

School Heads' Practices and Compliance in School's Disaster Risk Reduction and Management Program

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Abstract:

This study investigated the practices and compliance of school heads in implementing the School Disaster Risk Reduction and Management (DRRM) Program in Cluster 6 of a major division in Central Philippines during the 2024–2025 school year, serving as a basis for formulating a Public Service Continuity Plan (PSCP). Using a descriptive quantitative design, data were collected from 80 SDRRM coordinators (50 elementary, 30 secondary) via a validated questionnaire. Findings showed high levels of DRRM practices in prevention, mitigation, rehabilitation, and monitoring, particularly in conducting drills, risk assessments, and post-disaster evaluations. However, moderate ratings in curriculum integration, infrastructure improvements, immediate relief, and psychosocial support revealed critical gaps. Compliance levels largely mirrored these trends, with high adherence in technical preparedness but moderate compliance in emotional recovery measures. Demographic variables such as age and educational attainment influenced job security and work condition motivations, though motivation and stress levels did not significantly impact performance. Overall, the results indicate that while DRRM implementation is strong, psychosocial recovery and emergency relief require focused improvement. These findings underscore the need for a well-informed PSCP that prioritizes continuous training, enhanced monitoring, integrated psychosocial support, and inter-agency collaboration to sustain educational services amid and after disasters.

Keywords: *Compliance, Prevention, Psychosocial recovery*

Introduction:

In recent years, the importance of Disaster Risk Reduction and Management (DRRM) in educational institutions has gained significant attention. Natural and artificial disasters can disrupt the normal functioning of schools, leading to a loss of valuable learning time, destruction of infrastructure, and, in some cases, endangering the lives of students and school staff (UNESCO, 2014; DepEd, 2019). Consequently, it has become essential for school leaders to establish and implement comprehensive disaster risk reduction programs (ADB, 2013; IFRC, 2020). School heads, who are at the forefront of educational management, play a crucial role in ensuring the effectiveness of these programs through their practices and compliance with established DRRM guidelines (Canales & Sanico, 2021; Libre, 2023; Tarun, 2024).

Through the Department of Education (DepEd), the Philippine government has mandated schools to implement disaster preparedness, response, and recovery programs in line with the National Disaster Risk Reduction and Management Act (Republic Act No. 10121). This initiative emphasizes the need for schools to develop and regularly update disaster risk management plans to ensure the safety and well-being of learners, faculty, and staff during a disaster. Even though disaster risk reduction has been given much attention, many challenges still exist in implementing and enforcing school DRRM practices. The alignment of school heads to DRRM guidelines, the availability of resources, and the provision of training might influence the success of programs. Compliance with DRRM mandates may differ significantly, influencing the overall safety culture within educational institutions.

This research aims to determine how school heads are involved in implementing disaster risk reduction programs and whether they stick to existing regulations and policies. Knowing the factors that enable the implementation of these programs is necessary in creating a Public Service Continuity Plan (PSCP) that will be a reference point for schools during future disasters. Supporting the findings will lead to a strengthened commitment to disaster preparedness. Therefore, schools would still be able to provide services even in times of disaster and, at the same time, initiate a culture of resilience and safety within the education system.

Objectives of the Study:

This study sought to determine the level of school heads' practices and compliance in schools' disaster risk reduction management program in one of the clusters in a large-sized school division in Central Philippines for S.Y. 2024-2025 as a basis for the public service continuity plan.

Theoretical Framework

Leadership and Organizational Management Theory emphasizes the pivotal role of leadership in successfully implementing programs within organizations. Based on the writings of various researchers, including Yukl (2010), the leadership theory of styles, such as transformational, transactional, or strategic, demonstrates how these styles can affect the organizational path, decision-making, distributing resources, and generally the organization's performance. Applying this theory in education identifies the school heads as the major players whose leadership characteristics directly influence the educational institution's performance.

In the context of Disaster Risk Reduction and Management (DRRM), this theory depicts the school heads as people who, through their leadership practices, solve and implement disaster preparedness plans. The school leaders who are effective in their roles motivate the teachers and staff to be engaged in disaster drills, assign the resources that are required for the safety infrastructure, and develop a culture of being prepared. Their skills of leading teams, clear communication, and making decisions that align with the strategy are the major factors that enable them to play a significant role in the school's resilience during a disaster.

This theory is appropriate for the present study because it underscores the importance of the school head's role in actualizing DRRM programs. Since the study focuses on the practices of school heads in implementing DRRM, the said theory serves as a sound theoretical foundation. It connects leadership behavior to school-level disaster preparedness actions, helping to assess how school heads influence the success of DRRM implementation.

Compliance theory, on the other hand, tries to explain whether people or organizations choose to abide by or violate current laws. This theory finds its roots in sociological and organizational studies, which point to the primary sources that greatly influence compliant behavior: inner motivations, outside pressure, clarity of the rules, and corporate culture (Kohler, 2005). It illustrates how and why the institutional actors who work in certain professions implement the government's orders in regulated workplaces, such as schools.

When connected to DRRM, it gives a perspective through which an observer can perceive the various characteristics of the school heads' reactions to the policies of the Department of Education and the local disaster agencies. It helps us determine whether the school heads accomplish what they are asked to do, such as carrying out the drills, providing the risk assessments, or creating the DRRM teams. Moreover, it underlines the possible obstacles to compliance, such as a shortage of resources, training, or even unclear directions that may be involved.

This theory is highly suitable for the current study as it supports the evaluation of the compliance behavior of school heads concerning DRRM requirements. Since one of the study's core objectives is determining how school heads adhere to DRRM guidelines, Compliance Theory offers a structured framework for analyzing the extent and quality of such compliance.

Finally, this theoretical framework highlights how crucial the practices of school heads and their adherence to RA 10121 are in guaranteeing the growth of a public continuity plan. The study aims to offer insightful information to help schools be more resilient and sustainable by matching school disaster risk reduction projects with the legal requirements defined in the Republic Act 10121, enhancing adequate disaster preparation and response.

