

**School disaster risk reduction management preparedness:
comprehensive disaster management plan**

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ABSTRACT

Schools are not only sites of learning but also often serve as potential evacuation shelters. The study determined the disaster risk reduction management preparedness of the selected elementary schools of Consolacion District II, Consolacion, Cebu, during the school year 2025-2026, as a basis for a comprehensive disaster management plan. The study was conducted at selected public elementary schools of Consolacion District II for the school year 2025-2026, with over 50 respondents. Further, the study employed the random sampling method. The questionnaire used was an adapted questionnaire. The study involved the correlational method. The following statistical treatments were used: simple percentage, while weighted mean, and the Pearson-Moment Product Correlation R were used to statistically solve. The results revealed that the respondents are mostly mid-career, predominantly female classroom teachers with bachelor's degrees and moderate teaching experience, while only a few have advanced degrees and most have limited professional training exposure. In terms of disaster risk reduction management, the school demonstrates a very high level of preparedness in hazard identification and mitigation, and a strong level of readiness in response planning, drills, family involvement, and community-based recovery activities. Overall, the school experiences minimal challenges in DRRM implementation, with only minor concerns related to limited rescue equipment and insufficient budget allocation for essential supplies, which are not considered major barriers to its overall preparedness. Furthermore, all variables are interpreted as not significant since their p-values exceed the 0.05 level of significance. Therefore, it is recommended that the proposed output of the study be adopted to strengthen the school disaster preparedness.

Keywords: Administration and supervision, school disaster risk reduction management preparedness, comprehensive disaster management plan, descriptive-correlational method, Consolacion, Cebu, Philippines.

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INTRODUCTION

The Philippines is among the most disaster prone countries in the world, frequently experiencing typhoons, earthquakes, floods, landslides, and other hazards that threaten communities and disrupt educational processes (Baluran, 2023; Nassirpour et al., 2018). In this context, schools assume responsibilities that extend beyond their primary role as centers of learning because they may also function as temporary evacuation centers during emergencies (Tsioulou et al., 2020). This dual role underscores the necessity for educational institutions to be adequately prepared to reduce disaster risks, protect learners and school personnel, and maintain the continuity of education before, during, and after disruptive events (Opabola & Galasso, 2024). Effective Disaster Risk Reduction and Management, or DRRM, is therefore essential to safeguarding lives and upholding learners' right to quality education even under hazardous conditions (Cruz & Ormilla, 2022; Manliguez et al., 2023). Despite the existence of DRRM policies and institutional frameworks, however, school leaders and DRRM coordinators continue to encounter difficulties related to limited contextualized planning tools and insufficient training opportunities (Pant, 2024; Baluran, 2023). Acierto et al. (2023) similarly identified inadequate personnel, limited financial resources, and insufficient DRRM education as persistent barriers to effective implementation.

The continuing vulnerability of schools to disasters demonstrates that preparedness cannot be understood solely as compliance with established policies. It also requires the capacity of teachers, school leaders, learners, families, local governments, and communities to anticipate hazards, communicate risks, act appropriately during emergencies, and recover afterward. International evidence indicates that substantial gaps remain in the institutionalization of school disaster preparedness. Although the Comprehensive School Safety Framework has been widely adopted, fewer than half of countries restrict the use of schools as evacuation shelters, and only a small proportion integrate disaster management into teacher education programs (Paci Green et al., 2019). These limitations illustrate the continuing gap between formal disaster preparedness frameworks and the development of sustained capacities among education stakeholders.

A similar concern is evident in the Philippine setting. Existing studies have largely focused on measuring levels of disaster preparedness and implementation (Acierto et al., 2023; Arcegonon et al., 2024), but relatively limited empirical evidence explains how teachers' DRRM knowledge and training are translated into actual school practices (Baluran, 2023; Lapada, 2022). This distinction is important because knowledge of disaster protocols does not necessarily guarantee effective action during emergencies. Preparedness involves the integration of knowledge, institutional support, available resources, established procedures, risk communication, and repeated practice. Within Region VII, particularly in Cebu Province, localized investigations of DRRM preparedness among elementary schools remain scarce despite the continuing exposure of communities to natural hazards. This lack of localized evidence limits the capacity of schools and education authorities to determine whether existing preparedness mechanisms correspond to the actual needs and conditions of particular communities.

