EXTENT OF RISK MANAGEMENT PRACTICES IN DATU ANOK GALMAK ELEMENTARY SCHOOL

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ABSTRACT

Schools are increasingly exposed to natural and human-induced hazards, particularly in disaster-prone countries like the Philippines, making effective risk management essential to ensuring the safety of learners and the continuity of education. This study aimed to examine the extent of risk management practices and to identify the issues and concerns affecting their implementation in a public elementary school in Isulan, Sultan Kudarat. Using a descriptive quantitative research design, data were collected from twenty (20) teachers of Datu Anok Galmak Elementary School through an adopted survey questionnaire consisting of three domains: contingency planning, risk assessment, and risk response and mitigation, complemented by an open-ended section on issues encountered. Results revealed that overall risk management practices were implemented to a high extent (M = 3.88), with contingency planning rated highest and risk assessment rated lowest, though still within the high category. Despite these positive findings, major challenges were identified, particularly insufficient budget and resources, lack of emergency equipment, and inadequate training of personnel. These constraints limit the effective and sustained implementation of risks management practices initiatives. This suggests that while risk management systems are generally in place, resource and capacity limitations significantly affect their effectiveness. Strengthened institutional support, adequate funding, and continuous capacity-building are recommended to enhance school disaster resilience.

Keywords: *Risk management practices; Disaster Risk Reduction and Management; School safety; Elementary schools; Isulan, Sultan Kudarat*

1. INTRODUCTION

Schools are expected to be safe spaces for learning, yet they are increasingly exposed to various natural and human-induced hazards that threaten the safety of learners, teachers, and school personnel. In disaster-prone settings, the ability of schools to anticipate, prepare for, and respond to emergencies is no longer optional but a critical responsibility. Effective risk management practices serve as vital mechanisms in minimizing loss of life, reducing damage to infrastructure, and ensuring the continuity of education during and after disasters.

As climate change and disasters continue to pose significant risks to education systems worldwide, there is a pressing need for strengthened governance, from individual schools to international bodies, to build greater resilience within this critical sector [6]. International frameworks such as the Sendai Framework for Disaster Risk Reduction emphasize the importance of integrating risk management into educational planning, school governance, and community preparedness. Moreover, schools are recognized not only as centers of learning but also as key institutions for fostering a culture of safety and resilience. However, studies across developing regions reveal that despite the presence of DRRM policies, many schools continue to struggle with limited resources, inadequate training, and insufficient infrastructure, which weaken the effective implementation of risk management practices [7].

The Philippines is widely recognized as one of the most disaster-prone countries in the world. In fact, due to the country's geographic location along the Pacific Ring of Fire and the typhoon belt; it is extremely vulnerable to climate-related and geological hazards [5]. given this, the Department of Education (DepEd) has institutionalized DRRM through Department Order 37 s. 2015; a policy and frameworks that mandate schools to establish preparedness plans, conduct regular drills, and ensure safe learning environments. Despite these national efforts, challenges persist in translating policies into practice, particularly in public elementary schools where issues related to funding constraints, aging school buildings, lack of emergency equipment, and limited capacity-building opportunities for teachers remain evident [1].

At the local level in Isulan, Sultan Kudarat, public elementary schools face various environmental hazards that place school communities at risk. The municipality is exposed to natural threats such as flooding and earthquakes, which can disrupt learning and compromise the safety of students [8]. These vulnerabilities reflect a broader national context in which many schools require strengthened preparedness and resilience measures.

In response, the Department of Education (DepEd) – Sultan Kudarat Division has implemented strategies aimed at minimizing disaster risks in schools and ensuring the protection of learners. Disaster Risk Reduction and Management (DRRM) has been integrated into the school curriculum and is considered a key priority to safeguard children from potential hazards. As part of the curriculum, DRRM concepts are taught in classrooms and reinforced through related activities, which promote practical understanding and preparedness [4]. Hence, the actual implementation of DRRM policies in schools in Isulan varies depending on available resources, institutional support, and staff readiness. Observations and preliminary reports indicate that some schools struggle to sustain risk management initiatives due to limited budgets, insufficient training of personnel, and concerns regarding school facilities and safety conditions [1]. These challenges suggest that while policies and curricula exist, resource constraints and capacity gaps continue to hinder effective DRRM implementation at the school level.

