

Teachers' Perception on the Implementation of School Safety Measures in Selected Elementary Public Schools in Davao Del Norte

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ENDORSEMENT

In partial fulfillment of the requirements for the **MASTER IN CRISIS AND DISASTER RISK MANAGEMENT**, this research paper entitled, **“TEACHERS’ PERCEPTION ON THE IMPLEMENTATION OF SCHOOL SAFETY MEASURES IN SELECTED ELEMENTARY PUBLIC SCHOOLS IN DAVAO DEL NORTE”** has been prepared and submitted by **ERIC R. ROSILLO**, the acceptance of which is hereby endorsed.



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Upon the recommendation of the Oral Examination Committee, this research paper entitled, “**TEACHERS’ PERCEPTION ON THE IMPLEMENTATION OF SCHOOL SAFETY MEASURES IN SELECTED ELEMENTARY PUBLIC SCHOOLS IN DAVAO DEL NORTE** ”, prepared and submitted by **ERIC R. ROSILLO**, is hereby approved in partial fulfillment of the requirements for the degree **MASTER IN CRISIS AND DISASTER RISK MANAGEMENT**.

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A recipient of various Civil Service Special Awards for his contribution in Disaster Risk Reduction & Management in Davao del Norte and in Davao Region.

ERIC REBOTA ROSILLO

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TABLE OF CONTENTS

TITLE	426
ENDORSEMENT	427
APPROVAL PAGE	428
BIOGRAPHICAL SKETH	429
ACKNOWLEDGEMENT	430
TABLE OF CONTENTS	431
LIST OF TABLES	432
LIST OF FIGURES	433
LIST OF APPENDICES	434
ABSTRACT	435
CHAPTERS ONE INTRODUCTION	436
Rationale	436
Statement of the Problem	437
Research Objectives	437
Research Hypotheses	437
Significance of the Study	438
Scope and Limitation	438
CHAPTERS TWO REVIEW OF RELATED LITERATURE	439
Disaster Risk Reduction	439
School Safety	440
CHAPTERS THREE CONCEPTUAL/THEORETICAL FRAMEWORK OF THE STUDY	442
Conceptual Framework	442
Theoretical Framework	443
CHAPTERS FOUR METHODOLOGY	444
Research Locale	444
Research Design	444
Respondents of the Study	444
Research Locale Instrument	445
Data Collection	446
Statistical Treatment of Data	446
Ethical Consideration	446
CHAPTERS FIVE DISCUSSION AND ANALYSIS OF RESULTS	447
Results of the Findings	447
Discussion of the Findings and Analysis of Results	448
CHAPTERS SIX CONCLUSION AND RECOMMENDATION	452
Conclusion	452
Recommendation	452
REFERENCES	454
APPENDICES	456

LIST OF TABLES

S. No.	Table	Page
1	The Demographic Profile of Respondents	447
2	Comparative Data on Responses of Teachers to Implementation of Safety Measures Per School	447

LIST OF FIGURES

S. No.	Figure	Page
1	The Conceptual Framework of the Study	443
2	Philippine Map Highlighting Talaingod, San Isidro, and Asuncion in Davao del Norte	445

LIST OF APPENDICES

A. Letter of Permission to Conduct the Study	456
B. Survey Questionnaire on Teachers' Perception on the Implementation of School Safety Measures in Selected Public Schools in Davao del Norte	457
C. Informed Consent	460
D. Appended Table Items	461

ABSTRACT

The effects of natural disasters are overwhelming and most of the time deadly. We cannot prevent it to happen, but we can mitigate its impact through proper planning and correct implementation. The global data presented that education sector is one of the hardly hit in times of natural disasters.

The study aspired to determine the teachers' evaluation response on the implementation of school safety measures based on the following indicators: enabling environment, safe learning facilities, school disaster risk management, and disaster risk reduction in education.

The quantitative non-experimental design utilizing descriptive survey was used in this study. A total of one hundred five elementary teachers (Eighteen Male and Eighty Six Female) from rural public elementary schools of Sto. Nino Central Elementary School, Talaingod; Sawata Central Elementary School, San Isidro; and Cambanogoy Central Elementary School, Asuncion. These public schools are under the Department of Education Division of Davao del Norte who are the target schools in this study. The study used a questionnaire as the main source of data collection. The statistical tools employed to interpret the data gathered was frequency and percentage to identify the proportion of teachers who responded YES the school implemented safety measures and those who responded NO which implies that the school did not implement school safety measures.

Results of this study using descriptive statistics shows the variation of percentage of teachers who responded YES and NO in the implementation of school safety practices in terms of the different indicators: enabling environment, safe learning facilities, school disaster risk management, and disaster risk reduction in education. It was noted that School 3 has the least percentage of teachers who agreed that the school implemented safety measures consistent to all indicators compared to other two schools.

Keywords:- *Teacher Response, School, School Safety, MCDRM, Philippines.*

CHAPTER ONE INTRODUCTION

A. *Rationale*

Globally, people suffer the negative effects of natural disasters. The exposure to risks and hazards of the community make them more vulnerable to any climate-related and human-induced disasters. This natural event affects all sectors in the society including the education sector. The innate vulnerability of the children is a serious factor to consider on how we can minimize this vulnerability. Though disasters are inevitable, the effects can be anticipated and prepared for. The important role of teachers in knowledge transfer to their learners play a key factor in preventing and minimizing the causal effects of natural disasters. Teachers' awareness on the implementation of school safety practices is essential in the attainment towards zero casualty.

A report from the World Risk Report (2019) mentions that the Philippines is in the 9th Place with a rating of 20.69 Risk Index. This is because our country is situated in the Pacific Ring of Fire where active volcanoes and active fault lines are present resulting in various seismic events and volcanic eruption which triggered a strong 7.2 tectonic earthquake that struck the island of Bohol. Following the earthquake, some 696 schools in the island had been damaged, with an equivalent student population of over 270,000, were affected and displaced, 604 elementary school buildings and 92 high school buildings were damaged (UNICEF, 2014).

Not only our inclusion in the Pacific Ring Fire that made us in the list of the most disaster prone countries in the world, there is this regular visit of at least 20 tropical cyclones annually to our country. This is because the tropical cyclone generator in the Pacific Ocean is located in the eastern part of the Philippines, also known as the Western Pacific Tropical Cyclone gateway. True to this, the strongest Tropical Cyclone that ever hit the earth named Super Typhoon Yolanda (International name: HAIYAN) made landfall in the eastern part of Visayas, Philippines particularly in Tacloban City bringing storm surges as high as 6 meters with gusty winds of 360KPH. This hydro-meteorological event destroyed almost 90% of the school buildings in the region resulting in 3,171 classrooms displacing 1.7 million children (DepED, 2013).

Late last year, the island of Mindanao was hit by three successive strong earthquakes, the strongest being 6.8 magnitude affecting the areas of Cotabato and Davao region. The impact was massive damaging various school buildings across Cotabato and Davao regions displacing 3 million children and more than 400 were injured. Learners' education materials were damaged and no longer useful. The trauma brought by the series of shaking made the children helpless especially during the actual event where most of the recorded injuries were caused by stampedes due to panic and disorientation regarding what to do in times like this (NDRRMC, 2019).

In the Philippines, a framework on the implementation of disaster risk reduction program was formulated and crafted by the National Disaster Risk Reduction & Management Council for the local government units and national agencies including the Department of Education. As a response, the Department of Education released a department order stating that by attaining a safer school, teachers and the school administration must work together in the implementation of disaster risk reduction programs; like assessing the school physical structures and conducting hazard-based related preparedness activities. Also, strict compliance of building construction must emanate during the designing & planning process. This action will significantly contribute to reduce the vulnerability of the children and teachers in school and thereby attain a safe learning school against catastrophic disaster (DepEd Order No. 37, 2015).

Anent to, the National Disaster Risk Reduction & Management Council has this annual Search for Best Disaster Risk Reduction & Management School using the Comprehensive School Safety Checklist to evaluate and assess the implementation of disaster risk reduction programs as a vital aspect in the achievement of school safety from the enabling environment to three pillars. These guidelines will serve as the basis on the implementation of the various disaster risk reduction & management programs in the school (Jalad, 2017).

The recent earthquake events which affected Davao region shows that schools which became awardees of this Gawad Kalasag contest had only suffered minimal damages and no injuries especially mentioning the Panabo City National High School. This secondary school has been a consistent national awardee because of their religious implementation of their programs on school disaster risk reduction and management as vital factors in achieving school safety. The Provincial Damage Assessment and Needs Analysis report showed that Panabo National High School had no reported injury nor major damages in their classroom buildings after that strong Mindanao earthquake. This is a manifestation that school safety can be obtained if schools are religiously implementing their identified programs, projects, and activities in their school disaster risk reduction and management plan (PDRRMC Report, 2019).

It can be noticed these were identified in terms of the implementation of school safety measures. There are no existing guidelines in terms of Interoperability among local disaster risk reduction and management Office and the Department of Education in times of disaster; limited budget for the implementation of School Disaster Risk Reduction programs; School Disaster Risk Reduction focal is only a designate teacher and has no comprehensive training on disaster risk reduction; In the recent earthquake events, school safety was seriously affected based on the damaged and losses report submitted to the Provincial Disaster Risk Reduction and Management Office; Lastly, despite the quarterly drills, during the earthquake students were in extreme fear resulting to panic and injury.

This is supported by the study of Lopez, Magallen, Echavez, and Sales (2018) that risk reduction is recognized as vital for building a more equitable future and for reducing the severity of losses during disasters. Effective risk reduction occurs when there is cooperation between sectors of society, and there is an existing disaster preparedness program in place. The findings revealed that DepEd schools had a good compliance level on disaster preparedness. However, some problems were encountered such as inadequate training materials and lack of training among the school disaster risk reduction management teams. With this, the researcher initiated this research concept Teachers' Perception on the Implementation of School Safety Measures in Selected Elementary Public Schools in Davao del Norte. Thus, there is urgency to conduct the study.

B. Statement of the Problem

➤ *How many teachers perceived that the school where they are connected perceived the implementation of School Safety Measures particularly under:*

- Enabling environment,
- Safe learning facilities,
- School disaster risk management, and
- Disaster risk reduction in education?

➤ *Is there a significant difference in the evaluation response of teachers regarding on the implementation of School Safety Measures?*

C. Research Objectives

The main purpose of this study is to determine the significant difference on the teachers' evaluation response on the implementation of school safety measures. Specifically, this aims:

➤ *To determine the number of teachers who observed the implementation of School Safety Measures particularly under:*

- Enabling environment,
- Safe learning facilities,
- School disaster risk management,
- Disaster risk reduction in education.

