

[SV 18] THE AWARENESS OF DISASTER RECOVERY AMONG UNIVERSITY STUDENTS: A CASE STUDY ON UNIVERSITI UTARA MALAYSIA VOLUNTEERS

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ABSTRACT

Disaster management is intended to ensure that disaster occurrences can be managed and controlled with systematic and sustainable methods. It is important for each community to learn about the phases of disaster management, particularly the recovery phase. It is also important to encourage university students to be exposed to volunteerism programs so that they have additional skills and interest that can be used when they are out of the university environment. This study is conducted in Universiti Utara Malaysia (UUM) with the aims to explore and identify the level of awareness among students regarding the recovery phase of the disaster management and their knowledge of volunteerism. The findings of this study found that university students understand the knowledge of volunteerism in disaster. Besides, university students show that they have awareness on disaster recovery and sympathize with the disaster victims, which motivate them to volunteer for disaster recovery. The data for this study is collected using qualitative methods. The data gathered will help identify the level of awareness and knowledge of volunteering among UUM university students. This data will be useful for the UUM management to organize appropriate disaster recovery awareness campaigns based on the findings in this study to provide relevant skills training to all student volunteerism at UUM.

Keywords: *disaster recovery awareness, volunteerism knowledge, student university*

INTRODUCTION

Disaster management is an integrated process for planning, managing, coordinating and implementing the necessary steps to deal effectively with the impact on humans (Deshmukh et al., 2008). There are four stages of disaster management which is used to manage a disaster that is; prevention, preparedness, response and recovery. Each level has reasonable steps taken to manage the disaster. Prevention is an action designed to impede the occurrence of a disaster event and or prevent such occurrence having harmful effects on the communities or key installations (Ishak, 2004). In the preparedness stage, it is necessary to be ready with all mitigation plans that have been updated, setting up of the equipment and other important details. Built cultural heritage holds both cultural and national significance, and recovering from natural disasters cultural heritage has individual, social, cultural and national implications (MacKee et al., 2014). This shows that this recovery is a crucial stage in disaster management as it involves social, economic and cultural aspects.

Recovery is a process in which people and nations are assisted to return to their normal state after the disaster. The recovery process often takes 5-10 years or even more. The recovery consists of restoring normal life, through rehabilitation and reconstruction. This involves basic and vital services, improved housing and other buildings, bridges, schools, markets, employment, the provision of temporary housing, rehabilitation of injuries and psychosocial counseling for people suffering heavy losses from the impact of disasters.

Based on Malaysia's experience with disaster management in the last decade, it is critical to readdress the disaster mitigation problems toward better mechanisms in such a manner that disaster rescue works could be performed in an efficient and effective way. The aim was to reduce the feeling of discomforts amongst the Malaysian people and also to prevent the unnecessary loss of lives and damage to personal and national assets and properties (Rahman, 2012).

Recovery phase needs to be improved in terms of efficiency, the time and the needs of society. On the recovery phase of the disaster management also means we restore both physically and mentally. Community mental needs to be recovered from disaster happened so that they can survive and resist feelings of the trauma. However, there are still many who do not know Malaysia's goal of the recovery phase in the disaster management. Rehabilitation and reconstruction program should be implemented immediately after the disaster occurred. All government agencies, statutory bodies, private bodies and voluntary involved responsible for carrying out the assessment of damage and recovery and reconstruction of public infrastructure under their respective jurisdiction.

According to Noor (2016) university graduates who are active in volunteer activities will be given priority work in the public sector, depending on their experience in the field participated. Additionally, findings from the interviews with respondents can help universities to deliver disaster management measures such as campaigns to students or to develop skills training courses on disaster recovery.

Therefore, the aim of this study is to explore the awareness among university students on disaster recovery, which shall be achieved through the following objectives; (1) to identify any knowledge that should be related to volunteerism in disaster, and (2) to explore the awareness of recovery phase among university students.

SIGNIFICANCE OF THE PROJECT

This study could help broaden the understanding and the measures contained in the recovery phase of the disaster management. This study also fosters a spirit to always have an understanding of the measures contained in the recovery stage of disaster management. It is intended that students know whom to assist and what to do when they become part of a disaster recovery team. Other than that, the awareness to take awareness of the steps in this recovery phase can be applied in the students so as to recover the ecosystem, the culture, the spirit of community. Besides that, this study can help the recovery phase of disaster management being improved from the responses from the student about it, as well as students can be exposed to programs related to volunteerism. The results of this study can also be used to create ideas for conducting

training to university students to be more willing to volunteer at any time, should disaster strikes.