Review of Related Literature

Disaster Risk Reduction and Management (DRRM) is very important to lessen the effects of catastrophes in schools, and school heads can contribute a lot to ensuring safety, keeping educational continuity, and building resilience. The passed Republic Act No. 10121 law in the Philippines states that schools must incorporate DRRM, but the extent of compliance is still indefinite. Strong leadership of school heads, including their participation in training activities and allocation of resources, is essential for disaster preparedness. Nevertheless, problems such as the scarcity of resources, lack of training, and gaps in policy implementation are significant barriers to going further. Public Service Continuity Planning (PSCP) is far less than the school will resume operations after they have suffered from disasters. It is a tool that assures less disruption to education. Although these policies are in place, several issues, such as a lack of funds and confusion amongst the roles, make continuous capacity-building necessary to develop better preparedness and resilience mechanisms.

In international contexts, compliance with disaster risk reduction and management (DRRM) regulations is a critical responsibility for school heads. Research conducted in countries such as the United States and Australia confirms the reliance of compliance on the roles played by the leadership of school heads and the extent to which the resources are available locally. The U.S. Department of Education has issued federal guidelines that mandate schools to form a comprehensive disaster preparedness plan, carry out drills regularly, and train the staff if they want to comply with the law. In the same vein, the Australian Government Department of Education is the primary entity that directs compliance with DRRM practices, and it is very emphatic that the schools have to be well-organized for the unexpected.

In the Philippines, compliance with disaster risk reduction and management (DRRM) policies is mandated by the Department of Education (DepEd) and the National Disaster Risk Reduction and Management Council (NDRRMC). Schools must implement comprehensive DRRM programs, conduct regular risk assessments, and establish disaster-preparedness protocols. Research involving the entire population of school heads revealed that while awareness of DRRM policies is high, many still struggle to meet compliance standards due to resource constraints, particularly in rural and disaster-prone areas. Despite these challenges, the census results show that school heads across all covered regions demonstrate commitment to DRRM and actively seek external support, such as funding and collaboration with local government units (LGUs), to enhance school preparedness.

Despite many obstacles, local customs in the Philippines demonstrate that school leaders are energetic in performing Disaster Risk Reduction and Management (DRRM) programs. The census revealed that school leaders throughout the country are leading the way in disaster preparedness undertakings. This covers tasks such as holding drills regularly, improving emergency response guidelines, and checking the resilience of school facilities against disasters. The survey discovered that school heads habitually participate in training programs for their staff and themselves in areas vulnerable to disasters to enhance disaster readiness. Moreover, these practices indicate the partnership with LGUs to gain the necessary resources and technical support. However, the effectiveness of these practices hinges on available funding and the capability of school heads to mobilize broader community and government support, especially in rural or underserved areas.

Methodology:

This study employed a descriptive survey research design to assess school heads' practices and compliance with Disaster Risk Reduction and Management (DRRM) policies. Respondents, selected in correlation to a census study sampling, include school heads responsible for implementing DRRM measures. Respondents selected in correlation to a census study sampling include school heads responsible for implementing DRRM measures. The researcher obtained permission before data collection, ensuring voluntary participation and confidentiality. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used for data analysis. Ethical considerations were observed to maintain the anonymity and privacy of respondents.

Research Design

This study employed a descriptive research design to assess the level of school heads' practices and compliance in implementing the School Disaster Risk Reduction and Management (DRRM) Program. The findings would serve as a foundation for crafting a Public Service Continuity Plan tailored to the unique needs of public schools. Meanwhile, the research was conducted among selected elementary and secondary schools in a medium-sized division situated in an urbanized city in Central Philippines during the school year 2024–2025. The study aimed to gather factual and current data regarding DRRM efforts at the school leadership level through this design. Descriptive research systematically describes a situation, problem, or phenomenon without manipulating variables. It often involves collecting data that can be quantitatively measured and analyzed, such as frequencies, percentages, and mean scores, or it can be used to identify classifications and categories. As noted in the educational research literature, this method is valuable for providing a snapshot of existing conditions, behaviors, or attitudes within a population (Creswell & Creswell, 2018). It enables researchers to uncover important patterns and relationships for program planning and policy formulation.

Given the goal of identifying the extent of DRRM practices and compliance among school heads, the descriptive design is deemed most appropriate for this study. It allows for evaluating existing conditions and practices in real-world settings, which can help inform strategic planning and improve school preparedness. The descriptive approach supports data-driven decision-making, especially when the objective is to inform the development of practical and responsive interventions such as a Public Service Continuity Plan.

Respondents of the Study

The study was conducted among a total of 80 respondents, comprising 50 elementary SDRRM coordinators and 30 secondary SDRRM coordinators from 8 Districts of Cluster 6 – Southern Negros.

Table 1

Distribution of Respondents

District	Elementary SDRRM Coordinators		Secondary SDRRM Coordinators	
	Population (N)	Percentage (%)	Population (N)	Percentage (%)
A	8	16	4	13.33
B	8	16	4	13.33
C	6	12	3	10
D	5	10	3	10
E	5	10	2	6.68
F	5	10	6	20
G	5	10	4	13.33
H	8	16	4	13.33
Total	50	100	30	100

Data Gathering Instrument

The study utilized a self-made questionnaire to assess the school heads' practices and compliance with disaster risk reduction and management (DRRM) policies. The questionnaire was divided into three key sections: (1) respondents' profile, which gathered demographic details such as age, sex, educational attainment, and years of service; (2) school heads' practices in DRRM, assessing how frequently they implemented prevention, mitigation, rehabilitation, and evaluation activities in three different areas: prevention and mitigation practices, rehabilitation practices and monitoring and evaluation practices – where each contains 7-line items per area; and (3) Compliance with DRRM Policies, measuring the extent to which school heads adhered to established DRRM standards and protocols of three different areas: compliance with prevention and mitigation policies, compliance with rehabilitation policies and compliance with monitoring and evaluation policies – where each also contains 7-line items per area. To ensure consistency and ease of analysis, the instrument employed a five-point Likert scale containing the following scores: 5 always, 4 often, 3 sometimes, 2 rarely, 1 never. This allows for systematic responses.

