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Turbulence behind the Shadows: The Lived Experiences of Overseas Filipino Workers in Qatar Displayed after Natural Disaster Crisis, A Phenomenology

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Abstract: Background: The Philippines belongs to the most geologically active area in the world, known as the Pacific Ring of Fire, and the most active tropical cyclone area in the world in the northwestern Pacific Ocean. Due to the occurrence of numerous natural disasters throughout the Philippines' history, different reactions have emerged in order to prepare for the upcoming disaster. **Methods:** In order to attain the necessary data, this research adheres to a phenomenological approach on the perceptions of overseas Filipino workers on the different natural disasters that frequently hit the Philippines. The researchers interviewed Overseas Filipino Workers who have either been directly affected by a calamity or have had relatives who were. **Findings:** There are multiple reactions and coping mechanisms that are present, with them being developed overtime as they have been a necessary reaction to the numerous natural disasters that come their way. **Conclusions:** Overseas Filipino Workers perceive natural disasters as an active threat and must be treated with extreme caution in order to mitigate its impact. **Recommendations:** The data and outcome gathered in this study could be further validated if a bigger population would be utilized to analyze the varying perceptions of the Filipino workers.

Keywords: Natural Disaster, Calamity, Overseas Filipino Workers, Mitigate, Pacific Ring of Fire, Pacific Ocean, Tropical Cyclone

I. INTRODUCTION

We, humans, are not new to this kind of crisis, a worst-case scenario that we wish does not exist; a dreadful event that all countries are prone and problematic with, it is a problem that is impossible to prevent. As we all know, natural disasters are numerous events such as typhoons, earthquakes, tropical cyclones, hurricanes, and many more. Moreover, we cannot neglect the fact that the cause of these events is human activities causing climate change. This dreadful dilemma causes uncountable damages and deaths, and this has been a problem in some countries. Moreover, the Philippines is one of the unfortunate countries that has experienced numerous natural disasters, mainly typhoons and landslides, given the fact that the Philippines is located in the ring of fire. Every year natural calamities occur all around the world Mostly in Asia Pacific Region. According to the United Nations' Global Humanitarian Overview 2019 report, in the period between 2014 and 2017, 870 million people from 160 countries, either lost their lives, their livelihoods or was displaced from their homes because of disasters caused by natural hazards. Floods, severe storms, droughts, and other climate related extremes that affect most of the people. It is said that natural calamities were caused by not only climate change but also human activities.

Natural disasters can generate the most severe consequences as it causes loss of lives and livelihood (Strömberg, 2007). The Centre for Research on the Epidemiology of Disasters (CRED) defines a natural disaster as an unforeseen event that causes significant damage, destruction, and human suffering. CRED (2008) shows an increasing trend from 1900 to 2006 in the occurrence of natural disasters, most notably the hydro-meteorological disasters. Indeed, the most frequently occurring natural disaster in the Philippines is a tropical depression. The country experiences about 20 tropical storms usually occurring during the monsoon season (June to December) every year. Exceptions known to us are recent studies by Sawada and Shimizutani (2008), Yang (2007), and Takasaki et al. (2004) and Skoufias (2003). To bridge this gap in the existing literature, we analyze the impacts of tropical-storm Milenyo in the Philippines in 2006 on rural household welfare. (Sawada, Estudillo, Fuwa, Kajsa 2009). In recent decades, numerous studies have

been focused on assessing individuals' levels of preparedness for natural hazards, and the factors that promote the adoption of preparedness measures (Bronfman NC, Cisternas PC, LópezVázquez E, Cifuentes LA, 2015).

In the literature, there are different theoretical frameworks to conceptualize the adoption of preparedness measures to face natural hazards. According to the World Meteorological Organization [16], over the past five decades, nine out of ten natural disasters around the world are directly or indirectly related to extreme weather and climate change. In the post-2015 framework for DRR, the importance of education and awareness-raising programs have been agreed as the top priorities in the policy of disaster [13]. The educational and awareness-raising efforts have to be the responsibility of everyone rather than implemented and promoted by governments and media agencies only. In the education sector, several programs were carried out by the Ministry of Education to raise awareness and safety practices on the disaster. People's awareness and preparedness must be raised and increased by transferring knowledge to reduce the impact as much as possible. According to HFA, disasters are basically reduced when people are well aware, and the motivation is to create a culture of prevention and resilience to disaster. In this regard, collecting and disseminating knowledge and information on hazards, vulnerabilities, and capacities, especially for vulnerable people, should be prioritized. This research aimed into looking at the in depth perceptions of the Filipino migrant workers in Qatar when it comes to natural disasters in the Philippines and analyzing them. It examined their awareness, readiness, and preparedness for any natural calamity situation and determined their level of such. With natural disasters being a common occurrence in the Philippines, it could help them in their preparations and mitigations.

II. METHOD

A. Research Design

Qualitative research according to the University of Utah, is a process of naturalistic inquiry that seeks in-depth understanding of social phenomena within their natural setting. It focuses on the "why" rather than the "what" of social phenomena and relies on the direct experiences of human beings as meaning-making agents in their everyday lives. Rather than by logical and statistical procedures, qualitative researchers use multiple systems of inquiry for the study of human phenomena including biography, case study, historical analysis, discourse analysis, ethnography, grounded theory and phenomenology. As implied by Ashley Crossman, Qualitative research is designed to reveal the meaning that informs the action or outcomes that are typically measured by quantitative research. So, qualitative researchers investigate meanings, interpretations, symbols, and the processes and relations of social life. The phenomenological approach is employed in this study as it seeks to understand and give comprehension to the respondent's experiences.

B. Research Locus and Sample

This study was conducted at Philippine School Doha (PSD), the only science school in the Middle East. This school is known for its numerous accomplishments and lauds, with it serving the Filipino community since 1992. The location was selected due to its accessibility and proximity to our research adviser, Dr. Rowena Elsa P. Sagayadoro. The target participants of this study were Overseas Filipino Workers, particularly those who themselves have been affected by any type of natural calamity or have relatives who were affected by such. The selection of the seven participants was made through qualitative purposive sampling strategy (Creswell and Plano, 2011; Bernard, 2002; Patton, 2002 as cited by Vallesteros, 2018).

C. Data Collection and Ethical Consideration

The Data needed to support this study was gathered through a semi-structured interview. This was accomplished with the utilization of the robotfoto and the twenty-five developmental questions. The robotfoto according to De Guzman and Tan, is the personal data sheets of the research respondents, which include their vital personal and professional information. Semi-structured interviewing, according to Bernard (1988), is best used when you won't get more than one chance to interview someone and when you will be sending several interviewers out into the field to collect data. The data collected was transcribed verbatimly with the use of a cellphone. When the data had been collected, it was kept in secret as it was agreed upon in the written.

D. Data Analysis

For better understanding of the outcomes of this study, the researchers decided to use the following steps (Ryan, 2003; Vallesteros, 2018): 1) transcribing all the statements of the participants referring from the recorded audio; (2) identifying small units called the meaning units; (3) changing meaning units from the point-ofview of the participants (emic) to the understanding of the researchers (etic); (4) grouping the meanings to their rightful thought units and placing them under the pre-existing themes through a dendrogram that represents the relationship of likeness among a group of entities (wheatoncollege.edu); (5) creating a simulacrum, or a visual model for the findings.

