist staff and students stay optimistic and motivated despite adversity (Parveen et al., 2022).

Role of Resilient Leadership in Crisis Management

Beyond simply remaining composed and making decisions, resilient leadership in crisis management entails actively assisting the school community in navigating the situation while prioritising psychological safety, efficient use of resources, and strategic recovery.

- **Trust and Morale**: Building and sustaining trust with the school community is one of the most important responsibilities of a resilient leader in times of crisis. Effective crisis management is built on trust because it creates cooperation, open communication, and a sense of security for all school personnel. Resilient leaders ensure that their words and deeds match to foster an atmosphere where parents, employees, and students believe in the leadership's capacity to handle the situation. Sustaining morale is equally vital since it keeps people from feeling hopeless and

powerless. Resilient leaders boost morale by recognising the difficulties, providing assistance, and applauding minor successes during the healing process (Schechter et al., 2022).

- **Coordination of Resources**: Resources, including staff, money, time, and emotional support, must be used effectively during crises. Resilient leaders are adept at allocating these resources to meet short-term and long-term demands while optimising impact. This involves ensuring employees have the tools and assistance they require to help pupils overcome the psychological effects of the situation. It also entails directing funds into areas like recovery initiatives, safety procedures, and mental health programs that will have the biggest impact. Resilient leaders recognise the significance of planning and managing resources strategically to guarantee that the school community gets the assistance it requires at every stage of the crisis (McLeod, 2021; Osegbue, 2021).
- **Psychological Safety**: A resilient leader fosters an atmosphere where employees and students feel mentally and emotionally encouraged. Because people may be feeling trauma, worry, or terror during a crisis, psychological safety is crucial. Empathic and supportive cultures are fostered by resilient leaders who encourage staff and students to communicate their feelings and ask for assistance when necessary. Resilient leaders ensure that the crisis doesn't negatively impact the school community's mental health and that people may bounce back and prosper by upholding psychological safety (Alordiah, 2022; Mazurkiewicz, 2021).
- **Strategic Decision Making**: Strategic decision-making, particularly under pressure, is a strength of resilient leaders. They make well-informed judgements that lessen harm and promote recovery using data, stakeholder involvement, and their discretion. The capacity to analyse the circumstances, weigh the options, and act quickly are essential in times of crisis. Making strategic decisions reduces misunderstandings, efficiently distributes resources, and helps the school community navigate the situation. When making decisions, resilient leaders put students' and employees' welfare first, maintain school continuity, and establish a clear recovery plan (Dhandapani, 2024; Osegbue et al., 2018). Moreover, the fact remains that for the system to thrive the government in power should support the activities of the school system (Ohamobi et al, 2018).

AI-Enhanced Crisis Management in CIRE

The Crisis Intelligence for Resilient Education (CIRE) Model incorporates state-of-the-art Artificial Intelligence (AI) technology using the psychology and evaluation framework to improve school crisis management. Schools can use artificial intelligence to enhance their crisis readiness, response, and recovery. This enables them to identify possible threats early, distribute resources effectively, and communicate with all stakeholders, artificial intelligence (AI) technologies such as machine learning, natural language processing (NLP), and predictive analytics which are essential in revolutionising how schools handle crisis management.

Overview of AI Technologies

AI is a broad category of technologies enabling systems to carry out operations that require human intelligence. AI solutions allow schools to process vast amounts of data, identify trends, and make decisions based on up-to-date information regarding crisis management. The CIRE framework relies heavily on the following AI technologies:

- **Machine Learning**: Machine learning, a subfield of artificial intelligence, aims to create algorithms that let computers recognise patterns in data and anticipate or decide

without explicit programming. Machine learning algorithms can be used in crisis management to forecast future problems by analysing historical and current data. Machine learning, for example, can be used to spot trends in student conduct or medical records that point to the possibility of a crisis, such as a mental health crisis or an illness outbreak. This predictive capability improves readiness by allowing school administrators to take proactive measures before a problem occurs (Ramos et al., 2021).