➤ *To determine the significant difference in the responses of teachers regarding their evaluation on the implementation of School Safety Measures.*

D. Research Hypotheses

The following hypotheses were tested at 0.05 level of significance:

- *There is no significant difference in the responses of teachers regarding their evaluation on the implementation of School Safety Measures.*
- *School is not significantly associated with teachers' evaluation response on the implementation of School Safety measures.*

E. Significance of the Study

The effects of natural disasters are overwhelming and most of the time deadly. We cannot prevent it from happening, but we can mitigate its impact through proper planning and correct implementation. The global data shows that the education sector is one of the hardest hit in times of natural disasters. It aims for teachers to be properly informed, trained and prepared in dealing with the negative effects of natural hazards by learning the available strategies and approaches on school safety measures through disaster risk reduction and management (Luistro, 2011).

The goals of this study are the protection of education workers from death, injury, and harm in schools brought by natural hazards; Plan for educational continuity in the face of all expected hazards and threats; Safeguard education sector investments against the effects of these hazards; Strengthen risk reduction and resiliency through education; and, establish Clear line of coordination between the Local Disaster Risk Reduction & Mgt. Office and Department of Education in times of crisis and disaster situations [UNISDR], 2017).

At the end of the line, protecting and saving lives are the ultimate goals of all these efforts. The society in general needs drastic change in anticipating the worst-case disaster scenario that could happen in their community. The same is also needed in the education sector. The constant goal is to preserve lives, because it is our moral obligation as teachers to teach our students the right and effective manner in relation to disaster preparedness. "The findings of this study can be used by educational leaders as a source of information to increase teachers' perceptions of safety in their schools and classrooms. By exploring teachers' perceptions of the influence of the physical characteristics of school facilities, educators can utilize the findings of this study when planning renovations, new school construction designs, or decision making in schools" (Leonard, 2016) regarding how to make the school safer.

F. Scope and Limitation

This study reviewed the school disaster risk reduction implementation plan for the previous year, existing department orders & disaster reports. The target schools of this research were elementary public schools in the Department of Education Division of Davao del Norte.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter provides related literature, reading and studies gathered and reviewed by the researcher from the professional books, journals, internet and published materials. These interrelated concepts, sights, ideas from various authors lend support to the investigation undertaken by the researchers.

This study will discuss how teachers' perception on the implementation of Department Order No. 37 (2015), The Comprehensive Disaster Risk Reduction and Management (DRRM) in Basic Education Framework (DepEd D.O # 37, 2015); and school safety practices with the following indicators: enabling environment, safe learning facilities, school disaster risk management and disaster risk reduction in education (NDRRMC Circular # 26, Series of, 2019).

A. Disaster Risk Reduction

It refers to the concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events. Under this proactive approach, programs, projects and activities in reducing the vulnerabilities of the people can now be anticipated, prevented and prepared. One of the vulnerable sectors in our society are the children. Majority of these children are in school. They spend almost eight hours a day learning inside the four corners of the classroom and roaming around the campus (R.A.10121, 2010).

Over these years, children suffered most on the impact of disasters. The global disaster data shows that children's innate vulnerability plays a key role in why they are always at the losing end. The lack of proper education on disaster preparedness in school is one of the reasons why children become more vulnerable. Mostly, children's participation is only limited during drills. The limited learning materials on disaster risk reduction are another challenge to the students. This is common in developing countries like the Philippines. The dilapidated school buildings that are posing a serious threat to the learners in the event of a seismic occurrence like earthquakes are common in public schools. It is also common knowledge that tropical cyclones are getting stronger and becoming unpredictable, yet our efforts to make everyone safe during the event of a possible disaster is always not enough (Marais, 2012).

In the Nepal earthquake, students' lack of knowledge on disaster risk reduction resulted in negative consequences. The devastating tectonic earthquake which resulted in thousands of lives lost including children and millions of damages mostly in infrastructure resulted in a negative effect in their country. School building collapsed while the learning of the students temporarily ceased. Because of this, various international non-government organizations came to help by initiating post disaster activities. Local government and international organizations were determined to link the gap as numerous students became a casualty of that earthquake. The unified efforts of both the government, the education sector and the private sectors achieved positive results showing a significant increase in terms of the students' disaster risk reduction knowledge (Tuladhar et al., 2013).

Here in the Philippines, several studies related to disaster risk reduction integration in the school curriculum and school safety measures have been done prior to the advent of the Republic Act 10121 on the year 2010 and beyond. The importance of mainstreaming disaster risk reduction in the education sector has long been suggested even before the advent of our National Law which is the Republic Act 20121. The results of this study suggest that there is a positive impacts if disaster risk reduction initiatives are being integrated in the school curriculum from the basic education to the tertiary level according to the results of their developed modules which that implemented to their target schools. In response, the Department of Education has adopted and integrated the concepts of disaster risk reduction into 3 chapters with 12 lessons in Science I and 4 chapters with 16 lessons in social studies of 1st year in the secondary level. The importance of "School Safety Day" which involves hazard hunting, questionnaires and technical support on school safety and preparedness. The researchers' also highlighted the importance of periodic monitoring of the given modules in order to abreast on the possible changes and revisions if there are, this of course with the help of the curriculum experts from the education sector (Luna et al., 2008).

Another study on Integration of Disaster Risk Reduction in the Curriculum of Philippine Educational Institution was conducted in one of the schools in the country. They found out that the passage of the International Frameworks on disaster risk reduction, the Hyogo and Sendai Frameworks plus our local version the Philippine Disaster Risk Reduction & Management Act of 2010 really bolstered our efforts on disaster risk reduction implementation from all sectors in the society. However, there is still a gap in terms of integrating it in the school curriculum and translating it into actual practice this is because teachers themselves lacked appropriate knowledge and skills especially life skills. The study also suggest that disaster risk reduction should be offered as a mandatory subject for all learners in the schools, not just integrating it into selected subjects. Teacher educators as well should be capacitated to handle Disaster Risk Reduction subject with accurate and updated resource materials should be used, and an interdisciplinary approach or knowledge from both physical and natural sciences and social sciences be adopted in analyzing natural disasters (Valencia et al., 2018).

It supports the theory that the higher the level of preparedness, the lesser will be the problems encountered if proper education on disaster risk reduction is being seriously implemented in the school. The basic knowledge of the existing hazards in the school is essential both from the teachers and the learners. The need to conduct regular hazard assessment plays a vital role in developing a culture of school safety. Trainings for teachers are needed in order to be updated on the latest techniques as the source of information of the students. Also, awareness among stakeholders is imperative so as to encourage involvement and participation among stakeholders (Llarena & Punzalan, 2016)

B. School Safety

It is focused on the implementation of school safety measures with the following indicators: Enabling Environment, Safe Learning Facilities, School Disaster Risk Management and Disaster Risk Reduction in Education.

It means that teachers and learners are protected to possible effects of natural hazards by introducing proactive measures that could anticipate possible effects. These are programs, projects and activities identified by the school with the participation of stakeholders to implement inside the school premises to minimize causal effects of natural hazards. School disaster risk management is a cycle which emanates from hazard identification, risk assessment, vulnerability assessment, inventory of existing capacities and resources. It aims to make the entire school community prepared for a worst case given scenario. All these pre-disaster efforts should be shared and imparted to the learners for them to be informed on what to do in times of natural disaster (Le Houérou, 2010).

Earthquake and Typhoon resilient school building is a must for every school. The school must conduct regular inspection of their school building in relation to its integrity. Experts from these fields must be tapped to perform the said assessment to have reliable results and recommendations. Building retrofitting is one of the techniques in making these classrooms resilient in times of a possible shaking or strong winds. In times of natural disaster, the integrity of school building and learning facilities will surely be compromised like what had happened in the country of Peru wherein various schools were damaged as a result of an 8.4 magnitude earthquake (Muñoz et al., 2004).

Furthermore, school buildings by nature are highly vulnerable to earthquakes due to their unique features. Aside from this, earthquake hazards inside the classroom are also contributing to the danger that teachers and students may experience. The falling objects and inadequate exits are adding-up to their risks. However, not all classrooms are like this, this type of classroom is common in public schools where overcrowding is present. Constant disaster preparedness drills should be done regularly to educate the students and the teachers on the right thing to do (Rodgers, 2012).

It indeed correlates that implementation of school disaster risk reduction programs have a clear connection in achieving school safety, this after what had happened in Nepal wherein thousands of school buildings were destroyed due to catastrophic earthquake. The United Nations post-disaster needs assessment showed that if the government through the education department had seriously implemented disaster risk reduction programs like regular risk assessment of school buildings, the effects would not be overwhelming. While most of the schools have been constructed along the high risk areas which are vulnerable to different natural hazards. The educational sector has taken the hardest hit [UN-OCHA], 2015).

On the contrary, religious implementation of disaster risk reduction programs have shown positive effects in the attainment of school safety. The best example of this is the country of Japan. They successfully mainstreamed disaster risk reduction programs in their school curricula from grade 1 to senior high. In fact, the first senior high school in the world that offers disaster risk reduction as one of their academic strands can be found in Hyogo prefecture, the Maiko high school. Teachers and students led risk assessment on their buildings regularly. Hazard mapping and disaster preparedness activities are also being performed often. Graded actual drills based on existing hazards are executed monthly. The dedication of the Japanese government and its people in disaster risk reduction can be observed in the previous natural disasters that affected their country which had shown minimal effects in schools and students were resilient enough to withstand the effects of natural disasters (Masato & Mitsujib, 2012).

Further, the importance of teachers' perception in school safety measures is necessary, recognizing that few empirical assessments of school safety measures, especially from the perspective of teachers, have been conducted. However, we should also realize that teachers' perceptions—and misperceptions—can positively or negatively shape their expectations for their schools. This, in turn, can influence the implementation of related programs and activities in relation to school safety measures (Rahman, 2018).

Reviewing existing literature on teachers' perception of school safety, the only information that I got were survey results indicating that most school teachers in non-urban areas are generally not fearful at work. Meaning, they feel safe in their school community. A study found out that the severity of nearly every type of problems on school safety decreased steadily from urban to suburban to rural schools. These are clearly positive results but we don't have a clear understanding on what they mean by "Feeling Safe" and why they feel safe. Teachers' voices are essential in understanding school climate, as they are a catalyst for change and mold of learner's future (White and Beal, 1999).

