Asian Journal of Education and Social Studies



20(1): 21-31, 2021; Article no.AJESS.72298 ISSN: 2581-6268

## Communication Skills and Disaster Preparedness of Junior High School Students

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### Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

### Article Information

DOI: 10.9734/AJESS/2021/v20i130477 <u>Editor(s):</u> (1) Dr. Abdullah Aydin, Kırşehir Ahi Evran University, Turkey. <u>Reviewers:</u> (1) Bo Chen, Lingnan Normal University, China. (2) Rungrudee Klaharn, Srinakarinwirot University, Thailand. Complete Peer review History: https://www.sdiarticle4.com/review-history/72298

Original Research Article

Received 06 June 2021 Accepted 12 August 2021 Published 17 August 2021

### ABSTRACT

**Aims:** To correlate the communication skills and disaster preparedness of Grade 7 – 10 students **Study Design:** Descriptive correlation

**Place and Duration of Study:** Maria Cleta R. Delos Cientos National High School, Padada, Davao del Sur, Philippines. The municipality of Padada was badly struck by series of earthquakes in 2019; magnitude 5.9 on July 16; 6.3 on October 16; 6.6 on October 29; 6.5 on October 31; and 6.9 on December 15. The collection of data from students was conducted almost two years after the incidents, particularly on 22<sup>nd</sup> of May to 1<sup>st</sup> of June 2021.

**Methodology:** Two instruments were used to obtain the data. First was the researcher-made validated flashcards. It was used to measure the students' communication skills particularly general comprehension of disaster situations. The second instrument was a questionnaire adapted from the study of Tuladhar et al. 24 which was used to determine the students' knowledge, readiness, awareness, adaptation, and perception of disaster. The study included 204 students who were at grades 7-10.

**Results:** Findings of the study disclosed that learners had high level of communication skills in general comprehension. The overall rating on the learners' disaster preparedness was also high. The indicators for disaster preparedness was rated average and high in terms of knowledge,

readiness, adaptation, awareness, and perception. There was no significant difference on the level of learners' communication skills and disaster preparedness. However, a significant difference was found in indicator adaption on disaster preparedness.

**Conclusion:** It was noted in the results that the students' communication skills based on general comprehension and disaster preparedness are high and evidently high respectively. However, those results also reveal no significant difference. It only implies that an individual's communication abilities do not determine their disaster preparedness. Conversely, it is worthy to note that adaptation is linked to communication skills. This means that continues input or supply of information to individuals, making those information form part of their schema may increase their disaster preparedness. Thus, academic institutions need to intensify their disaster risk reduction promotion so that students can adapt to them. Disaster preparedness may become part of the curriculum and school system. Disaster preparedness should not be put in isolation.

Keywords: Communication skills; disaster preparedness; earthquakes; Maria Cleta R, Delos Cientos national high school.

### 1. INTRODUCTION

Natural catastrophes have killed more than 3 million lives worldwide, impacted at least 800 million people, and caused property damage of more than \$US50 billion in the last two decades [1, 2]According to save the Children Organization on[3], severe earthquakes struck the southern Philippines, affecting an estimated 3.2 million school children in Mindanao, the province of Davao del Sur has been identified as one of the most affected area and recorded one death of a 15 year old male student when evacuating to safer ground, he was hit by debris.

Recent catastrophic events in different part of the earth have caused intangible losses particularly to people who are unaware of the different disasters [4] Thus, Labraque et al. [5]mentioned that people must be well prepared to respond to disaster in order to minimize the harmful effects of the occurrence on the affected population. Unfortunately, Patel et al. [6]and Nipa et al. [7]pointed out that students are one of the most susceptible groups of people when a disaster strikes, as they suffer both physically and mentally; however, educational institutions fail to emergency provide proper preparedness programs for pupils. Jahan-Nipa et al. [8]opined that students remain one of the most overlooked when it comes to disaster preparedness. Thus, Davis et al. [9]reported that students expressed a general lack of concern about disaster, as well as a lack of enthusiasm to prepare for them.