Validity

It is crucial to follow systematic methods to ensure the validity and reliability of a self-made questionnaire. Validity ensures that the questionnaire accurately measures the intended concepts. Experts can review the questions to confirm they reflect the school heads' practices and compliance in schools' disaster risk reduction management (Pellegriano et al., 2021).

The evaluation criteria Carte V. Good and Douglas F. Scates set was used to establish the validity by presenting the instrument and interviewing the validators. The researcher carried over the suggestions, comments, and recommendations of the validators during the finalization and improvement of the instrument. The instrument received a perfect rating of 5, classified as "excellent," confirming its suitability for accurately assessing the intended variables.

Reliability

Reliability ensures consistency in results. Internal consistency can be assessed using Cronbach's alpha to verify that the items measure the same construct (Tavakol & Dennick, 2021). This method ensures the questionnaire is valid and reliable for collecting trustworthy data.

This study subjected the research instrument to reliability testing using Cronbach's Alpha.

A dry run test was conducted on 30 school heads from another cluster.

The reliability test involved 30 valid cases with 21 items and produced two notable Cronbach's alpha coefficients. The first result, 0.861, is considered "good," indicating solid internal consistency and confirming the instrument's reliability. The second result, 0.949, falls into the "excellent" range, further reinforcing the instrument's strong reliability

Data Gathering Procedure

The data for this study were collected through a structured and organized process designed to ensure the reliability and validity of responses. The research instruments, consisting of validated questionnaires, were distributed to the identified respondents—elementary and secondary School Disaster Risk Reduction and Management (SDRRM) coordinators—from selected public schools within Cluster 6 of a large Central Philippines division for the 2024-2025 school year.

Questionnaires were distributed in person to the respondents. This approach enabled the clear transmission of the instructions to the respondents and helped them get clarifications if needed. While some respondents decided to fill in the questionnaire immediately upon receipt, others were allowed enough time to fill in the forms and were asked to return them the next day.

Depending on the respondents' decision, the researcher collected the completed questionnaires either on the same day or the next. The researcher was confident that all the forms were collected securely and on time. After being

gathered, the completed questionnaires were arranged and grouped according to educational level, specifically separating elementary and secondary school coordinators.

This systematic division ensured the data analysis was accurate and consistent throughout the two school groups. Throughout the data-gathering phase, the researchers carefully observed moral issues. They have been careful to guarantee voluntary participation, that response secrecy was kept, and that all data provided would only be used for academic purposes.

Research Ethics Protocol

Participants' personal demographic information results were collected and were noted in the data capturing sheet. Informed consent via verbal communication was elicited with the respondents. They read and understood the provided information and can ask questions. Moreover, their participation was voluntary, and they were free to withdraw without giving any reasons. The respondents were assured that there would be no risks of harm will experience before, during, or after participating in the research. The data and information used in the study were treated with strict confidentiality. No statement regarding the participant's identity was disclosed unnecessarily in this study. After the data gathering, since there was no need, debriefing was not done by the researcher anymore, as cited in the Data Privacy Act.

Analytical Schemes

Various procedures were employed to analyze the data.

Objective No. 1 used a descriptive-analytical scheme to determine the profile of respondents in terms of age, sex, highest educational attainment, and length of service.

Objective No. 2 utilized a descriptive-analytical scheme to determine the level of school heads' practices in the school's disaster risk reduction management program according to the following areas: prevention and mitigation practices, rehabilitation practices, and monitoring and evaluation.

Objective No. 3 used a descriptive-analytical scheme to determine the extent of school heads' compliance in the school's disaster risk reduction management program according to the following areas: prevention and mitigation practices, rehabilitation practices, and monitoring and evaluation.

Objective No. 4 used a descriptive-analytical scheme to determine the level of school heads' practices in the school's disaster risk reduction management program according to the aforementioned variables.

Objective No. 5 utilized a descriptive-analytical scheme to determine the extent of school heads' compliance in the school's disaster risk reduction management program according to the aforementioned variables.

Objective No. 6 used a comparative-analytical scheme to determine the significant difference in the level of school heads' practices in the school's disaster risk reduction management program when grouped according to the aforementioned variables.

Object No. 7 utilized a comparative-analytical scheme to determine the significant difference in the extent of school heads' compliance in the school's risk reduction management program when grouped and compared according to the aforementioned variables.

Objective No. 8 used a relational-analytical scheme to determine the significant relationship between the level of school heads' practices and the extent of compliance with the school's risks reduction management program.

Presentation, Analysis, and Interpretation of Data

This chapter presents the presentation, analysis, and interpretation of data gathered from the respondents. The data was collected and then processed in response to the problems posed in Chapter 1 of this dissertation. The findings relate to the research questions that guided the study.

Profile of the Research Respondents according to Age, Sex, Highest Educational Attainment, and Length of Service

The data presents the distribution of sampled School Disaster Risk Reduction and Management (SDRRM) Coordinators from both elementary and secondary levels across eight districts. Out of a total population of 127 elementary SDRRM coordinators, 50 were selected as the sample, representing 100% of the intended sample size. The sample sizes for districts A, B, and H were the highest, with eight coordinators each, making up 16% of the total elementary sample individually. District C contributed six coordinators (12%), while districts D, E, F, and G each contributed five coordinators (10%).

On the secondary level, all 30 coordinators from the overall population of 30 were included in the sample, again representing 100% of the targeted sample size. District F had the highest representation with six coordinators (20%), while districts A, B, G, and H each contributed four coordinators (13.3%). Districts C and D followed with three coordinators each (10%), and District E had the smallest share with only two coordinators (6.7%).