- **Natural Language Processing (NLP)**: The AI subfield of natural language processing (NLP) aims to make it possible for machines to comprehend, interpret, and produce human language. To gauge sentiment and identify warning indications of impending crises, NLP can be applied to analysing many communication channels, including emails, social media, student surveys, and other written or spoken correspondence. NLP-driven technologies, for instance, can spot bullying trends, violent threats, or signs of mental distress in student conversations, assisting in the resolution of problems before they get out of hand (Osegbue et al., 2025; Alordiah, 2023b).
- **Predictive Analytics**: Statistical algorithms and machine learning methods are used in predictive analytics to examine past data and forecast future occurrences. Using data trends like attendance patterns, social dynamics, or health reports, predictive analytics can be used in the CIRE framework to predict possible crises. Predictive analytics enables schools to take proactive measures and stop crises from worsening by spotting early warning signs of issues enhancing general safety and wellbeing (Striepe, 2021).

Applications of AI in the CIRE Model using the Psychological and Assessment Framework

The CIRE Model uses AI technologies to improve crisis management procedures in several ways. They can facilitate decision-making, and also help make schools safer and more adaptable. They can be used to indicate:

- **Early Warning Systems**: AI-powered early warning systems are crucial for identifying possible disasters early on. These systems look for trends pointing to new dangers by analysing data from various sources, such as social media, school records, and behavioural tracking. AI, for example, can identify early indicators of social isolation, bullying, or behavioural problems that may escalate into violent or mental health crises. Early warning systems enable school administrators and counsellors to take action early and offer focused support to those at risk by detecting these problems before they worsen (Mutch, 2015).
- **Sentiment Analysis**: A potent AI method for assessing the emotional tone of communications, including staff surveys, social media posts, and student comments, is sentiment analysis. By examining this data, sentiment analysis technologies can detect growing dissatisfaction or worries within the school community. For instance, sentiment analysis might notify school administrators of possible problems with mental health, safety, or overall morale if a sizable portion of students use social media or anonymous surveys to voice anxiety or discontent with school conditions. This enables schools to deal with problems as soon as they arise, either by changing school policies or procedures or by providing mental health support services.
- **Resource Allocation**: During a crisis, resource allocation must be done effectively. Real-time resource tracking and allocation made possible by AI-powered systems can guarantee that the most pressing needs are satisfied efficiently. AI can, for instance, keep track of the availability of security guards, medical workers, and counsellors during a school emergency, ensuring that these resources are allocated where they are

most required. To guarantee that the school community has access to the support it needs urgently, AI systems can also prioritise the distribution of tangible resources, like medical supplies, according to the severity of the crisis (Riggio, 2022).

- **Crisis Communication**: Managing a crisis requires effective communication, and AI-powered solutions can improve communication. For example, AI chatbots can offer prompt, sympathetic answers to parents', employees', and pupils' enquiries during a crisis. These chatbots can provide emotional support, safety protocol advice, and answers to commonly requested enquiries. AI-powered communication platforms can also guarantee that important information reaches all stakeholders in a timely and understandable manner. AI technologies lessen the workload for school administrators by automating communication in times of emergency and guaranteeing that everyone is informed in a timely and correct manner.

Benefits and Limitations of AI-Enhanced Crisis Management in CIRE

Although AI can potentially transform crisis management in educational institutions completely, it is crucial to weigh the advantages and disadvantages of its application within the CIRE framework.

Its Benefits includes: D**ecision-Making**: By swiftly analysing enormous volumes of data and giving school administrators instant insights, artificial intelligence (AI) expedites decision-making. When the stakes are high and prompt action might lessen the effect of a crisis, the capacity to make data-driven decisions in real time is essential (Riggio, 2022).

- **Enhanced Efficiency**: AI improves the effectiveness of crisis management initiatives by automating processes like communication, resource allocation, and data analysis. As a result, school employees have less administrative work and can concentrate on more direct interactions with staff and kids (Prayag et al., 2023).
- **Improved Predictive Accuracy**: Artificial intelligence (AI) methods like machine learning and predictive analytics increase the precision of crisis prediction. This makes it possible for schools to take a more proactive approach, reducing the likelihood of crises arising or worsening without help (Extremera et al., 2022).
- **Strengthened Crisis Response**: By offering data-driven insights on the gravity of the problem, the resources required, and the most successful interventions, artificial intelligence (AI) improves the school's capacity to respond to emergencies. This makes it possible to respond more precisely and successfully, enhancing the general safety and well-being of the school community (Schechter et al., 2022; Tamim, 2025).