In relation to disaster response, communication is critical for eliciting appropriate reactions from communities and emergency responders [10].Risk communication, according to Rahman and Munadi [11], is widely acknowledged as a critical method for decreasing disaster effect and failure to explain risk could lead to an increase in fatalities. Thus, Jacob et al. [12]maintained that if there is effective communication, comprehension emerges but begins with understanding. Likewise, Baby et al. [13]found that students' effective communication skills improve their selfesteem. Also, Nakamura et al. [14]discovered that communication skills are vital in the community-based disaster prevention.

In relation with the occurrence of a disaster. communication and comprehension are essential in making people prepared [15].Risk communication and disaster education are key parts of disaster preparedness, but little is known about how these tactics affect students' behavior during natural catastrophes or how they cope afterward [16]. However, Srivono and Pratama [17]found that comprehension level was not essentially link with the experience of encountering the disaster; also education had no significant result to disaster preparedness. Moreover, Ma et al. [18]revealed that the higher the information communication level, the weaker the knowledge and skills preparation of people on disaster preparedness. These non-conclusive links between communication and disaster preparedness are very interesting to explore. The researcher assumed that communication based on comprehension and disaster preparedness of students depends on the extent of practice of individuals. This concept gave ground to conduct this study.

This study focused on communication skills and disaster preparedness, especially in the event of an earthquake, which students frequently experienced in Davao del Sur. Assessing students' disaster risk reduction management capacity was useful and important to ensure that students are capacitated in terms of disaster risk resistance and safety practices. Further, the researcher wanted to determine the students' communication abilities based on comprehension and its relationship to their emergency preparedness.

### **1.1 Research Objectives**

The main objective of this study was to ascertain the learners' communication skills and disaster preparedness at Maria Cleta R. Delos Cientos National High School, Padada District, Schools Division of Davao del Sur for the School Year 2020 – 2021. Specifically, it sought to answer the following questions:

- 1. What is the level of communication skill of the respondents in terms of?
- 1.1. General comprehension.
- 2. What is the level of disaster preparedness of the respondents, in terms of?
- 2.1. Knowledge;
- 2.2. Readiness;
- 2.3. Awareness;
- 2.4. Adaptation; and
- 2.5. Perception.
- 3. What is the significant relationship between the level of?
- 3.1. Learners' communication skills: and
- 3.2. Learners' disaster preparedness.

### **1.3 Conceptual Framework**

### 1.2 Scope and Limitation of the Study

This study was limited to describing the level of learners' communication skills and disaster preparedness of Grade 7 to Grade 10 Junior High School Learners in Maria Cleta R. Delos Cientos National High School, Padada District, Division of Davao del Sur for the School Year 2020-2021. Also, this study was limited to gathering the data on the level of learners' communication skills on general comprehension and the information on disaster preparedness. The gathering of data was done by administering survey questionnaires and face-to-face evaluation using researcher-made flash card materials. The researchers followed the Inter-Agency Task-Force (IATF) protocols in obtaining the data.

The study was also limited to 204 Junior High School students of Maria Cleta Cleta R. Delos Cientos National High School, Padada District, Schools Division of Davao del Sur. Due to this limited number of respondents, San Jose [19]mentioned that results can't generalize the entire Junior High School students of Padada District, rather the results may only be applicable to the selected respondents. Moreover, the gathering of data was conducted on May 22, 2021 to June 01, 2021. The entire Davao Region during the collection of data was under the General Community Quarantine (GCQ) where minimum health standards were implemented. Moreover, this study used the quantitativedescriptive-correlation method. This meant that. students' personal experiences, point of views, and perspectives on communicative skills and disaster preparedness were not included.

