



## Disaster Awareness and Preparedness and Disaster Risk Reduction Practices among Secondary Schools

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**Abstract:** Inevitable disasters pose a concealed threat that school leaders must address to prevent calamity and safeguard lives and assets. This study determined the disaster risk reduction awareness in selected secondary schools, aiming to mitigate current risks and enhance the resilience of vulnerable institutions. This study uses a quantitative approach. The research employed online surveys to gauge disaster risk reduction management among 50 secondary school heads and teachers in Northern Puerto Princesa City, Philippines. The findings revealed a high level of awareness among respondents, highlighting the importance of implementing programs like budget allocation for DRRM activities, student-led hazard mapping, and collaboration with local government units and NGOs. In conclusion, strengthening disaster risk reduction management and fostering partnerships are recommended for secondary schools to enhance preparedness and resilience.

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## INTRODUCTION

Disasters are major global problems and threats to sustainable development. Its effects are varied, as well as loss of life, injury, illness, and destruction. Property and other asset disasters can also lead to social and economic disruption, loss of infrastructure and other services, and environmental destruction (Twigg, 2015). This occurring phenomenon and its effects are proven to devastate our existence. The horrible visitation of Super Typhoon Odette in the Philippines, brought unforgettable experiences wherein not only local government leaders were involved but also school leaders as well as personnel suffered. The safety of schools is critical, and disaster risk reduction strives to reduce the vulnerability to and impact of disasters on schools. It prepares instructors and children for potential calamities, decreasing the severity of the disaster's impact.

Disaster risk management and risk reduction are emerging as systematic approaches to reducing the impact of climate change on the built environment. However, United Nations disaster management and emergency response policies since 2015 still need to capture the dynamics of hazard, exposure, and vulnerability that are essential to building urban resilience. Government is a crucial unresolved issue in both the configuration and reduction of disaster risk, according to the United Nations Development Program (UNDP). UNDP has made disaster governance a cornerstone of its efforts to assess, minimize, and

manage risks for the past two decades, safeguard development investments, and increase people's resilience (United Nations Development Programme, 2015). Alexander (2015) stated that the difficulty of managing catastrophes well in a globalizing society vulnerable to fast physical, social, and economic change depends on excellent planning and foresight and the capacity to combine disjointed aspects of the emergency response into coherent solutions. The approval and implementation of HFA was a watershed moment in catalyzing national and local DRR activities and enhancing international cooperation by establishing regional strategies, plans, and policies. The HFA was instrumental in advancing disaster risk reduction organizations, policies, and laws. Stakeholders at all levels improved their risk assessment and identification, disaster preparedness, response, and early warning capabilities.

In Pakistan, it is emphasized that students are often vulnerable to natural disasters, highlighting the necessity of disaster risk reduction programs for schools in countries where disaster preparedness is not legally mandated (Shah et al., 2020). Furthermore, it underscores the importance of enabling school authorities, including teachers and staff, to enhance their professional development in emergency response and disaster recovery measures. In Nepal, where climate change poses a significant threat, the adverse impact of school disruption on students' physical safety and mental well-being is noted, emphasizing the need for systematic DRR efforts (Anderson, 2019). Japan's experience with the 2011 earthquake and tsunami disaster highlights the value of disaster awareness and preparedness to reduce human and property losses (United Nations International Strategy for Disaster Reduction). Japan also leads DRR education, focusing on life preservation (Shaw et al., 2021). The Republic of Mauritius prioritizes preparedness and risk reduction in all sectors to ensure a safe environment for its population, involving residents in the disaster risk assessment process (National Disaster Risk Reduction and Management Centre, 2020).

Adopting the Hyogo Framework at the World Conference on Disaster Reduction by 168 representatives in January 2005 is a revolutionary worldwide agreement to implement a world agenda for reducing disasters, adding a number and outlining its global perspective on previous investigations and findings (Wisner, 2006). Most people agree that reducing the risk of catastrophe is part of and not a side of sustainable human development, a topic of marginal technical importance or significance. It is centred on the following five priorities for action: ensure that catastrophe risk reduction has an organizational solid foundation and is a local and national priority; define, evaluate, and track disaster risks and improve early warning; create a culture of safety and resilience at all levels by leveraging knowledge, innovation, and education; lower the primary risk factors; and boost emergency preparedness for efficient action at all levels.

