



SCHOOL LEADERS' PROFICIENCY AND THE SCHOOL DISASTER RISK REDUCTION MANAGEMENT PROGRAM IMPLEMENTATION

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ABSTRACT

The study evaluated the proficiency of school leaders in disaster management and the implementation of Disaster Risk Reduction and Management (DRRM) programs in selected schools in the Caloocan North District, involving 136 teachers and 33 school leaders from four schools. Using a descriptive-evaluative method and a survey via Google Forms, it analyzed proficiency levels and DRRM implementation using weighted mean, z-test, Pearson R, and Likert scale. Teachers rated school leaders' proficiency in preparedness, mitigation, and resiliency as moderately proficient, while school leaders rated themselves as highly proficient. Teachers identified a gap in capacity building for teachers, staff, parents, and learners, rating it as slightly proficient. The study found significant differences between teacher and school leader assessments of preparedness, mitigation, and resiliency, with teachers rating DRRM implementation as moderately implemented and school leaders rating it as highly implemented. Teachers identified deficiencies in early warning systems, community coordination, and recovery seminars. The study recommended disaster preparedness activities and capacity-building programs to enhance awareness and preparedness. A significant relationship was found between school leaders' proficiency and DRRM implementation, with a p-value of .03 indicating statistical significance.

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Keywords: *SDDRM, School leaders, Disaster, Disaster risk management, preparedness, mitigation, resiliency*

INTRODUCTION

Disasters disrupt daily life and negatively affect people's quality of life, impacting social, economic, emotional, and psychological aspects (Rico, 2019). The Philippines, ranked third globally for disaster risk by the UN Office of Disaster Risk Reduction (2019), experiences numerous natural and man-made risks. In March 2022, Caloocan City experienced multiple earthquakes, highlighting the need for effective Disaster Risk Reduction and Management (DRRM) in schools. Despite the earthquakes causing no casualties, it remains the responsibility of school leaders and teachers to ensure student safety on school grounds (Jasojaso, 2020).

The Department of Education (DepEd), as part of the National Disaster Risk Reduction and Management Council (NDRRMC), emphasizes disaster risk reduction to improve access, quality, and governance in education. The Disaster Risk Reduction and Management Service (DRRMS) was established to promote a safe learning environment aligned with the Philippine DRRM Act of 2010 (RA 10121), focusing on prevention, mitigation, preparedness, response, recovery, and rehabilitation. According to Department Order no. 21, s. 2015, school heads are responsible for DRRM implementation and must appoint an SDRRM coordinator to lead the DRRM team, which includes coordinators, teachers, and volunteers.

However, studies highlight issues with DRRM implementation. Tamboboy (2020) identified the need for better integration of disaster risk information in school curricula. Borromeo (2022) found that while school heads report implementing DRRM programs, there is a lack of continuous training and meetings for damage assessment. Ventura (2022) noted that schools need to improve facility inspections, DRRM equipment assessments, evacuation center management, and student monitoring after disasters.

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Despite disaster preparedness efforts, many still lack adequate information, exacerbating disaster impacts. Strengthening the school community's capacity to respond to disasters through enhanced disaster preparedness plans is crucial. This study aimed to assess school leaders' proficiency in DRRM and the extent of its implementation to empower individuals and groups to reduce disaster vulnerability.

MATERIALS AND METHODS

Research Design

The study employed a descriptive research method due to its appropriateness for the research topic. Chaudhari (2021) noted that a descriptive research design seeks data to methodically characterize a phenomenon, circumstance, or population. It helps answer the what, when, where, and how questions of the research problem, rather than the why. This approach involves a thorough and precise evaluation of the data. Furthermore, a descriptive-evaluative method was used because the researcher aimed to evaluate the school leaders' proficiency level and the extent of school DRRM implementation. According to Lau and Kuziemsky (2017), a descriptive evaluation study explains how a program is developed and implemented, as well as its effects.

Respondents of the Study

The respondents were grouped into two categories: teachers and school leaders from Bagong Silang High School, Camarin High School, Tala High School, and Kalayaan National High School. The researcher included twenty-seven (27) teachers and eight (8) school leaders from Bagong Silang High School, thirty-six (36) teachers and eight (8) school leaders from Camarin High School, forty-two (42) teachers and nine (9) school leaders from Kalayaan National High School, and thirty-one (31) teachers and eight (8) school leaders from Tala High School. In total, one hundred thirty-six (136) teachers and thirty-three (33) school leaders

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participated in the study. Survey questionnaires were distributed via Google Forms, and responses from these schools were used to evaluate and formulate a proposal for an enhanced training plan to guide school heads and DRRM implementers.

Sampling Technique

The researcher employed a purposive sampling technique to select one hundred thirty-six (136) teachers and thirty-three (33) school leaders from the four schools. Purposive sampling, also known as judgmental, selective, or subjective sampling, is a type of non-probability sampling in which researchers use prior knowledge about the study's purpose to select and approach eligible participants (Crossman, 2020). This method allows the researcher to gather a wealth of information from the data collected, enabling discussion on the significance of the findings. To implement this sampling method, the researcher first defined the population and compiled a list of its members. A standardized survey questionnaire in Likert scale format was sent to respondents via Google Forms to collect the necessary information. This sampling technique was appropriate for the study because the researcher categorized the respondents as teachers who are members of the SDRRM team and school leaders, which include department heads and school heads.

