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Research Article

# Perceptions of Youth Religious Understanding of Natural Disaster Resistance and Preparedness

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**Abstract.**
Indonesia is a country with the largest Muslim population in the world. In 2010, according to the Central Bureau of Statistics, Indonesia's population was 237 million, with an average age of 27.2 years. The composition of the population living in villages and cities is quite balanced, but generally they live on the island of Java, which has a population of 57.5%. Of this population, around 32.3 million people live in Central Java, which is known as supermarkets for natural disasters, ranging from earthquakes, fires, tsunamis, floods, landslides, and eruptions. Central Java experiences disasters of land and forest fires every year, extreme weather, drought, infectious diseases, rob, and tornadoes. The paper aims to explore the religious understanding of young people toward natural disaster resilience and preparedness. This study found that religious understanding generally does not affect Muslim youth regarding resilience and preparedness when facing natural disasters. Young people understand disaster risk and utilize technology to regularly monitor disaster situations. However, the attitude of young Muslims regarding resilience and preparedness is relatively worrying. This study provides an empirical basis for efforts to increase disaster-resilient awareness, especially for youth living in Muslim-majority countries.

**Keywords:** perceptions, youth religious, natural disaster resistance

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## 1. Introduction

Indonesia is a country with the largest Muslim population in the world. In 2010, according to the Central Bureau of Statistics, Indonesia's population was 237 million, with an average age of 27.2 years. The composition of the population living in villages and cities is quite balanced, but generally they live on the island of Java, which has a population of 57.5 percent. Of this population, around 32.3 million people live in Central Java, which is known as supermarkets for natural disasters, ranging from earthquakes, fires, tsunamis, floods, landslides and eruptions [1]–[3]. Central Java experiences disasters of

land and forest fires every year, extreme weather, drought, and infectious diseases, rob and tornadoes [4], [5].

The nickname suparmarket for natural disasters demands a shared awareness to be better prepared for disasters. The density of people living in cities in addition to facilitating understanding of disasters, is also the most dangerous when a disaster occurs [6]. Disaster preparedness pocket books to local wisdom books for dealing with disasters were published as an effort to mitigate disasters [7]. From that effort, there are still disasters in 2020 that have reached 1,340 or the most compared to other provinces. Disaster mitigation efforts carried out in general are not yet effective enough to reduce disaster trends.

The existence of a major disaster that has brought losses so far has been measured from a financial and material perspective, but minimal from a social [8], educational and cultural perspective. The religious perspective can be seen as a consideration to understand the post-disaster mitigation and reconstruction process. The Tsunami case study in Aceh made local people believe that the tragedy originated from God, and was not purely a natural disaster [9]. Disaster studies associated with religious thought have developed within a decade. Disaster research conducted in Muslim countries is indeed developing, but it is considered to be not well researched compared to countries with other religions [10]. Therefore, in a predominantly Muslim country, a rigorous research methodology is required, collaborating with practitioners and being able to interpret scientific findings differently in people's lives [11].

In the context of disaster mitigation, Indonesia has been quite successful in providing education to the population. The eruption of Mount Merapi in 2010 created a disaster response movement from young people and grass roots. This group mobilizes resources for disaster mitigation on the basis of social capital [12]. Mobilization is accelerating because it is encouraged by the use of technology, especially for youth. Disasters also create digital volunteers who focus on providing the latest disaster education. Education is provided by collecting data, analyzing, visualizing disaster data, where the data is sometimes shared with formal organizations [13]. Young people have a capable role to play as disaster ambassadors, especially in the use of disaster technology. Moreover, coupled with resources with qualified religious understanding.

This article is to explore young people's religious understanding of resilience and preparedness to face natural disasters. The indicators used are knowledge, attitudes and behavior in facing disasters.

## 2. Literature Review

Disaster is a social phenomenon. When a hazard confuses a vulnerable community, it exceeds the community's ability to cope with it, causing serious damage to safety, health, well-being, property or the environment. Disasters are triggered by natural phenomena or originate from human error [14, Opp. 1–3]. Disasters directly present disruption to people's systems and hinder access to the resources needed for human survival and well-being. Since 2000, more than 2 billion people have been directly affected by disasters [15, Opp. 1–3], [16]. In order to survive and recover from disasters, residents and communities are required to work together to overcome threats, limit their effects and restore their post-disaster functions. Collaboration between the government and the private sector is needed to improve the ability of the community to prepare and respond to and recover from disasters [17, Op. 1]. Post-disaster reconstruction involves workers in the informal sector because they have the resources, network access and flexibility in designing disaster recovery quickly at low cost. This ability is generally in contrast to formal workers who apply complex procedures [18], [19].