III. FINDINGS

The Philippines is the fourth most at-risk country in the world in terms of climate-related natural disasters, such as typhoons, sea-level rise, flooding, and extreme temperature. It is one of the top three countries in the world for population exposure. It has the most significant proportion of capital investment and stock along coastlines (Alcayna, Bolletino, Dy, & Vinck, 2016, p. xx). The country has been subject to numerous natural disasters even before record-keeping began. This fact has helped the Filipinos improve their preparations and precautionary measures overtime. This study, therefore, exemplifies the perception of Filipino migrant workers in Qatar with regards to the natural calamities that frequently hit the Philippines. The central question of: "How do Filipinos overseas perceive the different calamities and natural disasters in the Philippines?" and the specific question of: "What are the aspirations of overseas Filipinos whose family members are affected by calamities." Being the foundation of this research paper. As is shown in Figure (1), the simulacrum represents the three main themes of this study: Prevention, Awareness, and Readiness. With one theme directly affecting the other. These themes represent the ideas of the responses gathered, implying that their perception is greatly affected by these factors, which enables them to react to the best of their abilities.

A. Preparedness

The Philippine is a known country that has experienced an inexhaustible number of deadly natural disasters. This is due to its location, as the Philippines rests on the pacific ring of fire where many typhoons, earthquakes, volcanic eruptions, and other calamities occur with some of these disasters happening unexpectedly. That is why preparedness plays a key role in reducing the impact of disasters in certain populations by planning and organizing on what they're going to do and, also by listening to forecasted weathers so it will keep them updated on what's happening and lastly, to ready themselves and their family for the worse. They stated:

They just prepare the necessary materials or things like medicine, water, clothes and can goods. (P2)

Since PAGASA announced that a typhoon will come. We already evacuated to higher ground places. (P3)

We usually listen to forecasted weather in the news through televisions and radio. We prepare ourselves when there is a natural calamity that is happening in our place. We usually prepare some clothes that are being put in our bags so that whenever a calamity will come, we will be ready. We also prepare our essential documents to be secured in a safe place. We have foods stored so that when the calamity comes it there will be food available for us to consume. (P4)

Just the things that we read on the news on what we should do. And also the things that are imposed by the barangay officials on how to prepare for the upcoming calamities. (P5)

To prevent more damage, we had our house fixed immediately. (P1)

They just prepared all the things that they will need like the furniture was kept on the first floor of our house. (P2)

The preventive measures that we have done are. We saved a lot of a lot of money to build a second floor for his house so that whenever a calamity will hit again like big floods. We have a safe place to stay on the second floor of our house. (P4)

My father would tie ropes around the house in order to reduce damages during a typhoon. (P7)

Moreover, two of the victims stated that the government implemented some preventive measures to help reduce the impact the typhoons so it will not reach their areas. They stated: There are these called dike or rip rap that is being made to prevent the river from getting big, so it will no longer reach in the residential areas. (P5)

The local government units inspect the house for the prevention of damages that will be dealt with by the calamity. (P6)

Thus, victims indicated that to be able to prepare for the upcoming disasters. It is a need to prepare their necessities and family, as well as listening to forecasted weather and instructions that are being imposed by the government officials can be a big help to be updated and to plan. However, some people may be heavily prepared for the upcoming disasters, others are not, because there are certain situations where disasters happen unexpectedly, and also the absence of early warning systems catch the victims by surprise. They shared below their challenges they encountered during the disasters:

We did not prepare for the previous ones; we just transferred houses because there were no evacuation centers. (P1)

We did not prepare for the coming disaster. (P7)

It was very sudden because sometimes they did not know that it has already forecasted, and sometimes, they did not even know that the typhoon is coming. (P2)

Moreover, Filipino's has evolved certain years of experiencing these treacherous events. They came to accept that these disasters are a frequent life experience. One of the victims proves this statement he affirmed:

So far, we aren't preparing because we are used to these typhoons. Even the municipal government is not doing any actions. (P1)

After the damage has been done victims mostly seeks medical assistance to aid their family who got affected by the calamity, communities count on governments and hospital to receive goods and medical treatments. Most of the victims are fortunate to receive assistance and goods they need but some communities did receive same treatment be Yes there is, they provided foods and temporary shelter for those who got affected by the flood and also medical aids, especially for the babies. (P5)

Furthermore, most of the victims were fortunate to receive medical assistance and goods from the government, but some communities did not receive the same treatment they averred: There was government aid given but very minimal. The aid was unable to support us. (P1)

We did not receive any government aid but there are some local companies that provided assistance and clothes to us. (P4) Local government aid was given very late since they are also affected.

We rely on national government aid and other local and international donations. (P6)

We did not receive any government aid. (P7)

Other problems that they encountered when the disaster was over being the damage that it caused to their properties the victims stated below how extensive the damage incurred to them financially:

The damage it caused financially was very big as it damaged more than 50% of the total worth of our house. (P1)

It is extensive because, at that time, they cannot even go outside and purchase some foods; they were just so lucky that they prepared all we need before it happened. (P2)

If a strong typhoon hit you, you would lose your very essence especially if you are a farmer. (P7) Most of my salary was used to help my family to start over. (P3)

It was very big. We lost almost all of our savings because we need to reconstruct the house. (P4)

Furthermore, the victims were asked if the damage caused affected them financially. Below are the victims who are capable to secure their family and their properties, because they have stable jobs they stated:

It did not affect us that much because I and my siblings have stable jobs and incomes. (P1)

Not really since I am working abroad and my church mates lent me money to help my family. (P2)

Even though some of the victims are capable and have stables jobs. Some victims are not fortunate with the same luck because not all OFW's are capable of supporting their families and repairing the damages.

They shared below how the damages affected them financially: Yes, most of my salary was used to support my family. (P3)

Most of our saving was gone because of this flood.

That is why I was forced to work outside of the Philippines wherein I need to recover from all of the damaged properties during those times. Because working in the Philippines with a previous salary that I have. I cannot recover with all of the damages incurred to us. So I decided to go out of the Philippines to earn more money for the family and for building the house. (P4)

Yes, since not all in the Philippines are capable, especially when there is situations like they need to buy medicines, but they cannot go out because of the typhoon. So we help them financially with their expenses. (P5)

In the midst of disaster below are the steps the victims and their family perpetrate to avoid more dilemma. They elaborated below how they adjusted to the situation: In terms of long term. I am saving money in order to build a stronger house. I enrolled myself into insurance if in case this calamity would happen to us again at least there is financial support that will be available if there will be properties damaged. In order to prevent this calamity, I looked for someplace wherein these floods will not occur like in some higher places, not in the lower places like Rizal. (P4)

Materially speaking, of course we need to replace the things that are damaged to prevent it causing further damage. Life wise, we should not allow our family members to go out when calamities are impending. (P5)

Start educating my family and relatives that we do not take care of the environment, mother earth will take revenge, and it will hit us badly. Spread awareness too when there is a forecast of bad weather locals should follow the advice of our local government units. (P6)

Accordingly, below are the steps the victims perpetrated in order to prevent further damages, they assert that they are ready to face the upcoming disasters because they learned from their past experiences, and now they are more prepared and resilient they claim: I would say by now after that Ondoy event and after several years. Somehow, I and my family have saved money. We were able to build a second floor in our house so that whenever a flood will come in our area or place at least we have a second floor that we could stay safe. (P4)

B. Prevention

The Philippines is one of the most naturally hazard-prone countries in the world. The Philippines is at high risk from cyclones, earthquakes, floods, landslides, tsunamis, volcanic eruptions, and wildfires. This can cause thousands of life loss or damage of property, and typically leaves some economic damage in its wake, the severity of which depends on the affected population's resilience also on the infrastructure available. Many people in the Philippines have incurred big or small damages of property due to their location. They stated:

It was significant because it affected all the ground floor area of our house. (P2)

It was a washout. (P3)