Regarding disaster risk reduction and management, the Department of Education Service provides disaster risk reduction, emergency preparedness, and climate change adaptation (DRRMS) services. It serves as the focal point and coordination organization. A Service was created out of the department in 2015. The DRRMS has structured its objectives by its mandate to address the dangers the primary education sector faces from natural and human-caused hazards. Knowledge, practices, and preparedness are essential

in disaster risk reduction management. One method to improve learning and comprehension of disaster risks has been suggested: incorporating disaster risk reduction into formal education and curriculum (Nurdin et al., 2017). Educational institutions have two distinct responsibilities regarding natural disasters: teachers educate pupils about natural disasters. At the same time, caregivers are responsible for ensuring the safety of the children under their supervision (Bernhardsdottir et al., 2016).

Disaster risk education alternates between risk awareness and repercussions education. Educators are expected to be role models as well as active learners. A new framework for disaster preventive education has been developed, wherein individuals at all degrees of social organization (micro, meso, and macro) engage in three critical areas of intervention: assessments and strategy, physical and social safety (mitigation), and response-capacity development (Petal, 2014). Disaster Management in school, college, and university curricula will enable educated youth to respond to disasters with greater understanding, self-confidence, and survival skills. Student awareness will aid in developing a better, stronger, and more resilient nation. The effectiveness of disaster management is the people who are trained and knowledgeable in case of emergencies (Gupta, 2020). People who have been trained can help safeguard themselves and others. In this aspect, disaster preparedness requires proper planning and designing of thorough instructional programs (Torani et al., 2019).

This study focused on the preparedness of Disaster Risk Reduction Management in selected secondary schools in District III northeast of Puerto Princesa City, Palawan. This study described the respondents' disaster awareness, preparedness, and risk reduction practices. Also, it determined a significant relationship between the respondents' level of disaster awareness and preparedness with their level of disaster risk reduction practices. Furthermore, the respondents' likelihood of increasing awareness of disaster risk reduction was identified.

## **METHOD**

A descriptive quantitative research design is employed in this study to describe the level of disaster risk reduction and preparedness and the disaster risk reduction practices among schools, particularly the schools in Northern Puerto Princesa City, Philippines. The participants were 50 school heads and teachers in four secondary high schools in Palawan, Philippines. The respondents from five schools were chosen to be the participants since they have experienced severe casualties since Super Typhoon Odette devastated the Northern Part of Puerto Princesa. Hence, most participants have yet to witness sufficient preparation for disaster risk management in their respective schools and local government units. Survey questionnaires are used to gather information from the participants (Creswell, 2012). This includes Likert scale questions on the level of disaster awareness, preparedness, and risk reduction management considering its indicators, mean, and awareness status. It has been utilized since it is a standard Likert scale used by researchers across countries to measure disaster preparedness.

The researchers requested approval from the school principal and division superintendent to conduct the study. They also ask permission from different school

principals from the other schools who are also subjects for the conduct of the study. Upon approval, the researchers distributed the questionnaires through an online survey. The participants will answer the questionnaire through social media like Android phones and laptops. The participants submit their answers, and all of those answers are collected, analyzed, and interpreted by selected experts in the field. A structured survey was developed by reviewing and consolidating existing literature on disaster risk reduction. The survey was thoughtfully organized into three sections, encompassing 26 items related to disaster risk awareness, preparedness, and risk reduction. The rating scale employed in the study was carefully translated into verbal interpretations for enhanced clarity. A pilot test was conducted among selected school personnel, including school heads and teachers, to validate the survey's effectiveness and ensure its questions were comprehensible and insightful. This process allowed for fine-tuning the study based on feedback (Pentang, 2023). Subsequently, the researchers reviewed the survey, which experts approved, ensuring its reliability and suitability for the study.

