

## Using Risk Management Principles to Enhance School Leadership Preparedness and Crisis Response

Shazia Inayat Ali<sup>\*1</sup>, Sadia Saleem<sup>2</sup>, Iqra Zia<sup>3</sup>

<sup>1\*</sup>Assistant Professor, Department of Education, Jinnah University for Women, Karachi, Sindh, Pakistan.

<sup>2</sup>Co-Lecturer, Department of Education, Jinnah University for Women, Karachi, Sindh, Pakistan.

<sup>3</sup>Co-Lecturer, Department of Education Jinnah University for Women, Karachi, , Sindh, Pakistan.

**Corresponding author:** [shazia.ali@juw.edu.pk](mailto:shazia.ali@juw.edu.pk)

**Keywords:** Risk Management, School Leadership, Crisis Response, Preparedness, Educational Administration

**DOI No:**

<https://doi.org/10.56976/jsom.v4i4.394>

*Schools, colleges, and universities are coming under new challenging, and unpredictable conditions of safety threats, local health emergencies, natural catastrophes, technological breakdowns, and psychosocial emergencies. The leaders of schools are supposed to maintain continuity of learning and protect the students, personnel, and facilities. This paper explores the way in which risk management principles implementation can improve leadership readiness and crisis management at school. Based on developed risk management models, such as the identification of risks, their assessment, mitigation, communication, and continuous monitoring, the research examines their applicability and flexibility to school leadership. The data were gathered using the mixed methods approach by administering questionnaires and semi-structured interviews to school principals and vice principals, as well as, senior teachers. Quantitative results demonstrate high correlation between perceived preparedness and response capability during crisis and systematic risk management practices (positive). The qualitative insights also suggest that proactive planning, engaging in the stakeholders and training through scenarios make leadership more certain and confident in making decisions under pressure. The research adds to the body of educational leadership by merging the risk management theory and school governance practices, as it identifies the leadership competencies that allow schools to be crisis ready. The results highlight the importance of considering risk management principles into daily leadership activities in schools not as a form of compliance but as a form of strategy that can enable schools to be resilient and adaptive to crises.*

## 1. Introduction

### 1.1 Background of the Study

The world is becoming increasingly complex, risky and uncertain with environmental factors in educational institutions operating in this manner. The traditional understanding of schools was a comparatively stable and predictable institution where the most important thing was the implementation of a curriculum and development of students. But these modern realities have radically changed this understanding (Bhebhe et al. 2025). Schools are exposed to diverse risks today and include natural disasters like floods, earthquakes and storms; health risks like pandemics and disease outbreaks; safety and security risks like violence, terrorism and bullying; technological risks like cyber-attacks and data breaches; and psychosocial risks like student and staff mental health. Such issues have widened the roles of school leader's way beyond instructional leadership making them be at the forefront of preparedness, prevention and crisis response (Brunzell et al. 2024).

The growing rate and severity of crises that hit schools have highlighted the necessity of organized and active leadership strategies. The school fire, building collapse, violent acts and public health emergencies have enabled institutions that are not ready to be more affected, losing and experiencing long term impacts. Conversely, schools that have a strong leadership and well-established preparedness systems are more likely to respond faster, organize better with the stakeholders and recover faster. Principals and senior administrators in these institutions are the ones that are influential in fostering the way the risks are perceived, managed and communicated in the school community (Elbedour, 2019).

Risk management has also become an important model of countering uncertainty within the organizational setting. Risk management originated in disciplines like finance, engineering and corporate governance offers an organized manner of defining the possible threats, their probability and potential impact and strategies to limit their adverse effects. These principles have over time been transferred to the organizations in the public sector which are also in the healthcare systems, the emergency services and the learning institutions. Risk management in school setting is not solely limited to safety regulation compliance but also covers strategic planning, resource distribution, communication to the stakeholders and organizational learning (Díaz-V, & Gairín, 2017).

### 1.2 Risk Management and Leadership School

School leadership is also becoming one of the most important factors in institutional resilience. It is anticipated that good school leaders should be able to foresee difficulties and make correct decisions during crisis, and lead their communities through times of upheaval. Risk management principles have much in common with these expectations as they provide means of supporting foresight, preparedness, and adaptive response. The fundamental parts like risk identification, risk assessment, risk mitigation and ongoing monitoring allows the leaders to shift to reactive crisis management to proactive preparedness (Elbedur, 2021).