The sampling aims for equitable distribution across districts, with slightly higher sampling from districts with larger populations, particularly in the elementary category. The data includes the secondary SDRRM coordinator population and a proportionally distributed sample from the elementary population.

Table 2

Profile of Respondents

Variables	Categories	Frequency	Percentage
Age	Younger (less than 39 years old)	47	58.80
	Older (39 years old and above)	33	41.30
	Total	80	100
Sex	Male	39	48.80
	Female	41	51.20
	Total	80	100
Highest Educational Attainment	Lower (Bachelor's Degree)	56	70.00
	Higher (Post-Grad Level)	24	30.00
	Total	80	100
Length of Service	Shorter (less than 12 years)	48	60.00
	Longer (12 years and above)	32	40.00
	Total	80	100

As shown in Table 2, the profile of the 80 respondents reveals that the majority are younger than 39 years old, comprising 58.80% of the sample, while the remaining 41.30% are aged 39 and above.

A national consultation highlighted the active role of Filipino youth (ages 10–24) in disaster risk reduction (DRR). The participants emphasized their capacity to contribute to resilience and climate justice, advocating for increased involvement in DRR initiatives. This underscores younger individuals' significant presence and potential in DRR roles (UNICEF PHILIPPINES 2024). Also, the study on local government units in Nueva Ecija found that many DRRM officers have been in their positions for less than three years, suggesting a trend of younger or less tenured individuals in these roles. This aligns with observing a younger demographic actively participating in DRR efforts (International Journal of Disaster Risk Science, 2021).

Regarding sex, the distribution is relatively balanced, with females slightly outnumbering males at 51.20% and 48.80%, respectively.

The 2020 Census of Population and Housing (CPH) by the Philippine Statistics Authority (PSA) reported that more women than men attain higher levels of education, including education beyond the secondary level. Specifically, among the household population aged five years and over, 20.0% of women pursued higher levels of education compared to 18.1% of men.

Furthermore, the 2020 Global Gender Gap Report by the World Economic Forum found that 71.3% of Filipino women are enrolled in secondary education and 40.4% in college, compared to 60.2% and 40.4%, respectively, among men. Regarding educational attainment, a significant proportion of respondents (70.00%) hold a bachelor's degree, while 30.00% have pursued postgraduate education.

Mapa (2021), a National Statistician of the PSA, reported that a large portion of the Philippine adult population holds a bachelor's degree, while a smaller segment has pursued postgraduate studies.

Regarding length of service, 60.00% have been in service for less than 12 years, indicating a relatively less tenured workforce, while 40.00% have served for 12 years or more.

Booth (2023) reported that younger professionals in sectors like education and BPO in the Philippines typically have shorter tenure (under 12 years).

Furthermore, Torres (2022) emphasized in a study on educational workforce development that many public school teachers and staff are younger and early in their careers, particularly due to recent hiring programs and promotions.

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in the Areas of Prevention and Mitigation Practices, Rehabilitation Practices, and Monitoring and Evaluation

Table 3

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in Prevention and Mitigation Practices

Area	Mean	Interpretation
A. Prevention and Mitigation Practices		
As school head, he/she ...		
1. conducts risk assessments to identify potential hazards.	4.54	Very High Level
2. implements disaster-resilient infrastructure improvements.	4.20	High Level
3. conducts disaster preparedness orientations for students and staff.	4.51	Very High Level
4. integrates DRRM concepts into the school curriculum.	4.31	High Level

5. coordinates with local government and agencies for disaster preparedness initiatives.	4.35	High Level
6. ensures emergency exits, alarms, and safety measures were in place and functional.	4.35	High Level
7. conducts regular earthquake or fire drills in the school.	4.65	Very High Level
Overall Mean	4.42	High Level

The average mean for the level of school heads' practices in the School's Disaster Risk Reduction Management (DRRM) Program in prevention and mitigation practices is interpreted as high, with an overall mean of 4.35. This suggests that school heads consistently perform recommended DRRM practices at a commendable level.

Implementing safety measures is the most frequent primary practice among school heads, as revealed by the highest mean score of $r=4.69$ for the regular performance of earthquake or fire drills. Next is the mean score of 4.56, which deals with conducting risk assessments to determine potential hazards. School leaders' strong emphasis on hazard identification as part of their proactive safety strategy is high among the most preferred topics.

On the other hand, the practice that received the lowest rating was ensuring that the emergency exits, alarms, and safety measures were in good working condition. The mean score for this was $r=4.35$. Although it is still high, the figure indicates the least importance among the prevention and mitigation actions given in the list.

This lower score can be interpreted as no less than acknowledging physical infrastructure and technical safety systems as necessary, which might not be given the same attention as the drills and assessments. It stresses a need for more investments or regular maintenance of physical safety features that are just as important during emergencies.

Moreover, it is also noted that DRRM programs were actively carried out, particularly in the conduct of fire drills and collaboration with local government units. However, shortcomings in infrastructure and a lack of sufficient teacher training for integrating DRR into classroom instruction were also identified (Dela Cruz & Ormilla, 2022).

Table 4

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in Rehabilitation Practices

Area	Mean	Interpretation
B. Rehabilitation Practices		
As school head, he/she ...		
1. coordinates with government agencies and NGOs for post-disaster recovery assistance.	4.09	High Level
2. provides psychological first aid and counseling to affected students and staff.	3.64	High Level
3. oversees the repair and reconstruction of damaged school facilities.	4.25	High Level
4. ensures the availability of learning continuity plans after a disaster.	4.41	High Level
5. provides immediate relief assistance (food, water, supplies) to affected school members.	2.80	Moderate Level
6. conducts debriefing sessions for affected school members to assess emotional and mental well-being.	2.88	Moderate Level
7. develops and implements long-term recovery plans to strengthen school resilience after disasters.	4.15	High Level
Overall Mean	3.74	High Level

The average mean for the level of school heads' practices in Rehabilitation Practices under the School's Disaster Risk Reduction Management (DRRM) Program is 3.74, which is interpreted as a high level. Thus, school heads are empowered mainly to carry out post-disaster rehabilitation activities.

