

# Seven-Year Stress Reactions And Resilience Of Public School Teachers: Basis For Proposed Intervention For Calamity Survivors

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## **Abstract**

The study is aimed to identify the disaster stress reactions and resiliency of typhoon Sendong survivors after seven years. Purposively selected were public-school teacher participants from the City of Cagayan de Oro. The study is a qualitative research using Thematic Analysis of the stress reactions, coping strategies, and social support. Findings from the study showed the following disaster stress reactions: Kanunay ana sa hunahuna (Cognitive Reaction- flashbacks, muddled thought); Mga kaimtang (Physical Reaction-hunger, disease, relocation, nervousness); Mga kasakit (Emotional Reaction-anxiety, anger, fear sadness); Pagkawalay mahimo (Socio-Behavioral Reaction-help seeking behavior, helplessness); and Pag ampo ug Pagsalig sa Ginoo (Spiritual Reaction- faith in God, hope for family's safety). It identified the participants' resiliency during the calamity, such as: Kinaiyahan (Attitude-acceptance, helpfulness, gratitude); Espirituhanong Pagtuo (Spirituality-faith, hope); and Pagtinabangay (Support-internal:family, external:community) It also identified six resiliency themes after seven years: Espirituhanong Pagtuo (Spirituality-faith in God); Pagsusi kanunay sa Pamilya (Monitoring Family-communicating, connecting); Pagpangandam (Preparedness-listening to news, game plan, survival kit, safety storage), Maayong mga Panumduman (Savoring/ Treasuring-good memories, positive self-image); Kalingawan (Entertainment- engaging in interests, use of gadgets); and Pagtutok sa uban nga butang (Intentional Focus-being preoccupied). A community-based resilience program, "Hapsay", was proposed to assist, give closure and empower members of the community especially the victims of disasters.

**Keywords:** Disaster, Stress Reactions, Resilience, Intervention, Calamity Survivors

## **INTRODUCTION**

When natural disasters strike, the school should be a place of comfort and normalcy where students and teachers can seek refuge during times of uncertainty. But in the immediate aftermath, it can be challenging to know what exactly teachers need and how to help them cope in the best possible way. This is the exact scenario in the case of Cagayan de Oro City when it was hit by multiple environmental disasters that posed great danger to the whole of its populace.

It has been seven (7) years since the tragic events such as the flash floods took hundreds of lives in

those learning communities that has affected the lives of victims and survivors such as the teachers and students. Despite the passage of time, improvements and rehabilitation of the environment like infrastructures have not been done as yet. Thus, the physical evidence of the destruction remained visible throughout the community that serve as a grim reminder of the past. Moreover, the psychological effects of traumatic events can persist for many years after a devastating natural disaster (Olteanu, Amberger, Grant, Davis, Abramson, & Asola, 2011).

A field assessment of the Department of Education (DepEd) showed that tropical storm

Sendong damaged at least 14 schools in the worst-hit parts of Mindanao (Philippine Daily Inquirer, 2011). Tragic and yet very real, teachers and principals themselves were among the victims. They themselves were trying to rise above their own problems. The same teachers who experienced the trauma even took upon themselves to seek and go out of their way to make sure can still make it to school. They were helping children deal with trauma. As reported, the toll on DepEd included close to 37,000 affected students, almost 2,000 teachers and school officials, among whom seven perished, 318 lost their homes and 1,346 had flood-damaged residences. (Quismundo, 2012).

The public-school teachers in Cagayan de Oro, were patently affected by these catastrophic and unavoidable calamitous phenomena marked by great losses and lasting distress. Stress is admittedly inevitable but occupational stress following disasters like these, has to be acted upon immediately due to their harmful physical and psychological consequences to individuals that result when an imbalance exists between the demands of the work environment and individual needs, abilities, and resources (World Health Organization, 2018 ).

Under the circumstances as narrated above, DepEd has conducted psychosocial services; however, there is a need for sustained psychosocial care for affected students and teachers to ensure that learning and teaching can reach performance standards (Rivera in Philippine Daily Inquirer, 2012).

Emotional recollections of Sendong survivors from Cagayan De Oro and Iligan City indicated painful experiences from that fateful night in December 2011. One survivor, shared that before Sendong, “wala sa atong kasinatian ang typhoon signal 1,2,3 kay nagtuo kita nga dili maagian og bagyo.” (We were not conscious of typhoon signals because we believe the typhoon will not come this way.) After the Sendong tragedy struck, “ nausab na ang panghuna-huna sa mga tawo, gakalimtan na ang Simbang Gabi ug ang bagyo na ang mahinumduman.” (The frame of mind of the Sendong victims-survivors changed. They were always reminded of the

typhoon tragedy and tend to forget the Simbang Gabi) (Xavier News, 2016).

Teachers, by force of circumstances, take a more active role in providing essential services for students whilst also dealing with their own stresses in post-disaster situations. They play different roles in school not only as educators, but also as foster parents who care and serve as source of strength and inspiration to many students and bring about a sense of normalcy after the disaster. The gap on disaster stress reactions among public school teachers and their resiliency experiences is rarely tackled in literature. The sense of resolution of this situation, motivated the researcher to conduct this study.

Therefore, it is timely and relevant to conduct this study in order to prepare teachers as front liners in the aftermath of disasters who would invariably help the students and their families get back to the daily grind of life. The data generated from the practicing public school teachers who had actual experiences of the calamities in the City of Cagayan de Oro, hopefully can contribute to the Philippine oriented literature in understanding the post-disaster stress reaction and resilience among Filipinos. Thus, this study aims to create an intervention proposal specifically intended for calamity survivors.

