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Disaster Awareness and Preparedness of Senior High School and College Students: A Comparative Study

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Abstract
The country experienced different kinds of natural and artificial disasters because of its location. We could not prevent such calamities, but we could lessen the impact and save ourselves and the community by being equipped with different skills and knowledge about disaster awareness and preparedness. This study aims to determine the disaster awareness and preparedness level of senior high and college students. The respondents' demographic profile significantly affected their awareness and preparedness before, during, and after the disaster. The respondents are determined by age, gender, year level, course/strand, and social class. The researcher used a purposive sampling technique to determine the accurate result in this study. There are 190 respondents from senior high and 190 from college students, with 380 respondents being accumulated. Hence, the study's result shows that the students' disaster awareness and preparedness are affected because of their demographic profile. It also shows that the disaster awareness and preparedness level of senior high and college students at the University of Mindanao is good. Government and private schools must include different seminars, training, and subjects in the curriculum in all courses and strands.
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1. Introduction

The Philippines is among the countries prone to natural calamities because of its geographical location. It is situated in the Pacific Ring of Fire along the boundary of major tectonic plates (Bolettino, Alcayna, Enriquez, & Vinck, 2018). In the past few years, Filipinos have experienced a lot of natural disasters like typhoons, floods, landslides, earthquakes, volcano eruptions, droughts, terrorism, fire, and explosions. On 16 December 2021, super typhoon "Rai Odette" made its landfall in the country, bringing heavy rains, violent winds, floods, and storm surges to the Visayas and Mindanao areas. The typhoon left many deaths, and many Filipinos were left homeless and devastated (OCHA, 2022). Disaster causes serious disruptions in the community, which call for the global community to take action and steps to reduce the impacts of the calamities (Ventura, 2020). Disasters and calamities will continue to strike even in those countries that are well prepared, and the Philippines is no different (CFE-DMHA, 2021).

Knowing about disaster awareness and preparedness can provide adequate knowledge to everyone and help prepare them to respond to these disasters and emergencies. Awareness can be referred to as the ability of a person to perceive, feel, or be directly aware of events we are surrounded by (Nifa, Lin, Rani, & Wei, 2018). Lives are being saved, and countries and communities are strengthened by enhancing practice and response mechanisms to awareness and preparedness. Moreover, disaster preparedness can help save number of lives and property, and it aims to return the affected populations to normal as quickly as possible in a short period. It can also prevent or lessen the impact of physical, emotional, and mental health problems. It can reduce fear, anxiety, physical injury, stress, and more (European Commission, 2022).

In addition, disaster prevention awareness may be influenced by demographic and cultural factors, as well as by personal experience and attitudes (Kawasaki et al., 2022). Meanwhile, factors affecting emergency preparedness and relative behaviors are risk, preparedness knowledge, disaster experiences, and specific socio-demographic characteristics such as gender, age, and education. Students are more likely to suffer damage, especially when they are in school when a disaster happens (Tipler, Tarrant, Johnston, & Tuffin, 2017).

Hence, demographic factors could affect disaster preparedness behavior (DPB), young adults, middle–aged adults, and other adults with advanced age were at more risk of having barriers to disaster preparedness than the young-old (Cong, Chen, & Liang, 2021). Gender norms and ideals present themselves in diverse ways in different social roles and activities that men and women engage in within the family and community. There has been a correlation between deeper concern for other people's safety and well-being and the nurturing and caretaker roles primarily filled by women. Because expectations for men and women are frequently founded on stereotypes, distinct gender roles can also be reinforced in disasters (Cuesta et al., 2022). Furthermore, a disaster has a greater impact on the lives of people, especially those of low socio-economic status (SES). In a disaster, people with low SES are more at risk in catastrophes than other populations, as well as hurdles to disaster preparation and other challenging circumstances or experiences they can encounter during the phases of impact, reaction, and recovery

following a disaster since SES includes employment, education, and money (SAMHSA, 2017). Thus, households with low income depend only on natural resources as a source of their livelihood, making them more vulnerable to disasters and bringing heavy financial losses from natural disasters (Silva & Kawasaki, 2018). Local disaster understanding is known to be a significant background factor in sharing disaster experiences, and having encountered living outside of the disaster area enhanced self-reported knowledge and understanding level among the direct experience group (Kato, 2021).