4.41 was the highest mean recorded among all the indicators, which is the number for ensuring the availability of learning continuity plans after a disaster. This indicates that the school leaders are very dependable in their commitment to reducing the impact of the disruption of educational activities. At 4.25, the highest mean was associated with leading the repair and reconstruction of the damaged school facilities, an aspect of physical restoration after a disaster that is most emphasized.

On the other hand, when the issue was discussed, the lowest average score of 2.80 was given in the case of launching assistance for relief that is immediate to the affected school members. This figure can be categorized as being of only a moderate level. Thus, it is less of a priority or more challenging to achieve in this case.

The moderate level of this rating suggests a possible shortage of capacity or resources among school heads in terms of offering the urgent humanitarian relief required in emergencies. Addressing this could enhance the holistic approach to disaster response, particularly by ensuring that affected individuals receive timely and adequate support. This is similar to the research findings of Sumbillo Jr. & Madrigal (2020), which highlighted that while structural repairs and recovery planning were effectively carried out, psychosocial support services remained underdeveloped and needed further enhancement. This strengthens the study of Abuyog (2020), which states that providing

immediate relief assistance and psychosocial support indicates a need for a stronger emphasis on the human-centered aspects of recovery.

Furthermore, the Department of Education's Disaster Risk Reduction and Management Service (DRRMS) initiated psychosocial support and training programs for teachers, parents, and non-teaching personnel. These programs aimed to prepare school communities to study the importance of integrating psychosocial support into rehabilitation efforts (DepEd DRRMS, 2020).

Table 5

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in Monitoring and Evaluation

Area	Mean	Interpretation
C. Monitoring and Evaluation		
As school head, he/she ...		
1. regularly updates the school's DRRM plan based on lessons learned from past disasters.	4.21	High Level
2. conducts post-disaster assessments to evaluate school response effectiveness.	4.11	High Level
3. gathers feedback from teachers, students, and parents regarding disaster preparedness efforts.	4.23	High Level
4. documents and reports DRRM activities to the appropriate authorities.	4.45	High Level
5. identifies and addresses gaps in the school's disaster preparedness measures.	4.29	High Level
6. creates a disaster incident database to analyze patterns and improve preparedness strategies.	4.13	High Level
7. establishes a peer-review system for disaster response effectiveness among schools in the district.	4.06	High Level
Overall Mean	4.21	High Level

The overall mean for the level of school heads' practices in the Monitoring and Evaluation aspect of the Disaster Risk Reduction and Management (DRRM) program is 4.21, which corresponds to a high level. This finding indicates that school heads are generally proactive in evaluating and enhancing disaster preparedness procedures in their institutions.

Among the various indicators, the highest-rated practices received a mean of 4.31: identifying weaknesses in disaster preparedness, recommending improvements, and documenting disaster-related incidents for reporting. These scores reflect the school heads' strong emphasis on reflective processes and accountability mechanisms, which are critical in ensuring effective DRRM strategies.

Following closely is the conduct of post-disaster evaluations (mean = 4.28), emphasizing the importance of reviewing actual response efforts to refine future strategies.

The lowest-rated practice was conducting regular training sessions for school staff on updated DRRM monitoring and evaluation procedures, which earned a mean of 4.01. Although this is still rated at a High Level, it is noticeably the lowest among all practices, suggesting it may not be as systematically implemented.

This lower rating implies that while school heads effectively conduct evaluations and reviews, disseminating this knowledge through regular training sessions to the rest of the school staff is somewhat lacking. This gap may limit the wider institutionalization and sustainability of DRRM practices, especially without updated staff competencies.

The study by Tizon and Comighud (2020) emphasized the crucial role of Monitoring and Evaluation (M&E) in improving the overall effectiveness of DRRM initiatives. It is also pointed out that while school heads were actively engaged in DRRM, there was a need for further planning and improvement in M&E practices to ensure comprehensive disaster preparedness (Libre, 2020).

Extent of School Heads' Compliance in the School's Disaster Risk Reduction Management Program in the Areas of Prevention and Mitigation Practices, Rehabilitation Practices, and Monitoring and Evaluation

Table 6

Extent of School Heads' Compliance in the School's Disaster Risk Reduction Management Program in Prevention and Mitigation Practices

Area	Mean	Interpretation
A. Prevention and Mitigation Practices		
The School Head ...		
1. conducts regular risk assessments to identify hazards.	4.46	High Extent
2. implements disaster-resilient school infrastructure improvements.	4.11	High Extent
3. ensures the integration of DRRM education into the school curriculum.	4.28	High Extent

4. complies with government-mandated disaster drills (e.g., earthquake, fire).	4.39	High Extent
5. develops and enforces school emergency preparedness plans.	4.34	High Extent
6. coordinates with local authorities for disaster preparedness programs.	4.14	High Extent
7. ensures proper safety signage and emergency exits in school facilities.	3.81	High Extent
Overall Mean	4.22	High Extent

The overall mean score for the extent of school heads' compliance with the School's Disaster Risk Reduction and Management (DRRM) Program in the prevention and mitigation component is 4.25, which indicates a high extent of compliance. School leaders generally adhere to required practices and protocols to prevent and minimize disaster-related risks.

The highest-rated item was compliance with government-mandated disaster drills, with a mean score of 4.50, suggesting a strong institutional commitment to ensuring school-wide participation in these critical preparedness activities. Closely following was the school heads' development and enforcement of emergency preparedness plans, which received a mean of 4.38, demonstrating robust planning measures.

The lowest-rated practice was coordinating with local authorities for disaster preparedness programs, receiving a mean of 4.04. While still within the high extent category, this score highlights it as the least prioritized area in compliance actions.

