

Disaster Awareness and Preparedness of College Students: A Descriptive-Correlational-Comparative Study

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Abstract

Disasters and their impact on people's lives are arising. Such scenarios lead to disaster preparation of people in various organizations and institutions. However, limited studies deal with the influence of disaster awareness on preparedness, especially with allied health and business college students. Anchoring in the Protective Action Decision Model, this study aimed to examine the relationship between disaster awareness and preparedness of college students and to determine the difference in their preparedness based on their age, program, and gender in a faith-based private higher education institution in Metro Manila.

A descriptive-correlational, comparative design of quantitative research was utilized. Samples were drawn using stratified random sampling comprising 240 students from different departments answering a self-constructed and validated survey questionnaire. Data gathered were analyzed using SPSS version 21. Statistical tools used to answer the research questions include frequency, percentage, mean, Pearson correlation, independent sample t-test, and one-way ANOVA.

Results revealed that college students have high disaster awareness ($M = 3.63$) and are moderately prepared for disaster ($M = 2.91$). There is a statistically significant relationship between disaster awareness and preparedness ($r = .568$, $p < .001$). Moreover, disaster preparedness significantly differs according to gender ($t(184.160) = -2.91$, $p = 0.004$) but not with the age and course of college students.

Disaster awareness has an important role in the preparedness towards disasters of college students. Further, female college students are considerably prepared when disasters occur. Future research priorities and basic recommendations for improving disaster preparedness in the school setting are identified.

Keywords: *disaster awareness, disaster preparedness, college students, higher education institution*

Disasters and the associated social and economic impacts are rising (Emergency Database [EMDAT], 2018; Southard, 2017). The last decade has witnessed the highest number of impacts from disasters, and 2015 – 2017 were the hottest years ever (World

Meteorological Organization [WMO], 2017). In the report on disaster year in review 2019 released by the Center for Research on the Epidemiology of Disaster [CRED] (2020), worldwide, an estimated 11755 people are killed by natural disasters affecting 95 million

others and costing nearly 130 billion US dollars.

The Asia Pacific region has experienced the highest number of disasters (EMDAT, 2017; Radtke, 2019), wherein the Philippines is one of the most at-risk countries (EMDAT, 2017) because it lies along both the typhoon belt and the Pacific Ring of Fire (Bollettino et al., 2018; Domingo & Manejar, 2018). Hence, its islands are regularly impacted by floods, typhoons, landslides, earthquakes, volcanoes, and droughts (Bollettino et al., 2018). For instance, before the end of 2017, typhoons like Vinta and Urduja left the Philippines with more than three hundred dead and missing and billions worth of damages. A similar scenario happened before the end of 2018 wherein tropical depression Usman left 126 dead people and 4 billion worth of agricultural crops and infrastructure were damaged due to the floods and landslides (Domingo & Manejar, 2018).

In the local setting, the college understudy is located near Manila Bay and Makati City, one of the key cities transected by the West Valley Fault (Philippine Institute of Volcanology and Seismology [PHIVOLCS], 2015). Most student, faculty, and staff population comes from the vicinity of the institution and in the different areas in Metro Manila, or the National Capital Region. This area experienced floods during typhoons and occasional earthquakes.

Given the above scenarios, the need to augment disaster preparedness is vital. Disaster preparedness is defined as the knowledge and capacities developed by governments, professional response and recovery organizations, communities, and individuals to effectively anticipate, respond, and recover from the impacts of likely, imminent, or current hazard events or conditions (National Disaster Risk Reduction and Management Council [NDRRMC], 2011).

In a general view, it is widely acknowledged that schools play an important role in providing awareness amongst students and parents (Natividad, 2019). Akumu (2013) described disaster awareness as having knowledge and skills on disaster management that can help one identify and mitigate disaster occurrences. Gerdan (2014) pointed out in their study that awareness and preparedness towards disasters vary depending on the characteristics of individuals within the community and characteristics of communities across space.

Previous studies reported inconsistent results regarding disaster awareness, such as high level among nursing students (Cho, 2018) whereas low level for higher education students (Ozkazanc & Yuksel, 2015). On the other hand, most of the studies on disaster preparedness reported inadequately prepared or with low to moderate levels of preparedness. It includes different populations such as household Filipinos (Bollettino et al., 2018), registered nurses (Labrague et al., 2016; Nilsson et al., 2016; Oztekin et al., 2016; Tzeng et al., 2016), nursing students (Cho, 2018; Schmidt, 2011), and college students (Natividad, 2019; Park, 2019; Tkachuck et al., 2018).