Research Instruments

The researcher developed a research instrument using Google Forms to gather data on the extent of school heads' proficiency level and school DRRM implementation. The first part focused on the school leader's proficiency in terms of preparedness, mitigation, and resiliency based on DepEd Order No. 24, s. 2020. The second part assessed the extent of school DRRM implementation in terms of preparedness, mitigation, and resiliency based on the National Disaster Risk Reduction Management (NDRRM) manual. The survey questionnaire was presented to one school head, one MAPEH department head, one master teacher, one English teacher, and one SDRRM coordinator for comments and recommendations to assess its validity. The researcher considered these inputs and consulted with their thesis adviser for

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further advice and recommendations to ensure the questionnaire's validity before preparing the final version for distribution to the target respondents. A pilot test was conducted with a small group of fifteen (15) public school teachers from Sampaguita High School to examine the validity of each question in the research instrument. The instrument was found to be understandable, acceptable, and free of potential issues that could arise during data collection.

Data Gathering Procedure

Before distributing the research instruments, the researcher sought permission from the School's Division Office to conduct the study at the concerned schools. Request letters were sent to school principals and department heads to conduct the study in their schools. Respondents were informed about the study's objectives and assured that their responses would be kept confidential. After receiving approval, the researcher provided the teacher and school leader respondents with a Google Form link to the survey questionnaire. The researcher enlisted the assistance of the target schools' heads and department heads to share the survey link to increase response retrieval. Respondents completed the questionnaire at their convenience. The data extracted from Google Forms was classified, organized, and tabulated by the researcher before being given to a statistician for statistical analysis.

RESULTS AND DISCUSSION

1. Proficiency Level of the School Leaders as Assessed by Teachers and School Leaders Themselves

The subsequent tables discussed the proficiency level of the school leaders as assessed by the teachers and school leaders themselves on the variables known as preparedness, mitigation, and proficiency. School leaders were composed of school heads, and department heads. Moreover, weighted mean and its adapted Likert scale were used to expound the gathered data.

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Table 1 presents the indicators for school leaders' proficiency in terms of preparedness. This refers to their level of knowledge, skills, and readiness to handle emergencies or disasters in their schools. Moreover, it includes their understanding of the potential risks and hazards that their schools may face, their ability to create and implement emergency plans and protocols, and their capacity to lead their schools in responding to and recovering from disasters.

Table 1. Proficiency Level of the School Leaders in Terms of Preparedness

INDICATORS	Teachers		School Leaders		Average	
	WM	VI	WM	VI	WM	VI
1. Ensures the establishment of operational Early Warning System.	2.67	MP	3.45	HP	3.06	MP
2. Conducts an annual student-led risk identification and mapping within and around premises for evacuation purposes.	3.03	MP	3.64	HP	3.34	HP
3. Integrates DRRM in all school programs and activities and school improvement plan (SIP).	2.92	MP	3.73	HP	3.33	HP

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4. Provides capacity building for teachers, non-teaching staff, parents and learners on DRRM.	2.20	SL	3.67	HP	2.94	MP
5. Equips internal stakeholders and facilities with emergency medical kit and food supply.	2.89	MP	3.52	HP	3.21	MP
Overall Weighted Mean	2.74	MP	3.60	HP	3.17	MP

Legend: 3.26 – 4.00 Highly Proficient (HP) 1.76 – 2.50 Slightly Proficient (SP)
 2.51 – 3.25 Moderately Proficient (MP) 1.00 – 1.75 Not Proficient (NP)

Table 1 shows the respondents’ assessment on the proficiency level of the school leaders in terms of the first variable known as preparedness. School leader respondents highlighted that school leaders integrate DRRM in all school programs and activities and school improvement plan (SIP) having a weighted mean of 3.73, verbally represented as highly proficient. On the other hand, teacher respondents highlighted that school leaders conducts an annual student-led risk identification and mapping within and around premises having a weighted mean of 3.03 and verbally interpreted as moderately proficient, while the indicator with the lowest weighted mean of 2.20 is the provides capacity building for teachers, non-teaching staff, parents and learners on DRRM, which is verbally interpreted as slightly proficient. This implies that the school leaders should provide in-depth orientations, trainings, and workshops for teachers, school staff, parents, learners and the members of the school disaster risk reduction team.

Meanwhile, teacher respondents assessed preparedness with an overall weighted mean of 2.74 which means moderately proficient and the school leader respondents with an overall weighted mean of 3.60 which means highly proficient. The assessment of the school leader respondents is relatively higher compared to the assessment of the teacher

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respondents in terms of the preparedness proficiency undertaken in the selected public secondary schools.

The result of the study is also supported by Martinez et al. (2020) that all members of the school community must be well-informed about the specific hazards risks in the school through capacity building in order to heighten awareness and preparedness. School leaders should encourage active participation of parents and the community, as well as strong partnerships and links with the local or city government, emergency services, and the Disaster Risk Reduction and Management Council.

Table 2 presents the school leaders' proficiency in terms of mitigation. This refers to their ability to identify, assess, and reduce potential risks and hazards in their schools. Furthermore, it includes their understanding of the different types of risks that their schools may face, such as natural disasters or human-made emergencies, and their ability to implement measures to reduce or prevent their impact.

