

ANALYSIS OF MALADAPTIVE BEHAVIORS RESULTING TO NATURAL AND ANTHROPOGENIC HAZARD

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ABSTRACT

Exposure to traumatic stressors and subsequent trauma-related to mental changes may alter a person's risk-taking behaviour. It is still unclear whether this relationship depends on the specific types of traumatic experiences. Moreover, the association has never been studied in displaced individuals with substantial levels of traumatic experiences. The study determined the factors that could motivate the heterogeneous displaced individual to mal-adaptive behaviours and aimed to analyse the traumatized and displaced individuals having mal-adaptive manifestation. The researcher determined the causes of these maladaptive behaviours and its physical responses exhibited by no less than the respondents who experienced the traumatic events brought about by natural and anthropogenic hazards. This study employed quantitative methods which emphasized on the objective measurements and the statistical, mathematical, or numerical analysis of data that was collected through surveys. Computational techniques were used in determining their mal-adaptive behaviours using the Likert scale. The researcher's divided the forty (40) individuals which was the subject of the study into two groups. The result showed that the data with the Probability of 0.3 showed using drugs was consistently dominated by the behaviour in Probability (0.1) who are making up excuses as they did not finish the school work and Probability (0.2) which is avoiding conversations with other students. This was probably associated with Internally Displaced Persons curiosity and social media influences. It also showed that the mal-adaptive behaviours exhibit by the respondents was associated by their experiences during traumatic events such as typhoon and or fire hazard.

Keywords: *Maladaptive Behavior, Physical Response, Traumatic Experience, Natural and Anthropogenic Hazard*

INTRODUCTION

In different parts of the globe, people have been victimized by different disasters that can affect a human life economically, agriculturally and emotionally. Disasters can take different forms and the ongoing destruction may last for a couple of days or weeks. It may be a natural disaster such as floods, earthquakes, tornadoes and tsunamis. It can be also human-made disaster also known as anthropogenic hazards which is defined as, "A disastrous event caused directly and principally by one or more identifiable deliberate or negligent human actions" (World Disaster Report, 2014). In the Philippines, it was estimated that at least 119,000 people remained displaced due to conflict and violence as of May 2015 while at least 140,000 people are still displaced because of natural hazards-related disasters (RELIEFWEB, 2017). Thus, the researchers wished to analyse the internally displaced individuals

presenting maladaptive behaviours. At the same time the study explored the participants demonstrating maladaptive behaviours after experiencing traumatic events brought about by natural and anthropogenic hazards.

LITERATURE REVIEW

The prevailing idea of a disaster in the Philippines are those brought about by typhoons, earthquakes and floods, the phenomenon of internal displacement, as a consequence of armed conflict, has already reached a proportion that could no longer be ignored. More than 1 million people have already been affected by armed clashes since the government responded with an all-out military assault against Moro revolutionary fronts and criminal groups. This is nearly as many as those displaced by natural calamities placed by the Global Internally Displaced Person (IDP) Project to be at 1.5 million people in 2001. In Southeast Asia, the Philippines

rank third after Burma and Indonesia as countries with the greatest number of internally displaced persons (RELIEFWEB, 2017). The natural and anthropogenic hazards may adversely affect children far more than adults. Natural hazards may cause danger to the people, structures or economic assets which may lead to disaster if they are not mitigated and prepared for disaster management. The children lose the opportunity for education in times of war, those children who are forced to move from one place to another to find refuge due to their devastated homes, children hiding from bullets and bombs thrown everywhere between opposing camps. Due to such adverse situation, some children affected by this disaster might lose their sense of sight, some may lose a limb, some may also lose their cognitive ability, social relationship with others, opportunity of education, family and even some may lose their lives (Bothe, Olness, & Reyes, 2018).

The frequency and severity of sudden-onset natural disasters is increasing. Presently there are about 400 natural disasters every year, affecting 200 million people. This number has doubled since the report 20 years ago. Of the 200 million people whose lives are affected by natural disasters, around 36 million were forced to leave their homes in 2008 and are considered to be internally displaced persons. Unlike those displaced by conflict, this displacement is usually temporary and almost always occurs within the borders of the country (Ferris, 2010).