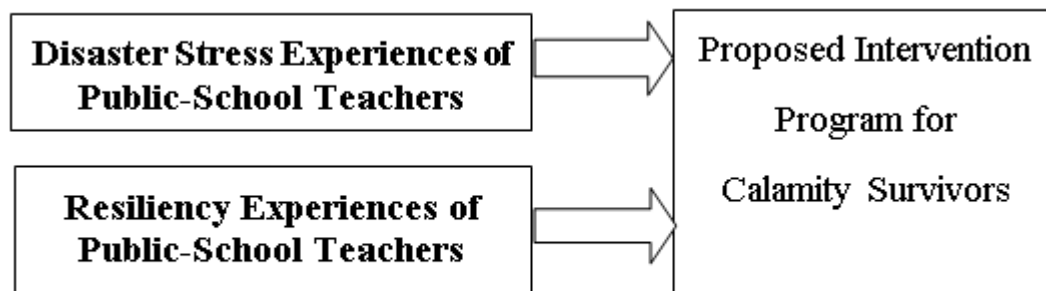
### **STATEMENT OF THE PROBLEM**

This study aimed to determine the disaster stress reactions and resiliency experiences of the public-school teachers in Cagayan de Oro City, S.Y. 2019-2020, serves as bases for a proposed intervention program for calamity survivors.

Particularly, this study intended to answer the following questions:

1. What are the disaster reaction experiences of public school teachers right after the disaster?
2. What are the resiliency experiences of public school teachers after the disaster?
3. What Intervention program can be recommended based on the gathered data?

### Conceptual Framework



**Figure 1. Teacher's Disaster Experiences, and Resiliency Experiences as basis for an intervention Program for Calamity Survivors**

Figure 1 shows that based on the Multiple Case Study approach, the researcher explored the disaster- stress experiences and resiliency experiences of the chosen teacher-participants who had survived the calamity within seven years. This became the basis for an intervention program that may be helpful for the calamity survivors.

## METHODOLOGY

### Research Method Design

This study utilized a Qualitative Research Method specifically a multiple case study design. The researcher explored the experiences of the teacher-participants regarding disaster stress reactions and resiliency experiences through face-to-face interview.

A multiple case study enables a researcher to explore real life contemporary multiple bound systems (cases) over time through detailed in-depth data collection, involving multiple sources of information and reports of case description and case themes (Gustaffon, 2017).

Case studies are usually a good choice for the investigation of events that are based on real-life settings (Sharp, 2009) because they involve a systematic gathering of evidence in order to describe a specific situation, which may allow for a general principle to be discovered (Yin, 2009).

### Population and Sampling

Purposive sampling was used in the study. Purposive sampling is also known as judgmental or expert's choice sampling wherein the researcher used personal judgment to select subjects that are considered to be representative of the population. The researcher made her own evaluation of the participants who could provide information as lived by him/herself. The researcher ensured that the participants were fully aware of the study and were willing to contribute in the process. The researcher also ensured the reliability and competence of the participants of the study to provide truthful and valid information of his/her experience.

### Participants of the Study

The participants of the study were seventeen (17) female public school teachers in the identified schools by the City Disaster Risk Reduction Management Office (CDRRMO) within Cagayan de Oro City who were victims of disaster brought about by Typhoon Sendong in 2011 and were still experiencing post-traumatic stress from the said disaster until the time of the study, and those who have moved on and have strived to start a normal life.

### Research Instrument

The researcher used an interview guide question as the main tool and clarificatory questions were asked to encourage the teacher-

respondents to open up the details of their experiences in order to appreciate the impact leading to the objective of the Study.

### **Ethical Considerations**

Ethical approval to conduct the study was obtained from the DLSU-D Research Office Institutional Ethics Review Committee.

### **Data Gathering Procedures**

#### **Phase I. Preparation Stage.**

1. A letter of permission to the Schools Division Superintendent of the Department of Education – Division of Cagayan de Oro City was requested to get the specific lists of schools, to identify the teachers who would serve as study participants and for the School Principals to give due authorization on the conduct of this study. It was made sure that confidentiality and privacy of the data gathered was maintained. All these were attached to each of the study and interview consent forms were distributed to each of the participants along with the data gathering procedure.

2. A letter of permission was also requested from the Institute of Ethical Review Committee at DLSU-D.

#### **Phase II. Data Gathering Stage.**

The purposively chosen seventeen (17) female public school teacher-participants were personally interviewed deeply with all due courtesy made prior to the actual interview conferences, as questions may touch on sensitive matters or melancholic sentiments. The participants shared their unique experiences in relation to the calamity (specifically flash floods brought about by typhoon Sendong) which transpired seven (7) years ago in the city of Cagayan de Oro. Explorations on how they had stress reactions, their coping strategies were elicited along with the social support that they have received thereafter.

The interview conducted was not limited to the guide questions and time allotment. It also touched on some unforgettable memories.

Coding process or the identification of a passage in the text was made based on other data items from transcribed audio records of interviews. Identification of concepts and finding relations among them were then completed which consequently enabled the researcher to organize, examine, and analyze them in a structured and methodical manner.

#### **Phase III. Data Analysis Stage**

After organizing all the data, thematic analysis followed. The transcripts were coded, and emergent themes were identified; codes were developed under each of the main themes; after which, the data were categorized to create a model. Data were interpreted and findings were explained for a comprehensive intervention program for calamity survivors.

#### **Thematic Analysis**

In this qualitative study, the researcher utilized thematic analysis method in order to identify, analyze, organize, describe, and report the themes found within the data set provided by the participants.

Nowell, Norris, White, & Moules (2017) opined that in data analysis the researcher makes judgments about the meaning, coding, re-contextualizing, and decontextualizing the data. They found out that thematic analysis should be the foundational method for qualitative analysis, as it provides core skills for conducting many other forms of qualitative analysis. The researchers declared that thematic analysis is a process used by many qualitative methods. It is not a separate method but rather something to be used to assist researchers in the analysis.

## RESULTS AND DISCUSSION

This chapter contains the description respondents' cases. It also contains the analysis of data, the themes that emerged in terms participants' disaster stress reactions and resiliency experiences during and seven years after the disaster which resulted to the proposed intervention program to address the data gathered from the study.

Participant A is a 45- year- old female, married with four children and has teaching experience for twenty-one years. I waited for her in her classroom since she attended a seminar outside the school campus. It was almost five in the afternoon, so I asked her if she was still willing to be interviewed. She replied it's fine with her, so I started the interview in her classroom. But since she has a very tragic experience because she lost her three children during the typhoon Sendong, I invited her to have coffee in a quiet place uptown. She agreed so we continued the interview at the café.