To elaborate, risk identification enables the school heads to recognize possible threats in a systematic manner in various domains such as physical infrastructure, the welfare of students, staff capacity and the external environmental influences. By risk assessment, leaders



are able to rank these threats according to their probability and possible effects in order to make sure that the scarce resources are used well. Risk mitigation is the creation of preventive and response actions like emergency plans, training schemes and communication guidelines. These strategies are kept to date and tested as the circumstances vary due to the constant observation and review (Grissom et al., 2021).

Although such principles are relevant, a majority of school leaders do not have much formal training in risk management. The preparation of leadership programs usually focuses on curriculum leadership, pedagogy and management in administration but tends to pay comparatively very less attention to crisis preparedness and risk-based decision making. Consequently, school administrators can use personal experience, intuition, or ad hoc answers in the wake of emergencies. Although these methods might be effective in small-scale incidences, in most cases, they fail in large scale or fast developing crises (Kayes, 2020).

### 1.3 Response to Crisis in The School Environment

Crisis response in schools entails a planned sequence of activities that help in safeguarding life, upholding order, and continuity of learning. Exceptional crisis response implies existence of roles and responsibilities, timely communication, co-operate with external agencies, and ability to make decisions amid uncertainty. The role of school leaders is to become a coordinator, communicator, and moral leader in case of crisis, which will direct and reassure students, employees, parents, and the community at large (Okilwa, 2023).

Studies have established that crises that are poorly handled may have a long-term adverse impact on learning outcomes, employee attitude, and societal confidence. Crises are usually aggravated by delayed response, insufficient communication, and coordination resulting in confusion, fear and the loss of reputation. On the other hand, well-equipped schools that have a well-developed risk management system and staffed by prepared leaders can respond to the incident better to reduce the risks and recover the normal functioning of the school (Reyes & Maslin, 2023).

The COVID-19 pandemic offered an eloquent example of why leadership preparedness and risk management are significant in the world of education. School leaders had to make immediate decisions about school closures, distance education, health policies, and communication with stakeholders and lacked clear guidelines in most cases. Experts who had prior experience in planning, risk assessment, and adaptive leadership were usually better able to overcome such challenges. This has strengthened the thesis that crisis preparedness ought to be at the heart of school leadership practice and not a secondary or peripheral issue (Striepe & Cunningham, 2022).

Although reasons have emerged supporting the significance of preparedness, most schools are still implementing crisis management in a reactive manner. Most of the emergency plans are just drawn to match the requirements set by the regulations and are never revised, modified, or exercised. Where undertaken, risk assessments have a tendency of being limited in scope to physical safety and omissions of strategic, technological and psychosocial risks. Moreover, school leaders do often complain that they do not have access to professional development opportunities aimed at risk management and crisis leadership.



This disproportion between the complexity of risks to schools and the readiness of school leadership is of serious concern. Poor risk management may lead to avoidable damages, a long-term learning delay, and loss of confidence in the stakeholders. It is thus urgent to conduct a study to determine how the principles of risk management can be integrated into the school leadership practices in a systematic way to increase preparedness and crisis management.

This research aims to review how the concept of risk management can be applied in school leadership and evaluate how the concept contributes to preparedness and efficient response during crisis. The study aims to present evidence-based suggestions on how structured risk management practices are applied to leadership effectiveness in times of crisis that may be beneficial in policy, leadership training, and school governance.

The importance of the study is that it may contribute both on the theoretical and practical level. In theory, it combines risk management model with educational leadership literature, which is a field that has not been studied. In practice, it can provide advice to policymakers, school leadership, and institutions of leadership development on the ways to enhance preparedness and resilience in the schools. In a world where uncertainty and risk are inevitable, it is necessary to provide school leaders with the skills and tools they need to handle crises successfully to achieve safe, stable, and sustainable learning.

#### **1.4 Research Objectives**

The research objectives of the given study are to:

Research the level of implementation of risk management principles by school leaders.

Evaluate the state of readiness of school leaders in the case of crisis.

Examine the association between risk management habits and successful crisis response.

Determine major difficulties of school leaders in their implementation of risk management.

Give policy suggestions on how to make school leaders prepared by risk management.

### **2. Literature Review**

#### **2.1 Concept of Risk Management**

The general view of risk management is the systematic and ongoing process according to which organizations are able to identify, analyze, evaluate, and respond to possible risks that can cripple the attainment of objectives. The ISO 31000 framework argues that risk management improves organizational decision-making, performance and resilience because it allows institutions to expect uncertainty, as opposed to responding to the crisis. It may be understood as the process consisting of some stages that are usually interrelated among which are risk identification, risk analysis, risk evaluation, risk treatment, communication and consultation, and constant monitoring and review (Mitrof, 2004).