The damage in terms of the properties is considerable. Imagine that our house and cars were submerged underwater. All of the appliances were destroyed because of the calamity. Most of our clothes were also flooded. (P4)

As far as my experiences are concerned. Tropical storm Ondoy had the most significant extent of the damage. Many people also died due to it. (P5)

Moreover, why do you think it incurred that much damage? They have stated that: Because Marikina is called a "catch basin" since all the nearby areas are elevated like Quezon city and Montalban, Rizal. So if there is rain, the water will accumulate in the center which is Marikina. Marikina is called a "catch basin" since all the nearby areas are elevated like Quezon city and Montalban, Rizal. So if there is rain, the water will accumulate in the center which is Marikina. (P5)

We can't prevent natural phenomena/disasters from happening but we can reduce and lessen the impact of it. Some of the victims however think that damages that were brought by the disasters were unpreventable as they stated: It was not preventable because almost all of the properties in our area were destroyed. It was actually when you go back to history or news during the Ondoy time, a lot of Filipino suffered under this big flood. (P4)

The damage is not preventable due to the nature of calamity itself, but it would be less if only my fellowmen listen and follow the barangay official's advice to move away from their homes and believed that a possible storm surge would happen. However, most people just stay in their houses and just move out when the storm has already started. (P6)

Moreover, two of the victims says that it is preventable. They stated: Yes, if they built a dike, it might have been prevented. (P3)

In this generation, I could say it can be prevented. (P7)

In order to somehow prevent a natural disaster happening, there should be procedures and measures in order to prevent future damages when a calamity strike.

Both because during that time, there was hefty rainfall, so a big flood occurred in the area. (P4) It is both the location and the nature of the calamity itself. (P5)

It is both due to location and nature. We are located near the sea and facing Pacific oceans. And the calamity itself is the most. (P6)

The damage was due to human activities and the quarrying of the river. (P3)

With regard to the steps that they are doing in order to prevent further damage in case the calamity strikes, one of the victims stated that: I cannot say that I am 100 percent prepared because we do not know what kind of calamities will happen in the future, but we are always prepared by all the things that we need and emotionally, (P2)

With the steps you have taken, can you say that you are prepared should another calamity hit? They stated that: The important lesson that I learned is floods happened because people were not respectful of the environment. A lot of trees are being cut. Garbage is not being appropriately thrown. And then, I learned that we have to be prepared all the time in terms of finances. We have to be very mindful of what is happening whenever there is a weather forecast. (P4)

We must take care of nature for what is terrible for nature is bad for us as well. (P3) The most important lesson is to be educated about what we must do. We must listen to what the government says, cooperate, and communicate with them as well as with our families since we are far away from each other, this is to give everyone peace of mind. (P5)

The most important lesson I learned is that the houses should be built to be typhoon proof and that there should be more evacuation centers in our area. Another is that we should always hold on to our families and have faith in God. (P1)

C. Awareness

The awareness of the intensity and nature of the calamity is essential. On this observance raising public awareness plays a significant role of providing safety for people. Long preparations can be achieved if the information is given before the date that a calamity would hit. I was just worried because, at that time,

I cannot call them because there is no signal, and there is no electricity, so I was just worried about not knowing if they are safe or not. (P2)

I am worried; it is the most initial reaction of us. We worry that hopefully no one got affected by our relatives. (P5)

Mix emotions. I am glad because my family is intact but upset to see the extent of damage that been done by the typhoon. (P6)

With all the experiences they had had, the respondents claim that they now have become prepared to face the situation should another disaster arrive. When it comes to calamity prone areas, location is the leading cause, which is why these respondents need to be receptive to disaster events. They mentioned that as soon as they became aware of the impact of the disaster, they felt unnerving. Imagine if your house was submerged with water. All of your assets and appliances were gone.

Moreover, all of your savings were affected by this flood.

Of course, I'm devastated during that time. (P4)

They experienced grief during the aftermath of the disaster since most of the victims said that they were affected severely. In contrast, however, they felt a sense of peace when they found out that their family members were safe. I was sad because I found out that my family had been affected, but my siblings and I immediately got together and sent money to the Philippines. (P1)

I was saddened, I can still remember a week before I asked my mother to stay with me in manila but she refused. (P7)

The lessons that I have learned In preparing for any other calamities is awareness for everybody. I could be a volunteer, or I will be teaching my children and family on how to prepare in terms of these calamities. (P4)

Just be prepared and vigilant. And to broaden my knowledge on how to educate my family regarding the disasters that could happen in the future. (P5)

IV. DISCUSSION

Awareness Increased awareness and knowledge of local threats and active involvement in disaster risk reduction among all community members – including children – are needed to create a 'culture of risk reduction' (Morris & Edwards, 2008, p. 389). While children's vulnerability in the face of natural disasters is well established, their involvement in disaster management has received relatively little attention even though ignoring their possible role in disaster risk reduction can endanger them in the event of a disaster and overlooks a potential resource for the communities where they live (Mitchell et al., 2008). Informed and engaged children may be better able than those who lack information and are unengaged to protect themselves and others (Peek, 2008).

Acquiring information is a critical role in our society, which helps us keep updated on what is happening. It is done through technologies or locally. According to the Hyogo Framework for Action(HFA), disasters are reduced when people are well aware, and the motivation is to create a culture of prevention and resilience to disaster. In this regard, collecting and disseminating knowledge and information on hazards, vulnerabilities, and capacities, especially for vulnerable people, should be prioritized. [Muttarak R, Pothisiri, Rundmo T, Nordfjærn T] Also, it is essential to note that people who are vulnerable due to their limitations and conditions certainly need specialized training and attention with the help of trained and professional people.[Muttarak R, Pothisiri, Rundmo T, Nordfjærn T. [Rohrmann B]. During the last decades, some studies indicated that trained people in society could be prepared for disasters and respond well. Also, some reported that disaster education is a functional, operational, and cost-effective tool for risk management. Further, some confirmed that low awareness and inadequate understanding of risk play a negative effect on people's readiness, response to hazard warnings, personal protection measures, and recovery].

Language is a defining criterion of culture, and as such, differences in language can prove a formidable barrier to improvements in disaster awareness. Since learning a new language requires time and patience, recent immigrants, as well as visitors to a country, may experience information gaps. Some older adults may never develop the language skills required to communicate in a new society effectively. Given the complexities of effectively communicating risk information among mixed cultural groups, the interactive involvement of stakeholders in the disaster education process is being recognized as a viable option. Irrespective of age group or educational level, games have long been recognized as an essential educational tool. It is in this context that the Disaster Awareness Game (DAG) is being promoted in this paper as an option for promoting disaster risk awareness in mixed cultural societies of the Caribbean.

Awareness is an essential ingredient of the development of disaster resilience in any society. Multiculturalism provides an added dimension to how awareness is promoted and the resultant nature of resilience. The DAG was developed as a strategy for enhancing resilience in multicultural societies of the Caribbean through the promotion of awareness in a manner that allows the equity. Despite the importance of individual preparedness, several studies report relatively low levels of disaster preparedness, even in disaster-prone areas (Adiyoso and Kanegae, 2014; Kohn et al., 2012). How people can be motivated to take precautionary actions when they have little prior disaster experience has been a fundamental question raised by scholars of risk analysis and risk communication (Harvatt, Petts, & Chilvers, 2011). Accordingly, in many disaster-prone areas, local and national governments and NGOs have put efforts into providing disaster educational programs and emergency training in order to raise awareness, promote self-reliance and

household preparedness actions. While such educational activities can boost disaster preparedness in some cases (Mishra and Suar, 2007, Wood et al., 2012), many studies have documented the failure of these campaigns in initiating protective actions (Baker, 1980, Paton and Johnston, 2001, Sims and Baumann, 1983, Sorensen, 1983).