“As I recall, of what has been a tragic occurrence that I have ever experienced, the anxiety of what is to come seems almost too terrifying to remember. To the residents of Cagayan de Oro City and neighboring areas, “talagsaon ra to na panghitabo ug makalilisang” (such typhoon is uncharacteristically rare and expectedly catastrophic). The night of December 16, 2011 was a night full of foreboding of the possible tragedy and I and my family prayed hard for safety and blessings from God that we would be spared with any harm or injury. The aftermath of the storm and the flood was so painful and brought with it an unforgettable image of our three (3) lovely and loving children lifeless. I was filled with unfathomable anger and could not even contain myself. I could have wished to die with them and if not for our strong faith in God, we could not think of living anymore. We took strength from our youngest child who, by the grace of God, had survived and so we must live for her.”

“Yes, I still experience some reactive stress after seven years especially during December as I see their classmates. I miss them. The memory

of that disaster which I never expected to happen will forever remain in my memory. I cannot help but bring back to mind the madness, the panic and the seeming helplessness I and my family experienced on that fateful night of December 16, 2011.”

Participant B is a 45- year- old female, married with fourteen years of teaching experience. I met her in her classroom, but she asked me to go back after her class at three in the afternoon.

“Typhoon Sendong and the Flood that came with it was such an unforgettable experience which can be characterized as the most horrible experience that has ever happened to me and my family and with the thousand others in our community along the river bank of Cagayan de Oro. I and my family feared the coming of this super typhoon because it has been spread around that it would be more destructive than all the typhoons that had ravaged the city for the past ten years.

“Whenever heavy rains start to fall, I would request to shorten my time so I could go home to prepare our things to leave in case the water level might rise due to heavy rain. During nighttime, I would struggle to put myself to sleep because I fear that all of a sudden the waters might rise and I might go through the horrible experience again. I believe that I have to endure the feeling of anxiety whenever there is heavy rain, especially during typhoons.”

Participant C is a 46- year-old female with 24 years of teaching experience. She is the breadwinner of the family because her husband cannot work anymore since he has anxiety disorder even before the typhoon Sendong. I interviewed her in her classroom after her class in the afternoon.

“Many were caught unprepared because we were complacent as the prediction of the violence of the incoming typhoon and that if there would be flood, it would only be the usual increase of the water level in the nearby Cagayan de Oro river. I have no other recourse but to turn to God and

implore His divine blessing and invited others at home to pray the Rosary. “

“The passage of the years have not erased my tension whenever the rains start to fall. But more than the anxiety I suffer inside me, I also worry for my husband who has anxiety disorder. To relieve myself, I pack up my things and would be prepared to go to seek refuge in our school where I feel safe from a possible flood.”

Participant D is a 36- year- old female with eleven years of teaching experience. I was hesitant to include her among the participants because she was on maternity leave during that time but since her house and the school where she is connected was heavily affected, I considered her. I interviewed her in the classroom.

According to Participant D it must have been a blessing in disguise because she was spared from the horrible experience of the calamity brought to bear upon her neighbors on that particular day when typhoon Sendong released its wrath upon in Cagayan de Oro City. Nevertheless, even as she was away, her thoughts were on her aging parents who were left at their house. She could not contain her feelings, whether she would be thankful because they were spared from the said disaster since she had just delivered her baby. But she was worried and anxious about the situation of her parents. Though, they were appeased by the donations and relief goods from the government, relatives and friends'.

“After 7 years, my students can still recall what happened to them during typhoon Sendong. I can say that the horrible experience has left a lasting trauma in their minds. As for myself, like my students, I would be prepared to go home early as soon as the rain would pour in torrents.”

Participant E is a 54- year- old female, married, twenty-eight years of teaching experience. I met her in her office after the meeting she had with the other teachers.

They were all asleep, thinking that the typhoon Sendong would just pass by. Their good neighbors, concerned with their safety called out to them that the flood water was getting higher. So, she hurriedly gathered all her collection of figurines of angels and saints while her son secured his laptop.

“Paspas kayo ang pagsaka sa tubig nga dali ra kayo mi taga hawak ang tubig “ (The water moved up so quickly that in a matter of a few minutes the water level was already on their waistline). To save ourselves from possible drowning, we moved up to the roof top while at the same time reciting the holy rosary and implored God for our safety and survival. After that bleak Christmas, my husband suffered high fever and was bed-ridden. He was diagnosed to have been afflicted with leptospirosis, and worse, a week after, my son also suffered leptospirosis. It was the most stressful time of my life especially because we spent our Christmas vacation up to the New Year at the hospital.”

“No matter what I do to divert my attention, my anxiety would come. I feel nervous and worried when the rains come and especially if there is an announcement of a storm. I panic easily.”

Participant F is a 35- year- old single female who is staying with her brother and father. She cried during the interview when she recalled the episodes.

“After an exhausting day I spent that night with my brother and my father, but we were already anxious because the wind had started to howl and the rains had already started pouring. Having nothing else to do, we prepared for the night hoping that the storm would just pass by. I practically panicked that I ran out without my slippers and no bra. It was good that I brought with me my savings and my hand bag and ran to the safety of the Barangay Hall where many people have already sought refuge and stayed until 4 o'clock in the morning when the rain had subsided. I was happy that our house was still standing but the divisions were all gone as the flood waters must have swept them away and all

our documents and papers were also soaked and beyond recognition. I remember that I was so hungry and was looking for food everywhere and I pity my father and my brother who must be hungrier than I was. Right after, I was affected with leptospirosis, but luckily, I was not admitted in the hospital because I responded to medication, aside from the fact that the hospitals were full and could not admit any more patients.”

“If there is heavy rain, I cannot sleep. I would then make preparations like making sure that I and my family are secure; and I would bring out the flashlights and other tools which would help us to survive in the event of another calamity. At home, I cope with my anxiety and try not to show my nervousness by watching movies. I would be holding my mobile phone all the time and be prepared to call for help. In this manner, I would somehow relieved of my stress”.

Participant G is a 49- year- old, female, married with twenty years of teaching experience. I interviewed her in her classroom during lunch break. She cried during the interview, because she can still recall her sad and bad experiences of the typhoon Sendong.