## RESULT AND DISCUSSION

This research provides a very important understanding and encourages the behaviour and attitudes of students in various conditions. This research has several findings that can be described as valuable information for the general education world. The data obtained is the respondents' level of awareness regarding disasters and the level of disaster preparedness of respondents. The data found can be seen in table 1.

**Table 1.** Descriptive Analysis of The Respondents' Level of Disaster Awareness.

Indicators	Mean	Verbal Interpretation
The teachers and school heads need to learn what emergencies or disasters are most likely to occur in the school.	1.66	Somewhat Unaware
The teachers/school heads understand their work designation during adverse weather and emergencies that occur in school.	3.66	Aware
The school needs a proper location or meeting place for evacuation.	1.94	Somewhat Unaware
The school has a personal support network. (Those that will help you if you are sick or unable to respond in an emergency.)	3.50	Aware
The school has no emergency hotlines where personnel can be reached in case of emergency.	2.18	Somewhat Unaware
The teachers/ school head has strong knowledge of whom to contact if they have questions or need information.	3.60	Aware
The school needs a proper location of exits in the buildings where you spend the most time.	1.98	Somewhat Unaware
The teachers/ school head thoroughly understands their work designation during adverse weather and emergencies.	3.74	Aware
The school was not prepared and signaled/told to evacuate buildings on campus.	2.08	Somewhat Unaware
The school has emergency procedures in case of a disaster in the school.	3.56	Aware
Overall Mean	2.79	Somewhat Aware

A descriptive analysis of respondents' level of awareness regarding disasters is presented in Table 1, with an overall average of 2.79, indicating a somewhat alert state.

There are three most important indicators of understanding. This data also shows that several students have the lowest indicators. These results emphasize the need for additional orientation and training for school staff, teachers and principals to ensure efficient implementation of school emergency plans during emergencies. Then, the researcher also analyzed students' preparedness for disasters, the research data of which can be seen in Table 2.

**Table 2.** Descriptive Analysis of The Respondents' Level of Disaster Preparedness

Indicators	Mean	Verbal Interpretation
The school has emergency basic supplies with you in case you have to 'shelter in place'.	3.26	Somewhat Prepared
The school does not keep emergency supplies in school.	2.10	Somewhat Unprepared
The school has to keep critical carry-with-you supplies. (Medication, small flashlight, fully charged portable devices, paper/pen/pencil, emergency health information)	3.04	Somewhat Unprepared
The school has no members trained in first aid and CPR/AED.	1.98	Somewhat Unprepared
The school has an up-to-date contact list, including office and home phone numbers and employee email addresses.	3.70	Prepared
The school needs a backup of essential documents backed-up at any other location.	2.20	Somewhat Unprepared
The school signed up to receive emergency alerts (social media, text, and email).	3.36	Somewhat Prepared
The school does not have emergency response-related apps downloaded.	2.38	Somewhat Unprepared
Overall Mean	2.75	Somewhat Prepared

The research results in Table 2 provide information that respondents' average readiness level is sufficient. However, several factors have the biggest role, such as electronic or digital communications available in the environment, especially in the school environment and also clear basic emergency preparedness for the worst possible scenario. Knowledge must be possessed by various parties well, and all parties must have a connection to explain and understand problems and how to handle them well. In other words, this data provides the information needed to emphasize the importance of emergency preparedness, especially in the school environment.

The role of students is very important because they may receive inaccurate information in developing their knowledge. Student information must be truly concrete and accurate so that in the face of a disaster that suddenly occurs at school, students can easily find a way out or solution. In providing information, perhaps one of the things is that signs are needed on disaster evacuation roads, and at the same time students must be taught how to see or read the evacuation routes that have been determined, where each evacuation route should have a clear and accessible meeting point for students, especially affordable for the strength and physical strength of the students. for that location. The research data that researchers found regarding students' attitudes regarding the level of disaster risk reduction practices they carry out can be seen in Table 3.