Limitations:

- **Ethical Concerns**: Resolving ethical issues, especially data protection, is one of the main obstacles to applying AI in crisis management. Gathering and examining sensitive data, such as student behaviour or medical records, raises concerns regarding consent, privacy, and data security. Schools must establish clear policies for the moral use of AI to safeguard employees' and pupils' rights and confidentiality.
- **Algorithmic Bias**: Biases in the data that AI systems are educated on can occasionally be reinforced by the system itself. For instance, an AI system may reproduce biases when evaluating fresh data if it was educated on prior data that showed unfair treatment or biased decision-making. Schools must ensure AI systems are fair, open, and devoid of prejudices that can result in staff or students being treated unfairly to prevent this (Alordiah, 2023).
- **Dependency on Technology**: The efficacy of crisis management initiatives may be jeopardised by technological malfunctions or inaccurate AI models. Therefore, an over-reliance on AI can potentially be detrimental. Schools must have backup plans

ready and ensure AI tools are utilised with human monitoring and judgement (Manafa et al., 2022; Schechter et al., 2022).

- **Misinterpretation of AI Insights**: AI systems risk being misunderstood, even though they can offer insightful information. School leaders must evaluate and contextualise data-driven recommendations so they may make well-informed decisions based on the larger picture. It is important to view AI insights as a tool to support decision-making rather than as a substitute for human knowledge.

Psychological Support and Assessment Framework in CIRE

The Crisis Intelligence for Resilient Education (CIRE) Model strongly emphasises integrating psychological support and assessment to manage crises in schools effectively. This is an innovation which carries out a deliberate change geared towards achieving a desired goal (Osegbue et al., 2022). The CIRE Model ensures that staff and students get the help they need to heal and rebuild by fusing short-term emotional interventions with long-term psychological treatment. The framework employs thorough evaluations to determine hazards, gauge resilience, and analyse the efficacy of crisis management in addition to attending to the school community's emotional and mental health needs. This two-pronged strategy (psychological assistance and thorough evaluation) is essential for short-term and long-term crisis recovery.

Psychological Component

The CIRE Model's psychological component focuses on providing the school community with immediate and continuous help to meet their emotional and mental health requirements both during and after a crisis. It contains a number of crucial techniques meant to lessen emotional suffering, promote healing, and enhance general wellbeing.

- **Crisis Intervention and Support Strategies**: Providing immediate emotional support and stabilisation to those impacted by the crisis is the main objective of crisis intervention. Peer support groups, counselling, and other emotional outreach techniques are used. Schools must respond quickly to the emotional needs of parents, employees, and children in times of crisis so that everyone feels supported and safe. Peer support networks, in which students assist one another, can be particularly helpful in fostering a feeling of belonging and mutual healing. To help impacted individuals navigate the first emotional upheaval of the crisis, trained staff members such as counsellors and social workers should be available to offer prompt, customised crisis counselling. Treating distress early and halting its progression can assist in lessening long-term psychological harm (Aslamiah et al., 2021).
- **Psychological First Aid**: Psychological first aid, which includes educating personnel to provide prompt psychological and emotional support during a crisis, is one of the main tenets of the CIRE Mode. This training prepares school workers to identify symptoms of distress, offer a secure and encouraging environment for staff and kids to communicate their emotions, and assist them in obtaining additional professional mental health treatments if needed. Practical help, active listening, and empathy are the cornerstones of psychological first aid. Schools can provide prompt emotional support to those experiencing distress by educating staff members on how to react immediately after a crisis. This lowers the likelihood of long-term trauma and speeds up recovery.
- **Trauma-Informed Care**: Following a catastrophe, establishing a school climate that acknowledges the psychological impacts of trauma and incorporates sensitive methods to lessen its effects requires trauma-informed care. Knowing how often trauma is among students and staff and reacting in ways that put safety, trust, and

empowerment first are key components of a trauma-informed approach. All employees must receive school training on spotting the warning signs of trauma, reacting compassionately, and understanding. This could entail offering specialist counselling, adjusting academic standards, and establishing secure environments where people can work through their feelings. During the healing process, leaders can assist people in feeling powerful, respected, and supported by integrating trauma-informed practices into the school culture (Grissom, 2021).

- **Mental Health Support**: During and after a crisis, staff and students must receive ongoing mental health care. Regular access to counselling services and mental health check-ins assist people in overcoming the emotional fallout from traumatic experiences. For students, this can entail group counselling, individual therapy sessions, and assistance from social workers or school psychologists. Nwakpa in Ohamobi et al. (2021) opined that it is essential that they should be an organized programme for diagnosis of needs and counselling of students, an oriental programme based on the principles of effective communication, remedial assistance and professional guidance for both physical well-being and mental health. The stress and emotional exhaustion that frequently accompany crises can be lessened for teachers by offering access to assistance programmes and continual professional development on mental health awareness. As people continue to rehabilitate and acclimatise to life after the catastrophe, long-term mental health care guarantees that recovery goes beyond the immediate aftermath.