“While the rains poured out as if it was the end of the world, I was filled with fear and worry for my parents who lived nearby and hoped that they would not be taken away by the flood. I found out that our house was totally damaged and practically nothing can be salvaged from it. Adding to this sad result of the disaster was also the indescribable damage which the Flood caused in my classroom.”

“Over the years I have learned to control my feelings though I still have fear every time it is cloudy and sense that the weather would be bad especially if there is an announcement from PAGASA. Then I would prepare the “emergency kit”, bags, flashlight, water, whistle which was advised of us by our Barangay Officials. In school, we are instructed to coordinate with the Disaster Risk Reduction Management team.”

Participant H is 47 years old, widow. She has 25 years of teaching experience. I went to her classroom, however, she was still having classes, so she asked me to come back in the afternoon after her class.

“I have the premonition that the storm would be destructive because the news announced that typhoon Sendong was an unusual kind of storm. Sensing that the situation was dangerous, I took hold of my handbag and my money and arranged the furniture and other valuable things in the house in such a way that the flood waters would not reach them. I have no other things to do except to implore the blessing from God that He will spare me and my loved ones from the disaster which the Typhoon might inflict upon us. I was thinking of my work, my classroom, my students and the school because I was quite sure that they too have been victims of this tragedy. Our house had been totally damaged and that we had no other recourse but to get a room in a nearby hotel and stay there while the clean-up and repair was being done.”

“Every time there is heavy rain, I cannot contain myself. I still feel nervous and worried and the images of that horrible night in 2011 come back.”

Participant I is a 43 -year- old female , married and has 18 years of teaching experience. I met her and had the interview in her classroom.

“Even as I knew that the storm would make a landfall on that early evening of December 16, 2011, I was confident that by midnight or dawn, it would be clear and I would attend the first Simbang Gabi. My neighbors had been saying that I should evacuate because our house is very near a creek which is a tributary to Cagayan de Oro River and if there would be a flash flood, our house would surely be carried away by the strong current. We heeded the advice, and we left our house and brought most of our belongings and prayed that the flood would not reach our house. Since we had nowhere to go, I made arrangement with my relative who lives in Taguanao which is located on a higher plane, to accommodate us for some time.”

“I cannot escape the thought that every time it rains, Sleep will not come. My family would then join me to make preparations should anything bad happen. At least, we have changed our attitudes in this kind of situation.”

Participant J is a 43 -year- old female, married with 17 years of teaching experience. We had the interview at the cafeteria, because I was still having my coffee break but since she has no class anymore so she passed by the cafeteria to see me.

“Knowing for certain that the typhoon and the flood would come, I took hold of all our valuables, money and jewelry and our mobile phones which would save us from the calamity. I was confident because my family was intact, and we knew that together we could surmount this hardship and adversity in our lives. My sadness ran deeper because I found out that some of my pupils were missing and no news whatsoever as to their fate. It is possible that they perished during the flood and their bodies were not found and could not be given decent burial. My class, due to the fact that some pupils were missing, was not the same again. I miss my pupils who perished in the calamity and I hope that such occurrence will not happen again.”

“It has become my natural reaction, as well as my family, that we feel worried when the rain is heavy and the possibility of flood is almost certain because we are in a flood-prone area and we are not yet convinced that the preparations against it would suffice.”

Participant K is a 35- year old lady, single and has six years of teaching experience. She was a very calm and cool person during the interview. She was also the youngest as to the teaching experience among the participants.

“Even as the Christmas vacation would preoccupy me with my family and friends, I nevertheless brought home my class cards and school records so that I could work on them during the relaxed days of the holidays. My family were worried about the storm and the

flood that would possibly come with it. So, the best way to face this adversity was to seek refuge in a safer place. So, with my valuables tucked inside my trolley bag, we went to the Barangay Hall to be safe during the height of the storm and the onslaught of the flood. Many people were already there and my mother urged the people to pray the Rosary. Even some Muslim brothers united with us as they also prayed with us. My strength is my faith and belief in God and my motto in life is consistent with confidence that there is no problem that has no solution.”

“I believe that the disaster that visited us in 2011 will not come again for another one hundred years, as others have predicted. For this, I entertain no more worries, except that I fear my mother would suffer heart ailment because they have not forgotten their suffering during typhoon Sendong.”

Participant L is 53 years old, married with 30 years of teaching experience. I went to her classroom and she was still having classes but she accommodated me since she was aware already that I was coming, so she gave seatwork to her students, so we could talk.

“I simply could not believe that a storm had brought forth a flood that was so devastating. At that time, I feared for my life because my son called out to me and asked me if we were going to die. I only prayed hard and could not answer my son who was already in panic and my daughter, who had a presence of mind, reminded us to pray because it is our only salvation. I was then thankful that we all survived even as all our belongings and appliances were destroyed and could no longer be used. Few days later, however, my husband was afflicted with leptospirosis and he had to be treated at the hospital. My biggest worry was the loss of my school records and the sadness that had befallen our class because one of my students had been missing and could have died during the flood.”

“After 2-3 years I can still vividly recall the event. But later on, or at this time, the fears have



diminished. I feel that if there would be another calamity, I know how to face it.”

Participant M is 53 years old, married and has 29 years of teaching experience. I interviewed her in the classroom.

“Our lives became so uncertain during the onslaught of the storm on that fateful night of December 16, 2011 because the rains brought by the typhoon and the rampaging flood was so formidable and horrifying that I thought I would die that night and all my family would not survive the ordeal. “Daghan na singgit sa silingan nga taas na ang tubig” (we heard shouts from our neighbors warning us that the waters had risen); “ug sa dihang taga hawak na ang tubig” (and indeed, had reached the waistline). I must admit that I was really afraid and on the verge of panic because I fear for my safety and that of my family. I urged everybody to pray the Rosary and seek the blessings and protection of God. My sadness subsided after that because many of my friends and students had perished and days after, many were also afflicted with leptospirosis.”