Risk identification is aimed at identifying both internal and external threats which can influence the operations of the organization. Such threats can be strategic, operational,

financial, technological or human. Risk analysis is the process of measuring the probability of occurrence and potential consequence of risks identified whereas risk evaluation is the prioritization of risks depending on its severity. Risk treatment involves the choice and execution of the right measures to reduce, spread, accept, and evade risks. The process of risk management is actually not a one time thing but an evolving and dynamic process that necessitates an ongoing process of learning and adaptation (Smith & Riley, 2012).

In the context of organizations, risk management has been regarded more and more as a defensive mechanism, and as the strategic means that helps to sustain and withstand. With risk management being embedded in the daily decision-making process, leaders would be in a better position to deal with uncertainty, allocate resources efficiently, and continue through the disruptive event (Mutch, 2015).

## 2.2 Educational Risk Management

Risk management in the education field has been traditionally linked to physical security and safety, legal regulation, and code of conduct. The very first measures were centered on such hazards as school facilities safety, fire protection, and control over students. But modern literature has broadened this view to acknowledge that there are a great number of risks interrelated in schools beyond physical security (Tierney, 2014).

According to latest research, strategic risks involve policy modifications, financial instability, reputational loss; technological risks such as computer attacks, data breaches, and system breakdowns; and psychosocial risks impacting the well-being of students and staff. The growing use of digital technologies and the development of online learning platforms have increased the vulnerability of schools to technological risks even further. Also, schools are open systems that are constantly engaged in interaction with families, communities, governmental agencies, and social environments, which means that they are especially vulnerable to external shocks (Okilwa & Bernet, 2023).

Risk management in education thus should be holistic and be coordinated to incorporate safety, governance, leadership as well as organizational culture. Based on the argument by scholars, the question of risk management integrated in school planning and leadership practice in the school improves the resilience of the institutions and also allows them to respond more suitably to crisis without losing the main educational role (Kingshott & McKenzie, 2013).

## 2.3 Leadership in Schools and Crisis Preparedness.

The leadership literature of schools has always reiterated the primary role of the leader in the creation of institutional preparedness and crisis response. School leaders are supposed to be the one offering guidance, mobilizing resources to help, communicating effectively, and take care of the emotional well-being of students and employees during times of crisis. One of the most commonly cited models that are applied in periods of uncertainty is adaptive, transformational, and distributed leadership models (Trondal, & Peters, 2013).

Adaptive leadership is more flexible and responsive to the changing environment, whereas transformational leadership aims at instilling trust, motivation, and commitment. Situational awareness, emotional intelligence, and decisive action are highly required in crisis situations because the leaders are often required to make fast decisions based on incomplete



information. Crisis preparedness is associated with good planning and training and exercises, communication procedures, and coordination with internal and external stakeholders (Weiner, 2014). Studies reveal that leaders that take part in systematic preparedness planning are in a good position to cope with emergencies and reduce the damage. On the contrary, the insufficient readiness may cause misunderstanding, reaction delays, and further damage. Consequently, crisis preparedness is now being viewed as a fundamental leadership skill as opposed to an administrative support or fringe skill (Williams *et al.* 2017).

#### **2.4 Risk Management-Leadership Relationships Theoretical Frameworks.**

A number of theoretical frameworks shed some light in the association between risk management and school leadership. The theory of High Reliability Organization (HRO) is especially applicable since it studies the way organizations working in the high-risk setting preserve safety and performance even in the situations of uncertainty. HRO principles involve an obsession with failure, unwillingness to make everything simple, sensitivity to operations, resilience commitment, and the willingness to reference expertise. These values closely relate to the proactive practice of school leadership that is focused on vigilance, learning, and flexibility (Wilson, & McConnell, 2020).

The Systems Theory is also a beneficial perspective to look at risk management in schools. Systems on behalf of schools are intricate organizations that consist of interconnected components interchangeable with the wider social, political, and environmental systems. The upset in any given area may spread to other parts of the organization. Risk management, in this case, dictates that leaders take a holistic approach that takes into account interrelations between people, processes, and structures.

Combined, these frameworks reaffirm the significance of leadership practices that emphasize anticipation and coordination, and enhancement. They argue in favor of the claim that sound risk management is an inherently leadership role that reflects on organizational culture and readiness (Yetick, 2015).