Although research in this area is increasing, yet there is still limited research on understanding disaster awareness and, more importantly, students' preparedness with different programs in allied health and business in the Philippine context. Hence, this study seeks to examine further the relationship between disaster awareness and preparedness among college students with different programs. The following specific research questions were addressed:

Research Question 1: What is the level of disaster awareness of the respondents?

Research Question 2: What is the extent of disaster preparedness of the respondents?

Research Question 3: Is there a significant relationship between disaster awareness

and preparedness of the respondents?

Research Question 4: Is there a significant difference in disaster preparedness of the respondents when grouped according to age, program, and gender?

Theoretical Framework

This study is anchored in Lindell and Perry's Protective Action Decision Model (2012). The model has the following major stages: environmental and social context, psychological processes, situational impediments and facilitators, and feedback. These stages are further broken up in the following way. Within environmental and social context are sub-stages: environmental cues, social cues, information sources, channel access and preference, warning messages, and receiver characteristics; and within psychological processes: pre-decision processes (exposure, attention, and comprehension), perceptual processes (of the environmental threat, alternative protective actions, and social stakeholders), and protective action decision making processes (Lindell & Perry, 2012). In this present study, students' characteristics and disaster awareness are both included in the receiver characteristics, whereas disaster preparedness is the behavioral response.

Methodology

Research Design

The study utilized a descriptive-correlational, comparative quantitative design of research to assess the level and extent of disaster awareness and preparedness of the respondents and consequently to examine any significant relationship between these main variables and to determine any significant difference in disaster preparedness based on the respondents' characteristics: age, program, and gender.

Population and Sampling Technique

The samples were drawn from a total population of 601 using stratified random sampling technique, which comprised 240 college students enrolled for the first semester of the academic year 2018 – 2019 from the different departments (see Table 1) in a faith-based private higher education institution located in Metro Manila. The Yamane formula was used to get the desired sample size. Majority of the respondents were 20-21 years old ($n = 94$) and predominantly belonged to females ($n = 151$). One respondent did not indicate a response to the item of age. Sample sizes for each stratum (i.e., program) were obtained using the Stratified Sample formula. $\text{Strata sample size} = \text{Entire sample} / \text{Total population size} \times \text{Layer size}$.

Table 1

Distribution of the Respondents by Course

Courses	Total Population	Sample Size	Actual
BS Accountancy	57	23	23
BS Business Administration	58	23	23
BS Medical Laboratory Sciences	21	8	8
BS Midwifery	64	26	26
BS Nursing	139	55	55
BS Pharmacy	16	6	6
BS Physical Therapy	117	47	47
BS Radiologic Technology	129	52	52
Total	601	240	240

Instrumentation

The data collection tool used for this current study was a self-constructed survey questionnaire based on the literature review, which has three parts.

Students' demographic information. College students were asked to provide information about their age, course, and gender.

Disaster awareness. This portion of the survey questionnaire contains 20-items; the Cronbach's alpha was 0.91. All items were scored on a Likert scale of 1 to 5 (1 = *not familiar at all*, 2 = *not as familiar*, 3 = *somewhat familiar*, 4 = *very familiar*, and 5 = *extremely familiar*).

Disaster preparedness. This section of the survey questionnaire contains 15 items and the response options on a 4-point Likert scale ranging from 1 = *never*, 2 = *rarely*, 3 = *seldom*, and 4 = *very often*. The Cronbach's alpha was 0.71.

The self-constructed survey questionnaire was validated by 5 experts receiving a content validity index of 0.84. In addition, a pilot study was conducted in order to test its reliability.

Data Gathering Procedure

Permission to conduct the study was secured from the college administrators. Upon approval, researchers started distributing survey questionnaires to the respondents. Once returned, the questionnaire was checked for the completeness of answers. Lastly, the questionnaire was kept safe in a cabinet at the research office.

Data Analysis

The data were analyzed using SPSS version 21. To address the first and second research questions, descriptive analysis such as mean score was used to assess the reported level and extent of college students' disaster

awareness and preparedness. To address the third research question, Pearson product-moment correlation coefficient was used to determine the relationship between disaster awareness and preparedness. To address the fourth and last research question, an independent sample t-test and one-way analysis of variance (ANOVA) were used to determine the significant difference in disaster preparedness based on the respondents' characteristics: age, program, and gender.