“I still experience nervousness, when there is heavy rain. It is natural that when you are worried, you cannot sleep, so I make up my waking hours, packing our things and then repacking them when good weather returns. “

Participant N is 54 years old, married and has 28 years of teaching experience. I interviewed her in her classroom after her class.

“Sa primero, medyo kalma ug kampante kayo ko bisan naka dungog ko sa news na may bagyo coming kay sige naman may bagyo specially pag December” (At first, I was not so particularly concerned about the coming typhoon Sendong because there had been many typhoons but these had weakened when they hit land). Our neighbors were also worried because my mother who was staying with me was already old and weak. Economic activity was at a standstill and many were looking for food. It was a good thing that our cultural practices would surface because our friends and relatives came and brought food

and clothes for us and the victims. It was there that I found out that one of my pupils was missing and could not be found. I had to assist in the effort to alleviate the social conditions which surfaced among the parents and students for the tragic experience they had undergone so unexpectedly and particularly during the yuletide season as many were quite depressed over their situation.”

Participant O is 52 years old, married and has 26 years of teaching experience. I interviewed her in the classroom. She was very friendly to the point that she shared with me a little about her husband who worked in Kuwait and that she is now happy with her two grandchildren.

“A I was startled by the voice of our neighbors shouting about the high water that had already reached more than a meter high and had engulfed the ground floor o house. Sensing that the flood waters would eventually reach us, I and my family went to a neighbor’s house which is more elevated and secure than ours to be safe. I found out that our house as well as my classroom were flooded beyond recognition. It was a very painful feeling because “masulob on kaayo nga bisan asa nga dapit sa amo daghan casualties” (everywhere, there was destruction and death and many were missing). My pain was doubled because my son almost died because of leptospirosis which he became afflicted with after several days. We had to spend our meager resources for his medication and treatment. I was relieved of my pain a little because my friends and relatives sent their assistance to me and this had helped a lot.”

Participant P is 53 years old with 27 years of teaching experience. We had the interview at her classroom after her class. She was teary eyed and a bit emotional while sharing her experiences.

“I was thinking that the news was exaggerated because early in the evening of December 16, the rain was just any normal splatter during the rainy season. Then I heard shouts that the water was high already, “ang dalan dili na makita, puro na tubig na halos molapas na sa tao” (and the roads

had been covered with flood waters already). To be safe, we went to our neighbor’s house and stayed on the 3<sup>rd</sup> floor as with all the other neighbors who were accommodated there. My classroom like all the others was damaged but we cleaned it up with the help of friends which eased my pain. But then, I got sick with leptospirosis and it was good that I responded to medication. To me, “swerte pa gyapon mi, ug second life na namu ni” (it was a miracle that we were unharmed compared to others who were not as fortunate).”

Participant Q is 54 years old with 27 years of teaching experience. I interviewed her in the classroom.

“The reality of an impending super typhoon and the possibility of a flood that would come with it had given me inordinate fear because my husband is a person with a disability. Half of his body is paralyzed and it would be burdensome for him to move around. On that fateful night of December 16, 2011, even as I was attending a

Christmas Party and later at the church for the early simbang gabi, I was already worried. We then decided to get out of our house and seek safer grounds, “ so gilangoy namu ang baha para lang maka adto sa silingan nga taas na balay para mas safe” (we waded and swam in the flood waters until we reached neighbor’s house which is quite elevated and stayed there for the night. The only valuable thing I managed to bring was my hand bag which I nearly lost because it was swept away by the violent and strong rushing waters; luckily, it was saved by a neighbor who swam to retrieve it. When I went to my classroom on that morning after the flood, I saw that everything was destroyed and the only uplifting thought was that there was no sad news about my pupils. I could have spent the New Year happy, but I was down with leptospirosis which I could have contracted due to the wounds and scratches that I got during the flood. But after all, it is good to be alive and continue my work as a teacher.”

**Table 1. Summary of Themes for Disaster Stress Reactions**

Superordinate Themes	Subordinate Themes
Kanunay anaa sa hunahuna (Cognitive Reaction)	Flashbacks
	Muddled Thoughts
Mga kahimtang (Physical Reaction)	Hunger
	Disease
	Relocation
	Panic
	Nervousness
Mga kasakit nga gibati (Emotional Reaction)	Anxiety
	Anger
	Fear
	Sadness
Mga kasakit nga gibati (Emotional Reaction)	Anxiety
	Anger
	Fear
	Sadness
Pagkawalay Mahimo (Socio-Behavioral Reaction)	Help Seeking behavior
	Helplessness
Pag ampo ug Pagsalig sa Ginoo (Spiritual Reaction)	Faith in God
	Hope for Family’s Safety

Table 1 shows the summary of themes for Disaster Stress Reactions, such as: *Kanunay anaa sa hunahuna* (Cognitive Reaction) is being described with flashbacks and muddled thoughts; *Mga kahintang* (Physical Reaction) is being described by experiences of hunger, disease, forced evacuation/ relocation, nervousness and panic; *Mga kasakit nga gibati* (Emotional Reaction) is being described by

experiences of anxiety, anger, fear and sadness; *Pagkawalay mahimo* (Socio-Behavioral Reaction) is being described by help seeking behavior and helplessness. And lastly, *Pag-ampo ug Pagsalig sa Ginoo* (Spiritual Reaction) is being described by experiences of faith in God and hope for family's safety.

**Table 2. Summary of Themes for Resilience Seven years after the Disaster**

Superordinate Themes	Subordinate Themes
Espirituhanong Pagsalig (Spirituality)	Faith in God
Pagsusi kanunay sa Pamilya (Monitoring Family)	Communicating
	Connecting
Pagpangandam (Preparedness)	Listening to News
	Game Plan
	Survival Kit
	Safety storage
Maayong mga Panumduman (Savoring/Treasuring)	Good memories
	Positive Self Image
Kalingawan (Entertainment)	Interests
	Gadgets
Pagtutok sa uban nga butang (Intentional Focus)	Being Preoccupied

Table 2 shows the themes for resilience seven years after the disaster. It speaks about all the aspects of being resilient and correspond to the needs of every individual figured in a disaster. Data shows that the majority of the interviewees (8 out of 17 teacher-participants) experienced anxiety or fear on what would possibly be the effects of Typhoon Sendong to their households and communities. Since natural disasters are inevitable, the majority of them expressed fear of what would happen badly if they were not ready. One interviewee said that seven years after the typhoon, her students still show the effects of trauma whenever a forecast of a typhoon would occur. Those who experienced the typhoon for the first time were in a state of fear thinking that the "Big One" can occur at any moment in time.