**Table 3.** Descriptive Analysis of the Respondents' Level of Disaster Risk Reduction Practices

Indicators	Mean	Verbal Interpretation
The school has a disaster risk reduction management process different from other schools.	3.56	Practiced
The school does not have disaster risk reduction management documentation and identifies the risk relating to the disaster.	2.14	Somewhat Unpracticed
The school needs continuity of operations planning and risk reduction policy.	2.08	Somewhat Unpracticed
The school needs more resources to assist during an emergency.	2.22	Somewhat Unpracticed
The school has enough resources locally to assist during an emergency.	3.08	Somewhat Practiced
The school has no disaster preparedness cycle.	2.26	Somewhat Unpracticed
The school has risk management strategies.	3.26	Somewhat Practiced
The school has no Incident Command Structure.	2.34	Somewhat Unpracticed
<b>Overall Mean</b>	<b>2.62</b>	Somewhat Practiced

Table 3 presents the data obtained regarding the level of disaster risk reduction practices carried out by respondents. The results show that this practice has actually been implemented, where the school implements a disaster risk reduction management process that is different from other institutions, this shows that there is an approach being implemented. are put into practice and there is also engagement in risk management strategies as well as ongoing efforts and have a level of accessibility of local resources to help in emergencies. Then the researchers also analyzed the correlation between the level of awareness and disaster preparedness of respondents and the level of disaster risk reduction practices, which can be seen in Table 4.

**Table 4.** Correlational Analysis Between The Respondents' Level of Disaster Awareness and Preparedness With Their Level of Disaster Risk Reduction Practices

Correlation Matrix	Disaster Risk Reduction Practices		
	Spearman's rho	p-value	Interpretation
Disaster Awareness	.546	.001	Highly Significant
Disaster Preparedness	.463	.001	Highly Significant

Table 4 presents data that provides in-depth information regarding the disaster awareness and preparedness level of respondents and their disaster risk reduction practices. The data above includes valuable information, namely, a very significant positive correlation exists between disaster awareness and disaster risk reduction practices. The data above also shows a significant positive correlation between disaster preparedness and risk reduction practices. From the data presented, it can be concluded that there is a very strong relationship between disaster awareness, preparedness, and risk reduction practices. Then, the last data review was to determine the possibility of respondents' increasing awareness of disaster risk reduction, where the complete data can be seen in Table 5.

**Table 5.** Descriptive Analysis of The Respondents' Level of Likelihood to Increase Awareness of Disaster Risk Reduction

Indicators	Mean	Verbal Interpretation
A comprehensive School DRRM Plan, including CCA and EiE measures, covers risk assessment, reduction, rehabilitation, and recovery.	3.22	Likely
A school budget that supports regular DRRM activities.	3.08	Likely
Conducted student-led school watching and hazard mapping (DO 23 s 2015) and involved students in DRRM planning.	3.24	Likely
A risk assessment of buildings, in coordination with the Education Facilities Division and with the support of other agencies and partners.	3.38	Likely
The school partnerships could be tapped to support its DRRM programs and activities, including those after a disaster.	3.36	Likely
Established a school personnel and learners tracking system/protocol in the event of a disaster or emergency	3.38	Likely
Hazard and evacuation maps are located in conspicuous places in the school	3.26	Likely
Available, accessible, and	3.32	Likely
adequate first aid kit in every instructional classroom	3.26	Likely
Regular hazard-specific drills (at least three hazards) with the participation of stakeholders (BFP, Medic, LGUs, NGOs, community, PTA, alums, and others)	3.26	Likely
Trained school personnel to administer first aid to students in case of emergency.	3.28	Likely
Trained teachers and other personnel who could provide psychosocial support to students.	3.04	Likely
Overall Mean	3.26	Likely

The research data in Table 5 explaining the respondents' likelihood of increasing awareness of disaster risk reduction practices reveals valuable insights. Data indicates the "likely" level of readiness and willingness to engage in these practices. These data suggest a high likelihood of increased awareness of disaster risk reduction. The data also provides information that the financial dimension and effective financial management are actually a small part that can still have an influence in ensuring the smooth running of disaster risk reduction efforts in schools.