Ethical Considerations

The ethics review committee at Manila Adventist College approved this study on July 19, 2018, with an approval number of 2018-14. Respondents consented using a cover letter accompanied each survey containing information about the purpose, risks, benefits, confidentiality, contact information, and the voluntary nature of the study.

Results

Level of Disaster Awareness

Presented in Table 1 is the overall mean for disaster awareness of college students. They have a high level of disaster awareness ($M = 3.63$). Respondents reported very high ($M = 4.24$) in the item which states "*a natural disaster such as typhoons, floods, tsunamis storm surge, and earthquakes can occur anytime*". On the other hand, low level is reported ($M = 2.25$) in the item which states "*damaged areas can't be a reservoir site for possible aftershocks which can be more severe*." These results indicate that students are very familiar that any disasters may happen anytime and least familiar about areas with damage can be a reservoir site.

Table 2*Level of Disaster Awareness of the Respondents*

Statements	Mean	Interpretation
1. A natural disaster such as typhoons, floods, tsunamis, storm surge, and earthquakes can occur anytime.	4.24	Very high
2. There are specific action responses during a disaster event	4.15	High
3. The country has been experiencing numerous disastrous events in a year (e.g. an average 20 typhoons/year)	4.10	High
4. As a result of a disaster, more possible disastrous events may likely to follow.	4.08	High
5. A small kit with emergency supplies must be brought always if evacuation is necessary.	4.04	High
6. Preserving or keeping food safe after a disaster should be taught in disaster seminars.	4.00	High
7. The Philippines ranks among the most disaster-prone country in the South-East Asia.	4.00	High
8. The government has several seminars and forums laid out in preparation for possible new disaster that may occur in the future (e.g. "The Big One")	3.90	High
9. The Philippines, as an archipelago, puts risk during a storm surge.	3.90	High
10. The Philippines is situated in a weather pathway near the equator known as the Typhoon Belt.	3.89	High
11. The government hosts several mass simulation drills to prepare the population for future unwanted disastrous events.	3.85	High
12. Local government units and agencies has provided hotlines which can be contacted during an event of a disaster.	3.82	High
13. There is a disaster plan that has been formulated at my school.	3.57	High
14. My school hosts seminars and forums to prepare us for a disaster.	3.53	High
15. There is no message that encourage the students to takes steps to be prepared for emergency situations in the school.	3.23	Moderate
16. There is no possible dangers that can occur after a disaster.	3.21	Moderate
17. The local media has not given any information regarding preparation in disasters.	3.14	Moderate
18. There is no established specific meeting placed to reunite with my classmates and teachers	2.88	Moderate
19. The government's assigned agency has not been inspecting the vulnerability of public and private institutions in a disaster.	2.85	Moderate
20. Damaged areas can't be a reservoir site for possible aftershocks which can be more severe.	2.25	Low
Overall Mean	3.63	High

Legend: 4.21-5.00 = Very high; 3.41-4.20 = High; 2.61-3.40 = Moderate; 1.81-2.60 = Low; 1.00-1.80 = Very low

Extent of Disaster Preparedness

College students have moderate extent of disaster preparedness ($M = 2.91$), as shown in Table 2. Respondents reported being highly prepared in the two items, which state, "I stay away from large bodies of water, especially when I hear about a new disaster may happen" ($M = 3.48$) and "I will evacuate calmly" ($M = 3.38$). On the other hand, respondents reported being slightly

prepared in the item which stating "I do not have the emergency numbers and contact details of the qualified personnel such as the local fire department, police, hospitals, and barangay officials" ($M = 2.35$). These suggest that students are prepared to stay away from bodies of water and are calm during the evacuation. Still, they lack information of emergency contact numbers of selected personnel in charge when disasters happen.