Assessment Component

The CIRE Model's assessment component is centred on the methodical analysis of the school community's psychological resilience, risks, and vulnerabilities. The CIRE Model offers a thorough method for evaluating crisis readiness, response, and recovery by leveraging AI-driven tools and additional data sources. This information depends on wise judgements, strengthening future reactions, and boosting the school community's resilience.

- **Risk Assessment and Crisis Mapping**: Risk assessment includes finding possible dangers, weak points, and emergencies that might affect the school community. Schools can produce comprehensive crisis maps that pinpoint areas of vulnerability and the probability of particular crises using AI and additional data sources. AI techniques, for instance, can forecast the likelihood of a crisis, such as a natural disaster, violent crime, or a health outbreak, by examining historical data, student behaviour patterns, local environmental hazards, and other pertinent information. School leaders can create proactive measures to address risks and prepare for emergencies ahead of time by making these maps. This predictive skill improves readiness, making the school community more capable of managing upcoming difficulties (Smith, 2012).
- **Vulnerability Assessment**: Because it helps determine which groups within the school community are most at risk during a crisis, vulnerability assessment is essential to crisis management. Factors like age, socioeconomic level, past trauma experiences, and mental health history can all have an impact on vulnerability. For instance, during a crisis, pupils who already have mental health issues may be more susceptible to experiencing significant psychological discomfort. Employees who have recently suffered a personal loss can also need more assistance. Schools can customise their crisis response initiatives to fit the unique requirements of at-risk groups by using vulnerability assessment, guaranteeing that everyone gets the help and consideration they require.

- **Resilience Measurement**: The psychological resilience of students, faculty, and the entire school community is known as resilience measurement. Surveys, interviews, and sentiment analysis can be used to measure how effectively people are handling the fallout from a catastrophe. Artificial intelligence (AI) systems can help by evaluating behavioural and emotional data, such as conversations or student questionnaires, to produce a numerical resilience indicator. School administrators can use this data to gauge the community's level of recovery and determine whether more assistance is required. Frequent resilience assessments enable ongoing support strategy monitoring and modification, guaranteeing that the recovery process stays on course (Chatzipanagiotou, 2023).
- **Post-Crisis Evaluation and Review**: It is crucial to assess the crisis response's efficacy after the crisis has passed. Feedback on how effectively the school's crisis management initiatives satisfied the needs of parents, staff, and students is gathered as part of this post-crisis review. Focus groups and surveys can yield important information about the response's advantages and disadvantages, enabling a comprehensive evaluation of crisis procedures and assistance programs. Finding response gaps and improving future tactics depend heavily on the data acquired at this stage. Post-crisis evaluations also offer a chance to acknowledge the school community's efforts, praise accomplishments, and stress the value of perseverance in the face of difficulty. Table 1 and Figure 1 display these elements.