LITERATURE REVIEW

Disaster response is a set of organized activities used to respond to current disaster occurrence and thereafter. The response phase focus particularly to aid such as lifesaving provides first aid, reduce and restore the damaged communication systems and transportation. The parties involved in the response phase should identify the tasks involved clearly. Recruited volunteers are those with skills for the unique needs of the disaster response, and are personally requested by the incident command system to assist in the effort (Fernandez, 2007). The recovery phase focuses on stabilization and return to society as well as the health care system to restore physical and mental relief. Activities can range from a recovery phase to rebuild building and repairing damaged public infrastructure. In this case, the recovery phase focused on helping people and system to adapt to a new sense of 'normal'.

The mitigation phase known as prevention phase characterized the measures taken to reduce the impact of disasters to limit the impact on human health, society functions, and economic infrastructure. Prevention, including hazard identification, assessment of threats to life and property, and taking steps to reduce the possibility of loss of life and damage to property, sometimes known as disaster mitigation.

Understanding the recovery phase

In the recovery phase, it is already generally accepted that disaster recovery covers various activities in which several activities are carried out sequentially and some are executed simultaneously. Therefore, it is more useful to think about disaster recovery in terms of four functions, namely; disaster assessment, short-term rehabilitation, long-term reconstruction and recovery management (Lindell, 2013). Through reaction and recovery capabilities, a new approach to disaster recovery has been popularized, especially by government institutions and non-governmental organizations (NGOs), through the concept of "build back better" (Joakim, 2013). In recovery and reconstruction process, the complications are finance, short time periods, racial mistrust and discrimination (Esnard et al., 2014). The recovery process of the reconstruction is to use a higher allocation. Therefore, the authorities must ensure that the activities to be carried out during the recovery are within the allocation of limited funds.

Of the concept of short-term recovery from this disaster, it is more focused on the assistance to be channeled to the victims as soon as possible. Short-term recovery is immediate and overlaps with the reaction. According to Baird (2010), disaster recovery is a long term in terms of the construction of evacuation centers for temporary housing for disaster victims. It also provides a safe long-term recovery facility for continued food aid. Therefore, it will take further action following the preparation of landing craft that can be loaded with supplies water and food to assist in the humanitarian effort.

Post disaster program and participant

According to Islam et al. (2016), the main strategy for dealing with post-disaster situations is to have a comprehensive framework or program consisting of disaster planning, resource management and output (rehabilitation and recovery). Any program,

borne by the interested parties, will always tie to a specific time and cost limitations. In this case the proposed Malaysia Disaster Preparedness Centre (MDPC) will carry out the coordination of this program, with direct cooperation with the National Security Council (NSC), National Hydrology Institute of Malaysia (NAHRIM), Medical Relief Society (MERCY) Malaysia, Malaysian Red Crescent Society, National Disaster Management Agency (NADMA) and other professional bodies and agencies.

In strategic initiatives, the stakeholders had established disaster preparation center known as the Malaysia Disaster Preparedness Centre (MDPC) which as major flood disaster coordinator for now and the future. The objective of the establishment of MDPC is to encourage and increase awareness, knowledge and practices concerning disaster. The National Security Council (NSC) as a platform to make major policy and coordinating body for disaster management. NSC works to coordinate and plan all activities related to the preparation, prevention, response operation and recovery in disaster management. NSC has assumed a leading role in post disaster incident because it involves the safety of the whole society.

National Hydraulic Research Institute of Malaysia (NAHRIM) was founded in 1993 with the aim to form a group of experts and provide research services as required in the planning, design, construction and implementation of research related to the development of water resources in particular and the environment in general. The objective above is to establish a National Focal Point that coordinates the investigation of hydraulic engineering in Malaysia. Malaysian Red Crescent has been a part of the recovery process by being ready to help the local community left vulnerable during an emergency or disaster. Working with the government, they will ensure that supplies are available and volunteers are adequate and ready to be deployed.

People's Volunteer Corp (RELA) establishment enables the masses to volunteer and be a member of a volunteer force to preserve and maintain the national peace and security. RELA's role is as a security and defense targets in important, areas of responsibility. Apart from that RELA will also move and protect the civilian population to safe areas during a disaster. They also act as the 'eyes' and 'ears' of the government. It aims to collect information to enforcement units and patrol their areas to prevent any hazards. On 26 August 2015, the Cabinet agreed to the establishment of the National Disaster Management Agency (NADMA) under the Prime Minister, who will take over the responsibility of the National Security Council. Establishment NADMA inspired by the Deputy Prime Minister, Dato 'Seri Dr. Ahmad Zahid Hamidi to ensure that the management and response to disasters more sustainable and efficient in meeting the demands and challenges. NADMA has been in operation since 1 October 2015 and will be the new focus for Malaysian disaster management efforts at the regional and international levels.