Table 3

Extent of Disaster Preparedness of the Respondents

Statements	Mean	Interpretation
1. I stay away from large body of waters, especially when I hear about a new disaster may happen.	3.48	Highly prepared
2. I will evacuated calmly.	3.38	Highly prepared
3. I practice how to drop to my hands and knees, cover my head and neck with my arms, and hold on to any sturdy furniture until the shaking stops.	3.22	Moderately prepared
4. I follow the way leading to the river during a storm	3.21	Moderately prepared
5. In an event of an earthquake, I will stay near glass windows, outside doors and walls.	3.05	Moderately prepared
6. If my house has been slightly destroyed after a typhoon, I will go inside my house right away.	3.04	Moderately prepared
7. I participate in the disaster plan that has been formulated by my school.	2.98	Moderately prepared
8. I attend seminars about being prepared for a disaster hosted by my school.	2.92	Moderately prepared
9. I do not participate in the practice drills hosted by my school.	2.79	Moderately prepared
10. I do not stay home whenever there are announcements by the government through their social media accounts about dangerous disasters that may happen.	2.72	Moderately prepared
11. I will not leave immediately even if I have been told to do so.	2.68	Moderately prepared
12. I attend seminars and forums laid out by the government, in partnership with several non-government offices for more knowledge.	2.63	Moderately prepared
13. I participate in government-hosted mass simulation drills in preparation for future disastrous events.	2.61	Moderately prepared
14. I have not obtained the established specific meeting place to reunite with other students and teachers.	2.60	Moderately prepared
15. I do not have the emergency numbers and contact details of the qualified personnel such as the local fire department, police, hospitals, and barangay officials.	2.35	Slightly prepared
Overall Mean	2.91	Moderately prepared

Legend: 3.26-4.00 = Highly prepared; 2.51-3.25 = Moderately prepared; 1.26-2.50 = Slightly prepared; 1.00-1.25 = Not prepared

Relationship between Disaster Awareness and Disaster Preparedness

Table 3 presents the result of Pearson product-moment correlation coefficient between disaster awareness and preparedness. It revealed a direct, moderate, and positive relationship between the respondents' awareness and preparedness on disaster ($r = .568, p < .001$), which is statistically significant. This data indicates that the higher the awareness on the disaster, the higher also the extent of preparedness by the respondents.

Table 4
Relationship between Disaster Awareness and Disaster Preparedness of the Respondents

	r	p-value	Interpretation
Disaster Awareness	.568**	.001	Significant

Note. ** Correlation is significant at the 0.01 level

Difference in Disaster Preparedness when in terms of Age, Course, and Gender

One-way analysis of variance was conducted to compare disaster preparedness based on the age group and programs of the respondents. Table 4 shows no significant difference in disaster preparedness between the age group of the respondents ($F = 2.83, df = 2,236, p = 0.06$). This suggests that regardless of the college students' age, they have the same disaster preparedness.

Table 5
Difference in Disaster Preparedness of the Respondents in terms of Age

Age	N	M	F	Sig.	I
20-21 y/o	94	2.83	2.83	0.06	NS
17-19 y/o	76	2.97			
22-36 y/o	69	2.95			
Overall	239				

Note. N – Population; M – Mean; F – F-value; I – Interpretation

As shown in Table 5, no significant difference is identified between the various programs in terms of their preparedness for disasters ($F = 1.71, df = 7,232, p = 0.11$). This indicates that disaster preparedness is the same for all the programs.

Table 6
Difference in Disaster Preparedness of the Respondents in terms of Course

Program	N	M	F	Sig.	I
Nursing	55	2.95	1.71	0.11	NS
Radiologic Technology	52	2.76			
Physical Therapy	47	2.88			
Midwifery	26	3.05			
Accounting	23	2.98			
Business Administration	23	2.97			
Medical Laboratory Science	8	2.84			
Pharmacy	6	2.94			
Overall	240				

Note. N – Population; M – Mean; F – F-value; I – Interpretation

An independent sample t-test was conducted to compare disaster preparedness between males and females. As shown in Table 6, female college students reported significantly higher disaster preparedness ($M = 2.97$) compared with male college students ($M = 2.80$), ($t(184.160) = -2.91, p = 0.004$). This result suggests that females are more prepared during disasters compared to males.

Table 7
Difference in Disaster Preparedness of the Respondents in terms of Gender

Gender	N	M	t	df	Sig.	I
Female	151	2.97	-2.91	184.16	.004	S
Male	88	2.80				

Note. N – Population; M – Mean; t – t-value; df – Degree of Freedom; I – Interpretation; S – Significant

Discussion

In the current study, the researchers investigated reports of disaster awareness and preparedness of college students. Overall, they reported a high level of disaster awareness. It denotes that these college students are highly aware of disasters. This result contradicts a previous study that documented that higher education students have low disaster awareness (Ozkazanc & Yuksel, 2015). On the other hand, in the study of Cho (2018), nursing students reported high disaster awareness. Benaben et al. (2019) pointed out that the more information obtained on disasters, the higher level of awareness is also acquired.