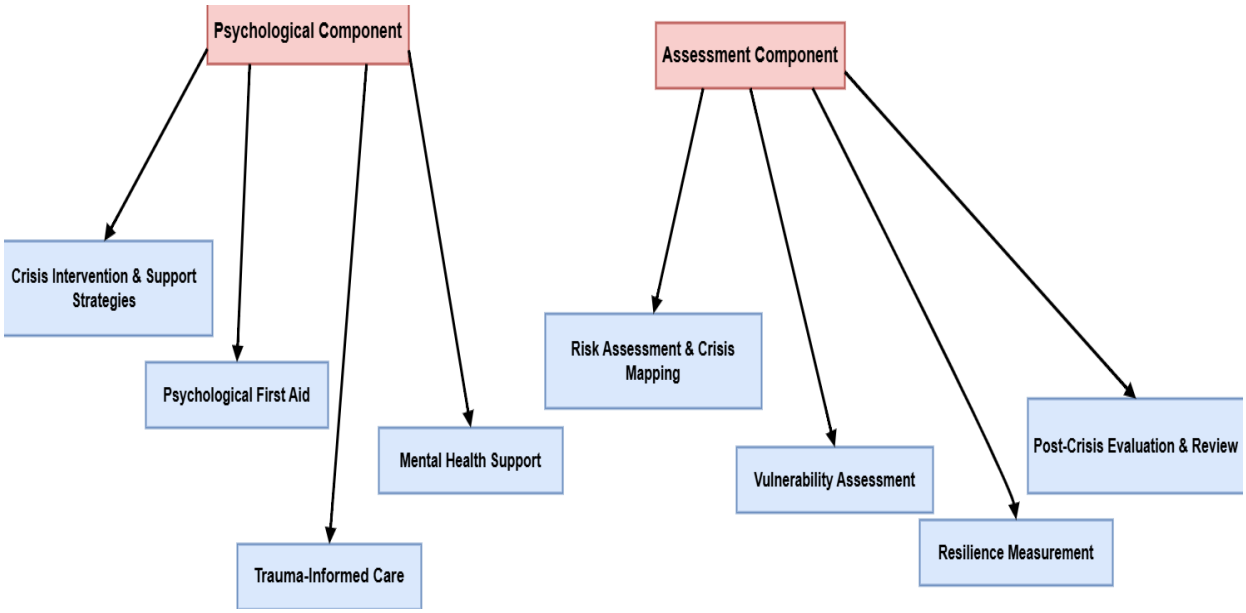

Figure 1: The Psychological and Assessment Framework

Implementation and Integration of CIRE

Careful planning and execution are necessary to successfully integrate and deploy Crisis Intelligence for Resilient Education (CIRE) to guarantee that the system functions well in a school setting. Integrating AI-enhanced crisis management tools and ensuring that staff and students can use them effectively in emergencies require several crucial tactics.

Strategies for Implementing AI-Enhanced Crisis Management

Creating AI tools specifically suited to the requirements of educational institutions is one of the first steps in putting the CIRE Model into practice. Cooperation with technological partners is crucial to developing AI systems that can evaluate real-time data, identify possible threats, and improve emergency decision-making. The design of these AI systems must

consider the particulars of school environments, including student conduct, mental health patterns, and possible hazards like bullying or violence. The tools will be precise, easy to use, and capable of supporting all facets of crisis management, from early detection to recovery, if schools and tech developers work together effectively.

After AI tools are created, system integration must be the main priority. This entails ensuring that the new AI capabilities blend perfectly with the current communication networks, crisis management procedures, and mental health services. AI must be completely integrated with the school's emergency protocols and backed by the existing systems to be useful in an emergency. Enabling staff, students, and parents to receive real-time warnings and updates may entail integrating AI capabilities with the school's communication systems. Furthermore, combining AI-powered tools with mental health services will guarantee that staff and students can quickly get their needed help. The school will be better equipped to handle emergencies and ensure that resources are distributed where they are most needed if the integration goes more smoothly.
Creating policies and procedures is crucial to putting AI-enhanced crisis management into practice. Schools must establish clear rules governing the moral use of AI tools, especially when it comes to sensitive data like student mental health records. Ethical issues such as data privacy, informed consent, and openness must be addressed to preserve confidence and defend the rights of employees and students. According to policies, AI tools should be utilised appropriately without adding biases or violating privacy. Additionally, schools must set up procedures for managing data, especially with regard to the sharing, storing, and safeguarding of private and health-related data.

Training and Capacity-Building for Staff and Students
The effectiveness of AI-enhanced crisis management depends on personnel and students being properly trained and equipped to use the technology. An essential part of the implementation phase is staff training. To guarantee that all employees are proficient in using AI tools for all facets of crisis management, from early detection to resource allocation, ongoing professional development should be made available. Teachers, administrators, counsellors, and other staff members will get the skills from this course to use AI effectively in an emergency. Staff members should receive specific training on evaluating the insights offered by AI tools, making data-driven choices, and reacting suitably to recognised hazards. Best practices for leveraging AI in crisis communication should be covered in training as well so that employees can effectively and swiftly provide critical information in an emergency.

AI-driven crisis management technologies can to be implemented successfully, by creating staff and student awareness. Students should be taught how to use AI-supported tools in the classroom, such as crisis communication platforms and apps for mental health. Students must know how to use the resources to report issues, ask for assistance, or get support when needed. By raising student knowledge, we can ensure that everyone in the school community can use the AI tools and that students are at ease doing so when they need support. Any hesitancy or uncertainty over the usage of AI tools can be lessened by giving clear instructions and continuing support.