### ***Respondents' Level of Disaster Awareness***

The level of awareness of respondents regarding disasters is based on the data presented in Table 1, which shows an overall average of 2.79, which indicates that respondents are somewhat aware. This table further highlights the three most prominent awareness indicators and their interpretation. Firstly, it is evident that teachers and school heads thoroughly understand their roles during adverse weather conditions and emergencies (3.74), demonstrating a high level of awareness. Second, they are well-versed in their responsibilities during school-based adverse weather events (3.66), indicating a full awareness. Thirdly, they exhibit robust knowledge regarding whom to contact for information or queries (3.60), highlighting their awareness. Conversely, the data reveals the lowest indicator, suggesting that respondents admit to needing to be made aware of the proper exit locations within the buildings where they spend most of their time (1.98). This finding underscores the necessity to provide further training and orientation for school

personnel to ensure the effective implementation of the school's emergency plan during exigencies. While teachers and school heads exhibit commendable awareness in terms of their roles and contacts during adverse weather and emergencies, the issue of proper exit awareness presents an area that requires attention and rectification.

These findings are aligned with the guidance provided by the United Nations Office for Disaster Risk Reduction, emphasizing the importance of a comprehensive catastrophe risk reduction strategy and disaster management plan. Such a plan should involve all key stakeholders and be based on a thorough assessment of risks, hazards, and capacities. Additionally, it should prioritize preparedness for response, contingency planning, and drills at the local level, along with creating a national disaster response strategy. As Emphasized, disaster preparedness should center on community awareness and understanding, reflecting the vital role of awareness and preparedness in disaster risk reduction and management.

Notably, the study underscores commendable awareness among teachers and school heads regarding their roles, responsibilities during adverse weather events, and appropriate contacts for information. However, the identified lowest indicator related to respondents' lack of awareness of proper exit locations within buildings emphasizes the need for additional training and orientation. The referenced principles from the UNDRR stress the importance of a comprehensive disaster risk reduction strategy involving key stakeholders and prioritizing preparedness. At the same time, Ecogroup3's emphasis on community awareness aligns with the significance attributed to awareness and preparedness in disaster risk reduction and management. While specific literature citations are not provided, the passage highlights critical principles from these sources, forming a basis for discussing disaster awareness levels and the need for targeted interventions.

### ***Respondents' Level of Disaster Preparedness***

Analysis of respondents' level of preparedness for disasters can be a very important determining indicator. From the research results, data was obtained which showed an overall average of 2.75, which indicated that the respondents were quite prepared. The table highlights the three most significant indicators of preparedness and their corresponding interpretations. First and foremost, schools have an up-to-date contact list that includes office and home phone numbers and employee email addresses, signifying a high state of preparedness (3.70). Additionally, schools have signed up to receive emergency alerts through various channels, such as social media, text, and email (3.36), reflecting a moderate level of preparedness. Furthermore, schools maintain emergency basic supplies for potential sheltering-in-place scenarios (3.26), emphasizing the importance of being somewhat prepared for such situations.

Conversely, the data reveals the lowest indicator, suggesting that schools must prepare to keep emergency supplies on-site (2.10). This underscores the necessity for schools to focus on contact lists and ensure the availability of essential supplies to enhance life-saving capabilities during unexpected events. While schools demonstrate readiness to maintain up-to-date contact lists, they also exhibit some preparedness in receiving emergency alerts through multiple channels and possessing basic emergency supplies for

evacuation centers. However, areas such as emergency response-related apps, the backup of essential documents at alternate locations, and maintaining emergency supplies within the school premises show room for improvement.

The result underscores the need for institutions to enhance their capabilities by ensuring the availability of essential resources within the school premises, which is crucial for effective response and recovery. These findings align with Patel et al.'s (2023) emphasis on the importance of mitigation and preparedness actions before disasters. The study underscores that decisions made in the preparedness phase significantly influence the efficiency of subsequent response and recovery efforts. This broader perspective emphasizes the critical role of proactive measures in disaster management beyond the specific indicators highlighted in the analysis.