Overall, college students were moderately prepared regarding disaster preparedness, which is consistent with the study of Natividad (2019), wherein university students at Batangas reported a moderate to a great extent. However, previous studies reported low to moderate preparedness among registered nurses (Labrague et al., 2016; Labrague et al., 2018; Nilsson et al., 2016; Oztekin et al., 2016; Tzeng et al., 2016). Based on the aforementioned results, one possible reason is where the students, faculty, and staff live. According to Bollettino et al. (2018), Filipino households living in the regions most impacted by typhoons have highest levels of preparedness. Another possible aspect to consider is the integrating of disaster education in the senior high school, wherein some of the students were graduates. Additionally, college students are mandated to enroll in the National Service Training Program (NSTP) on their first year, where they were reviewed and re-oriented of the different disaster-related concepts. Another reason to consider besides these program offerings is that the institution is providing yearly disaster-related awareness programs and drills such as earthquake and evacuation to the students during chapel convocation which most likely result in a high

level of disaster awareness and moderate preparedness.

Several studies highlighted the effectiveness of disaster-related programs such as awareness campaigns, simulations, training, and drills as interventions to increase disaster awareness and preparedness (Craft, 2019; Jasper et al., 2013; Nazli et al., 2015; Tkachuck et al., 2018). However, Rañeses et al. (2018) commented that "being prepared" here refers to being aware of the disasters that may occur instead of being prepared for an actual disaster.

The relationship between disaster awareness and preparedness has been reported in previous studies (Gerdan, 2014; Park, 2019). Important results of this study reveal that disaster awareness has a moderate and positive relationship to disaster preparedness. This indicates that the higher the awareness of disaster, the higher the preparedness. Turan et al. (2017) pointed out that education is crucial in providing information to individuals and turning this information into behaviors. Therefore, highlighting the importance of disaster awareness will also improve students' preparedness regardless of their programs. Evidently, this result supports the Protective Action Decision Model of Lindell and Perry (2012). To further elaborate on the similarities of the framework to the study, the initial perception or the 'awareness' from certain factors such as environmental cues, social cues, warnings and characteristics of the receiver creates a basis for the activation of one's protective action decision making that would tangibly be reflected on a person's preparedness through their behavioral responses (e.g., obtain information on phone numbers to contact during a disaster, join in disaster drills, listen to communication devices, prepare a backpack kit, etc.)/ Lindell and Perry further elaborates that the sequence within the model goes "on and on" in a feedback loop like fashion, as one continues

to search for more cues or information. In addition, as this sequence goes back and forth, the model presents a goal of long-term adjustments in preparedness, improving appropriate disaster responses over time. As experience correlates to awareness, this increases a persons' adjustment adoption. Though the demographic variable has no reliable adaptation predictors, assessment of these variables should continue.

Difference in mean ratings of disaster preparedness was found based on gender, but not with age and programs of college students. Specifically, female students reported being significantly more prepared than their male counterparts. Previous research documented that females are reported to have lesser preparedness than males (Mohammad-pajoooh & Aziz, 2014; Sobrio et al., 2016). Whereas, in one study, females are more likely to take protective action than males (Silver & Andrey, 2014). One possible explanation is that females pay more attention during programs or drills. With respect to the age of the college students, one potential reason to consider is their experience on floods, typhoons, and earthquakes. Additionally, most of them are living within the area of the institution and around Metro Manila. Another possible reason is the yearly awareness program and drills provided by the institution. Hence, regardless of age, the same reported disaster preparedness is present. Several studies mentioned that children and adolescents need particular attention in planning disaster and emergency preparedness because they are most likely to be affected psychologically, socially, and academically (Blake & Fry-Browns, 2018; Pratt, 2018). In addition, young ones are less likely to take protective actions for themselves (Silver & Andrey, 2014).

In terms of program, the literature review documented only the nursing and midwifery students but limited studies for pharmacy

and business students. In addition, most of the previous researches focus on registered nurses in different specialty areas and settings (Labrague et al., 2018). This current study provides significant baseline information regarding the disaster preparedness of college students in the allied health and business programs. It is worth noting that business students have high preparedness, possibly because of the programs and drills they received from the institution. According to Ozkazanc and Yuksel (2015), "it is a well-known fact that good quality education will bring success in the fight against disaster" (p. 752).