Several studies have reported increased psychological trauma among children after natural disasters and calamities. Post traumatic disorder (PTSD) and depression may arise weeks or months after the traumatic events. The severity of children's symptoms depends on factors such as the level of exposure to the situation, personal injury, level of parental support and dislocation. Life-threatening events during a disaster have been associated with psychological problems in children (Thienkrua *et al.*, 2006).

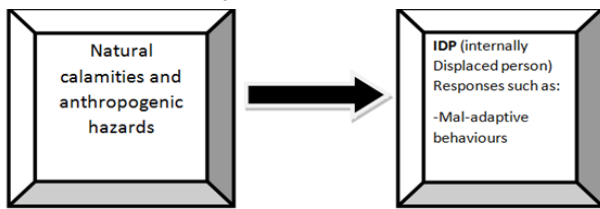
Based on the findings of one study, the Disaster Risk Reduction and Management Department indicates that there is a lack of planning, inadequate organizational management of resources, insufficient coordination in the provision of health services during the disaster, and the manner of participation of international relief efforts were the most important barriers to adequate disaster healthcare services delivery. Disaster risk reduction

requires knowledge for informed decision making and coordinated action (Weichselgartner & Pigeon, 2015). This study supports the value of health service managers coordinating the appropriate use of international aid in advance. It is suggested that this can be done by better communication with local and foreign constituents. Further, this study indicates that public education and proper pre-event planning help to bring about an effective response to providing healthcare services during a disaster.

In another research, it was found out that experience of a natural disaster affected children's altruistic giving. Immediately after witnessing devastations caused by a major earthquake, a 9-years-old child may become more altruistic. Moreover, experiencing a major earthquake will cause a 6-years-old child to be more selfish. Three years after the earthquake, children's altruistic tendencies returned to pre-earthquake levels, which suggests that changes in children's altruistic giving are an acute response to the immediate aftermath of a major natural disaster and findings suggested that environmental manipulations and empathy play crucial roles in human altruism (Li *et al.*, 2013).

This study focuses on maladaptive behaviour of internally displaced persons (IDPs) from post-traumatic experienced. Maladaptive coping mechanisms are emotion based and is attempted to reduce negative emotional states when an individual feel that a situation is out of control. Maladaptive coping mechanisms can further be explained as behaviours which are counterproductive to achieving either individual goals or adapting to real life situations. Adaptive coping mechanisms are problem based and attempt to change negative emotional states when an individual feel in control of a situation and can manage the negative emotional state. Those people who have experienced trauma and suffer from Post-Traumatic Stress Disorder (PTSD) are often at a higher risk to develop chronic pain.

Most of the studies suggest that disasters can cause maladaptive behaviour and physical responses to general populations both children and adults (Eckes & Radunovich, 2015). It is the intention of the study to determine how the post traumatic experiences on natural calamities and anthropogenic hazard could lead to maladaptive behavior and physical response as manifested by IDPs and to come up with a program of health and social intervention.

Framework of study**Figure 1: Schematic Diagram**

This is the schematic diagram of the maladaptive behaviours resulted from traumatic experience on natural and anthropogenic hazard among general population of displaced individual. This study was anchored on the Transactional Model of Stress and Coping Theory by Lazarus & Folkman, (1987) which states that, a stressor has two main components, an appraisal of the severity of a stressor which was encountered by the individual, and an appraisal of how well the stressor can be managed by the individual. This framework shows the relationship between natural and anthropogenic hazards' effect on displaced person's behaviour resulting into mal-adaptive responses (Lazarus & Folkman, 1987).

Statement of the problem

This study determined the factors that motivated maladaptive behaviours among the heterogeneous displaced individual in post- traumatic experienced due to natural and anthropogenic hazard. Specifically, it sought to answer the following questions:

1. What are the maladaptive behaviours manifested by a traumatized displaced individual?
2. What public disdainful acts were exhibited by the participants towards the situation?