In light of the above statements, a Social Construction Theory (SCT) of Berger and Luckman is used. SCT draws attention to the social vulnerability of particular population segments. The idea that risk vulnerability is socially engrained does not suggest that people are helpless because they perceive a situation incorrectly. These psychological, demographic, economic, and political dynamics frequently culminate in the development of population segments that are socially vulnerable (Endress, 2018).

Therefore, schools must strengthen their conduct training and formulate standard operating procedures (SOP) to explain the pre-disaster, disaster, and post–disaster stages (Wardana, Herdiansyah, & Wicaksono, 2021). It is essential that we also need to consider the overall profile of the students so that we can identify what are the possible calamities, emergencies, and disaster events that they experienced and may experience in the future. Strengthening the knowledge and skills of the students can enhance the chance that they openly discuss how to adequately protect their families, friends, relatives, and community. Likewise, conducting drills, developing plans, and providing hazard education to students is a step all schools must undertake to raise their level of emergency preparedness (Tipler et al., 2017).

This study's uniqueness is to make the future more secure. The researchers wanted to know if senior high school and college students at the University of Mindanao are disaster-aware and prepared for any future calamities. Being aware and prepared can help students mitigate the disaster's effects. Moreover, limited exposure to how to cope with disasters can be extremely lethal. It is vital to address this issue immediately to prevent further casualties and reduce the disaster's impact on the community. In addition, the outcome of this study could be a basis for how we can equip and broaden the knowledge of the students when it comes to disaster awareness and preparedness.

This study aims to provide knowledge, awareness, preparation, and readiness for disasters that will lead to a quality of life. Safeguarding the vulnerable is also the main reason why we need to pursue this study. The information will be significant to the students, as they will know their capabilities in handling and protecting themselves from physical injury and loss of life. It also helps them acquire new skills, test their abilities, and become more independent by being knowledgeable about doing emergency disaster plans in school and preparing them on their own. Aside from the students, schools and the community could also benefit from this study as a basis for how they will be empowered, build the confidence of all students and enhance the knowledge of students on how to be aware and prepared before, during, and after a disaster. With faster recovery from unavoidable disaster events, community preparedness planning abilities can increase community readiness and lessen the effect of disasters (Oloruntoba, Sridharan, & Davison, 2018).

The study intends to identify the knowledge and abilities of the groups and students so that we can respond and take steps to minimize their vulnerability to such disasters. It aims to help students in senior high school and college students at the University of Mindanao to be prepared in case of emergencies and disasters due to natural hazards or man-made causes to protect themselves from personal injury and loss of life as well as to protect the school property from damage. Specifically, the study wants to compare the level of disaster awareness and preparedness of senior high school and college students in terms of their disaster knowledge, disaster awareness and preparedness, disaster adaptation, disaster awareness, and disaster risk perception, regardless of age, gender year level/grade level, course strand, social class and disaster experienced.

2. Disaster Awareness and Preparedness

Indeed, awareness can be closely connected to one's understanding of a situation brought about to him/her from acceptable sources of information and authorities. Being aware does not always mean that a particular person or institution is ready enough in times of natural disasters and calamities that may come because, as we all know, logistics and infrastructural preparedness would be included as a count in the cycle preparation (Maminta, 2019). Risk knowledge means being aware of the possible risks, local hazards, and possible exposure to disaster impact. Disaster readiness is the process used to mitigate, prepare, respond, and recover from disaster. Disaster adaptation is a process to reduce the potential disaster associated with climate change. Disaster risk perception means how people respond to possible hazards and know whether the hazards could turn into a disaster (Oppenhimer, 2021).

There have been disasters all across the world, and no nation is exempted from this issue. The intensity and amount vary depending on the nation. Schools that are properly prepared for disasters are particularly good at managing the risks (Wanjala & Oyango, 2018). Although, being aware is not enough, practicing sustainability of the program needs to be carried out (Kurniawan & Sari, 2019). Individually or collectively, there are activities to address exposure and vulnerability to risks that are influenced by disaster awareness (Glago, 2019). According to Rosmadi (2023), people may not be aware of the risks associated with natural catastrophes and may be reluctant

to take protective measures to save their property and themselves.