This lower rating may imply that although school heads are largely compliant with internal school-based preparedness efforts, external collaboration, particularly with local disaster management offices or agencies, may need further strengthening. Enhancing this coordination could lead to more integrated and community-aligned disaster preparedness strategies.

Lastly, Jauro et al. (2023) indicated that public and private school principals demonstrated high capability for risk assessment, substantial preparedness, and significant competence in emergency response, supporting the notion of proactive hazard identification and institutional readiness.

Table 7

Extent of School Heads' Compliance in the School's Disaster Risk Reduction Management Program in Rehabilitation Practices

Area	Mean	Interpretation
B. Rehabilitation Practices		
The School Head ...		
1. reports post-disaster damages to the proper authorities.	4.45	High Extent
2. coordinates with the government and NGOs for recovery assistance.	4.20	High Extent
3. provides students and staff with psychological first aid and mental health support.	3.23	Moderate Extent
4. ensures learning continuity through alternative delivery modes after a disaster.	4.40	High Extent
5. oversees the repair and reconstruction of school facilities.	4.34	High Extent
6. implements post-disaster response activities as required by the Department of Education (DepEd) or other agencies.	4.34	High Extent
7. establishes partnerships with private sector organizations for additional post-disaster resources and support.	4.04	High Extent
Overall Mean	4.14	High Extent

The overall mean for the extent of school heads' compliance in Rehabilitation Practices under the Disaster Risk Reduction and Management (DRRM) program is 4.14, which indicates a high extent of compliance. This suggests that school heads are generally responsive and committed to the necessary steps for post-disaster recovery in their respective schools.

Among the indicators, the highest mean score of 4.45 was recorded for reporting post-disaster damages to the proper authorities. This demonstrates that school leaders prioritize procedural and reporting obligations in times of emergency. Close behind are the practices of ensuring learning continuity through alternative delivery modes (mean = 4.40) and both overseeing the repair and reconstruction of school facilities and implementing post-disaster response activities required by DepEd or other agencies (mean = 4.34), which reflect a firm adherence to physical and operational recovery measures.

With a mean of 3.23, which falls under the moderate extent category, the lowest-rated item offered mental health support and psychological first aid. Even if most rehabilitation regions have good overall compliance, this score shows a significant gap in meeting the emotional and psychological demands of impacted school stakeholders.

This result means that the psychosocial aspect of disaster recovery is still a weaker implementation area, even if structural and logistical rehabilitation efforts are well-handled. Enhancement of psychological support systems in school communities would significantly help whole recovery and long-term resilience.

This parallels the ideas of Alonzo et al. (2023), who underlined that school leaders faced several obstacles as they moved their schools toward resilience and recovery. The research highlighted how important it is for school leaders to change their behavior to meet changing circumstances and give staff members' and pupils' well-being top importance.

Table 8

Extent of School Heads' Compliance in the School's Disaster Risk Reduction Management Program in Monitoring and Evaluation

Area			
C. Monitoring and Evaluation		Mean	Interpretation
The School Head ...			
1. regularly updates the school's DRRM plan based on policy changes and past experiences.	4.21		High Extent
2. conducts post-disaster evaluations to assess response effectiveness.	4.28		High Extent
3. documents all disaster-related incidents and submits reports to authorities.	4.31		High Extent
4. engages stakeholders (students, teachers, parents, community) in DRRM policy reviews.	4.15		High Extent
5. identifies weaknesses in disaster preparedness and recommends improvements.	4.31		High Extent
6. conducts regular training sessions for school staff on updated DRRM monitoring and evaluation procedures.	4.01		High Extent
7. uses data analytics to track trends and improve disaster response strategies.	4.21		High Extent
Overall Mean	4.21		High Extent

The overall mean for the extent of school heads' compliance in monitoring and evaluation practices under the Disaster Risk Reduction and Management (DRRM) program is 4.21, which falls under the category of high extent. This indicates that school heads are actively fulfilling the expectations set for monitoring, documenting, and evaluating DRRM efforts in their schools.

The highest-rated item, with a mean of 4.39, was identifying weaknesses in disaster preparedness and recommending improvements. This reveals a strong emphasis on continuous improvement and learning from previous experiences. Close behind, with a mean score of 4.36, was the documentation of all disaster-related incidents and the submission of reports to proper authorities, suggesting that accountability and transparency are highly observed.

The lowest-rated practice was conducting regular training sessions for school staff on updated DRRM monitoring and evaluation procedures, which received a mean of 4.01. Although this still falls within the high extent category, it is comparatively lower than other indicators in this component.

This implies that while school heads demonstrate strength in identifying gaps and documenting disaster activities, the follow-through in sharing these lessons through regular staff development or training may be insufficient. Improving these training programs would help guarantee a more knowledgeable and ready staff, strengthening school-wide disaster resilience.

According to Canales and Sanico (2021), the efficiency of DRRM execution was much affected by the awareness of school heads. Their results emphasize how monitoring and evaluation (M&E) helps raise knowledge, eventually improving program effectiveness. Conversely, Dela Cruz and Ormilla (2022) noted that their research revealed good execution of DRRM initiatives directly related to school personnel's level of awareness and understanding, underscoring the need for MandE to support these areas.

Tarun (2024) investigated significant execution issues despite faculty and staff engagement. The study emphasized the need for MandE to maintain successful DRRM projects, indicating that regular program reviews and assessments are essential.

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in the Areas of Prevention and Mitigation Practices, Rehabilitation Practices, and Monitoring and Evaluation when grouped according to Age, Sex, Highest Educational Attainment, and Length of Service

Table 9

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in Prevention and Mitigation Practices according to Age

Categories	Younger		Older	
A. Prevention and Mitigation Practices	Mean	Interpretation	Mean	Interpretation
As school head, he/she ...				