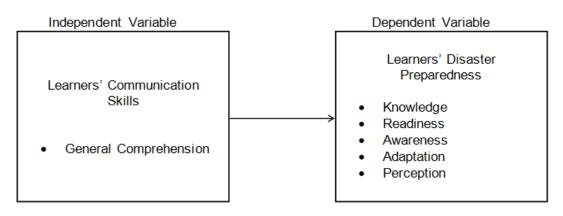


Fig. 1. Conceptual Framework showing the variables of the study

### 2. MATERIALS AND METHODS

### 2.1 Research Locale

Barangay Piape is one of the biggest Barangay in the Municipality of Padada. Province of Davao del Sur, and is composed of 7 sitios. Barangav Piape is situated at approximately 6.6600, 125.3737. on the island of Mindanao. Hazard Hunter assessment revealed that the locality is prone to disasters such as ground shaking, liquefaction and ash fall. It is just about 46 km. to Mt. Matutum as the nearest active volcano and around 9.3 km to Tangbulan fault as the nearest active fault in the area. This study will was conducted in the Grade 7 to Grade 10 classes at Maria Cleta R. Delos Cientos National High School of Piape in the Municipality of Padada, Division of Davao del, where the researcher was teaching English subjects and designated as School DRRM Coordinator.

### 2.2 Research Design

This study employed the descriptive-correlational research design. Allen [20] stated that quantitative method is commonly used when the research goals are to generate knowledge and examine occurrence of phenomenon which affect humans. Quantitative method was appropriate in this study because the primary aim of this study was to acquire information from the students about their disaster preparedness. It could be noted that the students had experienced earthquakes which affected their lives.

On the other hand, Sousa et al. [21]mentioned that descriptive-correlation is used if the aim of the study was to define the variables, as well as find the natural relationships existed between them. In this study, one of the purposes was to ascertain the link between the students' communication skills based on comprehension preparedness. Furthermore, and disaster Fraenkel et al. [22] highlighted that correlation requires subjecting two variables to various statistical treatments to assess the degree of relationship between the variables in guestion. In this study, to achieve the accurate result analysis, the researcher collected, arranged, identified, compared, and presented the relevant information. The levels of learners' communication skills were considered as independent variables, and learners' disaster preparedness was considered as the dependent variable.

### 2.3 Research Respondents

The respondents of this study were the 204 Grade 7 to Grade 10- Junior High School Learners of Maria Cleta R. Delos Cientos National High School in the Division of Davao del Sur for the School Year 2020-2021. These students answered the survey questionnaire and flashcard through a face-to-face evaluation.

### 2.4 Sampling Design and Technique

The study used a proportional stratified random sampling, where a number of students from Grade 7 to Grade 10 of Junior High school students were computed using Slovin formula  $n = \frac{N}{1+Ne2}$  popularized by Taro Yamane in [23]. Moreover, only those willing to participate were considered.

### 2.5 Research Instrument

There were two sets of instruments used in this study. The first instrument was the researchermade validated flashcards. Three expert validators were asked to assess its face, internal. and external validity. The validators were a Provincial Disaster Risk Reduction Officer, a School Disaster Risk Reduction Coordinator, and a School Head. This instrument was used to measure the students' communication skills particularly general comprehension of disaster situations. The instrument is composed of 15 situational questions regarding earthquakes. The students were asked to choose the best answer. The second instrument was a questionnaire adapted from the study of Tuladhar et al. [24], which was used to determine the students' knowledge, readiness, awareness, adaptation, and perception of disaster. The respondents were be asked to rate the given situations using the 5 points Likert scale where 5 was Very High, 4- High, 3- Moderate, 2- Low, and 1 – Very Low.

### 2.6 Data Analysis

This study used a survey questionnaire and researcher-made tools to gather data on the students' level communication skills and level of disaster preparedness.

### 2.7 Data Gathered

The data gathered in this study were the following: (1) level of students' communication skills; and (2) the level of students' disaster preparedness. All these data were gathered through researcher-made flashcards and survey guestionnaire.