In order to promote household disaster resilience, it is thus crucial to understand underlying factors explaining the adoption of preparedness measures. There are nevertheless relatively few empirical studies on the determinants of disaster preparedness in developing countries (Muttarak & Pothisiri, 2013). To this end, this study focuses on examining individual determinants of disaster preparedness in low- and middle-income countries in Southeast Asia, namely, the Philippines and Thailand, which have been affected by significant disaster incidents in the past decade. According to the most recent Climate Risk Index, both countries ranked among the top ten countries worldwide most affected by extreme weather conditions from 1995 to 2014 (Kreft, Eckstein, Dorsch, & Fischer, 2015). Such a disaster experience may raise public awareness and preparedness accordingly. In this paper, we aim to: (1) analyze the role of formal education in shaping an individual's propensity to prepare against disasters and identify mediating channels through which education may influence disaster preparedness; and (2) investigate the importance of past disaster experience and its interplay with education. Theoretically, both factors may determine preparedness through similar mechanisms such as increasing risk perception or knowledge about the devastating consequences of a disaster. Formal education, as a channel through which individuals can "learn" about disaster risks and preventive strategies, may consequently replace disaster experience in promoting preparedness actions. Surigao City is susceptible to disasters arising from natural hazards such as typhoons, floods, and earthquakes (City Disaster Risk Reduction Coordinating Council (CDRRMC), 2013). This situation calls for students' awareness in dealing with the risks of possible disaster. Although disaster risk reduction had been imparted to students, yet there is no guarantee that they had absorbed everything. Thus, this study aimed to determine the level of awareness on disaster risk reduction among public junior high school students of Surigao City.

Disaster Risk Reduction must be inculcated in education since everyone can be affected by it. Awareness will make students resilient to disaster. Habiba (2013) opined that undertaking preparedness and building awareness towards disaster risks is the first step of today's disaster management. According to Leoni (2011), awareness of the components of Disaster Risks Reduction (DRR) can help lessen the impacts of incoming disasters. Factors are contributing to the level of awareness on disaster risk reduction. Samiullah (2015) pointed out that the impacts of natural disasters vary from male to female. Women are said to be more vulnerable than men. However, according to Bradshaw (2015), vulnerability to a disaster is not based on sex or biological differences between men and women but rather due to the societal role they play and how they should behave. Wackinger (2012) mentioned that household location is often regarded as an essential factor contributing to the level of awareness on disaster risks. The question is how to grow and provide an overview of the community regarding disaster mitigation. One of the areas relevant to it in the field of education. Education based on the law number 20 the year 2003 article 1 is an effort to realize the learning atmosphere and the learning process so that active learners can develop the potential in the form of positive values needed for themselves, society, nation, and state. Positive values of awareness of the vulnerability of the surrounding environment are vulnerable and are at risk of disaster. About education, we can not escape from school as an educational institution for the community. Education and growth of public awareness to understand disaster mitigation efforts are closely related to each other. Through schools, we can include learning materials regarding disaster mitigation as a form of growing awareness with values inside

Preparedness During the past four decades, natural hazards such as droughts, floods, storms, and tropical cyclones and wildland fires have caused significant loss of human lives and livelihoods, the destruction of economic and social infrastructure, as well as environmental damages. Deaths since the 1950s increased 50 percent each decade, whereas the corresponding population growth rate was only 20 percent (Kreimer and Munasinghe 1991). an estimated 200 million or so people affected annually. By the year 2050, it is predicted that globally 100,000 lives will be lost each year to natural disasters, and the global cost could top \$ 300 billion annually (SEI, IUCN, IISD 2001). According to Bronfman, Cisternas, Repetto, & Castañeda. (2019). Quoted that Citizen preparedness strategies play a crucial role in reducing the effects of hazards that cannot be mitigated [Waugh WL. 2015], as such strategies seek to improve the ability of individuals and communities to respond in the event of a natural disaster [Haddow G, Bullock J, Coppola DP. 2017.]. The main objectives of this study are to understand the current levels of preparedness of a community exposed to multiple natural hazards and identify the primary socio-demographic characteristics of groups that show different levels of preparedness. According to Guillermo luz (June 2017), the world (the Philippines in particular) has made great strides in disaster preparedness, and the investment has paid off in terms of lives saved. However, economic and asset loss has yet to be contained because of the lack of relevant programs. Lives are saved, but people remain victims of an impoverished by the disaster. In September 2009, Tropical Storm "Ondoy" hit Metro Manila and neighboring provinces.

The absence of a warning system caught people flatfooted and unaware of the floods that ensued. In November 2013, Super typhoon "Yolanda" barreled into the central-eastern Philippines. It was the strongest storm worldwide ever to make landfall in the recorded history of storm-tracking. Forecasts were made and typhoon warnings issued early. However, because the people either ignored the warnings or did not take them seriously, the loss of life and damage were unprecedented because of the general lack of preparedness. That is why preparedness and resilience are needed at all times (Guillermo Luz 2017). A research conducted by Madrigano, Chandra, Costigan, & Acosta, (2017). Government agencies and policymakers have called for enhancing citizens' and communities' resilience to prepare populations in advance of disasters with an emphasis on promoting individual and community resilience through scholarly, policy, and programmatic efforts [5]. According to Webb GR, Tierney KJ, Dahlhamer (JM.2001). One of the most common ways to study natural disaster preparedness levels is by characterizing these measures within the places where individuals spend most of their time, such as their homes (with their families) and their workplaces. Researchers have mostly focused on understanding family preparedness when characterizing the preparedness levels of the population [Nguyen LH, Tierney KJ, 2006]. Family preparedness has been researched and measured through different types of activities, such as survival measures, mitigation measures and planning. Family preparedness is recognized as the base from which other preparation actions take place. According to Spittal MJ, Nguyen LH 2006. These areas are representative not only of the types of preparedness measures adopted by the population [Bourque LB, Shoaf KI, Nguyen LH 2006], but also the areas that people recognize as sources of common and relevant information for taking preparedness. Shaffril et al. (2013) and Fulsas (2007) have also highlighted the importance of access to weather information. Previously, local fishers relied heavily on their indigenous knowledge to forecast the weather; however, the swift evolution of technology has made weather forecasting possible via television and radio. Weather information is vital for coastal communities, as it assists them in managing their responses towards shifting weather, which in turn can save their lives and property. Personal health is also a factor in preparation since it usually has to do with work activities. According to Juliet Roudini, Hamid Reza Khankeh, and Evelin Witruk (2017) Research also indicates that individuals with poor mental health are at high risk (Clay et al., 2014).

The experience of dealing with hazards such as tsunamis has demonstrated that psychosocial characteristics and mental health are vital in disaster preparedness and management. Natural disaster funding also needs to include psychosocial retrieval, which is a crucial component of restoring individuals' and communities' well-being and mental health (Burke, 2014; Reser and Morrissey, 2009). To further elaborate Psychological preparedness can help people to think logically and wisely, which in turn may decrease the risk of severe injury and loss of life. Therefore, individuals and communities need to prepare psychologically for confronting a disaster. People are not fully aware of disasters, and the mental effects on human health, so natural disaster mental health preparedness is frequently unnoticed due to the more immediate and basic physical needs in disaster situations. (Barron, 2004; Zulch et al., 2012).