Indeed, teachers' voices are important in the attainment of a school safety. Their voices therefore offer a glimpse into each teacher's very approach to education towards their learners. They need to be heard as the implementer of school policies and programs. Teachers' voices, when allowed opportunities for expression, can be both positive and negative, in that it can maintain or challenge the existing guidelines on school safety measures (McLaren, 1998).

At present, I have noticed that various gaps were identified in terms of the implementation of school safety measures even if disaster risk reduction & management is being mainstreamed in the school curriculum. Integrating it into the school subject is a challenge to the teachers since they don't have proper trainings about disaster risk reduction continuum. In addition, there are no existing guidelines in terms of Interoperability among local disaster risk reduction and management Office and the Department of Education in times of disaster; limited budget for the implementation of School Disaster Risk Reduction programs; School Disaster Risk Reduction focal is only a designate teacher and has no comprehensive training on disaster risk reduction; The members of the School Disaster Risk Reduction & Management Committee are not fully functional since there is no dedicated office to act as the planning, implementing, coordinating and monitoring of all programs and projects in relation to school disaster risk reduction. This was observed in the recent earthquake events that shook Davao Region. The school safety was greatly affected according in the damaged and losses report submitted to the Provincial Disaster Risk Reduction and Management Office; Despite the quarterly earthquake drills being performed by the schools, learners were in panicked and in confusion on what to do in an actual shaking. I asked myself, what went wrong? These observations had inspired me to dig deeper on the challenges and issues on the implementation of disaster risk reduction program which is a prerequisite in obtaining school safety. The researcher had not come across with the study that was the same with the study undertaken at present, which is Teachers' Perception of the Implementation of School Safety Measures in Selected Elementary Public Schools in Davao del Norte. Thus, there is urgency to conduct the study.

CHAPTER THREE

CONCEPTUAL & THEORETICAL FRAMEWORK OF THE STUDY

A. *Conceptual Framework*

Presented in Figure 1 is the conceptual framework of the study. The school serves as a grouping variable moderator.

While the evaluation response on implementation of school safety measures which is described by succeeding indicators: enabling environment, safe learning facilities, school disaster risk management and disaster risk reduction in education.

The framework that I used for this study is from the National Disaster Risk Reduction & Management Council (NDRRMC) "Gawad KALASAG" (Kamidad at Sakuna labanan, sariling Galing ang Kaligtasan). Kalasag is the Filipino term for "shield" used by early Filipinos as a means of protection from attacks of enemies or harmful animals. Relatedly, Gawad KALASAG was conceived to protect or shield high risk communities against hazards by encouraging participation of various stakeholders in designing and implementing Disaster Risk Management (DRM) programs.

Initiated in 1998, Gawad KALASAG is NDRRMC's current recognition scheme in its search for excellence on DRM and humanitarian assistance. It provides the mechanism in obtaining sustained commitment and support from the highest level of government by recognizing the exceptional contributions of the various Disaster Risk Management (DRM) practitioners in rebuilding the resilience of nations and communities to disaster. At the same time, Gawad KALASAG continues to promote the spirit of volunteerism among agencies and individuals in providing the much needed help during the response phase of DRM. Practitioners of DRM include the Local Disaster Risk Reduction & Management Councils (LDRRMCs) at the provincial, city, municipal and barangay levels. Also includes the education sector from the Basic Education to Tertiary level. The LDRRMCs serve as the frontliners in preparing for, responding to, and recovering from any type of disaster or emergency. Moreover, Non-Government Organizations (NGOs), Private Volunteer Organizations, and Government Emergency Managers are the prime contributors and major stakeholders/partners in the implementation of DRM and humanitarian response programs.

The said annual search is now on its 22nd year of implementation. It is guided by a set of checklist for each category. The school checklist is consist of four Pillars, namely: Enabling Environment, Safe Learning Facilities, School Disaster Risk Management, and Disaster Risk Reduction in Education.

Enabling Environment aims to provide a rich, varied and safe learning spaces against all hazards by adopting policies on disaster risk reduction, create a school DRRM Team, Formulation of School DRRM Plan, and forging partnership among LGUs and other stakeholders in order to achieve a safe learning community where children are prepared in responding to negative effects of a disaster. An environment of resilient individual (DO 37 s 2015).

Safe Learning Facilities This pillar involves physical and other related structures of the schools. It also includes the establishment of temporary learning spaces that can be used during possible displacement brought by disasters and/or emergencies. Here, education authorities, architects, engineers, builders and school community members undertake safe site selection, design, construction, and maintenance of school structures and ensure safe and continuous access to the facility (DO 37 s 2015).

School Disaster Management deals with the establishment of organizational support structures such as the DRRM Service and DRRM Coordinators in all also cover the setting up of systems, processes and standards to operationalize the four (4) thematic areas in the context of basic education. (DO 37 s 2015).

Disaster Risk Reduction in Education means how the school through the teacher be effectively integrate Disaster Risk Reduction topics in the formal and non-formal school curricula and in extracurricular activities. This covers building the capacity and skills of learners and personnel, particularly teachers. (DO 37 s 2015).

➤ *Definition of Terms*

In this study the following terms were used to further explain the importance of these words. It is clearly presented and described on this corner how these words affect each other in terms of developing a safe school for teachers, learners, and stakeholders in the school.

- *Teacher Perception.*

As used in this study, perception is a mode of apprehending reality and experience through the senses, thus enabling discernment of figure, form, language, behavior, and action. Commonly, perception is defined as a way of seeing things (Munhall, 2008).

- *School.*

As used in this study, it is an educational institution mandated to implement disaster risk reduction programs to achieve safe learning spaces and safe learning environments for the teaching of students under the direction of teachers (DepEd, 2011).

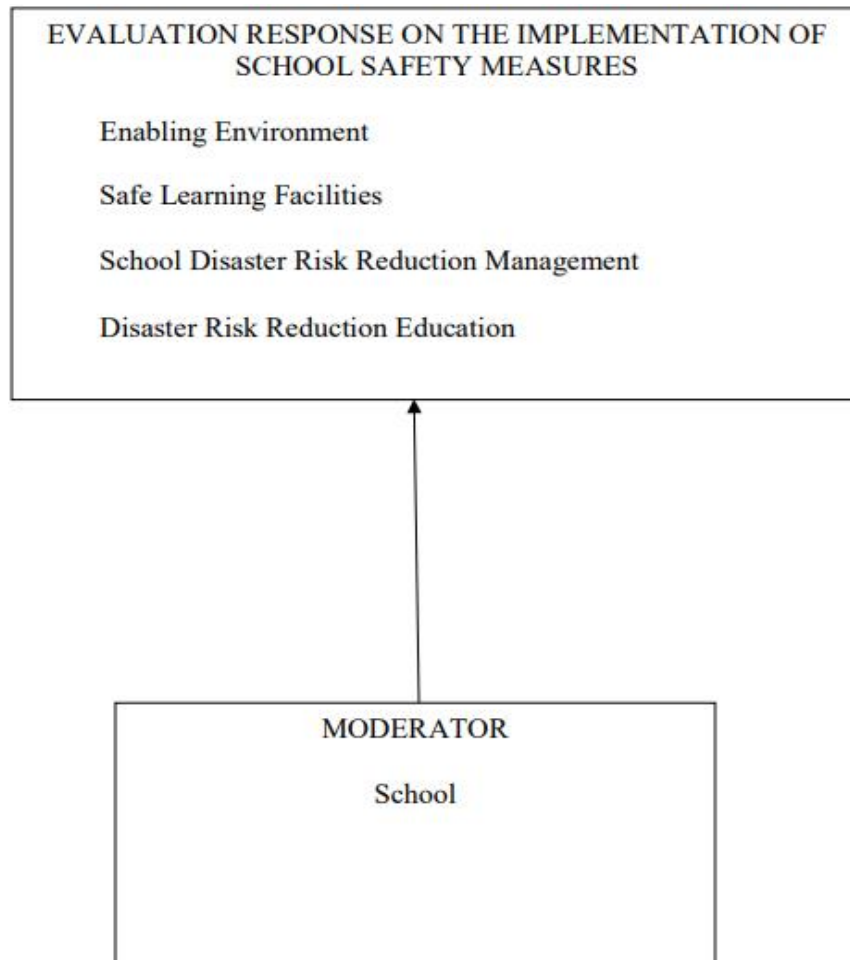


Fig 1 Conceptual Framework of the Study

- *School Safety Measures.*

As used in this study, it means that teachers, learners and parents are protected from any possible effects of natural hazards by initiating proactive measures under enabling environment, safe learning facilities, school disaster risk management, and disaster risk reduction in education (NDRRMC, 2019).

B. Theoretical Framework

This study is anchored on the theory that implementation of school safety measures promotes a culture of safety among teachers and the students. It is with this premise that natural disasters can be minimized if proactive measures are initiated. This framework of action embodies the ultimate goal which is to minimize the causal effects of disaster through this Comprehensive Disaster Risk Reduction and Management (DRRM) in the Basic Education Framework of the education sector to develop resiliency of the education sector (DepEd Order No. 37, 2015).

While the theory on School Safety anchors in the National Disaster Risk Reduction & Management Council Memorandum Circular # 26, Series of 2019 dubbed as *The Gawad Kalasag Search* under school category using the Comprehensive School Safety Questionnaire focusing on these areas: Enabling Environment, and the 3 Pillars: Safe Learning Facilities, School Disaster Risk Management and Disaster Risk Reduction in Education.

This is also anchored to Normal accident theory (NAT) which identifies factors in highly complex integrated systems that can have unexpected, undetected, and uncorrected system failures. Results showed that elements of culture and leadership found in the Human Resource Organization construct of disaster foresightedness and mitigation fostered an internal environment of successful enterprise reporting risk management to ethically achieve organizational goals and abate third-party stakeholder risk-harm (Ewers, 2017).

CHAPTER FOUR METHODOLOGY

This chapter presents the research design, research subject, research instruments, data gathering procedures, and the statistical treatment of the data.

A. Research Locale

The study was conducted in three rural public schools in the Province of Davao del Norte, namely: Sto. Nino Central Elementary School in Talaingod; Sawata Central Elementary School in San Isidro; and Cambanogoy Central Elementary School in Asuncion. I chose these schools based on these factors: Municipality of Talaingod is a 2nd Class Municipality. The topography of this area are commonly steep and delivery of basic services remain a challenge. The Municipality of San Isidro is a 4th Class Municipality. They are much poorer than Talaingod. Topography is not as steep compared to Talaingod. Location of the basic services are accessible. Lastly, the Municipality of Asuncion is a 1st Class municipality. It is closely located from the Capital of Davao del Norte, which is Tagum City with approximately less than 15 kilometers. Topography is flat and basic services are easily accessible.