Assessing the proficiency level of school leaders in terms of mitigation is crucial in ensuring that schools are prepared to address potential risks and hazards. It can help identify areas for improvement and guide the development of strategies and policies to enhance their ability to mitigate risks and protect students and staff. Additionally, it can also help schools to comply with relevant laws, regulations, and standards related to risk management and mitigation

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Table 2. Proficiency Level of the School Leaders in Terms of Mitigation

INDICATORS	Teachers		School Leaders		Average	
	WM	VI	WM	VI	WM	VI
1. Maintains close coordination with local DRRM council for disaster related activities.	2.99	MP	3.61	HP	3.30	HP
2. Conducts monthly disaster awareness drills in accordance to DepEd Order no. 21 s.2015	2.98	MP	3.70	HP	3.34	HP
3. Ensures building construction met the standard requirements to withstand earthquakes.	3.05	MP	3.58	HP	3.32	HP
4. School furniture and equipment are designed and installed to minimize harm to internal stakeholders during disaster.	2.91	MP	3.61	HP	3.26	HP
5. Maintains strong coordination and collaboration of the community people in school DRRM programs and activities.	3.06	MP	3.55	HP	3.31	HP
Overall Weighted Mean	3.00	MP	3.61	HP	3.31	HP

Legend: 3.26 – 4.00 Highly Proficient (HP) 1.76 – 2.50 Slightly Proficient (SP)

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Table 2 reveals the assessment on the proficiency level of the school leaders in terms of mitigation. Teacher respondents highlighted that school leaders maintain strong coordination and collaboration of the community people in school DRRM programs and activities having a weighted mean of 3.06, verbally represented as moderately proficient. Furthermore, the indicator with the highest weighted mean of 3.34 is conducts monthly disaster awareness drills in accordance to DepEd Order no. 21 s.2015, which is verbally interpreted as highly proficient as assessed by the two groups of respondents. On the other hand, the indicator with the lowest weighted mean of 3.26 is school furniture and equipment are designed and installed to minimize harm to internal stakeholders during disaster, verbally interpreted as highly proficient.

As gleaned on the table, the teacher respondents assessed mitigation with an overall weighted mean of 3.00 which means moderately proficient and the school leader respondents with an overall weighted mean of 3.61 which means highly proficient. This indicates that the school leaders' proficiency in relation to the school's mitigation plan is evident, as opposed to the perception of the teacher respondents. The assessment of the school leader respondents is relatively higher compared to the assessment of the teacher respondents in terms of the mitigation proficiency undertaken in the selected public secondary schools.

The findings of Shah et al. (2018) support the result of this study, which stated that during a disaster, school furniture and equipment can be a hazard to the school community. In addition, Proulx and Aboud (2019) discovered that in order to ensure safe learning environments, school leaders must need to improve the safety of school buildings through construction standards, furniture and material arrangement. School renovations such as the construction of ramps to replace steps, the application of plastic film to glass windows to prevent shattering during a storm or earthquake, the replacement of doors to open outwards

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for easy evacuation, and repairs to the floor, ceiling, and roof can all help to mitigate the disaster's potential effects.

Table 3 displays the school leaders' proficiency in terms of resiliency. This pertains to their capacity to guide their schools in bouncing back and recovering from adverse events, such as disasters or crises. It also includes their capacity to anticipate, prepare for, and respond to challenges and disruptions in a way that minimizes their impact on the school and its stakeholders.

Assessing the proficiency level of school leaders in terms of resiliency is important in ensuring that schools can continue to function effectively even in the face of adversity. It can help identify areas for improvement and guide the development of strategies and policies to enhance their ability to build resilience and recover quickly from disruptions.

Table 3. Proficiency Level of the School Leaders in Terms of Resiliency

INDICATORS	Teachers		School Leaders		Average	
	WM	VI	WM	VI	WM	VI
1. Prepares a contingency plan to ensure normal operation after the disaster.	3.12	MP	3.61	HP	3.37	HP
2. Establishes school partnership with LGUs and NGOs in support to the school DRRM programs in the aftermath of disaster.	3.06	MP	3.64	HP	3.35	HP

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3. Conducts immediate assessment of damages after every hazard or disaster.	3.15	MP	3.67	HP	3.41	HP
4. Prepares records of the effects of disasters for reporting to proper authorities.	3.18	MP	3.61	HP	3.40	HP
5. Conducts seminar on recovery, rehabilitation, and psychological support interventions.	2.82	MP	3.45	HP	3.14	MP
Overall Weighted Mean	3.07	MP	3.60	HP	3.33	HP

Legend: 3.26 – 4.00 Highly Proficient (HP) 1. 76 – 2.50 Slightly Proficient (SP)

2.51 – 3.25 Moderately Proficient (MP) 1.00 – 1.75 Not Proficient (NP)

Table 3 presents the assessments of the teacher and school leader respondents on the proficiency level of the school leaders in terms of resiliency. According to the table, the indicator with the highest weighted mean of 3.41 is conducts immediate assessment of damages after every hazard or disaster. This implies that school leaders conduct a thorough inspection for structural damage that must be repaired in order to ensure that the building is safe for occupancy.

Meanwhile, conducts seminar on recovery, rehabilitation, and psychological support interventions got the lowest weighted mean of 3.14, which is verbally interpreted as moderately proficient, as assessed by both groups of respondents. This finding implies that the school leaders should have a plan, scheme, or guidelines in place for the continuation of operations, resumption and rehabilitation, provision of shelter, basic needs, and a support

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system for evacuees, delivery of instruction through alternative modes, and assessment and monitoring of the effects and damages after a disaster.

As presented on the table, the assessment of the teacher respondents has an overall weighted mean of 3.07 which means moderately proficient. It is lower compared to the assessment of the school leader respondents with an overall weighted mean of 3.60, which means highly proficient.

The findings agree with the study conducted by Usami et al. (2018) that there is a need to integrate psychological support in school and community activities in the Philippines. Cooperation within the school community is essential for the psychological support required by survivors, particularly students who are vulnerable to the psychological effects of disasters. As a result, providing seminars and programs on post-disaster school policies, psychological support and services, and proper sensitivity training for students, teachers, and school leaders will assist them in dealing with the traumatic consequences of disasters (Tuazon, 2018).

Table 4 provides a valuable summary of school leaders' proficiency in terms of preparedness, mitigation, and resiliency as assessed by the groups of respondents.

