



THE CULTURE OF DISASTER PREVENTION AS AN IMPORTANT FACTOR OF GEOHAZARDS AWARENESS FOR YOUNG PEOPLE

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ABSTRACT

The recent grow of public interest towards geoscience is caused by the great amount of hazardous phenomena in the last decade. It has increased the need of specific information related to geohazards for all stakeholders, including young people or youth communities. Journalists, for example, often manipulate information mainly because they do not have the culture to understand the science behind the occurrences of geohazards phenomena, but also to increase the impact of the news. Youths are often exempted from the circle due to their specific interest and culture. This paper aims to describe the importance of culture on geohazard prevention among young people.

The methodology consists of observation on geohazards related content of various pop cultures among young people and description on their perception about disaster prevention. Data are obtained from interviews and questionnaires in the occasion of youth gathering such as music performance, costume play (cosplay) stage, movies, comics (anime), etc.

Result shows that geohazards are generally out of the minds of young people. For the so-called pop culture such as movies, music and comics (anime) are rarely observed geohazards related contents, which minimize the chance to introduce disaster prevention up to certain level. The youth perceptions on disaster are commonly related to activities on emergency when disaster happens. Therefore the extreme effect in the future would be the development of a culture of emergency rather than a culture of prevention to face geohazards among young generations.

Keywords: Culture, disaster prevention, awareness, young people, costume play.

INTRODUCTION

The recent grow of public interest towards several subjects on geoscience is caused by the great amount of hazardous phenomena in the last decade (Muslim *et al.*, 2015). Those phenomena are mainly related to geological disaster, which lead people to the common knowledge of plate tectonics, engineering geology, hydrogeology, etc. This could happen due to the occurrence of several geological disasters in Indonesia such as the 2004 Great Earthquake and Tsunami of Indian Ocean killing more than 200,000 people in Aceh. Then in the year of 2006 there was major earthquake in Yogyakarta, 2006 tsunami in Pangandaran, 2006 mud-volcano eruption in Sidoarjo, 2010 earthquake



in Padang, and 2010 volcanic eruption of Merapi around Yogyakarta, etc. The news of these events of disaster had been distributed well and fast using various types of mass media. This news had awakened not only Indonesian but also people all around the globe about the needs of knowledge for disaster prevention or efforts to disaster risk reduction, which is also called disaster mitigation (Shibayama *et al.*, 2012). Unfortunately, youth communities are often exempted from the circle of disaster news distribution due to their specific interest and culture.

In this research, youth communities are defined as a group of young people who share common interest or environment in a specific location. Schools or campuses usually become the place for young people to spend most of their daily life and time. There are many types of activities and groups in these particular locations such as extracurricular organization (student government, scouting, etc.) and clubs (sports, arts, cosplay, scientific circle, etc.). Media penetration into young people is commonly dominated through digital or online types, due to their capability to understand and operate sophisticated gadget in this modern era. This phenomenon is in contrary to older people who prefer printed matter and electronic media for their consumption of the news. Generally the interests of youth are having fun and digest “light” news (such as music, movies, etc.) rather than “hard” news (such as politics, economy or even disaster news).

The penetration of media into daily life had significantly changed the behavior and even culture of some people, along with the fast development of electronics and communication means. People tend to be practical and communicate easily with other. This has changed the culture of the world and the globe is shrinking. The news on event of disaster is easily spread out by media, which unconsciously create a culture of emergency. People tend to be afraid to face the reality and sympathy to the victims, which lead them to give a hand to help in any means. Unfortunately, this culture of emergency is usually in a short period and is not followed by development of culture of prevention especially in the mind of young people due to their negative interest for this kind of news. Whereas these young people will live in the next generation, who will probably face the similar disaster event in the future. Therefore, this paper aims to describe the importance of culture on disaster prevention among young people.

LITERATURE REVIEW

Indonesia is blessed by huge population with diverse culture from one place to another. Major population in Indonesia is currently dominated by young people in their productive age. Most of them are still in the school age from primary to secondary or even tertiary/higher education level. Therefore it is not uncommon to witness that victims of a disaster event involve many young people or youth communities in the schools (Muslim *et al.*, 2011).

Shibayama *et al.*, (2006) mentioned that there is a need for appropriate disaster education and training for stakeholders such as school communities, where there is positive correlation between willingness to respond or escape from a particular disaster and knowledge of the disaster event. Future research may help policy makers and benefit the population (all type of stakeholders, including school children & their teachers) living in disaster prone areas by helping to create a more prepared and confidence for schools environment.