Table 1- Demographic Profile of Respondents (N=380)

	Profile Variables	f	%
Sex	Male	137	63.9
	Female	243	36.1
Age	16-18	195	51.3
	19-21	124	32.6
	22-above	61	16.1
Level	Grade 11	81	21.3
	Grade 12	109	28.7
	1st year	34	8.9
	2nd year	44	11.6
	3rd year	84	22.1
	4th year	28	7.4
Course	ABM Strand	100	26.3
	STEM Strand	90	23.7
	CTE	103	27.1
	Non-CTE	87	22.9
Social Class	Lower Class	29	7.6
	Working Class	83	21.8
	Lower Middle Class	210	55.3
	Upper Middle Class	58	15.3
Type of Students	College	190	50
	Senior High School	190	50

Table 1 represents the demographic profile of the respondents, wherein 63.9% were male, and 36.1% were female. The respondents vary in age, with 51.3% aged 16-18, 32.6% aged 19-21, and 16.1% aged 22-above. In terms of year level, grade 12 has 28.7%, which has the highest number of respondents in the study, followed by 3rd-year students with 22.1% respondents. Third was Grade 11, with 21.3% of respondents. Next was 2nd-year students, with 11.6% of respondents, followed by 1st-year students, with 8.9%; fourth-year students have the lowest number of respondents, with 7.4%.

With regards to the course of the respondents, 26.3% are ABM (Accountancy, Business, and Management) strand, 23.7% are STEM (Science, Technology, Engineering, and Mathematics) strand, 27.1% are CTE (College of Teaching Education) and 22.9% are in the different college department. In social class, the lower middle-class level has the highest number of respondents, with 21.8%, followed by the working class, with 21.8%. Next, the lower class has only 7.6%. Overall, 50% of college students and 50% of senior high school students. Risk, disaster preparedness knowledge, disaster experiences, and specific socio-demographic traits like gender, age, and education can influence emergency preparedness and related behaviors. Students are more likely to sustain damage if they are enrolled in school at the time of the crisis (Tipler et al., 2017). Likewise, individual experiences and attitudes, as well as the demographic and cultural factors, may impact disaster prevention awareness (Kawasaki, et.al. 2022).

Table 2 – Level of Disaster Awareness and Preparedness of Senior High and College Students

Indicators	$\bar{x}$	SD
Disaster – Related Knowledge	3.86	0.53
Disaster Preparedness and Readiness	3.99	0.51
Disaster Adaptation	4.01	0.58
Disaster Awareness	4.02	0.56
Disaster Risk Perception	3.59	0.68
Overall	3.91	0.45

Reflected in Table 2 is the level of disaster awareness and preparedness of senior high school and college students. The indicators have a slight difference in the mean score with a high description and an overall value of 3.91 (SD=0.45). This means that students level of awareness and preparedness is good. The result implies that students had the knowledge what to prepare in case of disaster, and gives priority to disaster awareness. Students who have attended previously a first aid course has a high level of preparation for disasters than those who have not (Goddard, 2017). Likewise, providing quality education, training, seminars, and outreach programs helps students be aware and prepared for natural or artificial disasters (Hadi, 2021).

Accordingly, college students would expand and develop their disaster awareness if it was included in their university curriculum. Disaster Risk Reduction (DRR) education as part of the curriculum is more critical and beneficial since it includes practicing rescue skills. Implementing these, students are more equipped with the skills

and knowledge to survive (Patel et al., 2023). The result could also tie up with the Social-Cognitive Theory of Albert Bandura, which believed that humans could learn through observation without needing imitation. The learner decides how to act by observing the modeled behaviors, attitudes, emotional reactions, etc. he contends that learning occurs when we incorporate observable behavior into our knowledge base (Bandura, 2023).

Table 3 - Independent Samples t-Test of Respondents by Sex

Indicators	Sex	N	X	SD	t	p
Disaster-Related Knowledge	Female	243	3.90	0.54	1.742	0.08
	Male	137	3.80	0.53		
Disaster Preparedness and Readiness	Female	243	4.01	0.51	0.983	0.33
	Male	137	3.96	0.51		
Disaster Adaptation	Female	243	4.01	0.59	-0.01	0.99
	Male	137	4.01	0.56		
Disaster Awareness	Female	243	4.01	0.58	-0.54	0.59
	Male	137	4.04	0.53		
Disaster Risk Perception	Female	243	3.58	0.67	-0.33	0.75
	Male	137	3.60	0.70		
Overall	Female	243	3.92	0.45	0.453	0.65
	Male	137	3.90	0.44		

As shown on Table 3, the independent sample t-test of the respondents by sex. Among the indicators, disaster risk perception has the lowest average for females and males with a mean value of 3.58 (SD=0.67) and 3.60 (SD=0.70) respectively. Both sexes got high descriptions based on the Likert scale; this means that the independent samples t-test of respondents by sex in terms of disaster risk perception is good. The table further shows that male has the highest mean of 4.04 (SD=0.53) in terms of disaster awareness. The overall mean rating of 3.92 (SD=0.45), and 3.90 (SD=0.44) for female and male respectively with an overall t-Test of 0.453 and p-value of 0.65. Therefore, Ho is accepted and Ha is rejected, which means there is no significant difference in their level of disaster awareness and preparedness regarding gender.