Table 4. Summary of Assessments of the Teacher and School Leader Respondents on the School Leaders' Proficiency

School Leaders' Proficiency	Teachers		School Leaders		Average	
	WM	VI	WM	VI	WM	VI
1. Preparedness	2.74	MP	3.60	HP	3.17	MP
2. Mitigation	3.00	MP	3.61	HP	3.31	HP

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3. Resiliency	3.07	MP	3.45	HP	3.14	MP
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Legend: 3.26 – 4.00 Highly Proficient (HP) 1. 76 – 2.50 Slightly Proficient (SP)

2.51 – 3.25 Moderately Proficient (MP) 1.00 – 1.75 Not Proficient (NP)

As presented on the table 4 the assessment of the teacher respondents on preparedness, mitigation, and resiliency has an overall weighted mean of 2.74, 3.00, and 3.07 respectively, and verbally interpreted as moderately proficient. However, the assessment of the school leader respondents in terms of the aforementioned variables has an overall weighted mean of 3.60, 3.61, and 3.45 respectively, and verbally interpreted as highly proficient.

It can also be observed from the table that the assessment of the school leader respondents in terms of the aforementioned variables is higher compared to the assessment of the teacher respondents. Mitigation has the highest average weighted mean of 3.31 and verbally interpreted as highly proficient. Meanwhile, resiliency has the lowest average weighted mean of 3.14 and verbally interpreted as moderately proficient, as assessed by the two groups of respondents. This indicates that school leaders have a strong foundation in understanding and implementing preventive measures to mitigate potential hazards. Simultaneously, they should also focus on building the resilience of the school community to effectively respond, recover, and adapt in the face of disasters.

School leaders contribute significantly to the overall effectiveness of disaster risk reduction management in schools. An effective school leader develops comprehensive disaster response plans that outline procedures for various types of emergencies. Their proactive and informed approach helps create a safe and resilient learning environment, protects lives, and ensures the continuity of education even during challenging times (Stronge & Xu, 2021).

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2. Significant Difference Between the Proficiency Level of School Leaders as Assessed by the Two Groups of Respondents

The table below shows the significant difference between the proficiency level of school leaders as assessed by the two groups of respondents as shown in table 5. Z-test was used to compare the gathered data from the two groups of respondents.

Table 5. Test of Significant Difference in the Assessment of the Respondents on the Proficiency Level of School Leaders

Variables	Weighted Mean		z-computed value	z-critical value	Decision on H ₀	Remarks
	T	SL				
1.Preparedness	2.74	3.60	5.51	±1.96	Reject H ₀	Significant
2. Mitigation	3.00	3.61	16.57	±1.96	Reject H ₀	Significant
3. Resiliency	3.07	3.60	7.06	±1.96	Reject H ₀	Significant

Level of Significance: .05

Table 5 reveals the z-test analysis between the assessments of the teacher and school leader respondents on the proficiency level of the school leaders. As shown on the table, the computed z-values between the assessments of the two groups of respondents in terms of preparedness, mitigation, and resiliency are 5.51, 16.57, and 7.06 respectively. Since the computed z-values are higher than the Z-critical value of ±1.96 at 0.05 level of significance, the decision is to reject the null hypothesis. Thus, there is a significant difference between the assessments of the two groups of respondents in terms of preparedness, mitigation, and resiliency.

The findings show that teacher and school leader respondents' assessments of the proficiency level of school leaders differ in terms of preparedness, mitigation, and resiliency. The significant differences in teacher and school leader assessments imply that school leaders

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are highly proficient with their DRRM skills and capabilities, but this is not fully demonstrated to the teachers who are members of the SDRRM team.

The result of the study is also supported by Ergin et al. (2021) that school leaders and teachers may have different views on how their school leaders lead and the effectiveness of the program being implemented in the school. However, in the study of Mcleod and Dulsky (2021), most school leaders have little to no disaster leadership training and have never dealt with a disaster before. Even the best school DRRM program will be rendered ineffective if the principal is unprepared to lead the process. School leaders must be equipped with the tools and knowledge to deal with the challenges brought on by disasters, as well as to lead the school community through these challenges. As a result, it is critical for a school leader to maintain an open mind to continuous learning (Lindsey et al.,2018).

3. Extent of School Disaster Risk Reduction Management Program Implementation as Assessed by Teachers and School Leaders

The successive tables discuss the extent of school disaster risk reduction management program implementation as assessed by the teachers and school leaders themselves on the variables known as preparedness, mitigation, and proficiency. Weighted mean and its addapted Likert scale were used to expound the gathered data.

Table 6 presents the extent of school disaster risk reduction management implementation in terms of preparedness which refers to the level of implementation of measures that schools have in place to prepare for potential disasters or emergencies. This includes their readiness to respond to a disaster, as well as their ability to reduce the impact of disasters on their learners, staff, and infrastructure. Assessing the extent of school disaster risk reduction management implementation in terms of preparedness is critical in ensuring that schools are well-prepared to handle potential disasters. It can help identify gaps in

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preparedness measures and guide the development of training programs and resources to enhance their readiness.