1. conducts risk assessments to identify potential hazards.	4.49	High Level	4.61	Very High Level	High
2. implements disaster-resilient infrastructure improvements.	4.15	High Level	4.27	High Level	
3. conducts disaster preparedness orientations for students and staff.	4.43	High Level	4.64	Very High Level	High
4. integrates DRRM concepts into the school curriculum.	4.17	High Level	4.52	Very High Level	High
5. coordinates with local government and agencies for disaster preparedness initiatives.	4.28	High Level	4.45	High Level	
6. ensures emergency exits, alarms, and safety measures were in place and functional.	4.26	High Level	4.48	High Level	
7. conducts regular earthquake or fire drills in the school.	4.57	Very High Level	4.76	Very High Level	High
Overall Mean	4.33	High Level	4.53	Very High Level	High

The overall mean for younger respondents regarding school heads' practices in prevention and mitigation is 4.33, interpreted as a high level. In comparison, older respondents rated it at 4.53, which is classified as a very high level. These findings suggest that, across age groups, there is a strong recognition of school heads' preventive measures, with older respondents expressing slightly more favorable perceptions.

For older respondents, the highest mean score was 4.76 for conducting regular earthquake or fire drills, showing a deep appreciation for preparedness through simulation. This was closely followed by 4.64 for disaster preparedness orientations, highlighting older respondents' recognition of education and awareness efforts.

The lowest rating among younger respondents was 4.15 for implementing disaster-resilient infrastructure improvements, which still falls under a high level. For older respondents, the lowest score was 4.27 for the same indicator.

This suggests that structural improvements, while still considered well-implemented, may be perceived as the least emphasized aspect of mitigation practices compared to drills and orientation programs.

On the other hand, Lopez et al. (2021) identified issues in DRRM team training and documentation despite good overall compliance, and Arun (2024) highlighted implementation challenges and the necessity of ongoing review and stakeholder involvement.

Moreover, Tizon and Comighud (2020) linked DRRM effectiveness with the competency of school heads and the strength of monitoring practices.

Table 10

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in Rehabilitation Practices according to Age

Categories	Younger		Older	
B. Rehabilitation Practices	Mean	Interpretation	Mean	Interpretation
As school head, he/she ...				
1. coordinates with government agencies and NGOs for post-disaster recovery assistance.	3.91	High Level	4.33	High Level
2. provides psychological first aid and counseling to affected students and staff.	3.49	Moderate Level	3.85	High Level
3. oversees the repair and reconstruction of damaged school facilities.	4.26	High Level	4.24	High Level
4. ensures the availability of learning continuity plans after a disaster.	4.49	High Level	4.30	High Level
5. provides immediate relief assistance (food, water, supplies) to affected school members.	2.83	Moderate Level	2.76	Moderate Level
6. conducts debriefing sessions for affected school members to assess emotional and mental well-being.	3.02	Moderate Level	2.67	Moderate Level
7. develops and implements long-term recovery plans to strengthen school resilience after disasters.	4.23	High Level	4.03	High Level
Overall Mean	3.75	High Level	3.74	High Level

The overall mean scores for rehabilitation practices were 3.75 for younger and 3.74 for older respondents, reflecting a high practice level. This shows a broad consensus across age groups that rehabilitation efforts are actively carried out.

The highest rating from younger respondents was 4.49 for ensuring learning continuity after a disaster. Among older respondents, the highest score was 4.33 for coordinating with agencies for recovery assistance.

The lowest mean for both groups was in providing immediate relief assistance (2.83 younger; 2.76 older), categorized as a moderate level. This consistent rating implies a shared perception of insufficiency in providing urgent needs after disasters.

This gap suggests that while structural rehabilitation and learning continuity are well-addressed, there is a pressing need to strengthen the school's capability to deliver food, water, and similar support in emergencies. Additionally, Panganiban and Ferrer (2020) found that school heads prioritized restoring infrastructure and maintaining educational continuity, while comparatively less attention and resources were allocated to supporting psychosocial recovery.

Moreover, Quinto and Castillo (2023) examined school heads' views on disaster preparedness and rehabilitation, concluding that greater integration is needed in delivering psychosocial support and enhancing collaboration with external organizations.

Table 11

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in Monitoring and Evaluation according to Age

Categories	Younger		Older	
C. Monitoring and Evaluation	Mean	Interpretation	Mean	Interpretation
As school head, he/she ...				
1. regularly updates the school's DRRM plan based on lessons learned from past disasters.	4.17	High Level	4.27	High Level
2. conducts post-disaster assessments to evaluate school response effectiveness.	4.09	High Level	4.15	High Level
3. gathers feedback from teachers, students, and parents regarding disaster preparedness efforts.	4.13	High Level	4.36	High Level
4. documents and reports DRRM activities to the appropriate authorities.	4.45	High Level	4.45	High Level
5. identifies and addresses gaps in the school's disaster preparedness measures.	4.26	High Level	4.33	High Level
7. establishes a peer-review system for disaster response effectiveness among schools in the district.	4.13	High Level	4.12	High Level
	4.09	High Level	4.03	High Level
Overall Mean	4.19	High Level	4.25	High Level

The overall mean for monitoring and evaluation practices rated by younger respondents was 4.19, and by older respondents was 4.25, indicating a high level. This shows consistency in the perception that school heads are highly engaged in monitoring DRRM initiatives.

Both age groups assigned the highest mean of 4.45 to documentation and reporting of DRRM activities, reflecting the importance attributed to transparent recordkeeping.

The lowest-rated indicator for older respondents was the establishment of a peer-review system (4.03), while for younger respondents, the same indicator was also the lowest, at 4.09.

This may imply that while internal review and evaluation are strong, peer-to-peer or inter-school evaluations may be underutilized, possibly due to a lack of institutional structure supporting such collaboration.

Creating a disaster incident database and establishing a peer-review system were rated slightly lower than other practices but still within the high-level range, which may point to these being less emphasized or less visible to respondents. In addition, it was found that this approach emphasized improving operational workflows, directing data-gathering procedures, and actively engaging teachers in the preparation of MEA reports (Sanchez, Labordo, & Martir, 2024).