Volunteerism in disaster recovery

According to Khaliunaa (2011), volunteer action in response to disasters is perhaps one of the clearest expressions of the human values that underpin the drive to attend to the needs of others. Volunteers can be a significant resource of timely manpower, skills, and abilities, while providing valuable insight on a community's needs (Fernandez, 2007). Disaster volunteerism is a specific category of volunteerism and perhaps the most underappreciated (Johnson, 2014). According to Yamamoto (2013) it is said that the concept of "volunteer" originates in the concept of a volunteer soldier as opposed

to a conscripted soldier, and can be traced back historically as far as various groups which had religious significance, such as chivalric orders and the crusaders. Volunteers are focused on the local community or corporate bodies, even university students can also get involved in volunteer activities this. This is because these activities are open to anyone who would like to participate in humanitarian disasters or hazards recovery process. The university also plays an important role in disaster recovery as it is the place of study which indirectly can provide a range of knowledge and expertise that can be moved easily in response the community needs in the event of a disaster.

RESEARCH METHOD

According to Morgan (2014), qualitative research captures a set of purposes associated with meaning and interpretation. Thus, the subjective purposes that characterize qualitative research are related to meaning and interpretation, based on close contracts between researcher and the peoples that they study which is called respondents. Besides that, qualitative research focuses on phenomena that occur in natural settings, and the data are typically analyzed without the use of statistics (Jackson, 2009).

Personal interviews

Interview assessed as one of the important sources of information within a case study. According to Morgan (2014), the open-ended interview has the advantage of leading to an inductive research which is the ability to extend the topics that emerged during conversations with respondents. Therefore, the usual semi-structured interview that included topics of interest as a researcher and additional interests and considers that the study participants increased. A personal interviews are situations in which questions were asked face-to-face, can be carried everywhere like in a room, on the field or on the roadside.

Purposive sampling

Pandiyan et al. (2011) state that purposive sampling is a non-probability sample that conforms to certain criteria. When the individual member of the population does not have the same possibility to be elected as members of the sample, it is use non-probability sampling (Jackson, 2009). Non-probability sampling is usually used because it pushed to be inexpensive, and it is simple to use these techniques to generate samples. Purposive sampling is a sampling strategy that is often used as a sample is taken from the group of participants according to certain criteria and based on the research questions, for example, volunteers at UUM (Family Health International, 2011). Besides that, this study collected the data amongst the student that have joined a disaster volunteer to Kelantan in year 2014.

Qualitative instrument

This study uses the semi-structured interview to collect the data from the respondents. The interviews are conducted with the respondents through an interview guide, which has 4 sections that will explain about the knowledge of disaster management and awareness of volunteerism from each respondent. The sections in an interview were the demography, awareness of disaster management, disaster recovery and volunteerism.

Table 1
Questions of interview

No.	Section	Description
1	Demography	This section purpose is to know the background of each respondent including their ages, race, sex, origin state, program and resident hall.
2	Awareness in disaster management	This section will elaborate the respondent's knowledge about the disaster management and their experience during the volunteer program to Kelantan in 2014.
3	Disaster recovery	Respondents need to elaborate the aspects involved in the disaster recovery process through their knowledge and the problems that they have faced through during the volunteer program.
4	Volunteerism	This section purpose is to identify the respondent encouragement to become the volunteer and the volunteer function through their experience.

Qualitative content analysis

Qualitative research technique applied in this study is widely using content analysis. Thus, this study elaborates the data using the content analysis in qualitative methods. Each section will be summarized by all the respondent data. This is because the content analysis consist three approaches namely conventional, directed and summarize. From this, we will get the similarity and the difference of responses from all the respondents for each question.

RESULTS

Seven respondents were interviewed to share their experiences. All the respondents were interview by face to face. In collecting the data, the authors have identified that four of the respondents were from Kedah, two respondents from Penang and one respondent from Selangor.

Seven respondents to the study were between the ages of 21 years to 24 years and six are the Malay and one is Chinese. Respondents consisted of five women and two men. Three of the respondents were students majoring in Public Management and the other majored in Management, Law, Logistics and Finance. Three of the respondents have stayed at the SME Bank Student Residential Hall (INASIS SME Bank) while two others respondent stayed at EON Student Residential Hall (INASIS EON) and other two respondents from TM Student Residential Hall (INASIS TM) and TNB Student Residential Hall (INASIS TNB) respectively.

Awareness on disaster management

Almost all respondents interpreted the same understanding on disaster management. They interpreted that disaster management is the control set by certain parties to assist victims in a disaster with effective and efficient methods. Aid is often disbursed as assistance in terms of manpower for updates, equipment, food, money, clothes and basic needs. Besides that, respondent E who thought the disaster management as measures undertaken by certain parties in dealing with natural disasters that happen in

our country. Among the measures adopted was to save the victims of natural disasters, evacuate to shelters and provide basic needs like food and drink to the victims of natural disasters.