According to Kreimer and Munasinghe (1991). During the past four decades, natural hazards such as droughts, floods, storms, and tropical cyclones and wildland fires have caused significant loss of human lives and livelihoods, the destruction of economic and social infrastructure, as well as environmental damages. Deaths since the 1950s increased 50 percent each decade, whereas the corresponding population growth rate was only 20 percent. An estimated 200 million or so people are affected annually. By the year 2050, it is predicted that globally 100,000 lives will be lost each year to natural disasters, and the global cost could top \$ 300 billion annually (SEI, IUCN, IISD 2001). Immediately following a natural disaster, communities count on hospitals to stay open, operate as smoothly as possible, and help save lives. Sometimes, hospitals are the only places that people can access to receive urgent medical treatment in a disaster. According to Fung, Loke, & Lai (2008). After September 11, 2001, nearly 5000 hospitals in the United States of America (USA) were urged to revise their protocols for disaster management, with an emphasis on preparedness. In the USA, an increasing number of continuing education courses have been established to prepare nurses on disaster management and responses (Bond and Beaten, 2005).

Disaster requires the response that is community-wide and should not merely be emergency service-driven (Davies 2005). The World Health Organization has also recommended the preparation of a detailed management plan for all potential disastrous happenings that could arise at a national level (World Health Organization, Expert Consultation Report 2006). There is no doubt about the global need for all healthcare workers to be prepared for disaster response and management, as well as for the public to be educated about how to protect themselves when disasters strike. According to a blog by service, master restorer, hospitals can provide a tremendous amount of support during a natural disaster. However, even the best run and best-prepared hospitals can quickly become overwhelmed by a flood of patients. The best way to prevent a hospital from getting overwhelmed is by ensuring the community has the resources and knowledge they need to take care of themselves as best they can. From an economic, rather than financial, perspective, the impacts of disasters can be divided into three categories: 'direct' costs, 'indirect' costs and secondary

effects (e.g., see Andersen, 1991; Bull, 1992; OECD, 1994; Otero and Marti, 1995). Direct costs relate to the physical damage to capital assets, including buildings, infrastructure, industrial plants, and inventories of finished, intermediate and raw materials, destroyed or damaged by the actual impact of a disaster.

The effects of disasters vary across the population. A \$1 loss does not mean the same thing to a rich person and a poor person (Hallegatte et al. 2017). Disasters can thus push nonpoor households into poverty and the poor into even deeper poverty. Those at the bottom of the income pyramid will feel the maximum impact of disasters as they will have the least capacity to cope. The poor get directly hit because of their high exposure to risks inherent in the location and design of their settlements. They will also face secondary economic effects through diminished or loss of livelihood opportunities. According USAID form the American people (2020) Recognizing the significant disaster risk in the Philippines, USAID/OFDA maintains robust disaster risk reduction programs that build the capacity of local communities, government agencies and nongovernmental organizations to prepare for and respond to the range of natural disasters that frequently impact the country. With support from USAID/OFDA, the World Food Program is coordinating with Philippine National Disaster Risk Reduction and Management Council to make necessary relief materials readily available and accessible when disasters strike.

This includes the pre-positioning of temporary generators, office units, temporary storage tents, and other logistics equipment in World Food Program warehouses in Luzon, Visayas, and Mindanao. USAID is also helping the government facilitate the transportation of equipment to affected areas by road, air, and sea. In case a significant emergency requires additional logistics support, World Food Program stands ready to supplement the Philippine government's relief activities. Since natural disasters will continue to happen and are becoming more frequent because of climate change, urbanization, and demographic changes, building the resilience of the people is essential (Hallegatte et al. 2017). Resilience measures are based on the belief that the disasters will have an impact on the community. Therefore, measures must be in place to facilitate a quick return to normalcy.

These include community emergency response teams, temporary shelter and evacuation areas, backup generators to restore power for critical systems, credit expansion to ease credit constraints, and provision of subsidies targeted at the poor and vulnerable populations. In times of crisis, social capital can also help communities to cope. Usamah et al. (2014) found that a strong social relationship supports the strong perception and level of resilience of the communities. Prevention According to Renda-Tanali, I., & Rubin, C. B. (2006). Prevention is defined as those activities taken to prevent a natural phenomenon or potential hazard from having harmful effects on either people or economic assets. Delayed actions drain the economy and the resources for emergency response within a region. For developing nations, prevention is perhaps the most critical component in managing disasters. However, it is one of the most difficult to promote. Prevention planning is based on two issues: hazard identification (identifying the actual threats facing a community) and vulnerability assessment (evaluating the risk and capacity of a community to handle the consequences of the disaster).

Once these issues put in order of priority, emergency managers can determine the appropriate prevention strategies. Disaster prevention refers to measures taken to eliminate the root causes that make people vulnerable to disaster (13) According to Asean Up (2016), monitoring the Philippines' climate and environment, Project NOAH stands for Nationwide Operational Assessment of Hazards. It was launched in 2012 to help people in the Philippines prevent and escape potential natural hazards through the use of advanced science and technologies. Project NOAH is a comprehensive initiative to plan for the readiness of the Philippines to prevent and face disasters, developing a nationwide network of sensors and reporting tools. For the general public, a handy and well-designed website of Project NOAH has been implemented so that anyone can monitor in realtime the climate and environment changes throughout the Philippines.

Thanks to various tools that are aggregated for real-time display over a Google map of the Philippines, anyone can view the current and expected upcoming rains, humidity, pressure, and temperature. Through the judicious integration of various meteorological satellites and stations, and climate change, precipitations, and more seriously, typhoons can be anticipated several hours in advance. Thanks to these tools, people and businesses can plan for their safety and minimize eventual damages to their properties. Project NOAH also allows browsing the databases of floods that occurred in the Philippines in the past century so as to evaluate risks in their region and be prepared for impending danger in case of heavy rains. Preventative Measures & Other Responses to Natural Disasters. (2018) Natural disasters occur regularly across the world. Fortunately, some preventative measures and responses have been put in place to decrease the impact of natural disasters. Natural disasters come in many forms. There are hurricanes, earthquakes, tornadoes, mudslides, volcanic eruptions, and tsunamis.

The very thought of having to go through any of these can be very strenuous and scary. The most prominent thought that probably goes through anyone's mind when these events are about to happen is whether they will survive and if they will still have anywhere to live. These occurrences are often devastating. The devastation can even go to the extreme of making cities, towns, and islands

non-existent. Unfortunately, natural disasters cannot be prevented altogether. That would be the ideal situation. The next best option is finding ways to lessen the effects of natural disasters. One of the things that can help to reduce the devastation that occurs from these events is to have the preparation and preventative measures in place before they are needed. Many city, county, state, and national governments have worked to come up with ways to reduce the devastation that comes from natural disasters. A very effective method employed to help people prepare for natural disasters is to have warning systems in place. One of the longest-used warning systems is the National Weather Service (NWS) system. The NWS can track severe thunderstorms, tornadoes, hurricanes, blizzards, and possible floods and issue public alerts and warnings. This allows people the chance to prepare their homes and seek shelter before the natural disaster hits. Sometimes, the best preventative measure that can be taken is to have evacuation plans. These plans are commonly used when hurricanes are approaching coastal areas. Ideally, the evacuation routes are designed when the highways leading toward and away from the coastal areas are built.