Additionally, Jauro, Siason, and Talaman (2023) assessed the Disaster Risk Reduction and Management (DRRM) competencies of school principals in Guimaras Island, in which results revealed that the principals exhibited strong skills in conducting risk assessments, maintained a solid level of preparedness, and showed notable proficiency in emergency response.

Table 12

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in Prevention and Mitigation Practices according to Sex

Categories	Male		Female	
A. Prevention and Mitigation Practices	Mean	Interpretation	Mean	Interpretation
As school head, he/she ...				
1. conducts risk assessments to identify potential hazards.	4.56	Very High Level	4.51	Very High Level
2. implements disaster-resilient infrastructure improvements.	4.26	High Level	4.15	High Level

3. conducts disaster preparedness orientations for students and staff.	4.49	High Level	4.54	Very High Level
4. integrates DRRM concepts into the school curriculum.	4.38	High Level	4.24	High Level
5. coordinates with local government and agencies for disaster preparedness initiatives.	4.41	High Level	4.29	High Level
6. ensures emergency exits, alarms, and safety measures were in place and functional.	4.41	High Level	4.29	High Level
7. conducts regular earthquake or fire drills in the school.	4.69	Very High Level	4.61	Very High Level
Overall Mean	4.46	High Level	4.38	High Level

Male and female respondents rated school heads' practices in prevention and mitigation at a high level, with means of 4.46 and 4.38, respectively. This indicates uniformity in perception, with a slight edge in higher ratings from male respondents.

The highest score among males was 4.69 for earthquake or fire drills, while among females, the highest was 4.61 for the same indicator. Both sexes rated risk assessments highly (4.56 males, 4.51 females), showing shared appreciation for proactive measures.

The lowest mean among females was 4.15 for infrastructure improvements, while for males, it was 4.26, indicating a high level.

This pattern implies that while both groups value preparedness, structural aspects need further support, possibly due to funding or logistical constraints.

In some cases, it was suggested that research in public elementary schools during the 2020–2021 school year revealed a high level of DRRM program implementation. Notably, the study identified significant differences in implementation levels across profile variables, including sex (Calegu, 2021).

Table 13

Level of School Heads' Practices in the School's Disaster Risk Reduction Management Program in Rehabilitation Practices according to Sex

Categories	Male		Female	
B. Rehabilitation Practices	Mean	Interpretation	Mean	Interpretation
As school head, he/she ...				
1. coordinates with government agencies and NGOs for post-disaster recovery assistance.	4.26	High Level	3.93	High Level
2. provides psychological first aid and counseling to affected students and staff.	3.69	High Level	3.59	High Level
3. oversees the repair and reconstruction of damaged school facilities.	4.33	High Level	4.17	High Level
4. ensures the availability of learning continuity plans after a disaster.	4.54	Very High Level	4.29	High Level
5. provides immediate relief assistance (food, water, supplies) to affected school members.	2.79	Moderate Level	2.80	Moderate Level
6. conducts debriefing sessions for affected school members to assess emotional and mental well-being.	2.82	Moderate Level	2.93	Moderate Level
7. develops and implements long-term recovery plans to strengthen school resilience after disasters.	4.08	High Level	4.22	High Level
Overall Mean	3.79	High Level	3.70	High Level

The overall mean for rehabilitation practices was 3.79 for male respondents and 3.70 for females, within the high-level range. Male respondents rated several practices higher, but female respondents gave a slightly higher score to psychosocial support.

The highest-rated item by males was 4.54 for ensuring learning continuity; females rated 4.29, which is still high. For both sexes, the lowest-rated item was immediate relief (2.79 males; 2.80 females) at a moderate level. This suggests a shared concern that immediate needs such as food and supplies may not be adequately addressed following a disaster.

The implication is that while recovery planning and infrastructure are well-managed, urgent humanitarian responses are viewed as underdeveloped.

This also shares a similar correlation with the 2023 study titled “Disaster Risk Reduction Management Program and Capabilities of Public Schools in the Province of Bulacan,” which examined how DRRM initiatives were carried out across its four core components, including rehabilitation. Results showed that rehabilitation efforts were effectively executed. Furthermore, statistical tests revealed no significant variation in responses between male and female participants, indicating a generally uniform and favorable perception of rehabilitation practices regardless of gender.

Moreover, the 2020 study titled *Implementation of the School Disaster Risk Reduction Management in Public Elementary Schools in Region VIII* assessed how DRRM was carried out, with attention to several components, including rehabilitation. Findings revealed that all areas, including rehabilitation, were implemented significantly. Although the study did not explicitly examine differences in perception based on gender, the consistently high scores indicate broad agreement on the effectiveness of the rehabilitation measures.

Conclusion:

The study revealed that school heads generally exhibited high levels of practice and compliance in implementing Disaster Risk Reduction and Management (DRRM) programs, particularly in safety drills, risk assessments, and documentation. However, significant gaps were identified in psychosocial support and immediate relief efforts. Demographic factors such as age, educational attainment, and length of service influenced perceptions and implementation, with more experienced and highly educated leaders demonstrating greater critical awareness, especially in strategic areas. Both male and female respondents shared similar views on strengths in preparedness and weaknesses in collaboration and mental health support. While DRRM implementation is largely effective, its inclusivity and sustainability remain limited. The study recommends enhancing capacity-building efforts focused on psychosocial and relief operations, strengthening monitoring systems through data analytics and stakeholder engagement, institutionalizing peer-mentoring structures, and integrating DRRM into the curriculum to promote resilience and community participation. Additionally, increased funding and logistical support are essential for improving emergency infrastructure and sustaining training programs. These findings underscore the need for a shift from mere compliance to a more holistic, resilient, and people-centered approach to disaster preparedness and response in schools.

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