As can be seen in the overall result, both females and males have a high level of disaster awareness and preparedness, it is congruent to the study of Erman et al. (2021) which states that, the effects of natural calamities are gender-neutral. Although men are disproportionately overrepresented when it comes to risk and rescue jobs or careers. However, it contradicts to the study of Cvetkovic et al. (2018), that men are more proficient in handling an emergency and are more equipped to act, both physically and mentally. This is because more men participated in disaster training, and are interested in rescue training and fire extinguishing, whereas more women care for people with disabilities and senior citizens/elderly (Fuji & Kanbara, 2019).

Another contradicting result is with the study of Padernal and Borja (2016) that female students are more disaster prepared and ready than male students, it further states that female students are more cautious than males on disaster risk reduction issues in natural disasters like earthquakes, typhoons, landslides, etc. because they are more concern with environmental issues which qualified to the gender role that they play in the society. Although the findings of this study is contrary to some studies it is because men and women perceive risks differently, and this difference is probably due to their varied cultural and societal roles (Baars & Petraroli, 2021).

Table 4 - Independent Sample t-Test of Respondents by Type of Students

Indicators	Type of Student	N	X	SD	t	p
Disaster-Related Knowledge	Senior High	190	3.77	0.56	-3.525	0.000
	College	190	3.96	0.50		
Disaster Preparedness and Readiness	Senior High	190	3.88	0.54	-4.207	0.000
	College	190	4.10	0.45		
Disaster Adaptation	Senior High	190	3.90	0.58	-3.650	0.000
	College	190	4.11	0.55		
Disaster Awareness	Senior High	190	3.92	0.55	-3.436	0.001
	College	190	4.12	0.56		
Disaster Risk Perception	Senior High	190	3.57	0.74	-0.431	0.667
	College	190	3.60	0.63		
Overall	Senior High	190	3.82	0.47	-3.932	0.000
	College	190	4.00	0.41		

Table 4 shows the independent sample t-test of the respondents by type of students, senior high school and college students at the University of Mindanao. The overall mean value of 3.82, SD=0.47 and 4.00, SD=0.41 for senior high school and college students, respectively with a t-value of – 3.932, p-value of 0.000 which is high, interpreted as good. In support, senior high school students have a high level of disaster-related knowledge, preparedness, adaptation, awareness, and perception (Macalaguing et al., 2018). Therefore, Ha is accepted and Ho

is rejected, which means there is a significant difference between senior high and college students regarding disaster awareness and preparedness.

The indicator with the lowest mean value with a slight difference for both types of students is the disaster risk perception with a high description, interpreted as good. Senior high school students have low disaster risk perception, this result could be based on the competence and integration of disaster risk reduction in the school curriculum (Mamon, Suba, & Son, 2017). Hence, senior high school under Science, Technology, Engineering, and Mathematics (STEM) strands are into science subjects whose disaster risk reduction is integrated, for example, earth science subjects and physical science (Lapada, 2022). In addition, students who have taken part in disaster or hazard education programs are to be expected to practice safe behaviors and apply disaster preparedness measures (Margarint et al., 2023).

The indicator with the highest mean value is the disaster awareness with 3.92, SD=0.55 and 4.12, SD=0.56 for senior high school and college students, respectively. The result described as high, interpreted as good. In support, college students are probably more aware if they are going to undergo the course on DRR education, and they will enhance their preparedness for disaster if they are conscious of the university emergency procedure (Patel et al., 2023).