Conclusion
In conclusion, this paper has provided an in-depth examination of crisis management in schools, highlighting the complexities of school crises, their psychological impact, and the factors influencing crisis response and recovery. The importance of resilient leadership in crisis management has been emphasized, along with the key characteristics of resilient

leaders and their role in navigating crises. The paper further exposed the application of AI in crisis management, specifically within the Crisis Intelligence for Resilient Education (CIRE) Model. Benefits and limitations of AI-enhanced technologies were also discussed. This paper clearly pointed out that school administrators have strong tools to act quickly and make wise judgements because of AI's capacity to scan vast volumes of data, anticipate possible dangers, and optimise resource allocation. When utilised appropriately, these technologies can enhance the accuracy and speed of crisis response operations, while supporting staff and students' emotional healing and well-being.

Recommendations

To further enhance crisis management in schools, the following recommendations are proposed:

1. School leaders should invest in developing and implementing AI-driven crisis management tools that can help identify potential crises, provide real-time alerts, and facilitate swift response and recovery.
2. Government should provide training and support for administrators and staff to develop resilient leadership skills, enabling them to effectively manage crises, prioritize student well-being and foster a culture of resilience.

References

Albahri, A. S., Khaleel, Y. L., Habeeb, M. A., Ismail, R. D., Hameed, Q. A., Deveci, M., Homod, R. Z., Albahri, O. S., Alamoodi, A. H., & Alzubaidi, L. (2024). A systematic review of trustworthy artificial intelligence applications in natural disasters. *Computers & Electrical Engineering*, *118*,109409–109409. https://doi.org/10.1016/j.compeleceng.2024.109409

Alordiah, C. O. (2023a). Proliferation of Artificial Intelligence Tools: Adaptation Strategies in the Higher Education Sector. (2023). *Propellers Journal of Education*, *2*(1), 53-65. https://ijvocter.com/pjed/article/view/68

Alordiah, C. O. (2023b). Appreciating the AI revolution: Empowering educational researchers through AI tools for writing research articles. Zamfara. *International Journal of Humanities (ZAMFARA IJOH)*, 2(1), 178-191. https://doi.org/zamijoh.2023.v02i01.013

Alordiah, C. O., Omumu, F. C., & Kaizar V. O. (2023). Investigating why students in Nigeria perceive education as a scam. (2023, May 23). *Journal of Applied Learning & Teaching (JALT)*, 6(1). https://doi.org/10.37074/jalt.2023.6.1.31

Alordiah, C. O. (2022). An examination of the latent constructs in a Wellbeing Scale for children: Application of Rasch Model. University of Delta, *Journal of Contemporary Studies in Education (UDJCSE)*, 1(2), 47-54

Alordiah, C. O. (2020). Development and factorial validation of a well-being scale for the Nigerian child. *Journal of the Nigerian Council of Educational Psychologists, 13*(1), 1- 12.

Aslamiah, A., Rizalie, M., Cinantya, C., & Amelia, R. (2021). COVID-19, School Leadership in Crisis? *ENDLESS International Journal of Future Studies*, *4*(2), 332–341. https://doi.org/10.54783/endless.v4i2.173

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), 118–118. https://doi.org/10.3390/educsci13020118

Dückers, M. (2017). A multi-layered psychosocial resilience framework and its implications for community-focused crisis management. *Journal of Contingencies and Crisis Management*, *25*(3), 182–187. https://doi.org/10.1111/1468-5973.12183

Elbedour, S., Alsubie, F., Al'Uqdah, S., & Bawalsah, J. A. (2020). School Crisis Management Planning. *Children & Schools*, *42*(4), 208–215. https://doi.org/10.1093/cs/cdaa021

Extremera, M. O., Townsend, A., & Segovia, J. D. (2022). Resilient leadership in principals: case studies of challenged schools in Spain. *International Journal of Leadership in Education*, 1–20. https://doi.org/10.1080/13603124.2022.2052758

Enwereji,G.N,Ohamobi,I.N & Emeka-Nwokeji.N.A(2022)Assessing the relationship between utilization of computer and academic achievement of postgraduate students in degree awarding institutions in Anambra State. *European Journal Research Reflection in Educational Science.*10(1) 40-50 https://researchgate.net/publication359973026

Fernandes, V., Wong, W., & Noonan, M. (2023). Developing adaptability and agility in leadership amidst the COVID-19 crisis: experiences of early-career school principals. *International Journal of Educational Management*, *37*(2), 483–506. https://doi.org/10.1108/ijem-02- 2022-0076