Table 6. Extent of School Disaster Risk Reduction Management Program Implementation as Assessed by Teachers and School Leaders in Terms of Preparedness

INDICATORS	Teachers		School Leaders		Average	
	WM	VI	WM	VI	WM	VI
1. Ensures the establishment of operational Early Warning System.	2.35	SI	3.24	MI	2.80	MI
2. Conducts an annual student-led risk identification and mapping within and around premises for evacuation purposes.	2.98	MI	3.67	HI	3.33	HI
3. Integrates DRRM in all school programs and activities and school improvement plan (SIP).	3.02	MI	3.67	HI	3.35	HI
4. Provides capacity building for teachers, non-teaching staff, parents and learners on DRRM.	2.91	MI	3.64	HI	3.28	HI
5. Equips internal stakeholders and facilities with emergency medical kit and food supply.	2.82	MI	3.61	HI	3.22	MI
Overall Weighted Mean	2.82	MI	3.57	HI	3.20	MI

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Legend: 3.26 – 4.00 Highly Implemented (HI) 1. 76 – 2.50 Slightly Implemented (MI)

2.51 – 3.25 Moderately Implemented (MI) 1.00 – 1.75 Not Implemented (NI)

Table 6 shows the assessment of the teacher and school leader respondents on the extent of school disaster risk reduction management implementation in terms of preparedness. According to the table, the indicator with the highest weighted mean of 3.35 was school leaders integrates DRRM in all school programs and activities and school improvement plan (SIP), while the indicator with the lowest weighted mean of 2.80 was school leaders ensures the establishment of operational Early Warning System (EWS), which is verbally interpreted as moderately implemented, as assessed by the two groups of respondents. Thus, the result indicates that the school leaders emphasized that the school is prepared as reflected in the School Disaster Risk Reduction Management program opposed to the teacher respondents, re: special attention to the establishment of operational Early Warning System.

Moreover, the teacher respondents assessed preparedness with an overall weighted mean of 2.82 which means moderately implemented and the school leader respondents with an overall weighted mean of 3.57, verbally represented as highly implemented. The assessment of the school head respondents is relatively higher compared to the assessment of the teacher respondents in terms of the preparedness measures undertaken in the selected public secondary schools. The result implies that school leader respondents assessed that disaster risk preparations are highly implemented relative to the assessment of the teacher respondents which is moderately implemented.

The results of the findings agree with the studies conducted by Cubillas (2021) and Castilla (2019) that lack of early warning systems and limited space for emergency evacuation are the most common DRRM related problems, and contributed significantly to the poor

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implementation of the schools' DRRM program. According to Rosario (2019) and UDRR (2022), an early warning system is a significant element of disaster risk reduction which prevents loss of life and economic and material impact of disasters. Early warning systems are therefore a crucial component that any school should possess in order to identify and alert the school community prior to disasters, enabling early action, helping to save lives, and lessening the impact of disasters.

Table 7 displays the extent of school disaster risk reduction management implementation in terms of mitigation which refers to the level of implementation of measures that schools have in place to identify, assess, and reduce potential risks and hazards. This includes their capacity to implement measures to reduce the likelihood or impact of disasters, such as conducting risk assessments, developing emergency plans, and implementing physical protection measures. Assessing the extent of school disaster risk reduction management implementation in terms of mitigation is essential in ensuring that schools are well-prepared to handle potential disasters. It can help identify areas for improvement and guide the development of strategies and policies to enhance their ability to mitigate risks and protect learners and staff. Additionally, it can help schools to comply with relevant laws, regulations, and standards related to disaster risk reduction and management, and to provide a safe and secure environment for the whole school community.

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Table 7. Extent of School Disaster Risk Reduction Management Program Implementation as Assessed by Teachers and School Leaders in Terms of Mitigation

INDICATORS	Teachers		School Leaders		Average	
	WM	VI	WM	VI	WM	VI
1. Maintains close coordination with local DRRM council for disaster related activities.	3.03	MI	3.64	HI	3.34	HI
2. Conducts monthly disaster awareness drills in accordance to DepEd Order no. 21 s.2015	2.94	MI	3.64	HI	3.29	HI
3. Ensures building construction met the standard requirements to withstand earthquakes.	2.94	MI	3.70	HI	3.32	HI
4. School furniture and equipment are designed and installed to minimize harm to internal stakeholders during disaster.	2.94	MI	3.64	HI	3.29	HI
5. Maintains strong coordination and collaboration of the community people in school DRRM programs and activities.	2.46	SI	3.55	HI	3.01	MI
Overall Weighted Mean	2.86	MI	3.63	HI	3.25	MI

Legend: 3.26 – 4.00 Highly Implemented (HI)
(MI)

1. 76 – 2.50 Slightly Implemented

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2.51 – 3.25 Moderately Implemented (MI) 1.00 – 1.75 Not Implemented (NI)

Table 7 presents the assessment of the school leaders and teacher respondents on the extent of school disaster risk reduction management implementation in terms of mitigation. It can be gleaned from the table that maintains strong coordination and collaboration of the community people in school DRRM programs and activities got the lowest weighted mean of 3.01, which is verbally interpreted as moderately implemented, as assessed by the two group of respondents. On the other hand, the indicator with the highest weighted mean of 3.34 was maintains close coordination with local DRRM council for disaster related activities, verbally interpreted as highly implemented. This finding implies that school leaders and teachers in public secondary schools should actively plan, initiate, and carry out mitigation measures. The school mitigation plan should be communicated to students, parents, faculty, and personnel. Steps should be planned and implemented to expand the scope of its implementation. The complete implementation of these steps can make a significant difference in avoiding the negative and adverse effects of a disaster.

Furthermore, the assessment of the teacher respondents for mitigation obtained an overall weighted mean of 2.86 which means moderately implemented, while school leader respondents overall weighted mean of 3.63 which means highly implemented. The assessment of the teacher respondents is comparatively lower as weighed to the assessment of the school leader respondents in terms of the mitigation undertaken in the selected public secondary schools.

The above findings correspond to the study of Al Ruwathi (2019), low public representation in public preparedness and mitigation, as well as low community engagement in the planning process, are the primary community-based vulnerabilities. This implies that the success of DRRM program implementation is not solely the school's responsibility. The government, community, non-governmental organizations, and schools should all collaborate

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on this. A long-term action plan that prioritizes community awareness raising, emergency planning, and local drills is required for disaster readiness to be at its peak.