Table 5 - Differences in Disaster Awareness and Preparedness by Age of Respondents

Indicators	Cluster	Sum of Square	df	Mean Square	F	p
Disaster-Related Knowledge	Between Groups	3.057	2	1.529	5.47	0.005
	Within Groups	105.271	377	0.279		
	Total	108.328	379			
Disaster Preparedness and Readiness	Between Groups	3.897	2	1.949	7.86	0.000
	Within Groups	93.422	377	0.248		
	Total	97.320	379			
Disaster Adaptation	Between Groups	3.767	2	1.883	5.84	0.003
	Within Groups	121.699	377	0.323		
	Total	125.466	379			
Disaster Awareness	Between Groups	3.461	2	1.731	5.59	0.004
	Within Groups	116.787	377	0.310		
	Total	120.248	379			
Disaster Risk Perception	Between Groups	0.046	2	0.023	0.05	0.953
	Within Groups	177.019	377	0.470		
	Total	177.065	379			
Overall	Between Groups	2.583	2	1.292	6.61	0.002
	Within Groups	73.707	377	0.196		
	Total	76.29	379			

Table 5 shows the differences in disaster awareness and preparedness of the respondents by age. The overall result shows the sum of squares between groups are 2.583 with a df of 2 and a mean square of 1.292. While within groups has a sum of square of 73.707 with df of 377 and a mean square of 0.196. The overall sum of square is 76.29 with a df of 379 and an F value of 6.61 with a p-value of 0.002 which is less than $\alpha = 0.05$. Therefore, Ha is accepted, and Ho is rejected, which means there is a significant difference between senior high and college students regarding their disaster awareness and preparedness when analyzed by age. This result is supported by the study of Rahman (2019) which claim that younger people are better prepared or have higher knowledge of earthquakes than older people are, and less educated are more likely to be unprepared than more educated ones. Likewise, older age groups are expected to be more sensitive and responsible to the problems in their communities, based on experience (Gerdan, 2014).

Table 6 - Differences in Disaster Awareness and Preparedness by Year Level of Respondents

Indicators	Cluster	Sum of Square	df	Mean Square	F	p
Disaster-Related Knowledge	Between Groups	4.011	5	0.802	2.88	0.015
	Within Groups	104.317	374	0.279		
	Total	108.328	379			
Disaster Preparedness and Readiness	Between Groups	5.521	5	1.104	4.5	0.001
	Within Groups	91.799	374	0.245		
	Total	97.320	379			
Disaster Adaptation	Between Groups	4.972	5	0.994	3.09	0.010
	Within Groups	120.494	374	0.322		
	Total	125.466	379			
Disaster Awareness	Between Groups	5.973	5	0.388	3.910	0.002
	Within Groups	114.275	374	0.468		
	Total	120.248	379			
Disaster Risk Perception	Between Groups	1.938	5	0.388	0.83	0.531
	Within Groups	175.127	374	0.468		
	Total	177.065	379			
Overall	Between Groups	3.446	5	0.689	3.54	0.005
	Within Groups	72.844	374	0.195		
	Total	76.290	379			

Table 6 shows the differences in disaster awareness and preparedness of the respondents by year level. The overall result for between groups, the sum of square of 3.446 with df of 5 and a mean square of 0.689. Whereas within group has a sum of square of 72.844 with df of 374 and a mean square of 0.195. The overall sum of square is 76.290 with a df of 379. The overall F value of 3.54, and the p-value of 0.005 which is less than the value of $\alpha = 0.05$. Therefore, Ha is accepted, and Ho is rejected, which means there is no significant difference between senior high and college students regarding their disaster awareness and preparedness when analyzed by year level.

Table 7 - Differences in Disaster Awareness and Preparedness by Course of Respondents

Indicators	Cluster	Sum of Square	df	Mean Square	F	p
Disaster-Related Knowledge	Between Groups	3.789	3	1.263	4.54	0.004
	Within Groups	104.539	376	0.278		
	Total	108.328	379			
Disaster Preparedness and Readiness	Between Groups	4.556	3	1.519	6.16	0.000
	Within Groups	92.764	376	0.247		
	Total	97.320	379			
Disaster Adaptation	Between Groups	5.509	3	1.836	5.76	0.001
	Within Groups	119.957	376	0.319		
	Total	125.466	379			
Disaster Awareness	Between Groups	4.331	3	1.444	4.682	0.003
	Within Groups	115.917	376	0.038		
	Total	120.248	379			
Disaster Risk Perception	Between Groups	0.732	3	0.244	0.520	0.669
	Within Groups	176.333	376	0.469		
	Total	177.065	379			
Overall	Between Groups	3.254	3	1.085	5.58	0.001
	Within Groups	73.036	376	0.194		
	Total	76.29	379			

Table 7 shows the difference in disaster awareness and preparedness by respondents' course. The overall result of the sum of square of between groups has 3.254 with a df of 3 and a mean square of 1.085. The overall sum of square of within groups is 73.036 with a df of 376 and a mean square of 0.194. Whereas, the total sum of square among the groups is 76.29, with a df of 379 and an overall F-value of 5.58 with a p-value of 0.001, which is less than $\alpha = 0.05$. Therefore, Ha is accepted and Ho is rejected, which means there is a significant difference between senior high and college students regarding their disaster awareness and preparedness when analyzed by course.