RESEARCH METHODOLOGY

The study employed Quantitative Analysis methods that emphasized objective measurements and the statistical, mathematical, or numerical analysis of data collected through surveys was done using computational techniques in determining the maladaptive behavior by means of Likert Scale.

This study was conducted in Block 27, Barangay Mabolo Cebu City where internally displaced victims and evacuees from natural and anthropogenic hazards are temporarily residing. The area was being utilized as their temporary relocation.

The respondents of the study were the heterogeneous

internally displaced person experiencing natural and anthropogenic hazard and were exhibiting maladaptive behaviours and demonstrated physical response. The researchers randomly selected a total of forty (40) participants from the general population. The selection was based on their availability and willingness to be interviewed, as well as their eagerness to share their personal experiences and if they voluntarily answered the survey questionnaire.

The researchers utilized the mixed standard and self-made survey questionnaire on assessment of maladaptive behaviours in terms of Delinquent Behavior. Withdrawn and Eating behaviour was measured using five Likert Scale with the following description of; (5) Always, (4) Often, (3) Sometimes, (2) Rarely, and (1) Never.

Data gathering procedure

After the study proposal was approved by the Study Committee Research Panel, the researchers communicated to the respective Local Government Units in Cebu City and Division for the Welfare of the Urban Poor (DWUP) officials, requesting permission for distribution of survey questionnaire to the identified respondents. The researcher selected ten to a total of forty (40) participants from general population.

To be able to attain the accomplishment of the study, the proponents asked the permission from the university, consent from the office of the division from the Division for the Welfare of the Urban Poor (DWUP) and from the local government unit of Barangay Mabolo. As well as permission were taken from the parents and guardians of the children. Prior to the conduct of the interview, the respondents were thoroughly informed of the scope of the study, their rights and the possible consequences of their involvement with the study. However, they were assured that their rights are preserved, and that all data gathered were treated with utmost confidentiality and privacy. The accomplished checklists and questionnaires were retrieved at an appointed time.

Statistically analysis was done with Statistical Software Minitab logo to describe the basic features of the data in this study. Together with simple graphical analysis, it forms the basis of quantitative analysis of data.

RESULTS AND DISCUSSION

This section discussed the probability of distribution among the respondents of this study. In its Probability, the

total respondents of forty were divided into two groups wherein each group consist of twenty representatives.

Table 1: Probability of distribution among the respondents

	Probability	
0.1	Making up excuses regarding not finishing the school work (A)	= (1)
0.2	Avoiding conversations with other students (B)	= (2)
0.3	Using drugs (C)	= (3)

The behaviours was analyzed among the 20 respondents and the data that shows the lowest probability, is “Making excuses regarding not finishing the school work” as probability 0.1 or marked (A) Code 1, followed by, “Avoiding conversation with other students” as Probability 0.2 marked (B) Code 2 and the behavior, “Using drugs” is Probability 0.3 marked (C) Code 3. The goal of this study is to interact the displaced persons in group 1 and group 2 regarding mal adaptive behaviour.

The data and information gathered is pertinent to the questions raised :

1. What are the maladaptive behaviours manifested by a traumatized displaced individual?
2. What public disdainful acts were exhibited by the participants towards the situation?

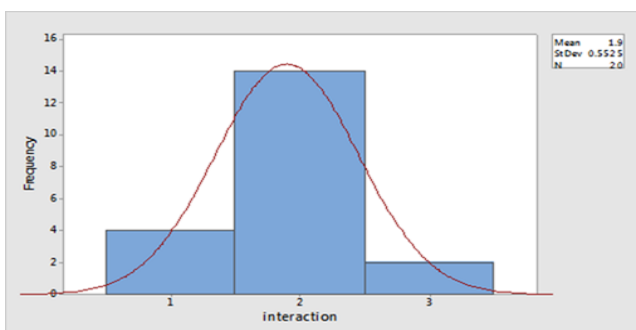


Figure 2: Histogram of the interaction among group 1 type of people.