Gainey, B. S. (2009). Crisis Management's New Role in Educational Settings. *The Clearing House A Journal of Educational Strategies Issues and Ideas*, *82*(6), 267–274. https://doi.org/10.3200/tchs.82.6.267-274

Grissom, J. A., & Condon, L. (2021). Leading Schools and Districts in Times of Crisis. *Educational Researcher*, *50*(5), 315–324. https://doi.org/10.3102/0013189x211023112

Johnson, K. R. (2023). Crisis Management in Education: Strategies for Resilience and Adaptation in Diverse Cultural Contexts. *Deleted Journal*, *3*(3), 152–160. https://doi.org/10.59613/armada.v3i3.2834

Liou, Y. (2014). School Crisis Management. *Educational Administration Quarterly*, *51*(2), 247– 289. https://doi.org/10.1177/0013161x14532467

Kaizer, V. O., & Alordiah, C. O. (2023a). Understanding the role of play in promoting cognitive, social, and emotional development in school children: implications for counsellors and evaluators. University of Delta. *Journal of Contemporary studies in Education (UDJCSE)*, 2(1), Available at https://foeunidel.org.ng/edu/2023/09/30/17/

Manafa, I.F., Ohamobi, I.N. & Osegbue, G.C. (2022). Utilization of ICT resources in the management of UBE in secondary schools in Anambra State. *African Journal of Educational Management, Teaching and Entrepreneurship Studies,* 7(1), 119-128.

Manafa, I.F & Ohamobi, I.N (2021) Evaluation of security management practices in public secondary school in Anambra State. *Unizik Journal of Educational Research and Policy Studies*.8,78-85 https://unijerps.org

Manafa, I.F. Ohamobi, I.N.& Okafor, P.C (2022) communication and information system in education.Education Dialogue:Research reports from Africa, EDUDIA-IEPA. 200-208 https://www.academia.edu

Mallik, S. (2023). Proactive and reactive engagement of artificial intelligence methods for Education: a review. *Frontiers in Artificial Intelligence*. https://doi.org/10.3389/frai.2023.1151391

Mazurkiewicz, G. (2021). Educational Leadership in Times of Crisis. *Risks*, *9*(5), 90–90. https://doi.org/10.3390/risks9050090

McLeod, S., & Dulsky, S. (2021). Resilience, Reorientation, and Reinvention: School Leadership During the Early Months of the COVID-19 Pandemic. *Frontiers in Education*, *6*. https://doi.org/10.3389/feduc.2021.637075

Mutch, C. (2015). Leadership in times of crisis: Dispositional, relational and contextual factors influencing school principals' actions. *International Journal of Disaster Risk Reduction*, *14*, 186–194. https://doi.org/10.1016/j.ijdrr.2015.06.005

Nwakpa, P. (2015). Student personnel management: a panacea for effective secondary school administration in Nigeria. Journal of research in humanities and social science, 3 (5), 62-64

Nickerson, A. B. (2021). The COVID-19 pandemic as a long-term school crisis: Impact, risk, resilience, and crisis management. *School Psychology*, *36*(5), 271–276. https://doi.org/10.1037/spq0000470

Osegbue, G.C & Ohamobi I.N (2025) The Administrative strategy for achievement of quality assurance in public sec school in Delta state. 01-15-25 international journal of management and business intelligence. https://jurnalinternational.com/index.php/IJMBI/article/283/243

Ohamobi, I.N., Anaeche, I.C., Oguejiofo, C.S., Osegbue, G.C., Obi, I.E., Onyekazi, P.I. & Anagor, N.A. (2024). Professional development of teachers as correlates of teachers' job commitment in public secondary schools in Anambra State. *Journal of Higher Education Theory and Practice,* 24(2), 63-73.

Ohamobi, I.N, Akulue, N.M & Okonkwo, N.P. (2021) Utilization of guidance and counselling as a support service for enhancing students' personnel administration in public secondary school in Anambra state. *Journal of Solaeational Research and Development,* 4(2)144- 156 https://www.researchgate.net/publication/361338636

Ohamobi, I.N. (2019). Acceptability of multisource feedback on principals for improved management of secondary schools in Anambra State. *Global Journal of Education, Humanities and Management Science(GOJEHMS*), 1(1)110–127 https://www.gogems.com

Ohamobi, I.N., Osegbue, G.C. & Manafa, I.F. (2018). Perceived influence of politics on personnel management of secondary schools in Anambra State. *American Academic and Scholarly Research Journal,* 10(3), 1-11.