### ***Respondents' Level of Disaster Risk Reduction Practices***

Comprehensive descriptive analysis based on research data regarding the level of disaster risk reduction practices carried out by respondents is information that must be taken into careful consideration. Notably, the data indicates an overall mean of 2.62, signifying that these practices are somewhat practiced. Among the key findings, the table highlights the three most notable indicators of disaster risk reduction practices, each accompanied by its corresponding interpretation. Firstly, many respondents report that their schools maintain a disaster risk reduction management process distinct from other institutions, which indicates a practiced approach (3.56). Secondly, schools exhibit some engagement with risk management strategies (3.26), reflecting ongoing efforts in this area. Thirdly, schools have a degree of local resource accessibility to aid in emergencies (3.08), underscoring the importance of community collaboration for disaster resilience.

Conversely, the data reveals the lowest indicator, suggesting that a significant proportion of respondents concur that their schools lack continuity of operations planning and a risk reduction policy (2.10), indicating an area of potential vulnerability. This underscores the need for school administrations and personnel to establish robust disaster risk management practices to ensure uninterrupted operations. Notably, as disasters frequently occur without warning, the absence of such planning poses a significant challenge (Agayon et al., 2022). This study aligns with the definition of disaster risk reduction as a systematic effort to identify and mitigate disaster-causing factors, as UNESCO advocates. Given the increasing frequency of natural disasters, there is a growing urgency for disaster risk reduction (DRR) education within the education sector. Schools have been deeply affected by recent earthquakes, landslides, and floods. As the Enterprise Risk Management Academy emphasizes, DRR education is essential for promoting resilience, preserving lives, and safeguarding property.

The findings offer insights into the disaster risk reduction practices among the surveyed respondents. Notable strengths include establishing a distinct disaster risk reduction management process within schools, indicative of a practiced approach. Moreover, schools exhibit engagement with risk management strategies, signifying ongoing efforts in this critical area. The accessibility of local resources for emergency aid underscores the importance of community collaboration in fostering disaster resilience.

However, a significant concern arises, as many respondents acknowledge the need for continuity of operations planning and a risk reduction policy within their schools. This highlights a potential vulnerability and emphasizes schools' need to establish robust disaster risk management practices to ensure uninterrupted operations. The study aligns with UNESCO's definition of disaster risk reduction as a systematic effort to identify and mitigate disaster-causing factors, emphasizing the urgency of integrating disaster risk reduction education within the education sector. As underscored by the Enterprise Risk Management Academy, such education is essential for promoting resilience, preserving lives, and safeguarding property, particularly in the context of the escalating frequency of natural disasters impacting educational institutions.

### ***Correlation between the Respondents' Level of Disaster Awareness and Preparedness with their level of Disaster Risk Reduction Practices***

This research can also be analyzed further, namely in a deep correlational direction between the level of awareness and disaster preparedness of respondents and their disaster risk reduction practices that occur in schools. Spearman's rho correlation was employed to ascertain the study's findings. For disaster awareness, the p-value of .001, at a significance level of .05, yielded a correlation result of .546, indicating a highly significant positive correlation between disaster awareness and disaster risk reduction practices. Similarly, for disaster preparedness, the p-value of .001, at the .05 significance level, resulted in a correlation value of .463, signifying a highly significant positive correlation between disaster preparedness and disaster risk reduction practices. These results underscore the connection between disaster awareness, preparedness, and risk reduction practices.

Given the highly significant correlation between these elements, school personnel must be well-informed and proficient in disaster awareness, preparedness, and disaster risk reduction practices. These components are intricately linked and mutually reinforcing. Strengthening disaster preparedness measures can significantly reduce the loss of lives and property during emergencies. Furthermore, effective preparedness strategies that expedite emergency response, rehabilitation, and recovery are essential for providing timely and focused support. Incorporating disaster awareness and preparedness into the school curriculum can play a crucial role in improving students' understanding and preparedness, aligning with the findings of previous studies. By nurturing a culture of readiness and risk reduction within educational institutions, we can better safeguard the well-being of students and staff and minimize the impact of disasters.