The multidimensional character of school disaster preparedness is explained through Ecological Systems Theory (Harkonen, 2007), which emphasizes that children's development and wellbeing are shaped by interacting environmental systems. These systems range from immediate settings involving family, school, and peers to broader influences involving community structures, public institutions, cultural norms, and societal values. Applied to DRRM, the theory suggests that the preparedness of an elementary school cannot be attributed solely to internal school systems. It is also influenced by local government DRRM policies, national education mandates, parental participation, community hazard awareness, available

resources, and prevailing attitudes toward safety. Children's safety and resilience therefore depend on interactions across these different ecological contexts.

Through the perspective of Ecological Systems Theory, assessing school preparedness requires attention to both institutional conditions and the broader environment in which schools operate (Harkonen, 2007). Local government support may strengthen school preparedness through resources, training, technical assistance, and coordinated emergency response, while weak coordination may constrain implementation. Parents and communities can likewise contribute knowledge, support evacuation planning, participate in drills, and reinforce disaster awareness beyond school premises. National policies establish expectations for preparedness, but their effectiveness depends on how these expectations are interpreted and enacted within local contexts. Consequently, school DRRM preparedness is best understood as the product of interacting ecological systems rather than as an isolated function of school administration.

This perspective is complemented by Resilience Theory (Moore, 2019), which focuses on the capacity of individuals, groups, and institutions to absorb shocks, adapt to changing circumstances, and recover from disruptive events. In school settings, resilience suggests that preparedness involves more than the presence of emergency protocols. It also requires the development of adaptive capacities among teachers, learners, administrators, and the institution as a whole. Strong social support networks, established and regularly practiced emergency routines, access to psychosocial resources, flexible systems, and trained personnel can strengthen the capacity of schools to continue functioning during emergencies and recover afterward.

Resilience Theory further establishes preparedness as a sustained institutional capacity rather than a temporary state of readiness (Moore, 2019). Schools that demonstrate resilience are able to anticipate potential threats, adapt their operations under difficult conditions, protect vulnerable members of the school community, and restore educational processes after disruptions. From this perspective, assessing DRRM preparedness requires identifying protective factors embedded within school culture, operations, relationships, and educational practices. Such an approach allows preparedness to be evaluated in terms of long term adaptive strength rather than simple compliance with emergency procedures.

Risk Communication Theory provides another important dimension for understanding school DRRM preparedness. Hendricks (2024) emphasized that preparedness depends substantially on how information about risks is developed, communicated, interpreted, and acted upon by stakeholders. In elementary schools, effective risk communication requires clear, timely, accurate, and understandable information among school administrators, teachers, learners, parents, communities, and disaster authorities. When stakeholders understand hazards and know the actions expected of them, they are better positioned to respond appropriately to warnings and emergency instructions.

Risk Communication Theory also stresses that communication must be adapted to the characteristics of the intended audience (Hendricks, 2024). This consideration is particularly important in elementary schools because young learners may require age appropriate explanations, visual materials, repeated demonstrations, and practical exercises to understand disaster risks and emergency procedures. Effective communication therefore involves more than issuing warnings. It includes early warning systems, clear emergency instructions, reliable communication channels, consistent messaging, and strategies that allow children and adults to understand and act upon risk information. This theoretical perspective supports the assessment of whether schools possess communication mechanisms that can facilitate coordinated and timely responses during emergencies.

The psychological processes underlying protective behavior are further explained by Protection Motivation Theory, as applied by Hopkins, C., et al. (2024). The theory proposes that protective actions are influenced by threat appraisal, which involves perceptions of the seriousness of a threat and one's vulnerability to it, and efficacy appraisal, which involves beliefs concerning the effectiveness of protective actions and one's capacity to perform them. Hopkins, C., et al. (2024) found that both threat appraisal and efficacy appraisal strongly predicted intentions to engage in climate change mitigation behaviors. These associations were observed among individuals who accepted the reality of climate change and among those who denied it, although the influence of threat and efficacy differed somewhat across these groups.

Hopkins, C., et al. (2024) also examined collective threat and collective efficacy and found that these constructs provided some additional predictive value but did not substantially improve the model beyond individual level appraisals. Furthermore, although messages intended to increase perceptions of threat or efficacy produced some changes in perceptions, they did not consistently result in stronger intentions to engage in mitigation behaviors. These findings have important implications for school disaster preparedness because awareness of risk alone may not be sufficient to generate protective behavior. Teachers and other school stakeholders must also believe that recommended preparedness measures are effective and that they possess the competence and resources needed to carry them out. Thus, preparedness involves both awareness of hazards and confidence in one's ability to respond effectively.