Grade Level	N (Actual Number)	N (Sample)
Grade 7	107	53
Grade 8	98	48
Grade 9	126	62
Grade 10	84	41
Total	415	204

 Table 1. Sample size distribution of grade 7 to grade 10 students in Maria Cleta R. Delos

 cientos national high school, school year 2020-2021

Scale	Scale Interval	Description	Interpretation
5	4.21-5.00	Very High (VH)	The indicator described was always observed, or the condition is very high.
4	3.41-4.20	High (H)	The indicator described was frequently observed, or the condition is high.
3	2.61-3.40	Moderate (M)	The indicator described was moderately observed, or the condition is met.
2	1.81-2.60	Low (L)	The indicator described was rarely observed, or the condition is low.
1	1.00-1.80	Very Low (VL)	The indicator described was never observed, or the condition is deficient

Table 2. The data obtained were interpreted using the following scale

### 2.8 Data Gathering Procedures

In gathering the data for this study, the researcher followed four steps which were detailed below:

*Identifying Respondents.* Using a Slovin formula the number of respondents per grade level was computed based on the actual enrolment, a proportional stratified random sampling was used to identify the respondents. The researcher asked permission from the school head and permitted to access the Learners Information System and downloaded the School Form 1 (SF 1) per section then, using an empty ice cream container the names were picked individually to determine the respondents based on the computed number of respondents per grade level, additional five (5) respondents were listed as supplementary in case someone refuse to participate.

Asking Permissions. A letter of endorsement from the office of the Dean-IGPE was secured on May 18, 2021. This letter of endorsement together with the hard copy of Chapter 1, research instrument and the details in adherence to COVID-19 health and safety protocol were furnished to the office the Schools Division Superintendent in the Division of Davao del Sur for approval to seek permission to conduct the study on May 20, 2021. The scanned-approved letter signed by the SDS was sent to the Division Alternate Focal Person through e-mail. On the same date, the school principal was shown the letter notifying of the undertaking's acceptance.

Data Gathering. Following the health and safety protocols, securing the letter of consent signed by parents of those under legal age and letter of ascent signed by the respondents, the researcher gathered the data through face-toface modality on May 22, 2021 to June 01, 2021. The data gathering was efficiently done since the researcher was known to the parents and students as the School DRRM Coordinator, thus trust was embedded along the process. The 204 respondents were easily accessed since they lived in a closed neighboring three (3) barangays of the Municipality of Padada namely Piape, Punta Piape and San Isidro. In addition, some of the households visited had two or more respondents, based on the stratified random sampling conducted. Likewise, the respondents' houses were just adjacent from one another.

Collection and Data Analysis. All collected data from the identified respondents were treated with utmost respect and confidentiality as part of the research ethics. On June 02, 2021, all data gathered were tallied, collated, and tabulated for easy processing and analysis. Tables were made to illustrate the data gathered and visually presented the processed data. It was summarized, analyzed, and interpreted using appropriate statistical tools and with the aid of statistical software.

### **3. RESULTS AND DISCUSSION**

# 3.1 Level of Communication Skills in terms of General Comprehension

Table 3shows the level of communication skills of students per grade level of Maria Cleta R. Delos Cientos National High School. It reveals that the student's average level of comprehension has a mean of 4.00 with a standard deviation of 0.79. The result implies that students of Maria Cleta R. Delos Cientos National High School had high level of communication skills in general comprehension specifically on an event of an earthquake. This result challenges the findings of Fadilah, et al. [25] which reveals that the level of knowledge literacy on earthquake among mathematics and science students in State University in Indonesia was below the developing process evidently less mastered. In addition, it is revealed that Grade 10 students has very high communication skills with a mean score of 4.32 and standard deviation of 0.53 compared to other grade level in junior high school curriculum since they are older and in a higher level of educational experience.