#### **2.5 Empirical Studies**

It has been shown by empirical studies that schools that have organized risk control and crisis preparedness plans are better prepared to address emergencies. Research has established that formal risk assessment, emergency response plans and frequently conducted simulation exercises enhance the response time, coordination and confidence in leadership. Leader training that involves exposing participants to decision-making under scenarios is especially beneficial of increasing preparedness.

Nevertheless, the empirical observation also shows that there are some lingering barriers of the application of risk management within schools. The usual obstacles are lack of finance and human resource, specialized expertise, training opportunities and policy fragmentation. The risk management initiatives are sometimes not undertaken at regular intervals or are applied as compliance measures and not as strategic issues in some settings. Nevertheless, it is argued that at least a small change in risk management behaviors can lead to substantial gains in the context of preparedness and resilience. This highlights why it requires a long-term institutional support and leadership input (Zhong *et al.*, 2014).

## 2.6 Research Gap

Though the literature reviews support the significance of crisis preparedness and leadership efficacy, there is a deficiency of empirical studies where the principles of risk management become embedded in school leadership models. Most studies observe their responses to crisis or response of leaders in isolation without effectively connecting them to a known risk management process. This oversight restricts the awareness of the role of well-organized risk management practices to leadership readiness and crisis response success. The current research fills this gap by empirically investigating how the concept of risk management principles and school leadership preparedness are interconnected. The combination of the theoretical lenses with the empirical evidence will help the study to advance the literature on the importance of operationalizing risk management in the process of educational leadership to increase the resilience and crisis response abilities.

## 3. Methodology

### 3.1 Research Design

The mixed methods research design was taken, as both the quantitative approach and the qualitative approach were integrated to give a thorough insight.

### 3.2 Population and Sample

The population of the study was principals, vice principals, and senior teachers of the selected secondary schools. Stratified random sampling was applied to sample 120 respondents.

The data collection instruments include: 3.3.1 Notes.

**Questionnaire:** Likert-scale structured questionnaire covering risk management practices and preparedness.

**Interviews:** Semi-structured interviews will be conducted with 15 school leaders to understand them better.

### 3.4 Validity and Reliability

The expert review guaranteed the content validity. The Cronbach alpha of 0.87 obtained through reliability testing was high, and it shows that internal consistency is high.

### 3.5 Data Analysis Techniques

The descriptive statistics and the regression analysis were used to analyze quantitative data. Thematic analysis was done on qualitative data.

## 4. Results, Tables, and Interpretation

Table No 1: Level of Risk Management Practice in Schools

Practice Area	Mean Score	Interpretation
Risk Identification	3.8	High
Risk Assessment	3.5	Moderate
Risk Mitigation Planning	3.2	Moderate
Monitoring & Review	2.9	Low

**Interpretation:** Schools demonstrate relatively strong risk identification but weaker monitoring mechanisms.

**Table No 2: Leadership Preparedness for Crisis Response**

Preparedness Indicator	Mean Score	Interpretation
Emergency Planning	3.6	Moderate
Training & Drills	3.1	Moderate
Communication Readiness	3.9	High

**Interpretation:** Communication readiness is a key strength, while training requires improvement.

**Table No 3: Regression Analysis**

Variable	Beta	Significance
Risk Management Practices	0.68	p < 0.01

**Interpretation:** Risk management practices significantly predict leadership preparedness and crisis response effectiveness.

## 5. Conclusion and Policy Recommendations.

### 5.1 Conclusion

In this research, it is determined that preparation and crisis management are highly improved when the concepts of risk management are implemented in school leadership. Schools with a systematic risk management system have a higher resiliency and leadership performance.

### 5.2 Policy Recommendations

Making risk management a part of school leadership preparation and professional development training. Create detailed school risks registers which include physical, technical, psychosocial, and strategic risks. Enhance inter-agency cooperation among schools, emergency services, health agencies, and community-based organizations.

Require frequent review and simulation exercises to maintain preparedness plans up-to-date and useful. Make risk management part of education policy systems to achieve a proactive approach in managing a crisis instead of responding to it.

## 6. References

Aven, T. (2016). Risk assessment and risk management: Review of recent advances on their foundation. *European Journal of Operational Research*, 253(1), 1–13.

Bhebhe, S., Runhare, T., & Monobe, R. J. (2025). Disaster risk management in schools: A case of primary schools in Zimbabwe. *Jàmbá: Journal of Disaster Risk Studies*, 11(1), 1–9.

Brunzell, T., Stokes, H., & Waters, L. (2024). Trauma-informed flexible learning: Classrooms that strengthen regulatory abilities. *International Journal of Child, Youth and Family Studies*, 10(3), 1–24.