Aside from these factors, these schools are in high risk area in terms of natural disasters like flood, landslide and earthquake. Landslide incident are common occurrence in Talaingod due to its topography. Flooding is perennial event in Asuncion due to the presence of Saug & Libuganon River which is one of the 18 major river basins in the country. Earthquake events are happening in San Isidro because of the presence of active fault lines in the area, the Central Mindanao fault which traverses this locality.

All these public schools are in Davao del Norte that is a province in the Philippines situated in the Davao Region occupying the South Eastern section of Mindanao with Tagum as its capital. The province has a land area of 3,426.97 square kilometers or 1,323.16 square miles. Its population as determined by the 2015 Census was 1,016,332. This represented 20.77% of the total population of the Davao Region, 4.21% of the overall population of the Mindanao island group, or 1.01% of the entire population of the Philippines. Based on these figures, the population density is computed at 297 inhabitants per square kilometer or 768 inhabitants per square mile. Davao del Norte is bordered, clockwise from the North, by Agusan del Sur, Compostela Valley, Davao Gulf, and Davao del Sur, Bukidnon. Davao del Norte has 8 municipalities and 3 cities. The total number of barangays in the province is 223 (PhilAtlas, n.d.).

B. Research Design

This study employed quantitative non-experimental design utilizing descriptive survey research. Descriptive research is defined as a research method used to describe the existing phenomena as accurately as possible. The word "existing phenomena" makes descriptive research contrary to experiment research which observes not only the existing phenomena, but also the phenomena after a certain period of treatment. The phenomena observed in descriptive research are already available. What is necessary for a researcher to do is collecting the available data through the use of research instruments such as test, questionnaire, interview, or even observation. The main goal of descriptive research is to describe systematically the existing phenomena under the study (Atmowardoyo, 2018).

C. Respondents of the Study

The target respondents were the teaching personnel of the following three elementary public schools in the Division of Davao del Norte utilizing the sampling technique called Convenient Sampling.

Table 1 The Demographic Profile of Respondents

School	Male	Female	No. of Respondents	Percentage
School 1	8	38	46	43.81%
School 2	5	22	27	25.71%
School 3	6	26	32	30.48%
Total	19	86	105	100.00%

As shown in the above table, there were 46 respondents from School 1 which comprises 43.81% of the total respondents. Meanwhile, there are 27 respondents from School 2 which comprises 25.71% of the total respondents. Moreover, there are 32 respondents from School 3 which comprises 30.48% of the total respondents. When distributed according to gender, there are total of 19 male respondents which is 18.10% of the total respondents while there are 86 female respondents which comprised the 81.90%. There are eight male from School 1, five from School 2, and six from School 3 while 38 female from School 1, 22 from School 2, and 26 from School 3.

D. Research Instrument

This study used survey questionnaires from the National Disaster Risk Reduction & Management Council through the *Gawad Kalasag* Search which has been used by the Office of Civil Defense for the last 22 years as basis of gauging school safety both in the private and public schools employing the comprehensive school safety checklist with the four indicators: enabling environment, safe learning facilities, school disaster risk management, and disaster risk reduction in education which the researcher also utilized in conducting the survey to teacher respondents regarding implementation of school safety measures. The survey questionnaire is a 38-item instrument with 10 items under enabling.



Fig 2 Philippine Map Highlighting Talaingod, San Isidro, and Asuncion in Davao del Norte

Environment, 5 items under safe learning facilities, 17 items under school disaster risk reduction management, and 6 items under Disaster Risk Reduction in education. The survey questionnaire is dichotomous by nature since responses are only YES and NO.

The survey questionnaires underwent a validation process to ensure the content validity. The first draft of the research instrument was submitted to the research adviser for comments, suggestions and recommendations to improve its presentation with the corrections to be included and integrated. The final copies were submitted to a panel of experts for refinement. The final revisions were made by incorporating the corrections, comments and suggestions given by the expert validators.

E. Data Collection

A letter asking for permission on the conduct of the study was sent to the Schools Division Superintendent. A letter of intent was then forwarded to the school principals of the identified schools. The researcher then visited the target schools and made initial coordinative activities like facilitating a brief orientation for the target recipients before conducting an actual survey. The researcher then checked, tabulated, and consolidated the results and then gave it to Statistician for the analysis.

F. Statistical Treatment of Data

The data that were gathered and tabulated, analyzed and interpreted using the following tools:

➤ *Percentage.*

It was used to identify the proportion of respondents who answered yes and no to the survey questionnaire.

➤ *z-test for Proportion.*

It was used to determine the significant difference in the proportion of teachers who answered YES and the proportion who answered NO.

G. Ethical Consideration

The main concerns of my study are the elementary public school teachers who are the prime movers of implementing school safety measures. Therefore, I have to ensure their safety, give full protection so that they will not lose their trust to me. I followed ethical standards in conducting this study. Likewise, ensure that this study is voluntary and that decisions about participation in research are made from an informed position.

In conducting this study, the ethical standards of Boyatzis (1998) as cited by Mark et al. (2005) are followed, to wit: respect for persons, beneficence, justice, consent and confidentiality.

Respect for persons entails obligation of the researcher not to take advantage of the weaknesses of the research participants/respondents. And to maintain friendship, trust and confidence among the participants of the researcher, self-sufficiency was eluded. Thus, permission to conduct this study is sought first from the school division superintendent, permission from school principals and grade heads as research participants are also sought. These steps are done before conducting the research to give due respect to the individuals concerned in the study (Creswell, 2012).

Consent is an important way of showing respect to persons during the research process. All respondents are made aware on the purpose and objectives of the research study including the full confidentiality of the information to protect their privacy (deLanda, 2009).

Beneficence refers to the researcher to maximize benefit to the respondent while minimizing risk of harm. Maximizing potential benefits goes along with a sound research design thus necessitates rigorous review. The valuable part of this study is explained to the respondents to fully understand the importance and they will be protected from any risk, physical, personal or psychological. Researchers are expected to provide the participants with outline risk prevention and benefits in their involvement in the study (Adams, 2013).

Confidentiality towards the results and findings, as well as the safety of the respondents, all of the personal information provided under the questionnaire specifically the name is made optional to the concerned respondent. This will help them decide to voluntarily participate in the study. The researcher also make sure that during the distribution of the questionnaire, the respondents will feel comfortable in answering the said instrument. Hence, due respect is given importance in this study (Maree & Westhuizen, 2007).

Justice requires an equitable distribution of the risks and benefits as result of this research. The contributions made by the participants should be acknowledged. They must be given due credits in their endeavors. The researcher hopes that through this study, they will be free from the negative feelings as they have to unload those unfavourable experiences in life.

CHAPTER FIVE

DISCUSSION AND ANALYSIS OF RESULTS

This chapter presents the results of the findings, discussion and analysis of results. The interpretation of the result commences with the demographic profile of respondents and comparative data on responses of teachers to implementation of safety measures in terms of school.

A. Results of the Findings

➤ The Demographic Profile of Respondents

The following table shows the demographic profile of respondents on the implementation of school safety measures from different schools and in terms of male and female teacher respondents.

Table 1 The Demographic Profile of Respondents

School	Male	Female	No. of Respondents	Percentage
School 1	8	38	46	43.81%
School 2	5	22	27	25.71%
School 3	6	26	32	30.48%
Total	19	86	105	100.00%

As shown in the above table, there were 46 respondents from School 1 which comprises 43.81% of the total respondents. Meanwhile, there were 27 respondents from School 2 which comprises 25.71% of the total respondents. Moreover, there are 32 respondents from School 3 which comprises 30.48% of the total respondents. When distributed according to gender, there are total of 19 male respondents which is 18.10% of the total respondents while there are 86 female respondents which comprised the 81.90%. There are eight male teachers from School 1, five from School 2, and six from School 3 while there are 38 female teachers from School 1, 22 from School 2, and 26 from School 3. The sample is dominantly comprised of female teacher respondents while School 1 occupies the greatest number of respondents and then followed by School 3 while School 2 has the least number of respondents.

➤ Comparative Data on Responses of Teachers to Implementation of Safety Measures Per School

The following table presents the percentage of teachers in three different schools who responded that that the school where they are connected implemented school safety measures in terms of enabling environment, safe learning facilities, school disaster risk management, and disaster risk reduction in education. The response was categorized into YES which means that the respondent agreed that the school implemented safety measures and NO which means that the respondents did not agree that the school implemented safety measures. Numbers presented below are in percentage form based on the population per school and then average man was then computed for over-all result.

Table 2 Comparative Data on Responses of Teachers to Implementation of Safety Measures Per School

Indicators	School 1		School 2		School 3		Mean	
	YES	NO	YES	NO	YES	NO	YES	NO
Enabling Environment	83.48	16.52	80.00	20.00	65.71	34.29	77.62%	22.38
Safe Learning Facilities	80.87	19.13	82.96	17.04	75.00	25.00	79.60%	22.40
School Disaster Risk Management	78.13	21.87	71.90	28.10	60.01	39.99	71.11%	28.89
Disaster Risk Reduction in Education	78.62	21.38	70.37	29.63	57.74	42.26	70.30%	29.70
School Safety Measures Implementation Mean	80.28	19.72	76.31	23.69	64.63	35.37	73.81%	26.19

As shown in the above table, 73.81% of the respondents agreed that the school implemented school safety measures while 26.19% of the respondents said they did not agree that the school implemented safety. Considering each indicator, 77.62% of the respondents agreed the school reinforced an enabling environment in the implementation of school safety measures while 22.38% did not agree. Meanwhile, 79.60% of the respondents agreed that the school ensured safe learning facility while 20.40% did not agree. Further, 71.11% of the respondents agreed that the school strengthened the disaster risk reduction management while 28.89% did not agree. Lastly, 70.30% of the respondents agreed that the school where they are in integrated disaster risk reduction in education while 29.70% did not.

The indicator with the highest percentage of teacher respondents who agreed that the school implemented this safety measure was safe learning facilities while the indicator with the lowest percentage of teacher respondents who did not agree that the school implemented this safety measure was the disaster risk reduction in education. This is due to the fact that teachers are directly working in the classroom and other learning facilities that is why insurance of safety learning facilities are observed and often checked while integration of disaster risk reduction in education is not observed because in the delivery of instruction of respective subject, teachers only aimed to hit the learning competency in the subject area taught. Moreover, trainings provided are more into practical responses during disasters and not on pedagogical integration of disaster and risk management principles.