The theoretical foundations of the study are reinforced by the Philippine Disaster Risk Reduction and Management Act of 2010, or Republic Act No. 10121. This law establishes a comprehensive, proactive, and community based approach to DRRM and mandates the strengthening of preparedness, mitigation, response, and recovery mechanisms across government institutions and communities. It also created the National Disaster Risk Reduction and Management Council and established the national policy direction for disaster resilience. Within the education sector, Republic Act No. 10121 emphasizes the development of resilient learning environments through DRRM integration in institutional plans, safe facilities, regular drills, awareness activities, and coordinated preparedness mechanisms.

Republic Act No. 10121 provides the overarching legal basis for evaluating disaster preparedness in schools because it emphasizes capacity building, proactive planning, risk reduction, and community participation. Its provisions support the establishment of functional DRRM structures, contingency plans, communication systems, and regular exercises that prepare institutions for emergencies. These requirements correspond directly with major indicators of school readiness and reinforce the responsibility of educational institutions to contribute to community resilience. The law therefore establishes that school preparedness is not merely desirable practice but an institutional responsibility aligned with national disaster risk governance.

The Comprehensive Disaster Risk Reduction and Management in Education Framework under DepEd Order No. 37, s. 2015 further operationalizes Republic Act No. 10121 within the education sector. It provides a structured framework for integrating DRRM into education governance and assigns responsibilities to Department of Education offices, school administrators, and personnel. The framework encompasses prevention and mitigation, preparedness, response, and recovery, thereby promoting a comprehensive approach to school safety. It also promotes DRRM integration into the curriculum, teacher capacity development, partnerships with local government units and organizations, and institutional mechanisms that support safer and more resilient schools.

DepEd Order No. 37, s. 2015 also provides concrete reference points for assessing school preparedness. These include functional school DRRM committees, disaster awareness education, safe learning facilities, early warning mechanisms, institutional preparedness plans, stakeholder participation, and learning continuity arrangements. By integrating risk reduction

into school governance, curriculum, infrastructure, and community engagement, the framework emphasizes that school preparedness requires coordinated action across multiple dimensions. Its provisions therefore strengthen the relevance of examining both institutional mechanisms and teacher capacity when evaluating DRRM implementation.

The School Based Disaster Preparedness and Response Measures under DepEd Order No. 33, s. 2021 further enhance these provisions by specifying procedures that schools should implement before, during, and after emergencies. The policy addresses risk assessment, early warning systems, evacuation procedures, situational monitoring, rapid response mechanisms, information management, coordination with local DRRM councils, and continuity of learning. It also emphasizes functional School DRRM Teams, emergency kits, psychological first aid, and psychosocial support for learners and personnel. The inclusion of psychosocial wellbeing recognizes that disaster response involves not only physical safety but also the emotional and psychological needs of affected school communities.

The importance of these policy expectations is supported by Philippine research examining DRRM implementation in schools. Domingo Dela Cruz and Ormilla (2022) found that public elementary schools in Ifugao had made considerable progress in establishing safe learning facilities, organizing school based DRRM committees, and integrating DRRM concepts into the curriculum. Nevertheless, their findings showed that disaster preparedness activities still required improvement. Similarly, Acierto, Robas, and Monte (2023) examined DRRM implementation in 11 elementary schools in Santiago District using Gawad Kalasag criteria and found that safe learning facilities were fully implemented. In contrast, the enabling environment and school DRRM criteria were only partially implemented, with DRR in education emerging as the weakest area. These findings suggest that structural preparedness may progress more rapidly than instructional and institutional dimensions of DRRM.

Teacher knowledge and readiness are also central to school preparedness. Manuel and Arias (2025) evaluated disaster management knowledge and practices among elementary school teachers in Cotabato and found generally good levels of knowledge and readiness, although gaps remained in areas such as early warning system installation and prioritization of personal safety. Similarly, Manuel et al. (2025) reported that teachers in Cotabato demonstrated good knowledge of disaster management but still encountered weaknesses in early warning systems and personal safety practices. These findings indicate that knowledge alone does not guarantee comprehensive preparedness. Effective implementation also depends on structural mechanisms, adequate resources, repeated drills, and institutional support.