The high level of comprehension scores on earthquake can be associated with the students' exposure to drills conducted in the schools and the negligible integration of disaster management on the subject matter. In the study conducted by Soffer et al. [26] in Israel among Israeli schools, they found that students' comprehension on earthquake increased after students' exposure to drills and intervention. Likewise, Novak et al. [27]found that the earthquake interactive drills conducted in schools lead students' better understanding on the escape procedures during actual occurrence.

### 3.2 Level of Disaster Preparedness

#### 3.2.1 Knowledge

The summary of ratings on learner's knowledge on disaster preparedness in Maria Cleta R. Delos Cientos National High School, Division of Davao del Sur for School Year 2020-2021 is presented in Table 4. As reflected the overall mean rating was 3.73 suggesting a high level of knowledge among students in disaster preparedness. This means that the indicators stated is manifested and frequently observed in many occasions.

Upon further scrutiny to the items in knowledge on disaster preparedness, the following were the results: an average level was found out on the knowledge of learners as to when disaster will occur with a mean of 3.11, and both high level of knowledge as learners think that disaster cannot be preventive and participating in training and seminars for disaster risk education with a mean ratings of 3.72 and 4.36 respectively. The result contradicts with the findings of Mehraein-Nazdik and Mohammadi [28]despite the high dangers, the knowledge levels of Shiraz and Kerman students in emergency procedures before, during, and after the earthquake were lower than intended and Mamon et al. [29]revealed that means that the students' degree of catastrophe knowledge is low.

### 3.2.2 Readiness

Table 4 presents the level of readiness on disaster preparedness. As disclosed in the table, the overall mean rating was 3.51 denoting an highlevel of readiness of the students. This means that the indicator is manifested and highobserved in some occasions.

Taken individually, items number 1, 2, 3, and 5 have an average level of readiness on disaster preparedness with a mean ratings of 2.93, 3.28, 3.43, and 3.44 respectively which means that learners have a moderately observed readiness. Furthermore, it shows that high level on disaster preparedness were observed in item number 4, 6, and 7 with a mean ratings of 3.59, 4.24(very high), and 3.64. This finding is consistent with the findings of Mamon et al. [29], they are ready and prepared for catastrophes because they value sharing catastrophe knowledge and experiences.

### 3.2.3 Adaptation

Table 4 revealed that the level of adaptation on disaster preparedness. As disclosed in the table, the overall mean rating was 3.59 denoting a high level of adaptation of the students. This means that the indicator is manifested and frequently observed in some occasions.

Taken individually, items number 3, 4, 6, and 7 have an average level of adaptation on disaster preparedness with a mean ratings of 3.31, 3.46(high), 3.12, and 3.29 respectively which means that learners have a highly observed adaptation. Furthermore, it shows that high level on disaster preparedness were observed in item number 1, 2, and 5 with a mean ratings of 3.96, 3.63, and 4.36. A result is consistent from the study of Mamon et al.[29], the highest percentage of students are adapted on disaster risk they are optimistic that government institutions would provide support during the catastrophe since they are aware of the locations of shelter areas, evacuation centers, and open spaces.

### 3.2.4 Awareness

The level of awareness on disaster preparedness as disclosed in the Table 4, the overall mean rating was 3.89 denoting an average level of awareness of the students of Maria Cleta R. Delos Cientos National High School. This means that the indicator is manifested and moderately observed in some occasions.

Taken individually, items number 3 has an average level of awareness on disaster preparedness with a mean rating of 3.42(high) which means that learners have a moderately (high)observed awareness disaster on preparedness. Furthermore, it shows that high level on disaster preparedness were observed in item number 1, 2, 3, 5, and 6 with a mean ratings of 3.67, 4.14, 4.28, 4.22, and 3.60 respectively. The result of the study correlates with Padernal [30]findings published that the public junior high school students are generally aware of discount catastrophe danger problems associated with the natural hazards.