Figure 2 shows the interaction within the group 1 for the three (3) types of behavior. The vertical axis is the frequency of 14.5 (29) respondents with value M=1.9. In horizontal axis data shows the Probability of 0.2 was more affected designated as “Avoiding conversations with other students”. According to a source, avoidance behaviour is also a means of mal-adaptive coping wherein an individual try to escape stress for they do not want to deal with it (Scott, 2018).

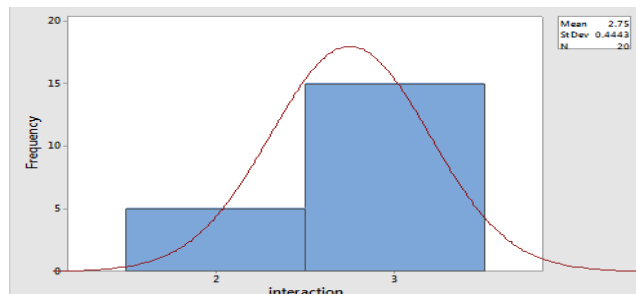


Figure 3: Histogram of the interaction among group 2 type of people

Figure 3 shows that the interaction of the 2 groups of respondents. Significantly, the higher maladaptive behavior was found with Probability 0.3 known as “Using Drugs” with M=2.75. Result shows one behavior which is the Probability 0.1 was dominated with the behavior or Probability 0.3 known as “Using Drugs”. Among the respondents, twenty (20) were noted to having changed in behaviour which could be considered as changed in the social interaction probably due to the use of drugs. A great influence could either be from social media since some of the respondents were curios. Aside from which, a big factor that could also be considered is the coping strategies of the respondents regarding post-traumatic experience. According to MayoClinic, (2018), a stressful and traumatic event in an individual’s life may cause temporary difficulty in adjustment and coping. Symptoms includes severe anxiety that may sometimes lead to an interference of our day-to- day functioning. Manifestation may also include physical and emotional reactions which may result to a self- destructive behaviour like drinking too much and or use of harmful drugs.”

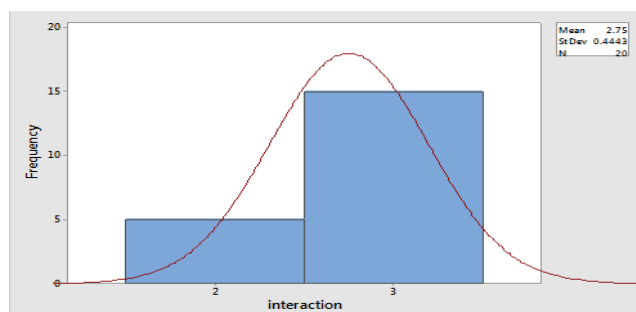


Figure 4: Histogram of the interaction between group 1 and group 2 types of people

Figure 4 shows an interaction between the group 1 and group 2 types of people. Data shows that in Probability 0.1 there was a totally diminished behaviour. After interacting

with the forty (40) respondents or the two groups, data revealed the Probability 0.3 was consistently dominated by the behaviour in Probability 0.1 and Probability 0.2. This was probably associated with the influence of curiosity and social media. The present data revealed there was consistent domination of the behavior probably associated with curiosity and social media.

CONCLUSION

The response of the IDPs to stressors has two main components, according to transactional theory of stress from Lazarus and Folkman. Based on the results, the severity of the stressor that was encountered by the IDPs will vary the coping management of each individual.

Therefore, findings highlight the need to include

behavioural management, strategies aimed to increase social engagement, sustained attention and decreasing aggressive behaviour in comprehensive intervention programmes for IDPs.

RECOMMENDATION

The researchers recommend that for the appraisal of the event and the resources for dealing with IDPs it is important to determine the level of stress experienced; Trauma-focused cognitive behavioural therapy should be offered to those with severe post-traumatic symptoms on the first month after the disaster. On the other hand, healthcare professionals should identify the need for appropriate information about the range of emotional responses that may develop and provide practical advice on how to access appropriate services for these problems.

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