Despite the recognized importance of risks management in schools, there remains a research gap in terms of localized, school-based assessments that systematically examine the extent of risk management practices and the specific issues and concerns encountered by teachers, particularly in elementary schools in Isulan, Sultan Kudarat. Most existing studies focus on broader regional or national assessments, leaving limited empirical evidence that reflects the actual conditions and challenges faced at the school level.

This problematic situation highlights the need for a descriptive quantitative investigation that documents current risk management practices and identifies prevailing concerns from the perspectives of teachers. Addressing this gap is essential in providing data-driven insights that can inform school administrators, policymakers, and stakeholders in strengthening institutional support, improving preparedness measures, and enhancing the overall disaster resilience of schools in Isulan, Sultan Kudarat.

1.1 Statement of the Problem

1. To what extent do risk management is being practiced in school in terms of:
    1.1 risks assessment;
    1.2 risks response and mitigation; and
    1.3 contingency planning?
2. What are the issues/concerns encountered in the risk management in school?

2. METHODOLOGY

2.1 Research Design

This study employed a descriptive quantitative research design to systematically examine the extent of risk management practices, as well as the prevailing issues and concerns within the school setting. The descriptive quantitative approach was deemed appropriate because the primary objective of the study was not to establish causal relationships but to describe, measure, and quantify existing conditions as they naturally occur. The use of a descriptive quantitative research design effectively captured the current status and magnitude of risk management as well as the issues and concerns they encountered in the school.

2.2 Participants and Sampling Technique

The participants of this study consisted of twenty (20) teachers from Datu Anok Galmak Elementary School. These teachers served as the primary respondents because of their direct involvement in classroom instruction, school operations, and participation in risk management activities. Teachers are in a strategic position to provide reliable and firsthand information regarding the extent of risk management practices and the issues and concerns encountered within the school.

Teachers were included in the study were currently employed as full-time teachers at Datu Anok Galmak Elementary School during the conduct of the study. They had at least one year of teaching experience in the school to ensure adequate familiarity with existing risk management practices; and they were willing to participate in the study and provided informed consent. On the other hand, teachers were excluded from the study if they were newly hired or had less than one year of service at the school, as their limited exposure might not allow for an informed assessment of risk management practices. In addition, substitute, temporary, or volunteer teachers, as well as non-teaching personnel and school administrators, were excluded since the focus of the study was on the

perceptions and experiences of regular classroom teachers. Teachers who were on extended leave during the data collection period or who declined to give consent were also excluded.

2.3 Research Instrument

The primary research instrument used in this study was an adopted survey questionnaire from Insular (2023), an unpublished master's thesis. The use of an adopted instrument was considered appropriate as it was already designed to measure constructs related to risk management and Disaster Risk Reduction and Management (DRRM) practices, aligning closely with the objectives of the present study. Minor modifications were made to contextualize the instrument to the setting of Datu Anok Galmak Elementary School, while the core structure and intent of the original questionnaire were retained.

The questionnaire was composed of three (3) domains that assessed key aspects of risk management practices. These domains focused on critical components such as contingency planning, risk assessment, and risk response and mitigation, allowing for a comprehensive measurement of the extent to which risk management practices are implemented in the school. Each item in these domains was rated using a five-point Likert scale, enabling respondents to express their level of agreement and facilitating quantitative analysis through the computation of means and standard deviations.

Part II of the instrument consisted of an open-ended questionnaire, where respondents were asked to enumerate the issues and concerns, they encountered in relation to risk management practices. This section allowed respondents to freely express their experiences and observations without being limited to predetermined response options. The inclusion of open-ended items complemented the quantitative data by providing richer contextual information and enabling the identification of school-specific challenges that may not have been fully captured by the closed-ended items.