This conclusion is consistent with the international literature. Goswami and Ahmad (2025), in their analysis of 67 Indian studies, identified hazard mapping, student led education, and community partnerships as important DRR strategies in schools. At the same time, they identified persistent challenges related to insufficient teacher training and weak policy support. Pal et al. (2023), through an assessment of schools exposed to multiple hazards, likewise concluded that disaster resilient education systems must integrate structural resilience, including safe facilities, with psychosocial resilience, including coping capacities. Such findings support a comprehensive understanding of preparedness that incorporates infrastructure, institutional systems, human capacity, communication, and psychological readiness.

The role of demographic and socioeconomic contexts has also emerged as an important consideration in DRRM research. Cvetkovic et al. (2024), in Serbia, found that demographic and socioeconomic factors influenced students' and teachers' perceptions of disaster risk reduction in schools. Their multivariate analysis indicated that age, gender, and parental education shaped perceptions of disaster safety, suggesting that DRR education and

preparedness initiatives should be responsive to particular community characteristics. Cvetkovic et al. (2024) further showed that teachers' age, gender, marital status, education level, and socioeconomic conditions affected attitudes toward DRRM education and school safety. These findings demonstrate that preparedness initiatives may be interpreted and implemented differently according to the personal and social characteristics of participants

Philippine studies similarly present varying relationships between teacher characteristics and DRRM participation. Quiachon (2024) found in Capiz that teachers' age, years of experience, and educational attainment were positively associated with their involvement, resiliency, and compliance in school risk reduction activities. More experienced teachers demonstrated greater resiliency, suggesting that accumulated professional exposure may strengthen commitment to disaster preparedness. In contrast, Parcon et al. (2025) reported in Iloilo that younger and less experienced teachers demonstrated stronger engagement in DRRM implementation and community participation, which may indicate greater openness to new preparedness approaches among teachers earlier in their careers. Polinar and Gonzaga (2023), meanwhile, found that demographic variables such as sex, age, number of trainings, and years of service did not significantly differentiate teachers' awareness levels, although teachers' involvement in DRRM was strongly associated with their awareness. Taken together, these studies indicate that teacher characteristics may influence preparedness in complex and context dependent ways and therefore warrant localized investigation.

International findings reinforce this observation. A study involving teachers in special needs schools in Japan reported by Sustainability (2022) found that disaster prevention awareness was significantly associated with age, years of teaching experience, and previous disaster exposure. Teachers with greater experience generally demonstrated stronger concern regarding disaster preparedness, suggesting that personal and professional encounters with risk can heighten preparedness awareness. These findings converge with the results of Cvetkovic et al. (2024) in showing that individual characteristics and environmental experience can affect perceptions, attitudes, and responses to disaster risk.

Beyond individual characteristics, strong connections between schools and communities are essential for preparedness. Rico (2019) argued that school and community collaboration significantly strengthens disaster preparedness by positioning schools as important centers of community resilience rather than isolated institutions. Schools depend on local governments, families, emergency responders, and community organizations for resources, information, coordination, and support before and during emergencies. This perspective strongly corresponds with Ecological Systems Theory because effective school preparedness develops through relationships across institutional and community environments rather than through school action alone.

Research also identifies institutional constraints that can undermine these collaborative efforts. A study of School Disaster Risk Reduction and Management implementation in Bayugan City identified inadequate funding, insufficient resources, weak collaboration, and limited training opportunities as major challenges. Malahay (2025) similarly found that secondary school educators in Negros Oriental encountered gaps in institutional support for disaster readiness initiatives and emphasized the need for stronger government leadership, resource mobilization, and coordination among school personnel, parents, and local agencies. These findings reinforce the argument that teacher preparedness must be supported by functional institutional structures and adequate material resources.

Comparable barriers have been reported internationally. Cvetkovic et al. (2024) found in Serbia that teachers encountered limited financial and human resources, heavy curricular demands, and insufficient legal mandates when attempting to integrate disaster risk reduction into classroom activities. Research in inclusive school settings in Indonesia likewise indicated uneven DRR understanding among teachers and learners because of limited capacity

development and insufficient training. Many teachers lacked the expertise necessary to integrate DRR meaningfully into the curriculum, while immersive and action based strategies such as simulations and games were rarely employed. These findings demonstrate that formal recognition of DRRM does not automatically result in effective classroom integration when teachers lack appropriate preparation and institutional support.