The Disaster Stress Reactions experienced by the participants during and right after the calamity showed that they were affected in the following themes as specified by the different areas: (1) **Kanunay Anaa sa Hunahuna** (Cognitive Reaction) –as being described by six(6) out of the seventeen participants by experiences of Flashbacks and Muddled thoughts, which means that some survivors still remember the effects of the typhoon Sendong and as such, they are traumatized by it; (2) **Mga kahintang** (Physical Reaction) described by the specific situations which occurred among the fifteen (15) victims-participants of the disaster as hunger, disease, relocation, panic, and nervousness; (3) **Mga kasakit nga gibati** (Emotional Reaction) described by nine (9) of the seventeen participants as Anxiety, Anger, Fear, and Sadness. Some interviewees were still

nervous and crying as they recalled their experiences while typhoon Sendong hit their area (4) **Pagkawalay mahimo** (Socio-Behavioral Reaction) described by four (4) of the seventeen participants as help seeking behavior and helplessness and; (5) **Pag ampo ug pagsalig sa Ginoo** (Spiritual Reaction) described by nine (9) of the seventeen participants as experiences of faith in God and hope for family's safety.

Nine (9) out of seventeen (17) participants expressed that their strength is due to their faith and belief in God. They mentioned that they have no other thing to do except to implore God's help and protection. In a similar manner, Bonab & Kuhsar (2016) mentioned that reliance on God is a spiritual virtue and

also a multidimensional construct being used as a coping strategy to deal with challenging events of life. They added that seeking God's guidance in decision making is knotted to a greater wellbeing, leading to more positive effect and better mental status.

In terms of participants' resiliency experiences during and right after the disaster, the following themes emerged among (12) of the seventeen participants (1) **Kinaiyahan (Attitude)** with specified areas as acceptance, helpfulness, and gratitude; (2) **Espirituhanong Pagsalig (Spirituality)** with areas as faith and hope (3)(**Support**) with specified areas as internal support (family support) and external support (community support).

Despite the passage of time, seven (7) years, most of the participants or fourteen (14) out of the seventeen (17) participants still admit to having experiencing fear and anxiety every time it would rain or have forecast of bad weather. However, they try to manage their fears and anxiety through ways that will make them feel ready to face the storm, while on the other hand, the remaining three (3) of the seventeen participants, expressed that they have already moved on with their lives.

Thus, it can be said that in all the expressions and stories shared by the participants, it is very evident that the depths of their sorrow, shock,

anguish and anxiety, and fear of their future seem to be endless and immeasurable.

Given the challenging and harrowing circumstance that the participant survivors had experienced with typhoon Sendong, they mentioned there is no other way out than to call on a higher being for help and protection.

It is with acceptance of the event that had wrought havoc and distresses in their life that bring harmony to the minds and peace in the lives of most participants. This has been realized by the participants that as soon as they have accepted their misfortunes coupled with their determination to rebuild their lives gives strength and hope for a better future.

Evident in the findings of the data is the glaring culture of the Filipinos where cultural values have been observed in their stories. Among them are the following: Pakikisama which translates into the desire and ability to get along with others, but also having a concern for, and being supportive of, group interests; Pakikipagkapwa (meaning being a part of or on equal terms with others), as a part of several relational imperatives which states that, as such, Filipinos place the ability to get along with others quite high; Utang-ng-loob (sometimes Utang na loob) which is an aspect of reciprocity, where the feeling of being indebted in gratitude, even if the debt itself is settled and in which repayments normally take form as services like serving at weddings or other occasions or helping out at the creditor's wish; Bayanihan which connotes collaboration and heroism and described as some kind of spirit or attitude, exemplifying it through people helping each other without thinking of themselves; and Bahala na which is described as the risk-taking tendency Filipinos might display (Bahala na is not directly related to the more group-individual-oriented values above, as it is perceived as daring, courageous and accountable.) It is said that this tendency comes at odds with other values and interests, like crossing dangerous waters in a small boat just to fulfil one's obligations to a given group while simultaneously putting people at risk.

On the other hand, the participants showed their expression of resiliency after seven years with the following superordinate and subordinate themes: (1) *Espirituhanong Pagsalig* (Spirituality) - Faith in God; (2) *Pagsusi kanunay sa Pamilya* (Monitoring Family) ;(3) *Pagpangandam* (Preparedness) - Listening to news, Game plan, Survival kit, Safety storage; (4) *Maayong mga pahinumduman* (Savoring/Treasuring) – good memories and Positive self-image; (5) *Kalingawan* (Entertainment)- interests and gadgets; and (6) *Pagtutok sa uban butang* (Intentional Focus) – Being Preoccupied.

It is evident in the data, that after seven years, the participants were able to cope in a manner of being ready and prepared for whatever disaster may come to their lives. They are also able to cope from the trauma of yesterday's disaster by engaging in matters that interest them such as hobbies and gadgets for entertainment. They also had found ways to be always prepared by keeping track of their family members in case anything happens. They also made sure that they have safe storages for their valuables that would not be easily affected by the storm. They also had prepared plans and survival kits in the event that a disaster strikes again.

Added to all these is their commitment and the fortitude to hold on to such belief in a higher being who will listen to their prayers and protect them by all means despite the harshness of calamities

Docena (2015) stated that the relationship among adaptive coping, individual resilience, community resilience, and absence of anxiety among internally displaced survivors appears to be an important discussion. It was mentioned that rather than focusing on trauma, studies that took a more positive and agentic approach used the conservation of resources theory as a frame. He found implications for practice, specifically the potential value of interventions that not only nurture individual resilience but also enable community resilience. The community resilience is a function of the quality of relationships and trust among members. Building this sense of community requires mechanisms and skills in

communication and conflict resolution. Given that resettlement camps are temporary, providing residents' skills in positive coping and models for community management may pave the way for smoother transition when they are relocated to more permanent housing.