The construction of these evacuation routes makes it possible to have traffic flow away from the coastal area toward the mainland area on both sides of the highway. Evacuating areas has been proven to spare lives in the event of a natural disaster. Of course, there are situations when people don't want to evacuate or when the natural disaster itself prevents evacuation. In those cases, government agencies and public service agencies encourage families to have disaster plans in place. The recommended preparations are based on the type of natural disaster. For instance, hurricane preparedness may include boarding up houses, stocking up on food supplies that do not require cooking, buying and storing water, and having a weather radio. If the natural disaster approaching is a tornado, then the suggested preparations may include going into a basement or the lowest level of the home and covering yourself with something that will block you from being hurt by flying debris or falling roofs. Treating roads with salt and rocks is another preparation method. This preparation can help to preserve roads and keep them in a drivable condition. In an ideal world, the government and public service agencies would tell everyone to stay off of the roads if a snowstorm or blizzard is on its way. However, we all know that is not the way it goes. What happens instead is that people decide to venture out as if snow and ice on the roads are not a problem. Treating the roads ahead of the snowstorm/ blizzard helps to prevent some accidents from happening that could cost people their lives. According to The State Council The People's Republic Of China (March 2019) Prevention and control of natural disasters to be strengthened. Premier Li Keqiang made an essential instruction on preventing and controlling forest and grassland fires, drought, and floods to a national videophone conference on March 28. The Premier said that efforts should be intensified to prevent and mitigate risks and eliminate significant lurking dangers.

In fighting forest and grassland fires, prevention and control should be coordinated, while prevention should be prioritized. Also, authorities at different levels should shoulder their responsibilities and enhance the capability for fire prevention, control, and rescue, in an effort to avoid major fire disasters. The prevention of drought and floods should also be strengthened. Water infrastructure should be perfected to ensure the safety of controlling floods and discharging water. Also, related mechanisms and systems should be improved, such as monitoring and warning, emergency command, and quick rescue mechanisms. State Councilor Wang Yong, also head of the state headquarters of forest and grassland fire prevention and control, flood control and drought relief, attended the conference. He stressed that the prevention and control of disasters, as well as emergency rescue, must be strengthened to minimize losses in forest and grassland fires, drought, and floods. The climate this year is not so satisfying in general, said Wang. The country is facing severe threats from fire disasters, flood, and drought, so precautions must be taken in terms of screening and eradicating potential hazards as well as enhancing disaster monitoring and warning systems.

Emphasis should be put in preventing spring conflagration in forests and on grasslands, with stricter regulation on sources of combustion and pre-deployment of rescue forces, he urged. Damages caused by disasters should be closely watched, and flood control facilities should be organized scientifically to ensure average agricultural production and safe drinking water, the state councilor said. Work must be carried out during emergencies, as well as the mechanism to report disasters. Moreover, the alert system should be unimpeded in order to take precautions promptly. No efforts should be spared to protect lives and property, he said. According to Kattie Grant (2015, December 28). ten measures must be taken to prevent more flooding in the future. 1. Introduce better flood warning systems The UK must "improve our flood warning systems", giving people more time to take action during flooding, potentially saving lives, the deputy chief executive of the Environment Agency, David Rooke said. Warning and preplanning can significantly reduce the impact of flooding. 2. Modify homes and businesses to help them withstand floods The focus should be on "flood resilience" rather than defense schemes, according to Laurence Waterhouse, director of civil engineering flood consultancy Pell Frischmann. He advised concreting floors and replacing materials such as MDF and plasterboard with more robust alternatives. "We are going to have to live with flooding. It is here to stay," Mr. Waterhouse said. "We need to be prepared." His recommendations were echoed by Mr. Rooke, who suggested waterproofing homes and businesses and moving electric sockets higher up the walls to increase resilience. 3. Construct buildings above flood levels, Britain should construct all new buildings one

meter from the ground to prevent flood damage, the former president of the Institution of Civil Engineers has suggested. Professor David Balmforth, who specializes in flood risk management, said conventional defenses had to be supplemented with more innovative methods to lower the risk of future disasters. 4. Tackle climate change. Climate change has contributed to a rise in extreme weather events, scientists believe. Earlier this month, the leader of the Green Party, Natalie Bennett, welcomed the landmark Paris Agreement, whereby governments from 195 countries pledged to "pursue efforts" to limit the increase in global average temperatures to 1.5°C above pre-industrial levels. "It is now crucial that world leaders deliver on the promise of Paris," Ms. Bennett said. "

The pressure is now on the British government to reverse its disastrous environmental policy-making." 5. Increase spending on flood defenses, Figures produced by the House of Commons library suggest that real-terms spending on flood defenses has fallen by 20 percent since David Cameron came to power. Yesterday [MON] the Prime Minister rejected this allegation, insisting the amount being spent had risen. Mr Cameron promised to review spending on flood defenses after chairing a conference call of the government's emergency Cobra committee at the weekend. 6. Protect wetlands and introduce plant trees strategically, the creation of more wetlands – which can act as sponges, soaking up moisture – and wooded areas can slow down waters when rivers overflow. These areas are often destroyed to make room for agriculture and development, the WWF said. Halting deforestation and wetland drainage, reforestation upstream areas and restoring damaged wetlands could significantly reduce the impact of climate change on flooding, according to the conservation charity. 7.

Restore rivers to their natural courses, many river channels have been historically straightened to improve navigability. Remeandering straightened rivers by introducing their bends once more increases their length and can delay the flood flow and reduce the impact of the flooding downstream. 8. Introduce water storage areas, Following the severe flooding of 2009, a £5.6 million flood alleviation scheme was established in Thacka Beck, on the outskirts of Penrith, Cumbria. More than 675 meters of culverts underneath the streets of Penrith were replaced and a 76,000m³ flood storage reservoir – the equivalent of 30 Olympic sized swimming pools – was constructed upstream to hold back floodwater. The risk of flooding from the beck was reduced from a 20 per cent chance in any given year to a one per cent chance, according to Cumbria Wildlife Trust. 9.

Improve soil conditions, Inappropriate soil management, machinery and animal hooves can cause soil to become compacted so that instead of absorbing moisture, holding it and slowly letting it go, water runs off it immediately. Well-drained soil can absorb huge quantities of rainwater, preventing it from running into rivers. 10. Put up more flood barrier bottom of Form; The Environment Agency uses a range of temporary or "demountable" defenses in at-risk areas. These can be removed completely when waters recede. Temporary barriers can also be added to permanent flood defenses, such as raised embankments, increasing the level of protection. "As the threat and frequency of flood risk increases, the use of passive flood defense has to be the only realistic long term solution," Frank Kelly, CEO of UK, on the other hand, natural and human-made disasters cause serious disruption to a community, and there are many casualties, financial, environmental, social, and economic losses, which are beyond the power of the community. As emergencies and disasters, along with their destructive effects, are rising all over the world, acquiring knowledge and its uses are regarded as the most effective way to prevent disasters or reduce its effects with the advancement in technology. (Adiyoso W, Kanegae H., 2012) Although the vulnerability of some communities and individuals to natural and human-made disasters is inevitable, the individuals can play a role in reducing these disasters by changing system resilience and disaster recovery capacity. (Aldrich N, Morris KA, 2008, Tuladhar G, 2015)

There is evidence that most injuries, damages, and deaths from disasters can be prevented, and disaster preparedness measures such as housing adjustment against risks can reduce the damage caused by disasters and accordingly improve recovery. Also, it is more effective when the people of a community have good cooperation in allocating resources and making appropriate recovery after disasters. Disaster education for vulnerable aims to provide knowledge, skills, motivation in individuals and groups to take action to reduce their vulnerability to disasters. Even educating vulnerable people makes effective actions for other people or communities. (Rohrman B, 2008) During the last decades, some studies indicated that trained people in society could be prepared for disasters and respond well. Also, some reported that disaster education is a functional, operational, and cost-effective tool for risk management. Further, some confirmed that low awareness and inadequate understanding of risk play a negative effect on people's readiness, response to hazard warnings, personal protection measures, and recovery. Hyogo Framework for Action (HFA) (2005–2015) emphasized five performance priorities for reducing the risk of disasters in the world. The priority of the third function was to apply knowledge, innovation, and education in order to create a culture of safety and resilience at all levels.