The continuity of learning is another central dimension of disaster preparedness. The Department of Education has connected stronger typhoon and disaster preparedness measures with the protection of educational continuity during emergencies. Alternative learning delivery mechanisms, including dynamic learning program materials and EduKahon kits, have been deployed to affected schools to reduce prolonged disruption among learners and teachers (Sevillano, 2025). Such initiatives demonstrate that preparedness encompasses not only immediate emergency response but also systems that allow education to continue when regular classroom conditions are disrupted.

The relationship between institutional preparedness and individual protective behavior further demonstrates the importance of disaster education. Wang et al. (2023) found in China that higher levels of school preparedness were positively associated with students' protective behaviors. More importantly, disaster education mediated this relationship, indicating that organized disaster education helps translate institutional readiness into individual resilience and protective action. These findings suggest that physical safety measures and administrative procedures are more effective when accompanied by structured learning experiences that help students understand risk and practice appropriate responses. A scoping review conducted by the BMC Public Health team (2025) likewise identified disaster preparedness education as an expanding global priority and concluded that formal DRRM education can address major gaps in public resilience while producing sustained effects at the community level.

The convergence of these findings suggests that comprehensive school DRRM preparedness is shaped by structural, institutional, educational, psychological, communicative, and community related factors. Ecological Systems Theory (Harkonen, 2007) explains the interconnected systems that influence preparedness, while Resilience Theory (Moore, 2019) emphasizes schools' adaptive capacities to anticipate, withstand, and recover from disasters. Risk Communication Theory (Hendricks, 2024) highlights the role of clear and appropriate information in enabling coordinated protective action, whereas Protection Motivation Theory, as applied by Hopkins, C., et al. (2024), explains how perceptions of threat and coping efficacy influence individual willingness to engage in protective behaviors. These theoretical perspectives converge with Republic Act No. 10121, DepEd Order No. 37, s. 2015, and DepEd Order No. 33, s. 2021, all of which establish institutional expectations for comprehensive, coordinated, and sustained school disaster preparedness.

The literature nevertheless demonstrates that significant gaps persist between policy expectations, teacher knowledge, institutional resources, and actual preparedness practices. Studies consistently identify problems involving inadequate financial and human resources, insufficient training, limited collaboration, weak early warning mechanisms, uneven DRRM integration in instruction, and inadequate opportunities for teachers to translate theoretical knowledge into practical preparedness. Although research conducted in various Philippine localities has examined levels of preparedness, teacher awareness, institutional implementation, and community participation, localized empirical evidence concerning elementary schools in Consolacion District II remains limited. This gap is important because preparedness is highly dependent on local hazard exposure, available resources, institutional conditions, community relationships, and teacher capacity.

Preliminary observations in selected elementary schools in Consolacion District II further suggest the need for localized assessment because only a limited number of teachers have reportedly participated in relevant DRRM seminars, workshops, and training programs. Insufficient access to such professional development opportunities may affect teachers' preparedness and their capability to respond effectively during emergencies. Since teachers are directly responsible for guiding learners, implementing emergency procedures, communicating safety information, and supporting educational continuity, their preparedness is central to the overall resilience of schools. However, no comprehensive study has yet examined the disaster risk reduction management preparedness of elementary school teachers in this locality or systematically connected their level of preparedness with the challenges they encounter.

Against this background, the present study assumes that teachers' level of school disaster risk reduction management preparedness influences the level of challenges they encounter. It therefore seeks to determine the disaster risk reduction management preparedness of selected elementary schools in Consolacion District II, Consolacion, Cebu, during the school year 2025 to 2026. By generating localized evidence concerning preparedness and the challenges associated with its implementation, the study responds to gaps identified in both local and international literature. Its findings are intended to provide a basis for school administrators, district officials, teachers, local government partners, and other stakeholders to design appropriate capacity building programs, broaden teacher participation in relevant seminars, workshops, and training, strengthen school policies and institutional support, improve communication and coordination mechanisms, and develop a contextualized comprehensive disaster management plan. Through these efforts, the study ultimately seeks to strengthen school preparedness and resilience, protect learners and personnel, support educational continuity, and enhance the safety of the entire school community.

Statement of the problem

The study determined the disaster risk reduction management preparedness of the selected elementary schools of Consolacion District II, Consolacion, Cebu, during the school year 2025-2026, as a basis for a comprehensive disaster management plan.