Moreover, it is believed that cooperation between communities, which serve as a source of identity for individuals and groups, and schools, which serve as a source of pertinent knowledge and behavior formation ground, is an effective strategy for promoting resilience among people (Rico, 2019).

Table 8 presents the extent of school disaster risk reduction management implementation in terms of resiliency which refers to the level of implementation of measures that schools have in place to build their capacity to recover quickly from disasters or crises. This includes their capacity to assess and address the impact of a disaster on their stakeholders, infrastructure, and resources, and their ability to adapt and adjust to the new situation. Assessing the extent of school disaster risk reduction management implementation in terms of resiliency is crucial in ensuring that schools can continue to function effectively even in the face of adversity. It can help identify areas for improvement and guide the development of strategies and policies to enhance their ability to build resilience and recover quickly from disruptions.

Table 8. Extent of School Disaster Risk Reduction Management Program Implementation as Assessed by Teachers and School Leaders in Terms of Resiliency

INDICATORS	Teachers		School Leaders		Average	
	WM	VI	WM	VI	WM	VI
1. Prepares a contingency plan to ensure normal operation after the disaster.	3.10	MI	3.61	HI	3.36	HI

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2. Establishes school partnership with LGUs and NGOs in support to the school DRRM programs in the aftermath of disaster.	3.06	MI	3.67	HI	3.37	HI
3. Conducts immediate assessment of damages after every hazard or disaster.	3.09	MI	3.70	HI	3.40	HI
4. Prepares records of the effects of disasters for reporting to proper authorities.	3.09	MI	3.64	HI	3.37	HI
5. Conducts seminar on recovery, rehabilitation, and psychological support interventions.	2.12	SI	3.33	HI	2.73	MI
Overall Weighted Mean	2.89	MI	3.59	HI	3.25	MI

Legend: 3.26 – 4.00 Highly Implemented (HI) 1. 76 – 2.50 Slightly Implemented (MI)

2.51 – 3.25 Moderately Implemented (MI) 1.00 – 1.75 Not Implemented (NI)

Table 8 reveals the assessment of the teacher and school leader respondents on the extent of school disaster risk reduction management implementation in terms of resiliency. As presented on the table, conducts seminar on recovery, rehabilitation, and psychological support interventions got the lowest weighted mean of 2.73, which is verbally interpreted as moderately implemented, as assessed by both group of respondents. This result implies that teachers should be given more orientation in order to equip them with the school's preparedness measures. Orientation and reorientation, practice, drills, proper information dissemination, and an open channel of communication among stakeholders could all be implemented.

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Meanwhile, the teacher respondents assessed the resiliency with an overall weighted mean of 2.89 which means moderately implemented and the school leader respondents assessed resiliency with an overall weighted mean of 3.59 which means highly implemented. The assessment of the teacher respondents is comparatively lower as weighed to the assessment of the school head respondents in terms of the resiliency practices undertaken in the selected public secondary schools.

The results of the findings agree with the study conducted by Regis (2020), he emphasized that disasters are traumatic life events that cause not only physical harm but also emotional harm, which can lead to anxiety and depression. Schools should also consider this issue by appointing qualified personnel to oversee the provision of psychosocial and psychological support to student-victims.

Table 9 displays the valuable summary of the extent of school disaster risk reduction management program implementation in terms of preparedness, mitigation, and resiliency as assessed by the groups of respondents.

Table 9. Summary of Assessments of the Teacher and School Leader Respondents on the Extent of School Disaster Risk Reduction Management Program Implementation

School Disaster Risk Reduction Management Program Implementation	Teachers		School Leaders		Average	
	WM	VI	WM	VI	WM	VI
1. Preparedness	2.82	MI	3.57	HI	3.20	MI
2. Mitigation	2.86	MI	3.63	HI	3.25	MI

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3. Resiliency	2.89	MI	3.59	HI	3.25	MI
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Legend: 3.26 – 4.00 Highly Implemented (HI) 1. 76 – 2.50 Slightly Implemented

(MI)

2.51 – 3.25 Moderately Implemented (MI) 1.00 – 1.75 Not Implemented (NI)

Table 9 presents the summary of assessments of the teacher and school leader respondents on the extent of school disaster risk reduction management program implementation. As shown on the table, the assessment of the teacher respondents on preparedness, mitigation, and resiliency has an overall weighted mean of 2.82, 2.86, and 2.89 respectively, and verbally interpreted as moderately implemented. On the other hand, the assessment of the school leader respondents in terms of the aforementioned variables has an overall weighted mean of 3.57, 3.63, and 3.59 respectively, and verbally interpreted as highly implemented. It can also be observed from the table that the assessment of the teacher respondents in terms of the aforementioned variables is lower compared to the assessment of the school leader respondents

Moreover, mitigation and resiliency got the highest average weighted mean of 3.25 and verbally interpreted as moderately implemented. However, preparedness has the lowest average weighted mean of 3.20 which is verbally interpreted as moderately proficient, as assessed by the two groups of respondents. This indicates an imbalance in the overall approach to school safety and disaster management. While mitigation and resilience are essential components of a comprehensive disaster risk reduction management, preparedness plays a crucial role in ensuring a timely and effective response to emergencies and disaster.

According to the study of Pardillo and Perigua (2020), balanced implementation of disaster phases in schools provides a holistic and proactive approach to managing risks, ensuring the safety of learners and staff, and maintaining educational continuity. It promotes

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effective emergency response, minimizes disruptions to education, and builds resilience in the face of potential disasters.