In the case of disasters, the state cannot stand alone. Collaboration to mitigate disasters needs to collaborate with groups that master science and technology and groups that understand religious issues [20]. As an example of efforts to increase disaster awareness, standing tall buildings with additional ideas based on local wisdom as a reminder of the tsunami in 2004 [21]. With this symbol, people's resilience is better protected from violent wars, disasters and mass death [22] and they continue their lives again [23]. Increased understanding of disasters continues to be nurtured with support such as printed and non-printed materials which function as disaster education in various places [24]. Supporting tools certainly develop according to the needs of the times. However, it should be noted that disaster risk reduction through education is the best process. Disaster education is not just an interactive process and shared learning, but also uses traditional and local wisdom to protect hazards from nature [25].

Young people who are pursuing higher education should be given knowledge of disaster mitigation materials. Culture and religion influence the way Indonesians recover more quickly when a disaster strikes [26]. In a predominantly Muslim country, especially those studying on a religion-based campus, disaster material is almost non-existent. It's different from adults [27]. Disaster material should be included in Pancasila or civics education, or stand alone. Not all young people understand disaster preparedness. Young

people tend to know disaster information and build website awareness in emergencies and disasters from social media [28]. Despite the tendency to have early information on disasters and be better prepared to face disasters, young people need to be equipped with religious understanding, so that racial sentiment in post-disaster management does not become a serious problem.

This collaboration of technology and religious understanding needs to be seen as a whole from the understanding of young people about natural disaster resilience and preparedness. With disaster education and religious understanding, young people are certainly better prepared and have social resilience to natural disasters. This research is different from other research on disasters. Disaster research efforts generally focus on mitigation and post-disaster recovery. There is nothing specific about the perception of disasters of youth living in Indonesia. Therefore, research that is quite relevant is used as an additional academic reference on disaster mitigation.

## 3. Method

This study involved young Indonesian residents aged 17-25 years, who are pursuing higher education at the University in Semarang City. The survey was conducted on 120 youths. The transcript results were analyzed using qualitative content analysis with a normative approach.

## 4. Results and Discussion

Youth's religious understanding of natural disaster resilience and preparedness is seen first from knowledge of threats. Disaster is a threat that is not clear when and where. The knowledge of young people about coming threats varies. Some are specially prepared for threats, and some do not care about threats. Modern technological devices also appear only capable of warning information about a disaster. At best, technology predicts the threat of disaster and how to anticipate it. Of course, technological information from modern knowledge is needed as initial information.

The next understanding of resilience and alertness is about the attitudes of young people. The emergence of threats to young people is sometimes used as an opportunity. When a natural disaster occurs, not a few young people choose to capture the moment of the disaster rather than trying to save themselves. Through technology, young people

record the seconds of the disaster, then spread it. However, not a few young people prepare everything they need if disaster strikes. When a disaster occurs, this type of young person will save themselves and go to a safe point, then communicate the disaster incident to related parties. The understanding of the attitude of this second type of youth needs to be improved because the average population of Indonesia is 27 years old.

Further disaster-aware understanding of disaster management practices. When the threat of disaster does occur, young people generally head for a safe gathering point. After the disaster was over, they worked together to carry out post-disaster reconstruction. Beyond understanding attitudes and behavior, Indonesian culture still considers disasters to come from God. God's power shows itself in various ways and forms, ranging from retribution for human actions, tests of faith or indeed disasters that God wants (destiny) regardless of human actions [9]. This religious understanding is deeply rooted in Indonesian traditions, including among Muslim youths.

The survey we conducted on 120 respondents from Muslim millennial circles showed results that supported the disaster awareness movement. Young people in the city of Semarang, Central Java who were sampled generally answered that they understood how to anticipate threats. The respondents we selected were 18 years to 25 years old, were Muslim and were currently studying at a religious college. In details, 12 respondents were 18 years old; 42 respondents aged 19 years; 41 respondents aged 20 years; 12 respondents aged 21 years; 4 respondents aged 22 years; 3 respondents aged 23 years and 6 respondents aged 25 years.

From this simple survey, information was found that there are still around 4.2 percent who do not understand where they live there is a potential for disaster. This was also supported by respondents who doubted whether their place of residence had problems with natural disasters or not. Respondents who were in doubt were 31.7 percent. The high number of samples who chose to hesitate could be because they were unaware of the threat of a disaster, or perhaps displayed an attitude of indifference to a disaster coming. Of course, the sample, which reached 35.9 percent, which is a combination of those who do not understand and are doubtful, is an indication of the lack of disaster signs around the house. Respondents who live in urban areas may live in dangerous locations and are potential victims of disasters. Meanwhile, 64.1 percent of respondents who understood the characteristics of urban areas were easily given a disaster awareness understanding. Thus, this is in line with the opinion that a developing

city can be the safest city, as well as the most dangerous city when a disaster arrives [6].