According to HFA, disasters are basically reduced when people are well aware, and the motivation is to create a culture of prevention and resilience to disaster. According to English.Gov.Cn (2018), The prevention of drought and floods should also be strengthened. Water infrastructure should be perfected to ensure the safety of controlling flood forest and grassland fire prevention

and control, flood control and drought relief, attended the conference. He stressed that the prevention and control of disasters, as well as emergency rescue, must be strengthened to minimize losses in forest and grassland fires, drought, and floods. The climate this year is not so satisfying in general, said Wang. The country is facing a severe threat from fire disasters, floods, and drought, so precautions must be taken in terms of screening and eradicating potential hazards as well as enhancing disaster monitoring and warning systems. Emphasis should be put in preventing spring conflagration in forests and on grasslands, with stricter regulation on sources of combustion and pre-deployment of rescue forces, he urged. Damages caused by disasters should be closely watched, and flood control facilities should be organized scientifically to ensure average agricultural production and safe drinking water.

V. CONCLUSION

This qualitative study delved into the various responses of Filipino workers in Qatar in regards to the natural disasters that may or may not have affected them directly to uncover their perceptions of such. The analysis of the phenomenological data through thorough understanding revealed that Overseas Filipino Workers (OFW's) are much aware of the calamities that affect their home country. It can be concluded that the OFW's have become prepared for the calamities that may hit their areas and that they perceive it with great caution and alertness. These OFW's have had countless experiences. The study revealed that prior to the most devastating natural disaster they experienced, they had little to no preparation. The plan in the event of an emergency significantly was already sufficiently prepared. The findings of this study highlighted the changes in perception and views that the OFW's initially claimed to have. That as the years passed by, they have changed their perception of them from frequent harmless events to more active threats, caused by what they claimed to be as "anthropogenic activities" or human-made activities. It also showed the importance of faith and optimism in overcoming these problematic and usually overwhelming situations. It also highlighted what the respondents believed to be insufficiency in the part of the government when it comes to assistance and aid, as what they provided was not nearly enough to meet the actual needs of the people who have been affected.

The Philippine government, therefore, should take action and be better equipped when it comes to responding to situations that go beyond their expectations. Moreover, as previously stated, the general public should be aware of the guidelines set by the government when it comes to preparations. It is a must to follow forecasted weather patterns and be aware of the nearest evacuation center. There must be cooperation from the public to ensure that there be, if not none, then as little casualty as possible. Findings in this study have revealed that although there have been preparations set in place, there is still room for improvement. OFW's perceive natural disasters as a danger that is always, and that could strike at any time. They, however, have varying types of preparations but meet a common goal, to reduce the damage that can come from the disaster. It is also revealed that there are still unearthed perceptions and aspirations that can be explored by other researchers to further improve the awareness, preparations, and readiness of the Filipinos in times of natural disasters.

REFERERENCES

- [1] Aldrich N, Benson WF. Disaster preparedness and the chronic disease needs of vulnerable older adults. *Prev Chronic Dis*. 2008; 5:A27.
- [2] Benson, C. (1997). *The Economic Impact of Natural Disasters in the Philippines*.
- [3] Bronfman, N. C., Cisternas, P. C., LópezVázquez, E., & Cifuentes, L. A. (2015). Trust and risk perception of natural hazards: implications for risk preparedness in Chile. *Natural Hazards*, 81(1), 307-327. doi:10.1007/s11069-015-2080-4
- [5] Center AD. A Study on Impact of Disasters on the Education Sector in Cambodia. Bangkok: Asian Disaster Preparedness Center; 2008. [Google Scholar]
- [6] Center AD. A Study on Impact of Disasters on the Education Sector in Cambodia. Bangkok: Asian Disaster Preparedness Center; 2008. [Google Scholar] [Ref list]
- [7] Center AD. A Study on Impact of Disasters on the Education Sector in Cambodia. Bangkok: Asian Disaster Preparedness Center; 2008.
- [8] Clerveaux, V., Spence, B., & Katada, T. (2010). Promoting disaster awareness in multicultural societies: the DAG approach. *Disaster Prevention and Management: An International Journal*, 19(2), 199-218. doi:10.1108/09653561011038002
- [9] Collymore J. Disaster management in the Caribbean: Perspectives on institutional capacity reform and development. *Environ Hazards*. 2011;10:6-22.
- [10] Haddow G, Bullock J, Coppola DP. Introduction to emergency management: ButterworthHeinemann; 2017
- [11] Heller, K., Alexander, D. B., Gatz, M., Knight, B. G., & Rose, T. (2005). Social and Personal Factors as Predictors of Earthquake Preparation: The Role of Support Provision, Network Discussion, Negative Affect, Age, and Education. *Journal of Applied Social Psychology*, 35(2), 399-422. doi:10.1111/j.1559-1816.2005.tb02127.x
- [12] Hoffmann, R., & Muttarak, R. (2018). Learn from the Past, Prepare for the Future: Impacts of Education and Experience on Disaster Preparedness in the Philippines and
- [13] Thailand. *Tap chí Nghiên cứu dân tộc*, (24). doi:10.25073/0866-773x/7
- [14] HOW DO PEOPLE COPE WITH A NATURAL DISASTER? THE CASE OF SUPER TYPHOON MILENYO IN THE PHILIPPINES. (n.d.). Retrieved from https://www.semanticscholar.org/paper/HOW-DO-PEOPLE-COPE-WITH-A-NATURAL-DISASTER-THE-CASE-SawadaEstudillo/3bc8f7497b3da8bb2986267fccc6c3_b051f504c5
- [15] Humanitarian Assistance. (2020, January 6). Retrieved from <https://www.usaid.gov/philippines/humanitarian-assistance>