2.4 Data Gathering Procedure

The process began with securing formal permission from the School Head of Datu Anok Galmak Elementary School. A written request was submitted explaining the purpose of the study, the nature of the data to be collected, the target participants, and the intended use of the findings. Approval from the school administration was obtained prior to the conduct of the survey to ensure institutional support and compliance with school policies.

Upon approval, the researcher proceeded with the selection and orientation of the participants, who were the twenty (20) teachers of the school. The purpose of the study, procedures involved, and the voluntary nature of participation were clearly explained to the respondents. Ethical considerations such as confidentiality, anonymity, and the right to withdraw at any time were emphasized. Informed consent was secured from all participants before the administration of the questionnaire.

The survey questionnaire was then distributed personally to the respondents. Clear instructions were provided on how to accomplish both parts of the instrument: the structured Likert-scale items and the open-ended questions. Respondents were given sufficient time to answer the questionnaire to ensure thoughtful and accurate responses, minimizing response bias and undue pressure.

After completion, the collection and retrieval of the questionnaires were carried out promptly. The researcher personally retrieved the accomplished questionnaires to ensure a high retrieval rate and to prevent loss of data. All retrieved questionnaires were checked for completeness before data encoding and analysis. The collected data were then securely stored and treated with strict confidentiality, ensuring that responses were used solely for academic purposes.

2.5 Statistical Treatment

The extent of risk management practices across the three domains, the mean was used to determine the average level of implementation for each indicator and domain. The standard deviation (SD) was computed to describe the variability or consistency of the respondents' perceptions. These measures provided a clear basis for determining whether the practices were implemented to a very high, high, moderate, low, or very low extent, based on the predefined interpretation scale.

To describe the overall extent of risk management practices, the composite mean was calculated by averaging the mean scores of all indicators. This allowed for a general assessment of how risk management and DRRM practices are implemented in the school as a whole.

For Part II of the questionnaire, which was an open-ended section, responses were analyzed using frequency counts and ranking. Similar responses were grouped and consolidated into common themes or categories, after which the frequency of each issue or concern was tallied. These frequencies were then ranked to identify the most and least prevalent DRRM-related issues encountered by the respondents.

3. RESULTS AND DISCUSSION

3.1 Extent of Risk Management Practices

Table 1 presents the extent of risk management practices as perceived by the respondents in terms of contingency planning, risk response and mitigation, and risk assessment.

Table 1. Extent of Risk Management Practices

Risk Management Practices	Mean	SD	Verbal Description
Contigency Planning	3.92	0.27	high extent
Risk Response and Mitigation	3.90	0.30	high extent
Risks Assessment	3.83	0.40	high extent
Overall	3.88	0.33	high extent

Among the indicators, Contingency Planning obtained the highest mean score (M = 3.92, SD = 0.27), verbally described as High Extent. This result indicates that respondents agree that contingency plans are largely in place and actively practiced. This result indicates that contingency planning is generally implemented and observed in most situations hence, minor improvements or enhancements may still be needed. The low standard deviation suggests consistency in responses, implying a shared perception that preparedness measures, alternative actions, and response plans for potential risks are generally well-established and understood. This finding reflects a proactive approach to managing uncertainties and ensuring operational continuity.

On the other hand, risk assessment recorded the lowest mean score (M = 3.83, SD = 0.40), although it still falls under the High Extent category. This suggests that respondents also agree that risk identification and evaluation activities are being implemented. This implies that risk assessment are generally implemented and observed in most situations but minor improvements or enhancements may still be needed. The standard deviation indicates more varied perceptions than other indicators.

Overall, risk management practices yielded a mean score of 3.88 (SD = 0.33), interpreted as high extent. This indicates that, in general, respondents agree that risk management practices are effectively implemented. This suggests that risk management practices are generally implemented and observed in most situations hence, minor improvements or enhancements may still be needed.