Specifically, it answered the following subproblems:

1. What are the respondents' profiles in terms of age, gender, designation, highest educational attainment, length of teaching experience, and relevant training and seminars?
2. What is the respondents' level of school disaster risk reduction management preparedness in terms of identifying hazards, mitigating hazards, developing a response plan, implementing drills and family education, and establishing a coping plan after a disaster?
3. What is the respondents' level of challenges encountered in the school's disaster risk reduction management preparedness?
4. Is there a significant relationship between the respondents' level of school disaster risk reduction management preparedness and their level of challenges encountered?
5. Based on the findings of the study, what comprehensive disaster management plan can be developed?

METHODOLOGY

This research employed a descriptive-correlational research design, utilizing an adapted questionnaire to determine the disaster risk reduction management preparedness of the selected elementary schools of Consolacion District II, Consolacion, Cebu, during the school year

2025-2026, as a basis for a comprehensive disaster management plan. Specifically, the study examined the profile of the respondents, the level of school's disaster risk reduction management preparedness, the level of challenges encountered in the school's disaster risk reduction management preparedness, and the significant relationship between the respondents' level of school's disaster risk reduction management preparedness and their level of challenges encountered. Further, the study employed the random sampling method, which required only a short period to accomplish since the respondents were available in the locale of the study. The researcher preferred to use these methods because they required accessibility and punctuality to be obtained by the researcher.

The research followed a system model employing the input, process, and output approaches. The input consisted of the profile of the respondents, the level of school's disaster risk reduction management preparedness, the level of challenges encountered in the school's disaster risk reduction management preparedness, and the significant relationship between the respondents' level of school's disaster risk reduction management preparedness and their level of challenges encountered. The process encompassed the method of gathering and synthesizing variables, including the method, gathering of data, organization of data, and analysis of data, whereby the questionnaire results were tabulated, analyzed, computed, and evaluated to determine the results. The output of the research provided the researcher with empirical data to develop and implement a comprehensive disaster management plan aimed at amplifying the disaster risk reduction management preparedness of the selected elementary schools of Consolacion District II, Consolacion, Cebu, which included the following elements: areas of concern, objectives, strategies, persons involved, budget, source of budget, time frame, expected outcome, and actual accomplishment.

The study was conducted in the selected public elementary schools of Consolacion District II. Public elementary schools in Consolacion District II have developed over the years from small, community-supported learning centers into fully established public institutions that cater to the growing population of the municipality, their history shaped by the community's commitment to making education accessible to all children, often beginning with modest facilities and limited instructional materials. As enrollment increased and national education reforms were introduced, these schools gradually improved their infrastructure, expanded their academic programs, and strengthened partnerships with local government units to support learners' holistic development. In addition, the lived experiences of stakeholders within these schools reveal a dynamic environment shaped by both opportunities and challenges, as teachers and administrators consistently navigate issues related to overcrowded classrooms, varied learner needs, and resource limitations, yet also demonstrate resilience through collaboration and innovative teaching practices, while parents and community members actively participate in school activities, recognizing their important role in supporting children's education. Furthermore, disaster preparedness has become a central concern for public elementary schools in Consolacion District II due to the region's vulnerability to natural hazards such as typhoons, flooding, and earthquakes, and over time, schools have strengthened their disaster risk reduction and management (DRRM) initiatives by conducting regular drills, establishing school-based DRRM committees, and integrating disaster awareness topics into the curriculum.

The respondents of the study were the random public elementary school teachers of the above-mentioned district, and the total number of respondents of the study was 50, computed through percentage. Of the total respondents, 10, or 20.00%, were from School A, 10, or 20.00%, were from School B, 10, or 20.00%, were from School C, 10, or 20.00%, were from School D, and 10, or 20.00%, were from School E, for a total of 50, or 100.00%. This

distribution shows that 50, or 100.00%, of the total respondents are all teachers, and further shows that these are public elementary school teachers of the chosen district. The municipality of Consolacion, Cebu provides a suitable and relevant environment for a study on disaster risk reduction and management (DRRM) preparedness among selected elementary schools due to its geographic location, population density, and exposure to multiple natural and human-induced hazards. Situated in a coastal and low-lying area of Metro Cebu, Consolacion is vulnerable to flooding, storm surges, earthquakes, and the impacts of strong typhoons, which are common in the region, and these recurring hazards necessitate effective preparedness measures, particularly in schools where young learners are highly vulnerable during emergencies. Moreover, Consolacion hosts a growing number of public elementary schools serving densely populated communities, making it an appropriate setting to assess how institutional readiness, safety policies, and disaster response mechanisms are implemented at the grassroots level.