### 3.2.5 Perception

Table 4 revealed that the level of perception on disaster preparedness. As disclosed in the table, the overall mean rating was 3.15 denoting an average level of perception of the students. This means that the indicator is manifested and moderately observed in some occasions.

Taken individually, all items in the indicator have average level of perception on disaster preparedness with mean ratings of 2.88, 3.49(high), 3.47(high), and 2.75 respectively, people strengthen their perception primarily based on knowledge, but when it comes to their very own vulnerability, then they continue to be detached about it. This discovering is steady with that of Mizrak and Aslan [31]on the study revealed that Gumushane University students in Turkey have higher disaster risk perception and contradict that of Mamon et al.[29], it if found on the study that majority of learners do not perceive or have no notion about the safety of their neighbour or surroundings. The same pattern was noticed when it came to their perceptions of earthquake-resistant constructions, such as their homes and other structures.

Generally, the level of disaster preparedness of the learners revealed to be high, with an overall mean rating of 3.57, which means that disaster preparedness has frequently observed among students of Maria Cleta R. Delos Cientos National High School for the school year 2020-2021.

### 3.3 Relationship between Learner's Communication Skills and Disaster Preparedness

Table 5 reveals that among the indicators of disaster preparedness, only adaptation on disaster preparedness obtained a p-value 0.000, which signifies significant relationship with students' communication skills. The rest of the indicators namely knowledge obtained a p-value of 0.432, readiness gained a p-value of 0.057, awareness garnered a p-value of 0.069, and perception obtained a p-value of 0.388. All these indicators showed no significant relationship with the students' communication skills, since those results exceeded 0.05 level of acceptability.

As a whole, the findings revealed that the level of communication skills specifically in general comprehension of the learners in Maria Cleta R. Delos Cientos National High School is high. Moreover, it was found out that the learners are highly knowledgeable, ready, adaptive, aware, and perceptive(average) on disaster preparedness. The learners are aware of some aspects of disaster risks on public awareness and education that is essential for the successful implementation of capacitating learners on communication skills and disaster preparedness. The students are also highly aware about earthquake situations and how to responds on it. which is a common natural disaster in the community. However, based on the result it reveals that communication skills and disaster preparedness has no significant relationship as shown in Table 5.

The result of the study is supported by some recent studies it discloses that effective Disaster Risk Reduction instruction in the basic school curriculum establishes and deepens the culture of awareness, preparedness, and resiliency among students [32]. According to Asharose et al. [33] communication and promotion of DRR can be realized through strategic planning, development, and improvement of educational materials.

Grade Level	Indicator Items	Mean	Standard deviation	Verbal interpretation
Grade 7	General Comprehension	3.73	0.89	High
Grade 8	General Comprehension	3.86	0.87	High
Grade 9	General Comprehension	4.14	0.68	High
Grade 10	General Comprehension	4.32	0.53	Very High
Overall	General Comprehension	4.00	0.79	High

Table 3	Level	of	communication	Skills
Table J.	LCVCI	UI.	communication	<b>UNIII3</b>

Indicator Items	Mean	Standard deviation	Verbal interpretation
Knowledge	3.73	0.51	High
Item 1	3.11	0.91	Average
Item 2	3.72	0.86	High
Item 3	4.36	0.82	Very High
Readiness	3.51	0.35	High
Item 1	2.93	1.07	Average
Item 2	3.28	0.83	Average
Item 3	3.43	0.82	High
Item 4	3.59	0.80	High
Item 5	3.44	1.03	Hihg
Item 6	4.24	0.86	Very High
Item 7	3.64	0.97	High
Adaptation	3.59	0.34	High
Item 1	3.96	0.83	High
Item 2	3.63	0.81	High
Item 3	3.31	0.90	Average
Item 4	3.46	0.89	High
Item 5	4.36	0.78	Very High
Item 6	3.12	0.87	Average
Item 7	3.29	0.93	Average
Awareness	3.89	0.40	High
Item 1	3.67	1.06	High
Item 2	4.14	0.89	High
Item 3	4.28	0.76	Very High
Item 4	3.42	0.98	High
Item 5	4.22	0.85	Very High
Item 6	3.60	0.89	High
Perception	3.15	0.57	Average
Item 1	2.88	1.18	Average
Item 2	3.49	0.92	High
Item 3	3.47	1.04	High
Item 4	2.75	1.09	Average
Overall	3.57	0.20	High