Respondents who understand the map of the area where they live and know the gathering point around their residence when a disaster threat occurs generally understands. As many as 59.1 percent of respondents understood where they had to find a safe point in the event of a disaster. Respondents who were doubtful were 29.2 percent, while those who did not understand were 11.6 percent. The number of young Muslim respondents who do not recognize the safe point of disaster indicates their personality towards the environment. This survey provides information that about 30.8 percent of Muslim youth in urban areas do not care or care about their environment. This is of course a serious problem with many citizens ignoring the potential for disasters. From the two indicators regarding understanding of disasters in youth, this shows an interesting finding. Respondents generally understand the threat of a disaster and a safe point when a threat occurs. However, the number of respondents who are doubtful and do not understand is more than 30 percent. This information is an alarm for the government to increase citizen awareness about the threat of disaster.

Correlation with the previous indicator, the attitude of young Muslims regarding the threat of disaster also shows a high graph. A total of 12.5 respondents stated that they were not responsive if the threat of disaster would strike suddenly. Likewise, 31.7 percent of respondents who expressed doubts about the threat of disaster. The absence of the attitude of Muslim youths to be ready and hesitant to face threats was 44.2 percent. Meanwhile, 55.1 percent were prepared to face disasters. This indicator is also in line with the attitude of young people whether to prepare tools that are ready to be used when a sudden threat occurs. Of the 120 respondents, 12.5 respondents did not have the attitude to prepare for the threat of disaster. Respondents who were in doubt were 45.8 percent. This lack of preparedness and doubt, when added up, reaches 58.3 percent. Meanwhile, 41.7 percent of respondents stated their attitude to be prepared to face threats.

These two indicators of attitude do show different results. However, the response of the attitude of Muslim youth to resilience and disaster preparedness seems appropriate. Muslim youth who did not have an attitude of preparedness for threats reached 44.2 percent and those who did not have an attitude for disaster preparedness reached 58.3 percent. The findings of this information are important so that education and education on disasters are encouraged in measurable ways. The information findings

emphasize the importance of education and research on disaster based on religious beliefs. Indonesia is a country with the largest Muslim population in the world which is vulnerable to natural disasters. However, education and research based on religious beliefs, especially in disaster mitigation, is still minimal [29]. This finding encourages the need for further research that regulates the role of religion in disasters.

Indicators related to disaster behavior show mixed results. Respondents who said they knew what to do when a disaster occurred was 81.6 percent, 15 percent had doubts, and 3.4 percent did not know what to do. Similar to the knowledge indicator, the respondents in this indicator already understand what they will do when a threat arrives.

Another behavioral indicator is when the disaster evacuation process takes place or after a disaster. Of the 120 respondents, there were 0.8 percent of young Muslims who had concerns about having to help evacuate victims of different ethnicities, religions, races and groups. This is also confirmed by 10 percent of respondents who chose to doubt. While those who did not question SARA during the evacuation or post-disaster process were 89.2 percent. This finding indicates that the majority of young Muslims do not care about racial issues when they are involved in helping disaster victims. However, the figure which reaches 10.8 percent is quite high for the size of young people who are currently studying at religious-based tertiary institutions. The finding of this information is a serious message that disaster education must be worked on seriously and in detail, from knowledge, attitudes to behavior.

Table 1: Knowledge, Attitudes and Behavior of Muslim Youth.

| | Don't Understand | | Doubt | | Understand | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (1) | (2) | (1) | (2) |
| Knowledge | 4,2 % | 11,6% | 31,7% | 29,2% | 64,1% | 59,1% |
| Attitude | 12,5% | 12,5% | 31,7% | 45,8% | 55,1% | 45,8% |
| Behavior | 3,4% | 0,8 % | 15% | 10% | 81,6% | 89,2% |

From these findings, disaster education is needed, especially in teaching materials at religious-based tertiary institutions. Education and research are the keys to avoiding the threat of natural disasters. However, the opinion that says that increased religiosity will foster religious organization which in turn presents restrictions also needs attention [30]. Religious education with the issue of increasing religiosity is not aimed at creating a divider among religious residents. In fact, religious education strengthens the sense

of mutual cooperation which encourages people to care for others. With religious education combined with disaster material, the growth of insulated religious understanding will automatically reduce. Muslim youths receive disaster-aware knowledge, attitudes and behavior, as well as moderate religious understanding.

## 5. Conclusion

Based on the explanation above, it can be concluded that the religious understanding of Muslim youths has no effect on knowledge and behavior of natural disaster resilience and preparedness. Young people understand disaster risk and utilize technology to regularly monitor disaster situations. This is in accordance with the results of the indicators of knowledge and behavior, where the understanding of young Muslims reached 64.1 percent and 59.1 percent; and behavioral indicators reached 81.6 percent and 89.2 percent.

However, the attitude of young Muslims regarding resilience and preparedness is relatively worrying. The results of the attitude indicator show that the attitudes of young Muslims who understand and prepare for disasters are only 55.1 percent and 45.8 percent. Meanwhile, the rest were hesitant and did not understand the threat of disaster. This study provides an empirical basis for efforts to increase disaster-resilient awareness, especially for youth living in Muslim-majority countries.

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