The study employed an adapted and modified survey questionnaire from the study of Ozmen, F. (2006) and Morcilla (2023), and the research-based questionnaire was composed of three (3) parts. The first part answered the profiles of the respondents, particularly as to their age, gender, designation, highest educational attainment, length of teaching experience, and relevant training and seminars. The second part answered the respondents' level of school's disaster risk reduction management preparedness, in terms of identifying hazard, mitigating hazard, developing a response plan, implementing drills/family education, and coping plan after disaster, which comprises five equal statements per sub-variable. The third part answered the respondents' level of challenges encountered in the school's disaster risk reduction management preparedness, which comprises a total of 10 statements.

The data gathering procedures detailed the methods, instruments, and protocols used in the collection process to ensure that the information obtained was valid, reliable, and appropriate for the objectives of the study. During the preliminary stage, the researchers sent a transmittal letter to the public schools' district supervisor and school principal to ask permission to conduct the study, and once approved, the researcher arranged with the schedule when to meet the respondents and conduct the study. During the data gathering stage, on the scheduled day, the researchers facilitated an orientation regarding the research, during which salient issues such as the purpose of the study, its procedure, and how the confidentiality of the respondents was protected were discussed, followed by the administration of the survey questionnaires, with instructions given on how to answer them; assistance was also provided while the respondents were answering the survey questionnaires, enough time was given to answer the said questionnaires, and retrieval of the questionnaires followed. During the post data gathering stage, the study tallied, organized, summarized, interpreted, and analyzed the results, and appropriate statistical tools were used in the treatment of data.

The study involved the correlational method, and the following statistical treatments were used. Simple percentage was used for the percentage of the respondents' profiles, describing the profile and frequency of the respondents. Weighted mean determined the distribution results of the level of school's disaster risk reduction management preparedness and level of challenges encountered in the school's disaster risk reduction management preparedness. The Pearson-Moment Product Correlation R tested the significant relationship between the respondents' level of school's disaster risk reduction management preparedness and their level of challenges encountered.

The researcher used the Five-point Likert Scale, which requires an individual participant to respond to a series of statements in the questionnaire as to the level of school's disaster risk reduction management preparedness and level of challenges encountered in the school's disaster risk reduction management preparedness. A scale of 5, with a range of 4.21-5.00, corresponds to the category Very High, with the verbal description that the practice

applies to a very great extent. A scale of 4, with a range of 3.41-4.20, corresponds to the category High, with the verbal description that the practice applies to a great extent. A scale of 3, with a range of 2.61-3.40, corresponds to the category Moderate, with the verbal description that the practice applies to a moderate extent. A scale of 2, with a range of 1.81-2.60, corresponds to the category Low, with the verbal description that the practice applies to a lesser extent. A scale of 1, with a range of 1.00-1.80, corresponds to the category Very Low, with the verbal description that the practice applies to a very little extent.

This study was guided by a set of ethical principles that informed the research design and practices, including voluntary participation, informed consent, anonymity, and confidentiality. With regard to voluntary participation, the study focused on the respondents' engagement and cooperation, and teacher respondents from the aforementioned research context were informed of their voluntary participation in the study. With regard to informed consent, the study was open about the goals and objectives of both the researcher and the respondents. With regard to anonymity, the respondents' profiles and data were likewise kept confidential during the study, and as a result, teacher respondents were assured that their privacy was respected with maximum discretion. With regard to confidentiality, the study ensured the confidentiality of the respondents' profiles, answers, and any data obtained, and respondents were guaranteed that any information gathered throughout the procedure was kept private and silent.

CONCLUSION

Based on the findings of the study, it is concluded that the disaster risk reduction management preparedness of the selected elementary schools in Consolacion District II, Consolacion, Cebu, during the school year 2025–2026 was generally evident across the assessed areas. However, opportunities remain to strengthen teachers' participation in DRRM-related training and further enhance school preparedness. Moreover, the analysis revealed that the respondents' profile variables had no significant relationship with their level of disaster risk reduction management preparedness, indicating that preparedness was generally consistent regardless of their demographic characteristics.

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