He added that most studies on displaced disaster survivors tend to focus on challenges and needs of survivors from a trauma perspective. His study sought to fill a gap in the literature by taking a positive, agentic, and ecological perspective in examining disaster survivors using the conservation of resources theory as frame. Specifically, studies as such contribute to the literature on disaster psychology by examining adaptive coping, individual resilience, and community resilience and how these variables are related to each other as well as their impact on the well-being of displaced survivors. He said that the potential value of interventions not only nurture individual resilience but also enable community resilience. Adolfsson & colleagues (2017) stated that health effects from natural disasters depend on several factors such as geographic, economic, and pre-disaster health situations as well as the disaster response. According to the study, physical injuries caused by natural disasters may include traumatic injuries and associated conditions. He stated that mental health problems reported include conditions such as stress-related reactions, post-traumatic stress disorder (PTSD), and depression or anxiety during the typhoon.

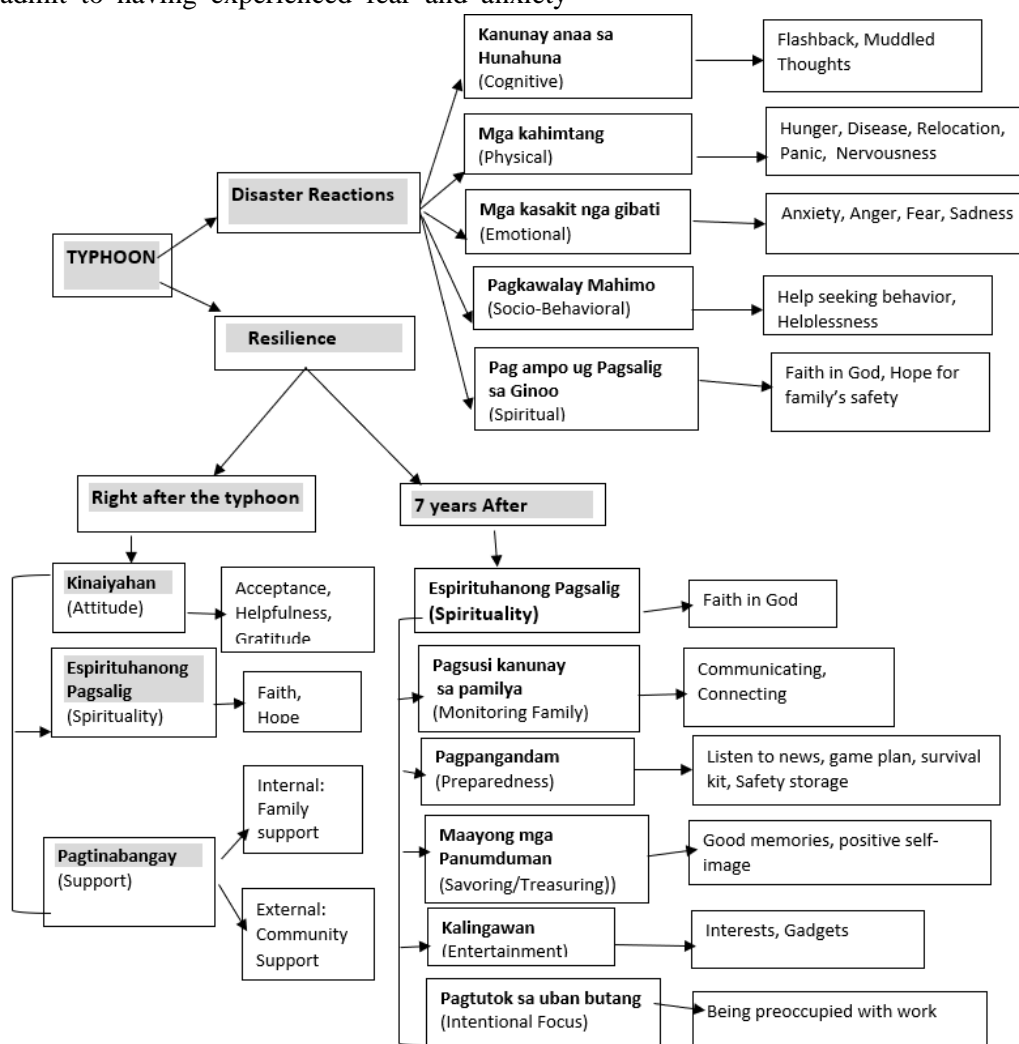
Aside from mental and physical diseases that occurred among participants, socio-behavioral manifestations have been found among participants. These manifestations appear to help the participants to cope with the disaster that occurred among them during the pressing times. All of the above are internal qualifications that would make a vibrant human being who has survived the onslaught of misfortune unspeakable of its horrors. One positive way of looking at it would be the compassion of a society that recognizes a shared destiny with any human being, regardless of status or creed.

The emerging finding shows that the major coping mechanisms seen among the participants

is affirmation of one’s strength as a human being and as temples of a great God.

Despite the passage of time, seven (7) years, or almost a decade, most of the participants still admit to having experienced fear and anxiety

every time it would rain or have forecasts of bad weather. However, they try to manage their fears and anxiety through ways that will make them feel ready to face the storm.



**Figure 2. Conceptual Model of the Stress Reactions and Resilience of Public-School Teachers right after and seven years after typhoon Sendong derived from the summary of themes**

Figure 2 was derived from the summary of themes of the Disaster Stress Reactions and Resilience of Public School Teachers right after and seven years after typhoon Sendong such as: 1) Kanunay anaa sa hunana (Cognitive Reaction) - flashback and muddled thoughts; 2) Mga kahimtang (Physical Reaction) – hunger, disease, relocation, panic, and nervousness; 3) Mga kasakit nga gibati (Emotional Reaction) – anxiety, anger, fear and sadness; 4) Pagka walay mahimo (Socio-Behavioral Reaction) – help seeking behavior and helplessness; and 5) Pag-

ampo ug pagsalig sa Ginoo (Spiritual Reaction) – faith in God, and hope for family’s safety.