### Table 4. Level of disaster preparedness

Table 5. Relationship between learner's communication skills and disaster preparedness

Independent variable	Dependent variable	Pearsonr	p-value	Interpretation
Learners'	Knowledge	-0.055	0.432	Not significant
Communication Skills	Readiness	0.133	0.057	Not significant
	Adaptation	0.345	0.000	Significant
	Awareness	-0.128	0.069	Not significant
	Perception	0.061	0.388	Not significant
	Overall Disaster Preparedness	-0.024	0.733	Not significant

Based on the result, there was a need to craft and implement system may include communication in disaster preparedness. It was evident that the learners of Maria Cleta R. Delos Cientos National High School were reactive in disaster. It implies that they only talked about disaster when they struck. Thus, the roles of teachers and local government unit are essential. At school, modules on disaster risk reduction may be produced and embedded in all subjects. On the other hand, local government units may use local radio stations to promote mitigating measures in case of disaster aside from conducting regular disaster drills.

### 4. SUMMARY

This study aimed to determine level of learners' communication skills. level of disaster preparedness and the significant relationship of the independent and dependent variables. This study involved students from Maria Cleta R. Delos Cientos National High School. This study used thae the quantitative-descriptive correlation design. Two hundred-four students who were asked to answer the flash cards and survey guestionnaire. The data gathered were collected and tabulated and were analyzed using relative frequency, mean, and Pearson r.

Findings of the study disclosed that learners have high level of communication skills in general comprehension. The overall rating on the learners' disaster preparedness was also high. The indicators of disaster preparedness was rated average and high in terms of knowledge, readiness, adaptation, awareness, and perception.

There was no significant difference on the level of learners' communication skills and disaster preparedness. However, a significant difference was found in indicator adaption on disaster preparedness.

### 5. CONCLUSION

It was noted in the results that the students' communication skills based on general comprehension and disaster preparedness are high and evidently high respectively. However, those results also reveal no significant difference. It only implies that an individual's communication abilities do not determine their disaster preparedness. Conversely, it is worthy to note that adaptation is linked to communication skills. This means that continues input or supply of information to individuals, making those

information form part of their schema may increase their disaster preparedness. Thus, academic institutions need to intensify their disaster risk reduction promotion so that students can adapt to them. Disaster preparedness may become part of the curriculum and school system. Disaster preparedness should not be put in isolation.

### 6. RECOMMENDATIONS

In the light of the foregoing findings and conclusions, the following are recommended:

- 1. Communication skills on general comprehension should be part of the system on disaster preparedness activities and programs.
- Department of Education officials and school administration may harness and capacitate the teachers on integrating communication as part of disaster preparedness through webinars and virtual trainings.
- 3. School should have an official media page to update learners on recent events, issuances and programs related to disaster preparedness to practice learner's general comprehension in communication skills.
- School heads may prioritize the disaster preparedness programs and activities integrating communication skills in crafting school annual implementation plan for the succeeding school year.
- Teachers and DRRM Coordinators may craft a quality assured learning materials or modules in disaster preparedness integrating general comprehension in communication skills in all grade level in the Junior High School program.
- 6. Parents and students should make habit on listening, watching, discussing disaster preparedness in all form of media and drills should be continuously practice at home.
- Similar studies may be conducted with a wider scope and greater number of respondents.

### CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the authors.

### ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the authors.

### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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> Peer-review history: The peer review history for this paper can be accessed here: https://www.sdiarticle4.com/review-history/72298