- [16] Izadkhah YO, Hosseini M. Disaster preparedness strategy through earthquake education and training of classified target groups. In Proceedings of The 2nd International Conference on Integrated Natural Disaster Management (INDM), Tehran: United Nations International Strategy for Disaster Reduction 2007 Feb
- [17] Jha, S., Martinez, Jr., A., Quising, P., Ardaniel, Z., & Wang, L. (2018). Natural Disasters, Public Spending, and Creative Destruction: A Case Study of the Philippines. SSRN Electronic Journal. doi:10.2139/ssrn.3204166
- [18] Kastolani, W., & Mainaki, R. (2018). Does educational disaster mitigation need to be introduced in school?. Les Ulis: EDP Sciences. doi:http://dx.doi.org.eres.qnl.qa/10.1051/shsc onf/20184200063
- [19] Lindell, M. K., & Perry, R. W. (2000). Household Adjustment to Earthquake Hazard. *Environment and Behavior*, 32(4), 461-501. doi:10.1177/00139160021972621
- [20] Morris KA, Edwards MT. Disaster risk reduction and vulnerable populations in Jamaica:
- [21] Protecting children within the comprehensive disaster management framework. *Child Youth Environ*. 2008;18:389-407.
- [22] Morris, K. N., & Edwards, M. T. (2008). Disaster risk reduction and vulnerable populations in Jamaica: Protecting children within the comprehensive disaster management framework. *Children, Youth and Environments*, 18(1), 389-407. Retrieved from <http://www.jstor.org/stable/10.7721/chilyoutenvi.18.1.0389>
- [23] Muttarak R, Pothisiri W. The role of education on disaster preparedness: Case study of 2012 Indian Ocean earthquakes on Thailand's Andaman Coast. *Ecol Soc*. 2013;18:51. [Google Scholar] [Ref list]
- [24] Muzenda-Mudavanhu C, Manyena B, Collins AE. Disaster risk reduction knowledge among children in Muzarabani district, Zimbabwe. *Nat Hazards*. 2016;84:911-31.
- [25] Omar SZ, Shaffril HAM, Kamaruddin N, Bolong J, D'Silva JL. Weather Forecasting as an Early Warning System: Pattern of Weather Forecast Usage among Coastal Communities in Malaysia. *Life Sci J* 2013; 10(4): 540-549]. (ISSN: 1097-8135). <http://www.lifesciencesite.com>. Retrieved from <https://www.servicemasterstore.com/blog/weather/hospital-emergency-preparedness-for-natural-disasters>
- [26] Padernal, P.O., Borja, E.A. (2016) Disaster Risk Reduction Awareness among Junior High School Students of Surigao City. *Proceedings Journal of Education, Psychology and Social Science Research*. Vol03:Iss02:Pg136. DOI: 10.21016/FE27WF1120
- [27] Prevention and control of natural disasters to be strengthened. (2019, March 28). Retrieved from http://english.www.gov.cn/premier/news/2019/03/28/content_281476584575402.htm?fbclid=IwAR1M_dKRcX7BkK3ds2dlOjOc8gw49qA1LYn_PqgfexIWxuDbv77tQmaAxE
- [28] Renda-Tanali, I., & Rubin, C. B. (2006). *Disaster Prevention and Preparedness Planning*. London, England: Pearson.
- [29] Rohrmann B, editor. Risk Perception, Risk Attitude, Risk Communication, Risk Management: A conceptual Appraisal. Conference Presented at the International Society of Emergency Management. 2008
- [30] Rohrmann B, editor. Risk Perception, Risk Attitude, Risk Communication, Risk Management: A conceptual Appraisal. Conference Presented at the International Society of Emergency Management. 2008
- [31] Rundmo T, Nordfjærn T. Does risk perception really exist? *Saf Sci*. 2017;93:230-40.
- [32] Sawada, Y. A. S. U. Y. U. K. I., Estudillo, J. P., Fuwa, N. O. B. U. H. I. K. O., & Kajisa, K. (2009). How Do People Cope With a Natural Disaster? The Case of Super-Typhoon Milenyo in the Philippines. *Development, Natural Resources and the Environment*, 116150.
- [33] Spittal, M. J., Walkey, F. H., McClure, J., Siegert, R. J., & Ballantyne, K. E. (2006). The Earthquake Readiness Scale: The Development of a Valid and Reliable Unifactorial Measure. *Natural Hazards*. doi:10.1007/s11069-005-2369-6
- [34] The importance of education on disasters and emergencies: A review article. (n.d.). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6512217/#ref6>
- [35] Tuladhar G, Yatabe R, Dahal RK, Bhandary NP. Assessment of disaster risk reduction knowledge of school teachers in Nepal. *Int J Health Syst Disaster Manag*. 2015;3:20. UNICEF. *Disaster Risk Reduction and Education*. New York: UNICEF; 2011. [Google Scholar] Waugh WL. *Living with Hazards, Dealing with Disasters: An Introduction to Emergency Management*: Routledge; 2015. Wisner B. *A Review of the Role of Education and Knowledge in Disaster Risk Reduction*. 2006 [Google Scholar]

BIOGRAPHICAL SKETCH

- A. Muadz U. Ali is currently a 2nd year senior high school student in Philippine School Doha taking up ABM (Accountancy, Business and Management) Academic Strand. He completed his Junior High School education in Philippine School Doha in 2018. He was a member of the school's scouting movement in 2015 where he participated in the Camporal. He is currently an active athlete partaking in daily fitness routines and has won gold for a track and field competition in 2012.
- B. Ron Joshua P. Banal is presently a senior high 12th grade student under the strand of ABM (Accountancy Business Management) of Philippines School Doha, Qatar. He have been in Philippine school Doha since primary to senior high. He achieve perfect attendance from intermediate to junior high. He actively joined the scouting movement and attended Camporal activities since grade 1. After his graduation on April 2020 of Batch Cavalier he will be following to be an IT (Information Technology) at College of North Atlantic-Qatar (CNA-Q), and finish his diploma for 3 years and continue his masters in Australia.
- C. Elian Miguel C. Bernales is currently in his 12th grade in Philippine School Doha under the strand of ABM (Accountancy, Business, and Management). He will finish his high school education by April of 2020. He is a consistent Laureola Awardee since his 11th grade, being able to garner the silver medal during the final term of grade 11. He is also a consistent part of his classrooms honor students. Additionally, he has been a constant academic awardee since 7th grade. He was awarded, along with his group members, the best research paper during his 8th and 10th grade where both were able to participate in competitions outside the school. In his 10th grade, he became a member of the C.A.T. (Citizenship Advancement Training) where he had the rank of 1st Lieutenant. He has participated in the school intramurals twice, playing badminton in grades 11 and 12 for the White Hawks, where he was able to become the 1st runner up for both. He is also a member of the Senior Safety Squad, an organization that ensures the safety of the students during events and gatherings. He was also a member of the PSD Hiyaw Chorale from grade 9 to grade 11. He is currently the sitting Peace Officer of the Supreme Student Government.
- D. Ameer Hossam El-Zolfi is currently a senior high school student under the ABM (Accountancy and Business Management) strand of Philippine School Doha, Qatar. He finished preschool in Masters Care Christian School of Quezon City in the Philippines. He then transferred to APEC Holy Spirit of Quezon city in the Philippines to study his first year of junior high but had to move to Doha, Qatar. He then continued his junior year in Philippine International School Qatar. He is also a member of Philippine School Doha's school paper, The link, as a photojournalist. He is an active member of the Senior Scouts organization in his school and joined the Camporal in 2019 which was held outside the school campus, where he was able to lead his crew to its overall champion title. He experienced working in the Preschool department as an assistant teacher and as a documentation officer during in-campus work immersion. He is also a member of the Qatar Volleyball Association staff and was one of the photographers. He is a player for the Al-Wakra Sports Club 5x5 and also a plays for the 3x3.
- E. Cherwick Eve M. Castillo is currently a grade 12 student under the ABM strand (Accountancy, Business, and Management) of Philippine School Doha, Qatar. During her 10th grade, her group conducted an experimental research wherein her group was chosen to be part of the research congress was able to display their product. Her participation in school also included her taking part in the PSD Intramurals 2019 women's basketball where her team; the Blue Eagles won the championship. She also participated in different seminars regarding research as well as financial literacy that has sparked her interests in securing her future. After graduation in April 2020, she plans to continue her studies in De La Sale College of Saint Benilde with the course of hospitality management.
- F. Marie Christine Lucky C. Mabilangan is currently at her 12th year of education under the ABM strand (Accountancy, Business and Management) of Philippine School Doha, Qatar. During her 9th year Science Fair, she won the title of 2nd runner of Ms. Eco fashion 2017. And on her 10th year Research Fair, her group with the title of "Developing Broilers with Domestic Incubator" was chosen to be a part of the research congress wherein they have conducted an experimental research and had won the title of 2nd Runner up. Her participation in school also included being a part of PSD IDOL wherein she was able to show case her talent in singing. She also was a part of the PSD Intramurals 2019 women's basketball where her team, the Blue Eagles won the title of Champion. She plans to continue her studies in College of North Atlantic Qatar with the course of Accountancy.



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