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EARTHQUAKE AWARENESS AND PREPAREDNESS OF SENIOR HIGH SCHOOL STUDENTS

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ABSTRACT

This study aimed to gather baseline data on Earthquake awareness and preparedness to Senior High School students of Medina National Comprehensive High School. A total of 486 respondents were given survey questionnaire that consists of awareness and preparedness sections. A five-point Likert scale was used to assess the earthquake awareness while a dichotomous scale was employed for earthquake preparedness. Results revealed that majority of the respondents were very much aware of various facts about earthquake. It is good to note that the senior high school students learned about earthquake threats and risks from the teachers and school programs. In addition, 89.1% of the respondents answered that television advertisements and programs helped the students be aware about the risk of earthquakes. In addition, 52% of the respondents were prepared of the upcoming earthquake. This number suggests that half of the population of senior high school were not prepared for the upcoming earthquake. In some aspects of preparation, the respondents were prepared like 60.5% have surveyed their home for safe spot to protect them from earthquake, 62.9% have prepared first-aid kit and 71.8% have stored water and food supply to use after earthquake. Though the responses in terms of preparedness were even, it can be seen that 74.2% of the respondents would "still like to be prepared for earthquake, but they don't know how".

It can be concluded that students were highly aware about earthquake. However, the respondents are not that prepared with if strong earthquake will strike the country.

KEYWORDS: *Awareness, Preparedness, Academic Track, Technical Vocational Track & Earthquake*

1. INTRODUCTION

According to OECD as cited by Baytiyeh (2014), closed to 90% of the earthquake fatalities occurred in developing countries and most deaths were due to lack of awareness and preparedness, poor engineering design and construction practices and corruption in the construction sector.

At present, much effort has been done by the National government to inform and prepare the community (including the students) about the effect of earthquake. In terms of preparation in school, the Department of Education has been conducting an earthquake drill at least twice a year. Moreover, the department has required all elementary and secondary schools to promote family preparedness for earthquakes this can be seen in DepEd Order no. 27 series of 2015 (Department of Education, 2015). In the senior high school, aside from earthquake drills, Disaster Readiness Risk Reduction (DRRR) subject has been integrated in the curriculum to capacitate the students. However, not all tracks have DRRR subjects which would mean that majority of the students are not capacitated (Department of Education, nd).

In this work, the researcher will determine the student's Earthquake awareness and preparedness of the senior high school students in Medina National Comprehensive High School. To the knowledge of the researcher, there have been no studies conducted related to Earthquake awareness and preparedness in the schools of Misamis Oriental which make this work unique in terms of setting. The outcome of this research would provide information to the School Disaster Risk Reduction Management that would help them in planning the safety of the community towards disaster particularly those that were caused by earthquake.

2. OBJECTIVES

1. Gather the demographic profile of the respondents in terms of:
   - 1.1 Gender
   - 1.2 Grade Level
   - 1.3 Strand
2. Determine the level of Earthquake awareness of MNCHS senior high school students?
3. Determine the level of Earthquake preparedness of MNCHS senior high school students?

3. METHODOLOGY

A letter was given to the principal to seek permission in administering the test questionnaire. The questionnaire for awareness and preparedness was adopted from the study of Baytiyeh (2014) with slight modification to fit for the current respondents. The questionnaire about earthquake awareness and preparedness was administered in the first period simultaneously. The advisers was asked to administer and retrieved the questionnaires.

4. SAMPLING DESIGN

The Sloven's formula was used to determine the number of respondents in this research. The simple random sampling method was then employed to select the respondents. Since the researchers have prepared more questionnaires than the required number of respondents based on the Slovin's formula, thus the researchers have decided to administer questions to more respondents from each of the grade level.

5. STATISTICAL DESIGN

This study made use of descriptive statistics to analyze the gathered data. For the first objective, frequency and percentage were used to present the demographic profile of the students. The second objective utilized frequency to present the earthquake awareness of the respondents. Similarly, the objective 3 were presented with the use of frequency however, it is dichotomous unlike objective 2 that made use of Likert scale.

6. GEOGRAPHICAL AREA

The research locale is a comprehensive high school of the Division of Misamis Oriental, Region X, Philippines and belongs to a 3rd class municipality. The school belongs to rural area and is situated at the Eastern part of Misamis Oriental. The municipality where the data are gathered is in Medina, Misamis Oriental. Below is the location of Medina National Comprehensive High School where the data were gathered:

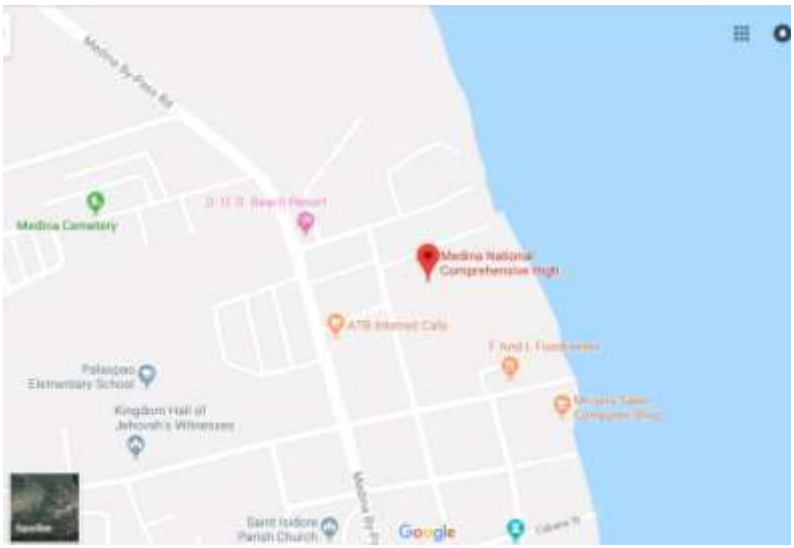

Figure 1. The Geographical Location of MNCHS

7. RESULTS

Category		Frequency	%
Gender	Male	169	34.77
	Female	317	65.23
Grade Level	Grade 11	234	48.15
	Grade 12	252	51.85
Strand	Academic	290	59.67
	Technical Vocational Livelihood	196	40.33

Table 1. Demographic Profiles of the Respondents

Statements	SD 1	D 2	N 3	A 4	SA 5
I am aware that a destructive earthquake will hit the Philippines anytime soon	6.5%	4.4%	15.3%	45.6%	28.2%
The Earthquake in the Philippines can reach a magnitude of 7.2 in the Richter scale	5.2%	12.9%	25.8%	40.7%	15.3%
Majority of buildings in Philippines will be damaged or collapsed because they were not designed or retrofitted to resist earthquakes	3.2%	6.9%	21.4%	53.2%	15.3%
The occurrence of recent earthquake disasters around the world triggered my awareness about future possible earthquakes in the Philippines	3.2%	5.6%	25%	53.6%	12.5%
I learned about earthquakes' threats and risks through the teachers and the program of the school	2.0%	4.0%	8.5%	53.2%	32.3%
Television advertisements and programs helped me be aware about the risk of earthquakes	2.0%	3.6%	5.2%	49.6%	39.5%
I surf the internet to learn about earthquakes	4.8%	12.1%	22.6%	45.6%	14.9%

Table 2. Responses to earthquake awareness statements

Based on table 2, majority of the respondents were very much aware of various facts about earthquake. It is good to note that the senior high school students learned about earthquake threats and risks from the teachers and school programs. In addition, 89.1% of the respondents answered that television advertisements and programs helped the students be aware about the risk of earthquakes. This result is contrary to Baytiyeh (2014) work that television have helped the students to be aware with earthquakes related issues. Similarly, the social media have helped the respondents be aware of the earthquake risk.

STATEMENTS	Yes	No
I feel prepared for an upcoming earthquake	52.0%	48.0%
I fastened items inside my home to prevent falling objects during an earthquake	36.3%	63.7%
I surveyed my home for safe spot that can protect me during an earthquake	60.5%	39.5%
I have prepared a flashlight with extra batteries to use after an earthquake	58.5%	41.5%
I have prepared a portable radio with extra batteries to use after an earthquake	37.9%	62.1%
I have prepared a complete first-aid kit to use after an earthquake	62.9%	37.1%
I have stored water and food supply to use after an earthquake	71.8%	28.2%
I have prepared light tools such chisel, hammer, rope to use after an earthquake	30.6%	69.4%
I would like to be prepared for earthquakes, but I don't know how	74.2%	25.8%
I would be prepared if I took earthquake training sessions or workshops	81.5%	18.5%

Table 3. Responses to earthquake preparedness statements

Based on table 3, 52% of the respondents were prepared of the upcoming earthquake. This number suggests that half of the population of senior high school were not prepared for the upcoming earthquake. In some aspects of preparation, the respondents were prepared like 60.5% have surveyed their home for safe spot to protect them from earthquake, 62.9% have prepared first-aid kit and 71.8% have stored water and food supply to use after earthquake. Though the responses in terms of preparedness were even, it can be seen that 74.2% of the respondents would "still like to be prepared for earthquake, but they don't know how". It seems that the respondents were not that confident or not yet sure in their preparations when there is earthquake. It is good to note that the respondents were willing to undergone training sessions or workshops to be prepared with earthquake as can be seen in their response to the last item of table 3 which 81.5%.

8. SUGGESTIONS

Based on the results, there is a need for more seminars and trainings for the senior high school students. The information about earthquake provided by televisions, radios and social media must be continued since it is influential to the students.

9. CONCLUSION

Based on the results, it can be concluded that students were highly aware about earthquake. However, the respondents are not that prepared with if strong earthquake will strike the country or the school.

10. REFERENCES

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