4. Significant Difference Between the Extent of School Disaster Risk Reduction Management Program Implementation as Assessed by Two Groups of Respondents

The table shows the significant difference between the extent of school Disaster Risk Reduction Management Implementation as assessed by the two groups of respondents.

Table 10. Test of Significant Difference on the Extent of School Disaster Risk Reduction Management Program Implementation as Assessed by Two Groups of Respondents

Variables	Weighted Mean		z-computed value	z-critical value	Decision on H ₀	Remarks
	T	SL				
1. Preparedness	2.82	3.57	5.12	±1.96	Reject H ₀	Significant
2. Mitigation	2.86	3.63	7.37	±1.96	Reject H ₀	Significant
3. Resiliency	2.89	3.59	3.42	±1.96	Reject H ₀	Significant

Level of Significance: .05

Table 10 reveals the z-test analysis between the assessments of the teacher and school leader respondents in the extent of school disaster risk reduction management implementation. As shown in the table, the computed z-values between the assessments of the two groups of respondents in terms of preparedness, mitigation, and resiliency are 5.12, 7.37, and 3.42 respectively. Since the computed z-values are higher than the Z-critical value of ±1.96 at 0.05 level of significance, the decision is to reject the null hypothesis. Thus, there is a significant difference between the assessments of the two groups of respondents in the extent of Disaster Risk Reduction and Management implementation in terms of preparedness,

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mitigation, and resiliency. The result implies that school leaders are more oriented on implementing the Disaster Risk Reduction and Management Plan than teachers.

According to Bacus (2020), teachers' lack of awareness of various DRR measures leads to an underwhelming implementation that may leads to various challenges and barriers that impede its effective implementation. Thus, more opportunities should be provided for teachers to increase or improve their awareness and understanding of the Disaster Risk Reduction and Management program in their respective schools (Escobar, 2021). The school leader should develop awareness and preparedness measures on a regular basis, disseminate relevant Disaster Risk Reduction and Management information, and increase teacher commitment to the successful implementation of the school Disaster Risk Reduction and Management and emergency plan (Cañete, 2019).

5. Significant Relationship Between the School Leaders' Proficiency Level and the Extent of School Disaster Risk Reduction Management Program Implementation

Table 11 shows the test of significant relationship between the school leaders' proficiency level and the extent of school Disaster Risk Reduction Management implementation by the two groups of respondents. Pearson r and its adopted degree of correlation was used in order to interpret and correlate the gathered data.

Table 11. Test of Significant Relationship Between the School Leaders' Proficiency Level and the Extent of School Disaster Risk Reduction Management Program Implementation

Variables	Computed r	Degree of Correlation	P-value	Decision on H ₀	Remarks
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School leaders' proficiency level		Positive			
Extent of school Disaster Risk Reduction Management implementation	0.57	Moderate Relationship	0.03	Reject H ₀	Significant

Level of Significance: .05

Data gathered reveals a computed r-value of 0.57 in correlating the school leaders' proficiency level and the extent of school Disaster Risk Reduction Management implementation resulting to a positive moderate relationship. Furthermore, a computed p-value of .03 is less than .05 alpha level of significance that leads to the decision of rejecting the null hypothesis. Thus, it can be concluded that there is a significant relationship between the school leaders' proficiency level and the extent of school Disaster Risk Reduction Management implementation by the two groups of respondents. The result designates that the school leaders' proficiency level is significantly related to the extent of school DRRM implementation.

The result of the findings is supported with the study of Kapucu and Ustun (2018) that school leaders' proficiency has a positive relationship with the effectiveness of disaster management. Furthermore, school leaders should make an effort to keep the school community safe in times of disaster and should encourage different stakeholders to become involved in disaster management preparedness. Thus, school leaders' contributions to disaster management in schools are critical because they are administrators who are responsible for ensuring the safety of the school community (Ananda et al., 2022).

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CONCLUSION

The researcher concluded that teacher respondents assessed the school leaders' proficiency in terms of preparedness, mitigation, and resiliency as moderately proficient, while school leaders assessed themselves as highly proficient. This finding indicates a difference in perception between the two groups regarding the proficiency of school leaders in these areas. As a result, there is a significant difference between the assessments of the two groups concerning preparedness, mitigation, and resiliency.

In terms of Disaster Risk Reduction Management (DRRM) implementation, teachers rated it as moderately implemented, while school leaders rated it as highly implemented. Despite these differences, there is a recognized need for schools to enhance DRRM implementation, particularly in areas related to the Early Warning System, community engagement, capacity building for the school community, and psychological support interventions. The study confirmed a significant difference in how teachers and school leaders perceive the extent of DRRM implementation, suggesting that teachers may not have as clear an understanding of DRRM program implementation as school leaders do.

The study also found that school leaders' proficiency in Disaster Risk Reduction Management is significantly related to the implementation of the DRRM program. This relationship indicates that a higher proficiency level among school leaders corresponds to a higher level of DRRM implementation, and vice versa.

RECOMMENDATION

Based on the findings of the study and conclusions, the researcher recommends the following for consideration:

1. Schools Division Office DRRM team and schools are encouraged to provide disaster preparedness activities to identify and plan disaster risk reduction strategies to

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address the immediate threat to lives, as well as to establish arrangements to enable the timely, effective, and appropriate responses to such events. This may give the school community the skills and capability to cope with the impact of disaster.

2. School heads and Department heads as school leaders are recommended to take extra steps to raise awareness of disasters and foster a climate of resistance and resilience by being visible in every Disaster Risk Reduction Management program implementation. Their presence in drills, seminars, and information dissemination to the school community will greatly boost teachers' involvement and awareness.

3. Schools Division Office DRRM Team and schools are suggested to conduct capacity building and disaster education to SDRRM team, school leaders, and all school community members in order to increase disaster risk awareness and preparedness, as well as to improve hazard monitoring and dissemination. Their ability to respond to disaster signals is a requirement for an effective Early Warning System.