Considering school by school result, School 1 has the highest percentage of 80.28% of teachers who responded that the school where they are in implemented safety measures. This is then followed by School 2 with 76.31% of teachers who agreed that the school where they are in implemented school safety measures. School 3 got the least percentage of 64.63% of teachers who said that their school implemented school safety measures. It can be noted that in all three schools where the survey was conducted, there are still teachers who didn't agree that the school where they are connected implemented school safety measures. This is due to lack of information and orientation on the work of School-Based DRRM to the remaining 19.72% of teachers from School 1, 23.69% of teachers from School 2, and 35.37% of teachers from School 3. It can be noted that School 3 has the most teachers who did not agree that their school implemented safety practices. This can be a lack of information-driven orientations for teachers or might be these proportion of teachers did not concretely live the orientation and information provided to them.

Further, in enabling environment, School 1 got the highest percentage of 83.48% of teachers who responded yes that the School 1 has enabling environment. It is then followed by School 2 with 80%, and then School 3 with the least percentage of teachers with 65.71%. The variation of percentage of teachers who agreed that the school ensured enabling environment can be attributed to different school set ups and location of the school. This might be the reason and possibly School 3 got the least percentage of teachers who responded this way.

In terms of safe learning facilities, School 2 has the highest percentage of 82.96% of teachers who responded that the school where they are connected has safe learning facilities. It is followed then by School 1 with 80.87%, and then School 3 with 75%. Same in the first indicator, still School 3 got the least percentage of teachers who agreed that the school ensured a safe learning facility. This can be attributed to set up of school buildings and other facilities and might be the lack of it. Moreover, teachers in this school might lack information-driven knowledge regarding this matter.

In school disaster risk reduction management, School 1 has the highest percentage of teachers who said that the school where they are connected religiously manages school disaster risk strategies with 78.13%. It is then followed by School 2 with 71.9%, and then School 3 with 60.01%. Still School 3 got the least percentage of teachers who agreed that the school has strong management plan on disaster risk reduction. This might be on the lack of information drive to inform these percentage of teachers.

For disaster risk reduction in education, School 1 has the highest percentage of teachers who integrated Disaster Risk Reduction Education across subject areas in teaching with 78.62%. It is then followed by School 2 with 70.37%, and then School 3 with 57.74%. Teachers in School 3 might lack pedagogical trainings on the integration of disaster risks reduction to learning areas during teaching-learning process.

If observed in the above result, School 3 has consistent least percentage of teachers who agreed that the school implemented school safety practices in all indicators. This might be due to the variation of information-driven strategies employed by every school regarding school-based disaster and risk reduction management. For the other two schools, they might have intensified their information-driven orientation and closely monitored teachers on the implementation of these safety measures in their school.

B. Discussion of the Findings and Analysis of Results

This part presents the discussion of the findings. This includes analysis of the results and supporting literatures that backed up the generated ideas of the study.

➤ *The Demographic Profile of Respondents*

Different schools have different number of teachers which depend on the school size and student population. As reflected in the study, three schools have different numbers of teachers employed, one school has higher number of teachers compared to the other two schools. The teacher to student ratio matters and should be considered in explaining why this school has a greater number of teachers than other schools. This is due to the fluctuating enrollment data that every school has. Moreover, in this study, there are fewer male respondents compared to female ones. This is true almost in all public schools that number of female teachers is dominant compared to number of male teachers.

In an article written by Tani (2019), it was emphasized that women are considerably over-represented in the teaching profession. Recent data show, among recent Australian university graduates, 97% of pre-primary teachers, 85% of primary teachers and 68% of secondary teachers are female. While in the study of Wood (2009), far fewer males than females work in education. This deficit may represent an unacceptable balance in teacher gender demographics.

In addition to the findings and support above, the greater the number of teachers, the more people in school can be depended when it comes to management of disasters and risks encounters. In today's world, managing risk has become a key imperative of social and organizational life and that society has become more litigious. Courts and juries no longer view educational institutions as having the special status of protected institutions in the community. Today, there is a move towards viewing them in the same way as corporate entities for liability purposes. For these reasons, today's educators must be aware that their decisions are subject to public and judicial scrutiny and be fully prepared to respond to questions concerning their policies, procedures and practices (Tourangeau, 2008).

Further, many schools and students experienced adverse effects during this disaster, most of which were attributable to the subsequent tsunami. This highlighted the need to improve disaster reduction measures and disaster management in all learning institutions and schools to ensure the safety of the students. Communities where children live must be made safe, and taking measures to ensure their safety in the event of a disaster is of the highest priority. Schools are often used as temporary accommodation for victims of flooding disasters (Gotoh, Takezawa, Hanada, & Yamamoto, 2016).

With the abovementioned, considering teachers to be a source of information on the implementation of disaster and risk management in school can be of great help in improving the current programs with relationship to the disaster and risk management schemes. Not just like source of information but also as partner of the government agency in ensuring safety in the community.

➤ *Comparative Data on Responses of Teachers to Implementation of Safety Measures Per School*

School safety is important because in order for any learning to take place, a child has to feel that he or she is in a safe environment. Majority of the teacher respondents agreed that the school implemented school safety practices while there are also few who responded NO which means that they did not observe the school reinforcing a school safety practices implementation. This can be accounted to the variation of information-driven strategies employed by every school regarding school-based disaster and risk reduction management. For the other schools, they might have strengthened their orientation dissemination and closely monitored teachers on the implementation of these safety measures in their school.

Teachers in School 1 perceived that the school where they are connected manifests more an enabling environment, followed by school learning facilities, then integrated Disaster Risk Reduction lessons in teaching across subjects, and lastly with strategic schemes in managing disaster risk reduction. Comparatively, teachers in School 2 perceived that the school where they are connected manifests a priority of school learning facilities, then enabling environment, then integration of disaster risk reduction in education, and lastly on management of school disaster risk reduction. While teachers in School 3 perceived the school where they are connected prioritizes school learning facilities, then enabling environment, then management of disaster risk reduction, and lastly on integration of disaster risk reduction in education. These variations of priorities from different schools reflect what cultural values are priorities of each school and can also be due to the resources that each school has.

In terms of aspects of school safety measures, School 1 has the highest percentage of teachers who observed that the school where they are connected manifests more priorities in terms of enabling environment. It is then followed by School 2, and then School 3. While School 2 has the highest percentage of teachers who responded that the school where they are connected has safe learning facilities. It is followed then by School 1, and then School 3. While School 1 has the highest percentage of teachers who said that the school where they are connected religiously manages school disaster risk strategies. It is then followed by School 2, and then School 3. Moreover, School 1 has the highest percentage of teachers who integrated Disaster Risk Reduction Education across subject areas in teaching. It is then followed by School 2, and then School 3. The variation on percentage of teachers who said YES the school implemented school safety measures can be due to the different levels of intensity on strengthening awareness and close monitoring of the implementation of safety measures among teachers. Each school has its own culture and values prioritized.

The variation of percentage of teachers who perceived that the school's priorities in four aspects of school safety practices can be attributed on the population of teachers, the priority of the school heads, and the geographic location of the school. Moreover, the knowledge or awareness of teachers can also be a factor on the variation of the differences among the responses on school safety practices evaluation.

The above information suggests that assessment of the implementation of school safety practices will generate to new information on the nature and prevalence of threats in schools using threat assessment that can guide further work to develop emerging school safety practice (Education Letter; Atlanta [Atlanta]04 July 2018: 27). Further, school climate has received increased attention in education policy and educators are seeking strategies to improve the climates of their middle and high schools. However, there has been no comprehensive synthesis of the empirical evidence for what works in school climate improvement. This review is a reinforcing literature that support how important is school safety practices assessment in schools (Voight & Nation, 2016).

Safe learning facilities got the highest number of teacher respondents who agreed that their schools have this component while there were still few who did not agree. In this case, they were able to observe that school building and classroom components are according to DepEd and National Building Code approved standard design and specifications. This same number of teachers also agreed that their schools conducted risk assessment of buildings, in coordination with the Education Facilities Division, and with support of other agencies and partners, has taken appropriate action with respect to unsafe school buildings, have undertaken regular inspection and repair of minor classroom (including facilities) damages, and agreed that their school heads are clear with the roles and functions of the school in camp management vis-à-vis the LGU and DSWD as per Joint Memorandum Circular No. 1, series of 2013 "Guidelines on Evacuation Center Coordination and Management" and RA 10821 "Children's Emergency Relief and Protection Act" and its corresponding IRR.

Education is a fundamental right for the human being; guaranteeing it is the basis for achieving sustainable development along with inclusion and quality. Inclusive and quality education must be provided in safe establishments that protect the life of the educational community from disasters, and continuity to learning opportunities must be ensured, even in the case of disasters regardless of age, gender or abilities (CE Noticias Financieras, English ed.; Miami [Miami]21 May 2019).

Enabling environment got the second highest number of teachers who agreed that their schools observe this component of school safety practices while there also few teachers who responded that they did not observe their schools considering this one. These teachers agreed that the schools where they are connected adopted/adapted/localized at least three existing policies relating to DRRM/CCA/EiE in education and school safety, formed School DRRM Team, with a focal person and consisting of personnel from different offices; with defined membership and roles and responsibilities and functions, have a comprehensive School DRRM Plan, which includes CCA and EiE measures, covering risk assessment, risk reduction, and rehabilitation and recovery, have budget that supports regular DRRM activities, conducted student-led school watching and hazard mapping (DO 23 s 2015), and involved students in DRRM planning at least once a year. Conducted student-led school watching and hazard mapping (DO 23 s 2015), incorporated results of student-led school watching and hazard mapping in the School DRRM Plan and SIP, collected and consolidated data on programs and activities on DRRM, covering the 3 Pillars to monitor results and impact exist, conducted Rapid Assessment of Damages Report (RADAR) which was submitted to Central Office, within 72 hours after the onslaught of a hazard in the area, and have 100% completion of DRR related questions in the EMIS/EBEIS.

The importance of building safe learning environments for learners is something that cannot be overstated. While it's true that every student learns a bit differently from the next, the environment itself plays a significant role in their development. Safe learning environments translate into comfortable learning environments. They are places where learners feel at home.

Children and youth need safe and supportive schools if they are to succeed in school, to develop in a healthy manner, and to thrive. These needs are particularly great for children who are vulnerable, namely those who struggle with trauma, the adversities of poverty, and the challenges of racism, ethnocentrism, religious prejudice, and disability. Schools are important settings for development, and there are school effects both on well-being, and on illbeing. Effective schools create strong conditions for learning, where students feel and are physically and emotionally safe; connected to and supported by their teachers and the school; challenged by expectations and are engaged in learning; and where their peers and the adults in the school practice good social and emotional skills. Safety is a necessary but not sufficient condition for learning. However, research suggests that safety is associated with test performance, and that this relationship helps explain association that are found between poverty and poor school performance (Themane & Osher, 2014).