In a study conducted by Jasper et al. (2017), disaster preparedness should remain part of the curriculum to be able to deal with the negative impacts of natural and man-made catastrophes. Thus, it is essential that all courses in the university should teach rescue skills and basic medical training to be fully equipped with the knowledge and

provide hands-on experiences to raise their awareness about and attitude toward such events (Matunhay, 2022; Patel et al., 2023).

Table 8 - Differences in Disaster Awareness and Preparedness by Social Class of Respondents

Indicators	Cluster	Sum of Square	df	Mean Square	F	p
Disaster-Related Knowledge	Between Groups	0.465	3	0.155	0.540	0.665
	Within Groups	107.863	376	0.287		
	Total	108.328	379			
Disaster Preparedness and Readiness	Between Groups	0.037	3	0.012	0.047	0.986
	Within Groups	97.283	376	0.259		
	Total	97.320	379			
Disaster Adaptation	Between Groups	0.689	3	0.230	0.692	0.558
	Within Groups	124.777	376	0.332		
	Total	125.466	379			
Disaster Awareness	Between Groups	0.866	3	0.289	0.909	0.437
	Within Groups	119.382	376	0.318		
	Total	120.248	379			
Disaster Risk Perception	Between Groups	3.291	3	1.097	2.373	0.070
	Within Groups	173.774	376	0.462		
	Total	177.065	379			
Overall	Between Groups	0.642	3	0.214	1.064	0.364
	Within Groups	75.647	376	0.201		
	Total	76.290	379			

Table 8 shows the level of disaster awareness and preparedness of the respondents by social class. The overall result shows that the sum of square between groups is 0.642, df is 3, and a mean square of 0.214. Further, within groups has a sum of square of 75.647, df is 376, and a mean square of 0.201. The overall sum of square is 76.290 with a df of 379 and an F value of 1.0064. The value of $p = 0.665$ which is greater than the value of $\alpha = 0.05$. Therefore, Ho is accepted, and Ha is rejected, which means there is no significant difference exists in the level of disaster awareness and preparedness of the respondents when analyzed by social class.

In comparison, in a study conducted by SAMHSA (2017) there is a significant difference in people in the working class and those from lower socio-economic status hence the later whose jobs expose them to risk have fewer resources than those with higher socio-economic status and part of the middle class. Likewise, people from low socio-economic backgrounds are less prepared for catastrophic events despite increasing disaster threats because of problems like the absence of affordable housing options and receiving inadequate wages and illiteracy rates (Rogayan & Dollete, 2020).

These conflicting results were thought to be caused by the fact that the study was carried out for the student population, and their societal status was based only to the status of their parents. Although it is mentioned in the introduction that disasters put low SES populations at more danger than other groups, but forget not that low SES includes employment, education, and money. Therefore, this social status profile of the respondents does not directly apply to them.

4. Conclusion

The result shows that the overall disaster awareness and preparedness of senior high and college students is high, interpreted as good. In terms of the significant difference of the respondents in terms of Sex, Year level, and Social Class, there is no significant difference. This implies that no matter what your gender, year level, and your status in the society has nothing to do with being aware and prepared in any disaster. However, as to the Type, Age, and Course the result shows that there is a significant difference. This implies that the type of students, its age, and course has a disparity in disaster awareness and preparedness.

The result is supported by the Social Construction Theory. This theory highlights specific population groupings' social vulnerability. It is not implied by the claim that risk vulnerability is socially engrained that people are helpless because they perceive a situation incorrectly.

Based on the study's findings, the researchers recommend offering and giving more importance to educating all students on disaster preparedness and awareness, basic life support, and rehabilitation topics that can be used in lifelong learning. This could be achieved if it is integrated into curricula and implementing education programs as a core subject to all courses. Develop activities and training that expose and provide experiences to the students with different disaster management skills. Lastly, provide students with a safe environment inside the university by providing types of equipment, evacuation areas, and disaster knowledge that can be beneficial before, during, and after the disaster.

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