Public schools in Sultan Kudarat have effectively implemented Disaster Risk Reduction and Management (DRRM) programs and demonstrate strong capacity in responding to hazards during disaster events [4]. Similarly, it was reported that there is high level of implementation in disaster prevention and mitigation, preparedness, recovery, and rehabilitation, while also noting that aspects of disaster response require further improvement in practice [2].

3.2 Issues/Concerns Affecting the Risk Management

Table 2 Issues/Concerns Affecting the Risk Management Practices

Issues/Concerns	Frequency	Rank
Insufficient budget and resources for disaster preparedness and safety(combined: Lack of budget; Lack of resources)	19	1
Insufficient emergency equipment and facilities (combined: Insufficient emergency equipment; Unavailable emergency facilities)	17	2
Inadequate training of teachers and personnel on DRRM and rescue operations(combined: Lack of teachers' training; Insufficient rescue training; Lack of training)	15	3
Limited access to continuous DRRM information and preparedness awareness(combined: Lack of constant information about DRRM; Lack of courage in preparation for incoming calamity)	15	3
Unsafe school facilities and physical conditions(combined: Slippery floor; Unsafe facilities)	11	5
Dilapidated and structurally unsafe school buildings(combined: Old building structure; Dilapidated/old building)	9	6
Unsafe electrical and fixture installations(combined: Unsafe wiring; Unsafe installation of ceiling fan/wall fan)	8	7
Presence of environmental hazards near classrooms(combined: Trees near classrooms; Falling debris)	6	8

The highest-ranked issue is insufficient budget and resources for disaster preparedness and safety, which obtained the highest frequency (f = 19) and ranked first among the concerns. This finding indicates that respondents most frequently experience limitations in financial support and material resources necessary for effective disaster preparedness. The prominence of this issue suggests that, despite existing DRRM policies and initiatives,

inadequate funding constrains the procurement of safety equipment, implementation of preparedness activities, and maintenance of essential facilities. This result underscores the critical role of sufficient resource allocation in strengthening school-based disaster resilience.

In contrast, the lowest-ranked issue is the presence of environmental hazards near classrooms, which recorded the lowest frequency (f = 6) and ranked eighth. This suggests that fewer respondents identified hazards such as nearby trees and falling debris as major concerns compared to other issues. While this may imply that environmental risks are less prevalent or already mitigated in some school settings, the result does not negate their potential danger. Instead, it highlights that these hazards, though less frequently reported, still warrant attention as part of comprehensive school safety and risk reduction planning.

The findings reveal that the most pressing challenges in risk management implementation are resource- and capacity-related, particularly in terms of budget availability, emergency equipment, and training of personnel. The clustering of high-frequency issues around funding, facilities, and training indicates systemic constraints that affect the consistent and effective execution of disaster preparedness measures. Meanwhile, lower-ranked concerns largely relate to physical and environmental hazards, suggesting variability in school conditions. Taken together, the results emphasize the need for strengthened institutional support, increased investment in DRRM resources, and sustained capacity-building efforts to address both operational and structural safety concerns in schools.

It was emphasized that public school educators must be adequately trained in Disaster Risk Reduction and Management (DRRM), including basic life support, first aid, contingency planning, and the incident command system, as these areas represent critical opportunities for improvement. Without sufficient training, teachers may be ill-prepared to respond effectively during emergencies [4]. Moreover, the absence of adequate resources, emergency supplies, functional communication systems, and well-coordinated response mechanisms significantly increases the risks faced by both learners and teachers, potentially leading to severe consequences during disaster situations.

4.0 Conclusion

The findings of the study indicate that although risk management practices are generally well-established and implemented to a high extent, their overall effectiveness is significantly influenced by existing resource and capacity constraints. While schools demonstrate preparedness through contingency planning and established procedures, limitations in financial resources, availability of emergency equipment, and access to continuous training hinder the full operationalization of these practices. These constraints reduce the ability of schools to consistently translate plans into effective action, particularly during actual emergency situations.

5.0 References

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