School disaster risk management ranked third with the greatest number of teacher respondents who agreed that the schools where they are connected are implementing this component although there are also some teachers who responded that their schools are not implementing this one. These teachers agreed that the schools where they are connected have a Contingency Plan, i.e. Preparedness Plan turned into response actions when a disaster strikes, have 80% of students and their families have accomplished the Family Preparedness Plan together (family evacuation, reunification), as per DO No. 27, series of 2015, have established a school personnel and learners tracking system/protocol in the event of a disaster or emergency, have hazard and evacuation maps are located in conspicuous places, have available, accessible, and adequate first aid kit in every instructional classroom, have at least 2 necessary and functioning equipment, in case of a disaster (e.g. fire extinguisher, handheld/base radio, generator, etc.), have conducted regular hazard-specific drills (at least 3 hazards) with participation of stakeholders (BFP, Medic, LGUs, NGOs, community, PTA, alumni, and others), have established functional early warning system to inform students and personnel of hazards and emergencies (protocol, warning signs, devices, IEC), considering national and LGU warning systems

and protocols, have trained personnel to administer first aid to students and personnel, have pre-identified spaces for putting up Temporary Learning spaces/Shelters in the aftermath of a disaster or emergency, have ready resumption strategies and alternative delivery modes to ensure education continuity (strategies, materials, focal persons to implement), have psychosocial interventions for personnel and students, have trained teachers and other personnel who could provide psychosocial support to students, have an evacuation plan and procedures, have a student-family reunification plan that is clearly disseminated to students, teachers, and parents, have conducted awareness and capacity building for families and learners, and have participated in the different DRRM/CCA/EiE activities of the LGU.

Disasters are being experienced worldwide with growing intensity and frequency with respect to geology, tectonic setting, location, topography, poor land use and environmental practices, and dependence on tourism. Education has been recognized as being an important strategic resource in the fight to achieve individual and social transformation, especially as it relates to attitudes and behaviors promoting a culture of safety. There is therefore a need to fully understand the role of educators as key change agents in building local resilience to environmental challenges. As recommendations and appeals increase for the implementation of a more comprehensive, sustainable, preventative and resilient approach to disaster management, governments have begun to seriously consider the need for integrating Disaster Risk Reduction in formal education (Knight, 2015).

While disaster risk reduction in education got the least number of teachers who said they have observed the schools considering this one and with the highest teachers who said the schools where they are connected did not observe this component of school safety measures. These teachers said that their schools have integrated key DRRM/CCA/EiE concepts in at least 4 subjects based on the national Curriculum Guide, have more than 75% of students who are actively participating in various DRRM/CCA/EiE activities, have a DRRM/CCA/EiE capacity building plan for teachers and personnel, have school head and personnel who received at least 3 DRRM/CCA/EiE trainings from division or region or partners, have at least more than 10 DRRM/CCA/EiE resource materials available in the school, and have presence of DRRM corner, with updated IEC materials posted in it, in every classroom.

The study of Mutasa and Coetzee (2019) finds that the experiential learning (EL) method provides an appropriate method by which DRR knowledge can be conveyed within the existing curriculum, as many teachers who have taken the innovative step of integrating DRR into their existing subjects are already implementing key components associated with the EL model. It is also established that although EL provides many potential benefits for an integrated DRR curriculum, the lack of clear policy direction and lack of various supporting resources are preventing the method benefits from being realized for many schools.

In all items analyzed, it was found that there was a variation on the percentage of teachers who agreed that the school implemented safety measures and this difference in the responses of school safety with the SRO group perceiving their schools as being safer than the teachers in the SRO/SSO group. In an environment in which the issue of school safety is becoming an increasingly important topic, the perception of teachers working in these schools is vital.

School shootings and emergencies have created the need for educators to be proficient in emergency response procedures; yet they do not always receive the requisite training. The lack of an established delineated training program for kindergarten to Grade 12 institutions has created a situation where educator preparedness varies immensely at schools. Numerous national events of targeted school violence have exemplified the need for quick and proper responses by educators to mitigate the tragic results until first responders arrive (Rinaldi, 2016).

This is in lieu with the study of Valadez (2017) that disasters on school campuses can occur at any time and school leaders must be prepared to handle a variety of potential emergencies to protect their campuses. Research identifies definitive steps that can be taken to decrease the chances of school crises. The study found that the literature is framed in a macro perspective of the individual components of school safety, offering broad-based strategies on how to protect students and staff before, during, and after a disaster. Experienced school principals, coordinators, and teachers focus on these perspectives and understanding of the needs of the school community that is the foundation of safety.

The study of Lamb (2018) as a support of this study was a review of the emergency response plan because there is limited research on how residential school campuses should respond to critical incidents on campus. Residential schools face a unique challenge because they do not close at the end of the day and cannot rely on students being in set locations, such as class, at the time of an incident. The documents and interview responses were coded for training, confidence, preparation, and communication.

CHAPTER SIX CONCLUSION AND RECOMMENDATION

A. *Conclusion*

The following conclusions were generated based on the results of the study:

- The researcher conclude that majority of the teachers are having difficulty in integrating Disaster Risk Reduction topics in their lesson plan based on the lowest ranking of the indicator Disaster Risk Reduction in Education.
- The researcher conclude that the highest number of teachers who agreed that the schools where they are connected are implementing safe learning facilities, followed by enabling environment, then school disaster risk management, and lastly is the disaster risk reduction in education. Further, in enabling environment, School 1 got the highest percentage of teachers who responded yes. It is then followed by School 2, and then School 3. While School 2 has the highest percentage of teachers who responded that the school where they are connected has safe learning facilities. It is followed then by School 1, and then School 3. While School 1 has the highest percentage of teachers who said that the school where they are connected religiously manages school disaster risk strategies. It is then followed by School 2, and then School 3. While School 1 has the highest percentage of teachers who integrated Disaster Risk Reduction Education across subject areas in teaching. It is then followed by School 2, and then School 3.
- The researcher conclude that there is significantly a greater number of teachers who agreed that the schools where they are connected are implementing school safety measures than those who said that their schools are not.
- The researcher conclude that majority of the schools got the lowest rating on the indicator Disaster Risk Reduction in Education, which means that 2 out of the 3 target schools are having difficulty in effectively integrating disaster risk reduction topics in the school curricula simply because they lack proper training on the subject matter.

B. *Recommendation*

The following recommendations were generated based on the result of the study:

- School Administrators and School Disaster Risk Reduction & Management Coordinator are encouraged to formulate a Disaster Preparedness Capacity Plan for teachers separate from the mandated school DRRM plan. This is to enhance their knowledge and skills in the field of Disaster Risk Reduction.
- School Administrators and School Disaster Risk Reduction & Management Coordinator are encouraged to do innovation aside from classroom teaching of disaster risk reduction & management, it could be complimented by conducting various co-curricular activities such as poster making lessons, slogan and essay writing based on the learners' personal experiences about natural disasters, and training on school-based hazard map making in order to increase the knowledge level of teachers since there were still teachers who responded NO on the survey questionnaire despite of the existing guidelines given by the Department of Education in relation to integration of disaster risk reduction in the school curriculum.
- School Administrator and School Disaster Risk Reduction & Management Coordinator are encouraged to closely coordinate with the Local Disaster Risk Reduction & Management Council of their locality on how the school can formulate an early-warning system. Make sure also that everyone in the school knows about this system. Perform (announced and unannounced) drills based on the existing and potential hazards of the community.
- School Administrator and School Disaster Risk Reduction & Management Coordinator are encouraged to train all teaching and non-teaching personnel regarding disaster prevention like risk assessment, basic forecasting and preparedness training like basic life support, first aid, and planning formulation not just the members of the school disaster risk reduction & management committee.
- School Administrator and School Disaster Risk Reduction & Management Coordinator are encouraged to participate on the annual National Disaster Resiliency Month celebration by initializing school inspired activities like "School Safety Day" concept wherein various activities can be learned by the teachers and learners in collaboration by the local disaster risk reduction & management council of the locality.
- School Administrator and School Disaster Risk Reduction & Management Coordinator are encouraged to join in the Gawad Kalasag Search for Best School Disaster Risk Reduction & Management implementer in order to be properly evaluated how they are doing in terms of implementing their school disaster risk reduction & management plan.
- School Administrator and School Disaster Risk Reduction & Management Coordinator are encouraged to adopt national & local policies on disaster risk reduction by localizing it and should be translated into its own vernacular, so that everybody in the school community can be able to understand.
- School Administrator and School Disaster Risk Reduction & Management Coordinator are encouraged to execute Memorandum of Agreement or Understanding between the local government unit through the local disaster risk reduction & management council and other civil society organizations in the conduct of disaster risk reduction programs since school has a limited resources to use to.

- School Administrator and School Disaster Risk Reduction & Management Coordinator are encouraged to formulate policies in relation to the strengthening of hazard-based disaster risk reduction program. Policy recommendations shall emanate from the school itself where the information on the existing hazards are known. Teachers on the other hand, intensify their efforts on disaster risk reduction implementation by assessing the status through conducting a regular meeting with the members of the school disaster risk reduction and management committee. Additionally, creating active partnership and collaboration among partners both in government and non-government institutions. The school disaster risk reduction focal person shall orchestrate initiatives to gain extra mileage in terms of requesting additional resources to government and other stakeholders by actively engaging during the local disaster risk reduction & management council meeting. Lastly, studies related to the focus of this research are also highly recommended using different indicators which will validate the consequences herein or will deal with other problems and gaps which were not covered in this study. The researcher also advocates that it is high time to have a research on this issue in a larger setting and a wider scope and also to further do a research on Teachers' Perception on the Implementation of School Safety Measures.