Macedo *et al.*, (2015) mentioned that the communication by geoscientists to the authorities and population is a multidisciplinary, complex and dynamic work that



involves a series of activities aimed at the application of scientific knowledge in the processes of human, social, territorial and sectorial development.

Lacking ability of geoscientists to use simple language for common people in communicating the disaster through mass media could lead to misunderstanding or even uninteresting information (Peppoloni and Di Capua, 2012) especially for young people. Eventhough the information is very important to save their life in facing the event of disaster. Journalists, for example, often manipulate disaster information mainly because they do not have sufficient background and culture to understand the geoscience behind the occurrences of geohazard events, but they need also to increase the impact of the news toward their market or communities. Media is rarely focusing itself into this crucial issue.

METHODOLOGY

Polit and Beck (2008) mentioned that the greatest advantage of survey research for disaster issue is its flexibility and broadness of scope. Due to the knowledge limitation of this topic, the authors thought that a survey research would be more appropriate as it would generate a basic understanding of the phenomenon as well as reach a larger proportion of the population. A mixed method of descriptive and exploratory research is carried out in this research. Descriptive & exploratory researches are appropriate when little is known about the topic being investigated.

The methodology in this research consists of observation on geohazards related content of various pop cultures among young people through several media such as animation, movies, music, etc. The object of this research is students at schools or campus circles, commercialized publications, unique brochures, live stage events, where the young people mostly do their daily activities with fun and full of happiness. Data are obtained from direct interviews and questionnaires to youths, starting from elementary to high school and university students as well as their parents in the occasion of youth gathering such as music performance, costume play (cosplay) stage, movies, comic discussion (anime), etc.

RESULT AND DISCUSSION

Result from observation shows that geohazards are generally out of the minds of young people in schools or campuses, suggesting that many students do not aware about disaster phenomenon (Aguilar & Retamal, 2009). They see this kind of information is just like uninterested advertisement.

For the so-called pop culture such as movies, music and comics (anime or cosplay) in live stage or performance are rarely observed geohazards related contents, which minimize the chance to introduce disaster prevention up to certain level. The youth gathering for cultural occasion is rarely seen as a golden chance to educate young people for increasing awareness of geohazards (see Figure 1 and 2). Even in the occasion of live stage or performance, disaster preparedness seems to be forgotten by the event organizer even though involving hundreds of attendance at one time. It includes preparing ambulance, signs of evacuation, fire extinguisher, etc. This preparation is necessary, not only when a natural disaster happens such as earthquake or flood but also man-made disaster such as fire, failure of stage, etc.



The youth perceptions on disaster are commonly related to activities on emergency when disaster happens, such as preparing assistance for the victims, collecting donation, set up emergency kitchen, etc. Majority of the participants in the survey did not even know about simple form of disaster preparedness to face the event such as do not panic, escape or evacuation route, safety area, survival kit, communication tools, etc. This result suggests a feeling among young people of limited preparedness to respond to a disaster event.

Muslim *et al.* (2011) mentioned that based on the discussions with school principal, teachers & students as well as local education section office, it is interesting to note that based on national curriculum, earth science is included in the subject of Geography instead of Geology course in all level of elementary to high school. Even in a region where previous geological disaster had occurred, local content of curriculum for disaster is not developed yet so far. Although most of participants stated they know about disaster events but many stated they have no ideas about kinds of natural disaster in their area or current vicinity. It is possible that the majority of participants answered since they have read newspaper or watch TV about the recent disaster events in Indonesia and elsewhere but unfortunately they don't have idea for their own area.

It is worthy to note that pamphlets adopted from Japanese comic, created and produced in Japan along with the appearance of foreign researcher in the school or classroom seemed to increase psychologically the enthusiastic attention from students and teachers to the disaster topic in each school (See Figure 3 and 4).

CONCLUSION

From the observation above, it can be concluded that the specific interest of using mass media among youth and the lack ability of geoscientist to communicate with media has unconsciously supported the development of emergency culture. Whereas, to increase the disaster preparedness among youth is far more useful to save their life when disaster happens. Therefore the extreme effect in the future would be the development of an emergency culture rather than a culture of prevention to face geohazards among young generations.

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Figure 1. Involvement of pop-culture “Cosplay” to advertise the needs of disaster prevention among youth in an event of Japanese Sakura Festival



Figure 2. Students of senior high school involvement of disaster prevention as part of extracurricular activities in their school



Figure 3. Introduction of disaster prevention activities and geohazard knowledge in early stage among elementary school students in their own premise



Figure 4. Simple performance in the classroom to introduce disaster prevention among elementary school children using drama and costume play