To address the psychological needs of the affected population, SDRRM core groups should boost the morale of affected learners and community members by assisting disaster victims. This could be accomplished by developing and implementing psychosocial programs, as well as conducting psychological stress debriefings.

4. Regular meetings and monitoring for disaster mitigation measures may be conducted by school heads, DRRM coordinators, and team members as part of the core group. Teachers should coordinate with these individuals and be a part of the team.

5. School heads and Department heads are highly encouraged to undergo a variety of disaster training programs to develop disaster management proficiency. It is important for school leaders to continually update their knowledge about disaster management by attending regular training sessions and staying up-to-date on the latest best practices in disaster management.

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REFERENCES

Al Ruwaihithi, A. A. (2019). A Critical Review of Emergency and Disaster Management in the United Arab Emirates 23.

Ananda, P., Simatwa, E.M., Juma, S. (2022). Contribution Of Principals To School Disaster Management Preparedness In Public Secondary Schools In Kakamega County, Kenya. DOI: 10.29322/IJSRP.12.01.2022.p12163

Bacus, J. B. (2020). Disaster Risk Reduction Management in Carcar Central Elementary School Cebu City. CMU Journal of Science, 24(1), 1-1

Borromeo, M. R. (2022). Implementation of Disaster Risk Reduction Management Program and Teachers' Level of Commitment: Basis for a Proposed Contingency Plan.

Chaudhari, A. (2021). Research Design. Voxco. <https://www.voxco.com/blog/research-design>

Crossman, A. (2020). Understanding Purposive Sampling. An Overview of the Method and Its Applications. <https://www.thoughtco.com/purposive-sampling-3026727>

Cubillas, Ariel. (2021). The implementation of the school disaster risk reduction and management program components of the disaster.

DepEd Order no.21, s. 2015. Disaster Risk Reduction and Management Coordination and Information Management Protocol. <https://www.deped.gov.ph/2015/06/01/do-21-s-2015-disaster-risk-reduction-and-management-coordination-and-information-management-protocol/>

Escobar, M. (2021). Disaster Risk Reduction and Management Plan of Selected Public Schools in Marikina City. Available at SSRN 3792508.

Jasojaso, E. (2020). Disaster Risk Reduction Management Practices of School Principals.

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Kapucu, N., & Ustun, Y. (2018). Collaborative crisis management and leadership in the public sector. *International Journal of Public Administration*, 41(7), 548-561.

Lau, F., & Kuziemsky, C. (2017). Handbook of ehealth evaluation: An evidence-based approach

Martinez, M. Q., Mella, M. C. G., & Lisay, M. S. (2020). Capacity-building initiatives for a disaster-ready school community: development of a comprehensive disaster risk reduction management plan.

McLeod, S., & Dulsky, S. (2021). Resilience, reorientation, and reinvention: School leadership during the early months of the COVID-19 pandemic. In *Frontiers in Education* (p. 70). Frontiers.

Pardillo, R. S., & Perigua, I. (2020). Disaster Preparedness in Sagay City. *Globus Journal of Progressive Education*, 10(1), 1-9.

Proulx, K., & Aboud, F. (2019). Disaster risk reduction in early childhood education: Effects on preschool quality and child outcomes. *International Journal of Educational Development*, 66, 1-7.

Regis, D. (2020). Implementation of the school disaster risk reduction management in public elementary schools in region VIII. *SABTON: Multidisciplinary Research Journal*, 2(1), 48-61.

Republic Act 10121 (2010). Philippine Disaster Reduction and Management Act.
<http://legacy.senate.gov.ph/lisdata/3036627171!.pdf>

Rico, G. C. S. (2019). School-community collaboration: disaster preparedness towards building resilient communities. *International Journal of Disaster Risk Management*, 1(2), 45-61.

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Rosario, A. J (2019). Youth Participation and Disaster: Examining Suggestions on Disaster Risk Reduction Management in Metro Manila, Philippines.

Shah, A. A., Ye, J., Pan, L., Ullah, R., Shah, S. I. A., Fahad, S., & Naz, S. (2018). Schools' flood emergency preparedness in Khyber Pakhtunkhwa province, Pakistan. International Journal of Disaster Risk Science, 9, 181-194.

Stronge, J. H., & Xu, X. (2021). Qualities of effective principals. ASCD

Tamboboy, R. (2020) Readiness of Selected Schools Disaster Risk Reduction Management at North 1 District Division of Caloocan City: Basis for a Proposed Localized Risk Reduction Management Program.

Tuazon, A. C. A. (2018). Campus displacement Experiences of the University of the Philippines students and teachers Affected by typhoon haiyan: Perceived needs for Mental health and Psychosocial support. Acta Medica Philippina, 52(4).

UN Office for Disaster Risk Reduction. (2019). Disaster Risk Reduction in the Philippines - Status Report (Tech. Rep.)

UNDRR. (2022). The importance of early warning systems in disaster risk reduction. <https://www.preventionweb.net/news/importance-early-warning-systems-disaster-risk-reduction>

Usami, M., Lomboy, M. F. T., Satake, N., Estrada, C. A. M., Kodama, M., Gregorio Jr, E. R., ... & Hayakawa, T. (2018). Addressing challenges in children's mental health in disaster-affected areas in Japan and the Philippines—highlights of the training program by the National Center for Global Health and Medicine. In BMC proceedings (Vol. 12, No. 14, pp. 1-8). BioMed Central.

Ventura, C. (2022). Disaster Risk Reduction Management Implementation and the School and Resilience: Basis for a Proposed Sustainability Plan.

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