REFERENCES

- [1]. Atmowardoyo, H. (2018). Research methods in TEFL studies: Descriptive research, case study, error analysis, and R & D. *Journal of Language Teaching and Research*, 9(1), 197-204. doi: <http://dx.doi.org/10.17507/jltr.0901.25>
- [2]. Department of Education (2013). Yolanda damaged schools. Retrieved from <https://www.deped.gov.ph/2016/01/21/84609/>
- [3]. Department Order No. 37 (2015). The Comprehensive Disaster Risk Reduction and Management (DRRM) in Basic Education Framework. Retrieved from www.deped.gov.ph
- [4]. Education - school psychology; study findings from university of virginia broaden understanding of school psychology (student threat assessment as a standard school safety practice: Results from a state wide implementation study). (2018, Jul 04). *Education Letter* Retrieved from <https://search.proquest.com/docview/2060941047?accountid=31259>
- [5]. Gotoh, H., Takezawa, M., Hanada, R., & Yamamoto, T. (2016). Flood risk management for schools in the lowlands of tokyo, japan. Southampton: W I T Press. doi:<http://dx.doi.org/10.2495/UW160181>
- [6]. Jalad, R. (2017). Gawad Kalasag Comprehensive School Safety Checklist. Retrieved from <https://www.ocd.gov.ph>
- [7]. Knight, V. (2015). Disaster risk reduction education in the caribbean: Policy, practice, and implications for teacher education. *Journal of Eastern Caribbean Studies*, 40(3), 187- 209,252. Retrieved from <https://search.proquest.com/docview/2028118268?accountid=31259>
- [8]. Lahelma, E. (2000). Lack of male teachers: a problem for students or teachers? Retrieved from <https://www.tandfonline.com/doi/pdf/10.1080/14681360000200093>.
- [9]. Lamb, M. B. (2018). Exploring the emergency response plan of the north carolina school of science and math to determine preparedness and reduction of risk in violent incidents (Order No. 13425485). Available from ProQuest Central. (2175676062). Retrieved from <https://search.proquest.com/docview/2175676062?accountid=31259>
- [10]. Lapointe, D. A. d. (2016). Teacher perception of school safety between mississippi secondary schools with school resource officers and school safety officers (Order No. 10096170). Available from ProQuest Central. (1780335972). Retrieved from <https://search.proquest.com/docview/1780335972?accountid=31259>
- [11]. Le Houérou, P. (2010). World Bank International Finance Corporation. Retrieved from <https://www.google.com.ph/search?dcr=1&ei=eUKlWr7eDMOz0gT6sKXY>
- [12]. Luistro, A. (2011). Disaster Preparedness Measures for Schools. Retrieved from <https://www.deped.gov.ph>
- [13]. Luna, M. , Bautista, M., & De Guzman, M. (2008). Mainstreaming Of Disaster Risk Reduction In The Education Sector In The Philippines. Retrieved from <https://www.adpc.net/igo/>
- [14]. Marais, H. (2012). Annual Report United Nations International Strategy for Disaster Reduction. Retrieved from https://www.unisdr.org/files/33363_unisdrannualreport2012
- [15]. Masato, M. & Mitsujib, K. (2012). Building damage during the 2011 off the Pacific coast of Tohoku Earthquake. Retrieved from <https://doi.org/10.1016/j.sandf.2012.11.012>
- [16]. Muñoz, A. , Quiun, D., & Tinman, M. (2004). Repair and Seismic Retrofitting of Hospital and School Buildings in Peru. Retrieved from www.iitk.ac.in/nicee/wcee/article/13_2000
- [17]. Mutasa, S., & Coetzee, C. (2019). Exploring the use of experiential learning in promoting the integration of disaster risk reduction into primary school curriculum: A case of botswana. *Jamba*, 11(1) doi:<http://dx.doi.org/10.4102/jamba.v11i1.416>
- [18]. National Disaster Risk Reduction and Management Council [NDRRMC], (2019). Mindanao Earthquake. Retrieved from <https://reliefweb.int/report/philippines/ndrrmc-update-sitrep-no-21-regarding-magnitude-66-and-65-earthquakes-tulan>
- [19]. Punzalan, R., & Llarena, J., (2016). School Safety Hazards Preparedness of Public Elementary Schools In The Division Of Calamba East District. Retrieved from <https://calabarsonneda.gov.ph>
- [20]. Provincial Disaster Risk Reduction and Management Council Report [PDRRMC], (2019). Earthquake Damage Assessment and Needs Analysis Report. Retrieved from <https://www.davaodelnorte.gov.ph>
- [21]. Rahman, M. (2018). Exploring Science Teachers Perception of Classroom Assessment in Secondary Schools of Bangladesh. doi:10.5281/zenodo.1296835 Volume 4.
- [22]. Rinaldi, R. P. (2016). Assessing educators' school safety and security preparedness at a new jersey K-12 nonpublic school (Order No. 10257572). Available from ProQuest Central. (1871186125). Retrieved from <https://search.proquest.com/docview/1871186125?accountid=31259>
- [23]. Rodgers, J. (2012). Why Schools are Vulnerable to Earthquakes. Retrieved from https://www.iitk.ac.in/nicee/wcee/article/WCEE2012_1189
- [24]. Tani, M. (2019). Why are teachers mostly female? Because men get better pay in other professions. Retrieved from <https://theconversation.com/why-are-teachers-mostly-female-because-men-get-better-pay-in-other-professions-109569>.
- [25]. Themane, M. & Osher, D. (2014). Schools as enabling environments. Retrieved from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0256-01002014000400001.
- [26]. Tourangeau, R. E. (2008). 0RW1S34RfeSDcfkexd09rT2In loco parentis1RW1S34RfeSDcfkexd09rT2: An investigation of the law, risk management and risk issues in the context of education from the perspective of educators (Order No. NR48663). Available from ProQuest Central. (304317688). Retrieved from <https://search.proquest.com/docview/304317688?accountid=31259>
- [27]. Translated by ContentEngine, L. L. C. (2019, May 21). Global safe schools initiative. CE Noticias Financieras Retrieved from <https://search.proquest.com/docview/2228494411?accountid=31259>

- [28]. Tuladhar, G., Yatabe, R., Kumar Dahal, R. & Bhandary, N. (2013). Knowledge of disaster risk reduction among school students in Nepal <https://doi.org/10.1080/19475705.2013.809556>
- [29]. United Nations International Strategy for Disaster Reduction [UNISDR], (2017). Annual Report. Retrieved from https://www.unisdr.org/files/58158_unisdr2017annualreport.pdf
- [30]. United Nations International Children's Emergency Fund [UNICEF], (2014). Bohol Earthquake Situation. Retrieved from <https://reliefweb.int/report/philippines/unicef-philippines-bohol-earthquake-situation-report-22-january-2014>
- [31]. United Nation-Office for the Coordination of Humanitarian Affairs [UN-OCHA], (2015). Earthquake in Nepal. Retrieved March 23, 2018 from <https://www.unitednations.org>
- [32]. Valadez, R. A. (2017). The role of leadership in the time of crisis: Preventing, preparing for, and responding to crises on a school campus (Order No. 10637871). Available from ProQuest Central. (2001167689). Retrieved from <https://search.proquest.com/docview/2001167689?accountid=31259>
- [33]. Valencia, M., Ali, M., Maryani, E. (2018). Integration of Disaster Risk Reduction in the Curriculum of Philippine Educational Institution. Retrieved from <https://www.atlantis-pess.com/proceedings/aes-18/55917397>
- [34]. Voight, A., & Nation, M. (2016). Practices for improving secondary school climate: A systematic review of the research literature. *American Journal of Community Psychology*, 58(1), 174-191. doi: <http://dx.doi.org/10.1002/ajcp.12074>
- [35]. Wood, T. D. (2009). Teacher perceptions of gender-based differences among elementary school teachers (Order No. 3405432). Available from ProQuest Central. (220000637). Retrieved from <https://search.proquest.com/docview/220000637?accountid=31259>.
- [36]. World Risk Index, (2019). World Risk Index . Retrieved from <https://reliefweb.int/report/world/worldriskreport-2019-focus-water-supply>.

APPENDIX A

LETTER OF PERMISSION TO CONDUCT THE STUDY



February 3, 2020

MS. ERIC R. ROSILLO
Researcher
Philippine Public Safety College
Old Balara, Quezon City

Dear Mr. Rosillo:

This is to inform you that your request for a permit to conduct a study entitled “*Teacher’s Perception of School Safety among Elementary Public Schools in Davao del Norte*” has been approved.

You may proceed with the conduct of your study once all the required documents stipulated in the Guidelines for the Conduct of Research/Study are submitted to this Office through the Planning and Research Section. During the data gathering, you are reminded of items d, e, and f indicated in Section 3 General Guidelines, stating that you are to brief/debrief all of your respondents regarding the topic, scope, and nature of your study, provide them a copy of the Confidentiality Agreement, and that the participation of the respondents to the study is voluntary.

Very truly yours,


DEE D. SILVA, DPA, CESO V
Schools Division Superintendent

CC:SEPS for Planning and Research



APPENDIX B

SURVEY QUESTIONNAIRE ON TEACHERS’ PERCEPTION ON THE IMPLEMENTATION OF SCHOOL SAFETY MEASURES IN SELECTED ELEMENTARY PUBLIC SCHOOLS IN DAVAO DEL NORTE

NATIONAL DISASTER RISK REDUCTION & MANAGEMENT COUNCIL
 GAWAD KALASAG: SCHOOL SAFETY CHECKLIST
 DEPARTMENT OF EDUCATION

Research Paper: “TEACHERS’ PERCEPTION OF SCHOOL SAFETY AMONG ELEMENTARY PUBLIC SCHOOLS IN DAVAO DEL NORTE”

Name of School:		Rural	
Address:		Urban	
CRITERIA		YES	NO
Enabling Environment		POINTS	
		1	0
1	Adopted/Adapted/localized at least 3 existing policies relating to DRRM/CCA/EiE in education/school safety		
2	Formed School DRRM Team, with a focal person and consisting of personnel from different offices; with defined membership and roles and responsibilities/functions		
3	Has a comprehensive School DRRM Plan, which includes CCA and EiE measures, covering risk assessment, risk reduction, and rehabilitation and recovery		
4	School budget supports regular DRRM activities		
5	Conducted student-led school watching and hazard mapping (DO 23 s 2015), and involved students in DRRM planning at least once a year. Conducted student-led school watching and hazard mapping (DO 23 s 2015), and		
6	Incorporated results of student-led school watching and hazard mapping in the School DRRM Plan and SIP		
7	Data collection and consolidation on programs and activities on DRRM, covering the 3 Pillars to monitor results and impact exist		
8	Rapid Assessment of Damages Report (RADAR) is submitted to Central Office, within 72 hours after the onslaught of a hazard in the area		
9	100% completion of DRR related questions in the EMIS/EBEIS		
10	School has partnerships that could be tapped to support its DRRM programs and activities, including those during and after a disaster		
Sub-total		10	
Pillar 1: Safe Learning Facilities			