These findings emphasize the importance of well-informed and proficient school personnel in disaster awareness, preparedness, and risk reduction practices. The interdependence of these components highlights the need for a comprehensive approach. Strengthening disaster preparedness measures mitigates the loss of lives and property during emergencies and facilitates efficient emergency response, rehabilitation, and recovery efforts. Integrating disaster awareness and preparedness into the school curriculum aligns with previous studies, offering a crucial avenue to enhance students' understanding and readiness. Fostering a culture of preparedness and risk reduction within

educational institutions emerges as a critical strategy to safeguard the well-being of students and staff and minimize the impact of disasters.

### **Respondents' level of Likelihood to Increase Awareness of Disaster Risk Reduction**

The descriptive analysis of respondents' likelihood to increase awareness of disaster risk reduction practices reveals valuable insights. The data indicates an overall mean of 3.26, signifying a "likely" level of readiness and willingness to engage in such practices. Notably, the study identifies three key indicators that indicate a substantial likelihood of enhancing awareness of disaster risk reduction. First, conducting a risk assessment of buildings in collaboration with the Education Facilities Division and external agencies and partners (3.38) underscores the commitment to proactive measures. Second, leveraging school partnerships to support Disaster Risk Reduction and Management programs, even post-disaster (3.36), highlights the potential of collaboration for resilience. Third, the preparedness to train school personnel in administering first aid during emergencies (3.28) reinforces the importance of life-saving skills. Conversely, the data reveals the lowest indicator, indicating that securing a school budget to support regular DRRM activities (2.14) is considered "likely." This underscores the financial dimension of DRRM, highlighting the need for effective financial management to ensure the smooth operation of school disaster risk reduction efforts.

In light of these findings, it is evident that while schools may have some disaster risk reduction management elements, comprehensive planning, adequate budget allocation, and ongoing personnel training are equally essential components for a robust and effective school DRRM program. UNESCO's emphasis on systematic efforts to analyze causal factors of disasters reinforces the importance of a holistic approach to disaster risk reduction within the educational context. These findings collectively highlight that, while schools may possess some elements of disaster risk reduction management, comprehensive planning, adequate budget allocation, and ongoing personnel training are equally essential components for a robust and effective school DRRM program.

### **CONCLUSION**

The findings of this study shed light on the current state of disaster awareness, preparedness, and risk reduction practices within the context of schools. Notably, the research identifies key areas where improvements are needed. Teachers and school heads have a strong level of awareness regarding their roles during adverse weather and emergencies, along with a robust understanding of whom to contact for information. However, a lack of proper exit locations within school buildings highlights an area needing immediate attention. Furthermore, the study reveals that schools are well-prepared regarding contact lists, emergency alerts, and basic supplies, but there is room for improvement in keeping emergency supplies on-site. Disaster risk reduction practices also show strengths in risk management strategies and access to local resources. Nevertheless, a significant gap in the continuity of operations planning and risk reduction policy needs to be addressed. The positive correlation between disaster awareness and risk reduction practices underscores the importance of increasing awareness to enhance preparedness and

mitigate potential risks. Schools must address the identified gaps and prioritize disaster risk reduction measures. Enhancing awareness and preparedness should be accompanied by a comprehensive strategy to close the existing deficits in emergency exit signage and on-site supplies. Schools should also focus on developing robust continuity of operations planning and risk reduction policies to ensure a holistic approach to disaster preparedness and risk reduction. Furthermore, efforts to increase awareness must include initiatives such as risk assessments, partnerships with external agencies, and training for school personnel in first aid administration. Lastly, securing a dedicated budget to support regular disaster risk reduction activities is essential for maintaining the safety and resilience of educational institutions. Overall, this study highlights the need for a more proactive and integrated approach to disaster risk reduction in schools, which can ultimately safeguard the well-being of students and staff in emergencies.

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