Based on the experience of all respondents, the management functions that can help the victims of disaster are listed as follows:

1. Provide assistance in terms of clothing, shelter and basic needs.
2. Provide counseling to the disaster victims.
3. Redevelop the affected area with clean schools and housing.
4. Government agencies or non-governmental organization (NGO) can provide financial assistance.
5. The Ministry of Health to provide health assistance in terms of medical and population health monitoring.
6. Creating special placement services for disaster victims with good infrastructure facilities.
7. National Security Council (NSC) became the main coordinator in ensuring that this matter be resolved by government agencies as well.

Disaster recovery

Many respondents gave the same opinion related to disaster recovery that includes physical aspects. They explained that the recovery of the physical aspect involves replanting trees, the reconstruction of damaged buildings, cleaning activities in the affected area, recovery of property damage, repairing of pipelines and reclamation of the riverbanks to prevent water overflowing into residential areas. Respondent E also noted that disaster recovery steps are held through mutual cooperation. Besides that, respondent A, B, C and D also interpret this disaster recovery also involves emotional recovery. This is because they argue that after a disaster, the victim will experience trauma and emotional disturbance. Therefore, the emotional recovery will also be noted. Respondent D also stated that disaster recovery is also involved in social aspects such as volunteerism, welfare and treatment to the victims.

Based on an understanding of each of the respondents, the parties who are involved in disaster recovery are listed below:

1. People's Volunteer Corp (RELA)
2. Malaysian Red Crescent (MRCS)
3. Non-governmental Organization (NGO)
4. Government
5. Malaysian Security Council (NSC)
6. Ministry of Health
7. Ministry of Women, Family and Community Development
8. Fire & Rescue Department of Malaysia
9. Malaysian Armed Forces
10. Volunteers

Based on the experiences of respondents, the problems encountered during the disaster recovery process listed below:

1. The lack of volunteers.
2. Lack of water resources and basic needs.
3. Problems of damaged roads that limit the movement for volunteers and victims.
4. Equipment is not enough.

5. The problem of electricity sources.
6. Lack of volunteer knowledge about the safety and health issue.
7. The problem of the scope and help that really needed by the victims.

Student's volunteerism

All of respondents give the same answer regarding the encouragement to volunteer which is of their own willingness. The nature of humanity and sympathy to the victims of disasters exist in deepest heart of all respondents. Therefore, all of the respondents feel the need to assist victims in difficulties. Respondents G said that if she did not take the opportunity to act as a volunteer, they may not be another chance to contribute to the victims. In addition, they also want the experience in managing disaster stricken areas. Respondents F hoped that his help can return disaster area to normal condition.

Four of the respondents had been involved in volunteer activities before. Respondent A was involved in volunteer to clean the housing senior citizens during the days of high school, while Respondent D, F and G had previously been involved with disaster volunteers in Pahang. Their previous involvement in voluntary activities is also an encouragement to them to engage with volunteers organized by UUM for the volunteer program in Kelantan to help flood victims in 2014.

The university's role in encouraging respondents to engage with volunteers listed below:

1. Encouragement for student volunteers to make advertising in mass.
2. Provide transportation to students who attend a volunteer.
3. Hold talks on the importance of helping people in distress.
4. Supply of funds to this volunteer mission to solicit contributions from outside that characterized the donation.
5. Be a backbone to support students to be a volunteer in any disaster issue.

According to respondents A and C, they argue that the role of the volunteer can be optimized by following the development of the disaster that occurred periodically. Volunteers need to infuse enthusiasm for helping tirelessly in restoring the disaster area. Besides that, volunteers must communicate well with the victim so that the healing process runs smoothly. The role of volunteers can be optimized by understanding their roles and duties while on duty and volunteer should know what is the basic safety and healthy knowledge, if they do not know, they cannot survive in that situation.

RECOMMENDATIONS AND CONCLUSIONS

This study is to identify awareness among university students on the matter of volunteerism in the disaster recovery process. The objective of the study was achieved through interviews of seven respondents who are volunteers UUM for assistance mission to Kelantan flood victims to share their experiences and through the study of literature. Through interviews that have been conducted, it was identified that more can be explored in developing the knowledge of the volunteers and awareness of disaster recovery process, as well as what motivates the students to be involved with volunteer activities before. Although participating in volunteer activities seems to be very simple, but there are still many university students who do not have extensive knowledge in

taking appropriate steps to manage a disaster but to see it as a way of short-term relief and as their social obligations towards the society.

Sufficient knowledge and exposure on disaster recovery and volunteerism can be advantageous for UUM students as it will optimize their role as volunteers should they decide to get involved in disaster recovery process in future. In future, the university should implement a variety of programs related to disaster management which aims to spread the knowledge on disaster recovery that can attract the attention of university students to be more interested in becoming a volunteer. Furthermore, future research should emphasize on in-depth knowledge of volunteerism in disaster management as universities have the potential to be of assistance during the disaster recovery process, as well as inculcating the sense of social responsibility and awareness among the students.

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