Coombs, W. T. (2007). *Ongoing crisis communication: Planning, managing, and responding* (2nd ed.). Sage.



Coppola, D. P. (2015). *Introduction to international disaster management* (3rd ed.). Butterworth-Heinemann.

Díaz-Vicario, A., & Gairín, J. (2017). A comprehensive approach to managing school safety and crisis. *Educational Research*, 59(4), 1–17.

Elbedour, S., Alqahtani, A., Rihan, I. E., Bani Odeh, K., & Abu-Bader, S. (2019). School-based disaster preparedness and risk reduction. *Education and Urban Society*, 51(6), 1–23.

Elbedour, S., Ten Bensel, R., & Alqahtani, A. (2021). Managing schools during crisis: Leadership strategies and challenges. *International Journal of Educational Management*, 35(2), 1–15.

Flanagan, R., & Norman, G. (2016). *Risk management and construction* (2nd ed.). Wiley-Blackwell.

Gainey, B. S. (2010). Crisis management's new role in educational settings. *The Clearing House*, 83(6), 267–274.

Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How principals affect students and schools*. The Wallace Foundation.

Heath, R. L., & O'Hair, H. D. (Eds.). (2009). *Handbook of risk and crisis communication*. Routledge.

Hosseini, M. R., & Barker, K. (2016). Modeling infrastructure resilience using Bayesian networks. *Reliability Engineering & System Safety*, 145, 1–14.

Kapucu, N. (2008). Collaborative emergency management: Better community organising. *Disasters*, 32(2), 239–262.

Kayes, D. C. (2020). *Organizational resilience: How learning sustains organizations in crisis*. Oxford University Press.

Kingshott, B., & McKenzie, M. (2013). Leadership and disaster preparedness in schools. *School Leadership & Management*, 33(4), 1–17.

Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 40(1), 5–22.

Mazurkiewicz, G. (2021). Educational leadership in times of crisis. *Risks*, 9(5), 1–12.

Mitroff, I. I. (2004). *Crisis leadership: Planning for the unthinkable*. Wiley.

Mutch, C. (2015). The role of schools in disaster response. *International Journal of Disaster Risk Reduction*, 14, 1–11.

Okilwa, N. S. A., & Barnett, B. G. (2023). Preparing school leaders for crisis management. *Journal of Educational Administration*, 59(3), 1–16.

Reyes, D., & Maslin-Ostrowski, P. (2023). Confronting a compound crisis: School leadership during COVID-19. *Frontiers in Education*, 6, 1–11.

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

Striepe, M., & Cunningham, J. (2022). Educational leadership in emergency contexts. *Educational Management Administration & Leadership*, 50(3), 1–18.

Tierney, K. (2014). *The social roots of risk: Producing disasters, promoting resilience*. Stanford University Press.

Trondal, J., & Peters, B. G. (2013). The rise of European administrative space. *Journal of European Public Policy*, 20(2), 295–315.

United Nations Office for Disaster Risk Reduction. (2015). *Sendai framework for disaster risk reduction 2015–2030*. UNDRR.



Weick, K. E., & Sutcliffe, K. M. (2015). *Managing the unexpected: Sustained performance in a complex world* (3rd ed.). Wiley.

Weiner, J. M. (2014). Distributed instructional leadership. *Educational Administration Quarterly*, 50(5), 772–809.

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity. *Academy of Management Annals*, 11(2), 733–769.

Wilson, T., & McConnell, A. (2020). Leadership and resilience during crisis. *Public Administration Review*, 80(5), 1–12.

World Health Organization. (2020). *Considerations for school-related public health measures in the context of COVID-19*. WHO.

Yettick, H. (2015). School leadership under pressure. *Educational Policy*, 29(4), 545–574.

Zdziarski, E. L., Dunkel, N. W., & Rollo, J. M. (2007). *Campus crisis management*. Jossey-Bass.

Zhong, S., Clark, M., Hou, X. Y., Zang, Y., & FitzGerald, G. (2014). Development of disaster resilience indicators. *International Journal of Environmental Research and Public Health*, 11(8), 1–19.

Zhou, L., Wu, X., Xu, Z., & Fujita, H. (2018). Emergency decision making for natural disasters. *Information Sciences*, 442–443, 1–18.

Zimmerman, H. J. (2010). *Risk management and decision making*. Springer.

Zohar, D., & Luria, G. (2005). A multilevel model of safety climate. *Journal of Applied Psychology*, 90(4), 616–628.