Osegbue, G., Ekwe, N., & Alordiah, O. S. (2025). Artificial Intelligence and the Future of School Leadership. *Nigerian Journal of Social Psychology*, *8*(1). https://www.nigerianjsp.com/index.php/NJSP/article/view/196

Osegbue, G.C. (2022). Effectiveness of visual video tutoring on students' learning in coping with COVID 19 in the new normal. *International Journal of Educational Practice (IISTE),* 13(21) 110-122.

Osegbue, G.C. (2021). Principal' management of students' personnel services for attainment of educational goals in Anambra State. *Journal of Educational Research and Development,* 4(1), 85-92.

Osegbue, G.C., Manafa, I.F. & Ohamobi, I.N. (2022). Collaborative teaching practice and teachers' job performance: A contemporary innovative practice for employability and global competitiveness. *COOU Journal of Educational Research,* 7(1), 78-88

Osegbue, G.C., Manafa, I.F. & Ohamobi, I.N. (2018). Effective leadership: Imperative for primary school management and supervision in Anambra State. *American Academic and Scholarly Research Journal,* 10(3), 33-43.

Osegbue, G.C., & Nnubia, J.N. (2020). Adequacy of strategic plan implementation in secondary schools' administration for sustainable educational development in Anambra State, Nigeria. *Unizik Journal of Educational Management and Policy,* 4(1), 104-114.

Potter, P. D., Pavlakis, A. E., & Roberts, J. K. (2020). Calming the Storm: Natural Disasters, Crisis Management, and School Leadership. *Journal of Cases in Educational Leadership*, *24*(2), 96–111. https://doi.org/10.1177/1555458920973695

Parveen, K., Tran, P. Q. B., Alghamdi, A. A., Namaziandost, E., Aslam, S., & Xiaowei, T. (2022). Identifying the Leadership Challenges of K-12 Public Schools During COVID-19 Disruption: A Systematic Literature Review. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.875646

Prayag, G., Muskat, B., & Dassanayake, C. (2023). Leading for Resilience: Fostering Employee and Organizational Resilience in Tourism Firms. *Journal of Travel Research*, *63*(3), 659–680. https://doi.org/10.1177/00472875231164984

Riggio, R. E. (2022). Crisis Leadership. *Annual Review of Organizational Psychology and Organizational Behavior*, *10*(1), 201–224. https://doi.org/10.1146/annurev-orgpsych-120920-044838

Schechter, C., Da'as, R., & Qadach, M. (2022). Crisis leadership: Leading schools in a global pandemic. *Management in Education*, *38*(4), 164–171. https://doi.org/10.1177/08920206221084050

Striepe, M. (2021). Understanding educational leadership during times of crises: a scoping review. *Journal of Educational Administration*, *60*(2), 133–147. https://doi.org/10.1108/jea-03-2021-0057

Smith, L. (2012). School leadership in times of crisis. *School Leadership and Management*, *32*(1), 57–71. https://doi.org/10.1080/13632434.2011.614941

Tamim. (2025). Resilient Leadership in Crisis: Strategies for Navigating Economic and Operational Disruptions in a Volatile World. *International Journal for Multidisciplinary Research*, *7*(1). https://doi.org/10.36948/ijfmr.2025.v07i01.34204

Tokakis, V. (2018). Crisis management in public administration: The three phases model for safety incidents. *Safety Science*, *113*, 37–43. https://doi.org/10.1016/j.ssci.2018.11.013

Urick, A., Carpenter, B. W., & Eckert, J. (2021). Confronting COVID: Crisis Leadership, Turbulence, and Self-Care. *Frontiers in Education*. https://doi.org/10.3389/feduc.2021.642861

Wart, M. (2011). Crisis Management Competencies. *Public Management Review*, *13*(4), 489–511. https://doi.org/10.1080/14719037.2010.525034

Wiedermann, C. J., Barbieri, V., Plagg, B., Marino, P., Piccoliori, G., & Engl, A. (2023). Fortifying the Foundations: A Comprehensive Approach to Enhancing Mental Health Support in Educational Policies Amidst Crises. *Healthcare*, *11*(10), 1423–1423. https://doi.org/10.3390/healthcare11101423

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organisational Response to Adversity: Fusing Crisis Management and Resilience Research Streams. *Academy of Management Annals*, *11*(2), 733–769. https://doi.org/10.5465/annals.2015.0134

Indexing