1	School building/classroom components are according to DepEd and/or National Building Code approved standard design and specifications (see criteria and checklist for Pillar 1, No. 1, for corresponding points)		
2	School conducted risk assessment of buildings, in coordination with the Education Facilities Division, and with support of other agencies and partners		
3	School has taken appropriate action with respect to unsafe school buildings (e.g. upgraded/retrofitted, nonusage, etc.)		
4	Undertaken regular inspection and repair of minor classroom (including facilities) damages		
5	School Heads are clear with the roles and functions of the school in camp management vis-à-vis the LGU and DSWD as per Joint Memorandum Circular No. 1, series of 2013 "Guidelines on Evacuation Center Coordination and Management" and RA 10821 "Children's Emergency Relief and Protection Act" and its corresponding IRR		
	Sub-total	5	
Pillar 2: School Disaster Risk Management			
1	School has a Contingency Plan, i.e. Preparedness Plan turned into response actions when a disaster strikes		
2	80% of students and their families have accomplished the Family Preparedness Plan together (family evacuation, reunification), as per DO No. 27, series of 2015		
3	School has established a school personnel and learners tracking system/protocol in the event of a disaster or emergency		
4	Hazard and evacuation maps are located in conspicuous places in the school		
5	School has available, accessible, and adequate first aid kit in every instructional classroom		
6	School has at least 2 necessary and functioning equipment, in case of a disaster (e.g. fire extinguisher, handheld/base radio, generator, etc.)		
7	School conducted regular hazard-specific drills (at least 3 hazards) with participation of stakeholders (BFP, Medic, LGUs, NGOs, community, PTA, alumni, and others)		
8	School has established functional early warning system to inform students and personnel of hazards and emergencies (protocol, warning signs, devices, IEC), considering national and LGU warning systems and protocols		
9	School has trained personnel to administer first aid to students and personnel		
10	School has pre-identified spaces for putting up Temporary Learning spaces/Shelters in the aftermath of a disaster or emergency		
11	School has ready resumption strategies and alternative delivery modes to ensure education continuity (strategies, materials, focal persons to implement)		

12	School has psychosocial interventions for personnel and students		
13	School has trained teachers and other personnel who could provide psychosocial support to students		
14	School has an evacuation plan and procedures		
15	School has a student-family reunification plan that is clearly disseminated to students, teachers, and parents		
16	School has conducted awareness and capacity building for families and learners		
17	School participated in the different DRRM/CCA/EiE activities of the LGU		
	Sub-total	17	
Pillar 3: DRR in Education			
1	School has integrated key DRRM/CCA/EiE concepts in at least 4 subjects based on the national Curriculum Guide		
2	More than 75% of students are actively participating in various DRRM/CCA/EiE activities		
3	School has a DRRM/CCA/EiE capacity building plan for teachers and personnel		
4	School Head and personnel have received at least 3 DRRM/CCA/EiE trainings from division or region or partners		
5	At least more than 10 DRRM/CCA/EiE resource materials are available in the school		
6	Presence of DRRM corner, with updated IEC materials posted in it, in every classroom		
	Sub-total	6	
	TOTAL POINTS	38	

APPENDIX C

INFORMED CONSENT

INFORMED CONSENT FORM

Philippine Public Safety College
Katipunan Ave, Old Balara, Quezon City, Metro Manila
Master in Crisis and Disaster Risk Management

Title: “TEACHERS’ PERCEPTION OF SCHOOL SAFETY AMONG ELEMENTARY PUBLIC SCHOOLS IN DAVAO DEL NORTE”

Purpose of the Study

The main purpose of this study is to determine the significant association between school and teachers’ evaluation response on the implementation of school safety practices among elementary public schools in Davao del Norte.

Specific Procedures to be Used

The researcher will be using a survey questionnaire which was adopted from the National Disaster Risk Reduction and Management Council (NDRRMC) on their Annual Search in Gawad Kalasag under the School Category using the school safety checklist.

Duration of the Participation

The questionnaire can be accomplished in 3-5 minutes only.

Confidentiality

As a participant in this study, you are given the right and option to choose to have your identity kept confidential for the processed data of the study for whatsoever valid purpose to further ensure your safety. You are free to refuse any questions if you believe it is sensitive, offensive, or detrimental.

Voluntary Nature of Participation

Your participation in this study is voluntary. It is up to you whether or not you decide to participate. If you decide to participate, you will be asked to sign this consent form. After you sign this consent form, you are still free to withdraw at any time and without any giving reason. *Withdrawing from this study will not affect the relationship you have, if any, with the researcher.* If you withdraw from the study before the data collection completed, your data will be destroyed.

Contact Information

If you have any questions about this research project, contact the Philippine Public Safety College, Old Balara, Tandang Sora, Quezon City, Philippines on this number: (02) 872-10517.

I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH EXERCISE AND I AM PREPARED TO PARTICIPATE IN IT.

Participant’s Name and Signature

Date



ERIC R. ROSILLO

Researcher’s Name and Signature

Date

APPENDIX D**APPENDED TABLE ITEMS****Survey Summary Results**

Research Title: “ Teachers’ Perception of School Safety among Elementary Public Schools in Davao del Norte

CRITERIA	Cambanogoy Central Elementary School, Asuncion		Sawata Central Elementary School, San Isidro		Sto. Nino Central Elementary School, Talaingod	
	YES	NO	YES	NO	YES	NO
ENABLING ENVIRONMENT						
1. Adopted/adapted/localized at least 3 existing school policies relating to DRRM/CCA/EiE	38	8	24	3	21	7
2. Formed School DRRM Team, with a focal person and consisting of personnel from different offices; with defined membership and roles and responsibilities/functions	42	4	24	3	16	12
3. Has a comprehensive School DRRM Plan, which includes CCA and Education in Emergencies (EiE) measures, covering risk assessment, risk reduction, and rehabilitation and recovery	38	8	20	7	11	17
4. School budget supports regular DRRM activities	41	5	20	7	19	9
5. Conducted student-led school watching and hazard mapping (DO 23 s 2015), and involved students in DRRM planning	39	7	19	8	21	7
6. Incorporated results of student-led school watching and hazard mapping in the School DRRM Plan and School Improvement Plan (SIP)	41	5	22	5	22	6
7. Data collection and consolidation of programs and activities on DRRM, covering the 3 Pillars to monitor results and impact exist	39	7	19	8	11	17

8. Rapid Assessment of Damages Report (RADAR) is submitted to Central Office, within 72 hours after the onslaught of a hazard in the area	39	7	19	8	23	5
9. 100% completion of DRR-related questions in the Education Management Information System (EMIS)/ Enhanced Basic Education Information System (EBEIS	28	18	23	4	19	9
10. The school has partnerships that could be tapped to support its DRRM programs and activities, including those during after a disaster	39	7	26	1	21	7
SUB-TOTAL	384	76	216	54	184	96
SAFE LEARNING FACILITIES						
1. School building/classroom components are according to DepEd and/or National Building Code approved standard design and specifications	39	7	24	3	21	7
2. School conducted risk assessment of buildings, in coordination with the Education Facilities Division, and with support of other agencies and partners	36	10	23	4	23	5
3. School has taken appropriate action with respect to unsafe school buildings (e.g. upgraded/retrofitted, non-usage, etc.)	36	10	23	4	21	7
4. Undertaken regular inspection and repair of minor classroom (including facilities) damages	38	8	19	8	20	8

5. School Heads are clear with the roles and functions of the school in camp management vis-à-vis the LGU and DSWD as per Joint Memorandum Circular No. 1, series of 2013 "Guidelines on Evacuation Center Coordination and Management" and RA 10821 "Children's Emergency Relief and Protection Act" and its corresponding IR	37	9	23	4	20	8
<i>SUB-TOTAL</i>	186	44	112	23	105	35
SCHOOL DISASTER RISK MANAGEMENT						
1. School has a Contingency Plan, i.e. Preparedness Plan turned into response actions when a disaster strikes	39	7	23	4	12	16
2. 80% of students and their families have 3 Page 3 of 5 accomplished the Family Preparedness Plan together (family evacuation, reunification), as per DO No. 27, series of 2015	33	13	13	14	5	23
3. School has established a school personnel and learners tracking system/protocol in the event of a disaster or emergency	39	7	21	6	17	11
4. Hazard and evacuation maps are located in conspicuous places in the school	41	5	22	5	24	4
5. School has available, accessible, and adequate first aid kit in every instructional classroom	36	10	21	6	11	17
6. School has at least 2 necessary and functioning equipment, in case of a disaster (e.g. fire extinguisher, handheld/base radio, generator, etc.)	37	9	14	13	21	7

7. School conducted regular hazard-specific drills (at least 3 hazards) with participation of stakeholders (BFP, Medic, LGUs, NGOs, community, PTA, alumni, and others)	37	9	20	7	24	4
8. School has established functional early warning system to inform students and personnel of hazards and emergencies (protocol, warning signs, devices, IEC), considering national and LGU warning systems and protocols	36	10	18	9	21	7
9. School has trained personnel to administer first aid to students and personnel	35	11	22	5	19	9
10. School has pre-identified spaces for putting up Temporary Learning spaces/Shelters in the aftermath of a disaster or emergency	39	7	22	5	20	8
11. School has ready resumption strategies and alternative delivery modes to ensure education continuity (strategies, materials, focal persons to implement)	41	5	22	5	17	11
12. School has psychosocial interventions for personnel and students	28	18	18	9	11	17
13. School has trained teachers and other personnel who could provide psychosocial support to students	21	25	15	12	10	18
14. School has an evacuation plan and procedures	36	10	21	6	22	6
15. School has a student-family reunification plan that is clearly disseminated to students, teachers, and parents	35	11	16	11	9	19
16. School has conducted awareness and capacity building for families and learners	39	7	20	7	20	8

17. School participated in the different DRRM/CCA/EiE activities of the LGU	39	7	22	5	23	5
<i>SUB-TOTAL</i>	611	171	330	129	286	190
DISASTER RISK REDUCTION IN EDUCATION						
1. School has integrated key DRRM/CCA/EiE concepts in at least 4 subjects based on the National Curriculum Guide	38	8	20	7	24	4
2. More than 75% of students are actively participating in various DRRM/CCA/EiE activities	38	8	20	7	22	6
3. School has a DRRM/CCA/EiE capacity building plan for teachers and personnel	32	14	19	8	17	11
4. School Head and personnel have received at least 3 DRRM/CCA/EiE trainings from division or region or partners	36	10	20	7	18	10
5. At least more than 10 DRRM/CCA/EiE resource materials are available in the school	34	12	13	14	6	22
6. Presence of DRRM corner, with updated IEC materials posted in it, in every classroom	39	7	22	5	10	18
<i>SUB-TOTAL</i>	217	59	114	48	97	71
<i>GRAND TOTAL</i>	1398	350	772	254	672	392