Limitations

Several limitations in the current study should be noted. First, it is conducted at one private higher education institution limiting the generalizability of the results. Another is the unequal distribution of the samples as observed in terms of gender and programs of college students suggesting a cautious interpretation of the results. Specifically, concerning gender, females were overrepresented, and males were underrepresented since more females were enrolled during the said academic year. On the other hand, when programs are considered, there was an under-representation of the pharmacy and medical laboratory science since both were newly offered programs. The use of a self-constructed questionnaire is another limitation that posed a possible bias of the response. Lastly, the statements included in the self-constructed questionnaire only underwent face and content validity but did not undergo exploratory and confirmatory factor analysis which may create better dimensions.

Conclusion and Recommendations

This study aimed to examine the relationship between disaster awareness and preparedness of college students. Consequently, to determine differences in disaster preparedness based on students'

selected characteristics. In general, college students who are enrolled in this particular private higher education institution have high disaster awareness with moderate preparedness towards disaster. Disaster awareness provides an important role in the preparedness of students during disasters. Moreover, disaster preparedness significantly differs according to gender but not with the age and program of college students.

Given the results, the recommendations of this study are as follows: maintain regular school-based disaster-related programs such as awareness campaigns, training, and

drills spearheaded by the administrators in collaboration with the school health nurses. Contact details of personnel in charge may be included during programs and posted in the school building. A replication of the study in multiple and other setting, using a larger sample size and different group of student also needs to be considered. In addition, to check the validity of the questionnaire using exploratory and confirmatory factor analysis. Moreover, to include other factors such as psychological and social factors that may affect disaster preparedness and conducting a qualitative study focusing on disaster preparedness based on gender.

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Appendix

Disaster Awareness Statements	Extremely familiar (5)	Very familiar (4)	Somewhat familiar (3)	Not as familiar (2)	Not familiar at all (1)
1. A natural disaster such as typhoons, floods, tsunamis storm surge, and earthquakes can occur anytime.					
2. There are specific action responses during a disaster event					
3. The country has been experiencing numerous disastrous events in a year (e.g. an average 20 typhoons/year)					
4. As a result of a disaster, more possible disastrous events may likely to follow.					
5. A small kit with emergency supplies must be brought always if evacuation is necessary.					
6. Preserving or keeping food safe after a disaster should be taught in disaster seminars.					
7. The Philippines ranks among the most disaster-prone country in the South-East Asia.					
8. The government has several seminars and forums laid out in preparation for possible new disaster that may occur in the future (e.g. "The Big One")					
9. The Philippines, as an archipelago, puts risk during a storm surge.					
10. The Philippines is situated in a weather pathway near the equator known as the Typhoon Belt.					
11. The government hosts several mass simulation drills to prepare the population for future unwanted disastrous events.					
12. Local government units and agencies has provided hotlines which can be contacted during an event of a disaster.					
13. There is a disaster plan that has been formulated at my school.					
14. My school hosts seminars and forums to prepare us for a disaster.					
15. There is no message that encourage the students to takes steps to be prepared for emergency situations in the school.					
16. There is no possible dangers that can occur after a disaster.					
17. The local media has not given any information regarding preparation in disasters.					
18. There is no established specific meeting placed to reunite with my classmates and teachers					
19. The government's assigned agency has not been inspecting the vulnerability of public and private institutions in a disaster.					
20. Damaged areas can't be a reservoir site for possible aftershocks which can be more severe.					

Disaster Preparedness Statements	Never (1)	Rarely (2)	Seldom (3)	Very Often (4)
1. I stay away from large body of waters, especially when I hear about a new disaster may happen.				
2. I will evacuated calmly.				
3. I practice how to drop to my hands and knees, cover my head and neck with my arms, and hold on to any sturdy furniture until the shaking stops.				
4. I follow the way leading to the river during a storm				
5. In an event of an earthquake, I will stay near glass windows, outside doors and walls.				
6. If my house has been slightly destroyed after a typhoon, I will go inside my house right away.				
7. I participate in the disaster plan that has been formulated by my school.				
8. I attend seminars about being prepared for a disaster hosted by my school.				
9. I do not participate in the practice drills hosted by my school.				
10. I do not stay home whenever there are announcements by the government through their social media accounts about dangerous disasters that may happen.				
11. I will not leave immediately even if I have been told to do so.				
12. I attend seminars and forums laid out by the government, in partnership with several non-government offices for more knowledge.				
13. I participate in government-hosted mass simulation drills in preparation for future disastrous events.				
14. I have not obtained the established specific meeting place to reunite with other students and teachers.				
15. I do not have the emergency numbers and contact details of the qualified personnel such as the local fire department, police, hospitals, and barangay officials.				

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