In terms of resiliency of the teacher- participants during the disaster, the following themes emerged: 1) Kinaiyahan (Attitude) – acceptance, helpfulness, and gratitude; 2) Espirituhanong Pagsalig (Spirituality) – faith and hope; 3) Pagtinabangay (Support) – Internal support (family support) and External support (community support).

On the other hand, the themes that emerged seven years after the disaster

include : 1)Espirituhanon (Spirituality) faith in God; 2) Pagsusi kanunay sa Pamilya (Monitoring Family) communicating and connecting; 3) Pagpangandam (Preparedness) listening to news, game plan, survival kit and safety storage; 4) Maayong mga Pahinumduman (Savoring/Treasuring) – good memories, and positive self-image; 5) Kalingawan (Entertainment)- interests and gadgets; 6)

Pagtutok sa uban butang (Intentional Focus)- being preoccupied.

Based on the findings, a proposed program is designed that would address the data gathered from this study.

The current researcher came up with an intervention program proposal- HAPSAY in order to address the key issues or needs of the victims.

Table 3. Identified Needs: basis for Intervention Program

1. Needs	2. Recommendations
3. -The need to alleviate emotional reactions for anxiety and fear symptoms	4. -Trauma focused psychological interventions
5. -The need to cope with their stressors, particularly sadness and anger	6. -Local government or Barangay level mindfulness activities
7. -The need to control their flashbacks and muddled thoughts	8. - Rational Emotive Behavior Therapy to be facilitated by School Counselors or Mental Health workers 9. -Local School based mindfulness interventions
10. -The need to control and manage physical reaction, like: disease, hunger, panic, nervousness	11. - Local government or Barangay level assessment and surveying activities among community members. 12. -implementing seminar-workshops on managing and lessening the negative effect of physical illnesses.
13. -The need to empower the community's social behavioral responsibility	14. -Local government or Barangay level altruism seminars 15. -Local School based social helping behavior seminar-workshops

<p>16. -The need to empower local community's spirituality</p>	<p>17. -Local church-based activities related to art and music therapy for family members</p> <p>18. -Local school-based year-end spiritual retreat</p>
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The identified needs based on these findings were used to come up with the proposed intervention program for the participants, entitled, HAPSAY.

The word Hapsay, a Visayan word, means orderly and neat. The researcher came up with the title of the program which proposes activities based in the community in alleviating the victims' disaster reactions, such as: Cognitive reactions (flashbacks and muddled thoughts); Emotional reactions ( anxiety, fear, sadness, and anger); Physical reaction (disease, hunger, panic, and nervousness); and to develop resilience among its members and endeavor to make their lives stable and maintain an orderly and normal life after the disaster.

**CONCLUSIONS AND RECOMMENDATIONS**

In conclusion, based on the results and findings of the data, most participants related that they still manifested anxiety and fear after seven (7) years that typhoon Sendong has occurred.

The participants experienced the following Disaster Stress Reactions such as: Cognitive Reaction (flashback and muddled thoughts); Physical Reaction (hunger, disease, panic, nervousness, and relocation); Emotional Reaction (anxiety, anger, fear and sadness); Socio-Behavioral Reaction (help-seeking behavior and helplessness); and Spiritual Reaction (Faith in God and hope for family's safety).

Despite the disaster stress reactions, participants also showed their resiliency experience right after and after seven years of the disaster. In terms of resiliency right after the disaster, the participants showed resilience in the following ways: Attitude (acceptance, helpfulness, and gratitude); Spirituality (faith and hope); and

Support ( internal support -family and external support-community).

Despite the passage of time, seven (7) years after, most of the participants still admit to having experienced fear and anxiety every time it would rain or have forecasts of bad weather. However, they try to manage their fears and anxiety through ways that will make them feel ready to face the storm, while only a few of them expressed that they have already moved on with their lives.

The participants' resiliency after seven years were manifested in the following ways: Spirituality (faith in God); Monitoring Family (communicating, connecting); Preparedness (listening to news, game plan, survival kit, and safety storage); Savoring/ Treasuring (good memories and having a positive self-image); Entertainment (engaging in interests and use of gadgets); and Intentional Focus (being preoccupied with work).

The results and findings of this research became the basis of the proposed community-based intervention program, aptly called HAPSAY, which aims to provide empowerment towards the members of the community. The activities of which include community-based healing sessions, closure activities that may produce concrete cognition and acceptance of the traumatic experiences the participants had, understanding and recognizing disaster reactions , and eventually establishing resilience among themselves.

**RECOMMENDATIONS**

The following are the researcher's recommendations:

1. The researcher proposes the use of the **HAPSAY** Program that involves the community in the process of healing the disaster stress reactions among the victims. It is hoped that the



program shall help establish resilience among its members.

2. In order to facilitate the proposed program, it is recommended that the mental health workforce be increased to meet the service demand in Cagayan de Oro.

3. Professional training for mental and psychosocial support worker be conducted as it has been identified as essential to maintain, sustain, and promote the mental health among the members of the community.

4. The local church, barangay, and local schools should be tapped as helpful venues to report and treat immediate physical and mental problems occurring inside the community.

5. The local professionals such as teachers, mental health professionals, and related professionals should be trained to facilitate community-based seminars and activities in order to lessen the effect of physical and mental health concerns in the community.

6. It is also important to coordinate well with the local Disaster Risk Management Team regarding the physical and psychosocial health concerns within the community should emergencies arise.

7. It is also recommended to provide empowerment to the community's social behavioral responsibility by practicing strong connection with their community members by means of the altruism and social helping behavior seminar/ workshops to be facilitated by local church, local government staff, and local school personnel.

8. Local barangay level and local church-based groups may also be tapped to facilitate spiritual activities, art and music therapy for family members.

9. Future researchers can also include the effect of male teachers' disaster reactions and level of resiliency experiences, since the current study was limited to female teacher participants.

10. It is recommended that future researches make use of both quantitative and qualitative approaches on similar topics as this study. By using both types of research approach, the strengths of each approach can make up for the weaknesses of the other, thus, enable the research to yield better concrete results.

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