

Comparative Study between Domestic and Foreign Tourists Perception: The Influence of Disaster Knowledge towards Intention to Re-Visit Tangkuban Parahu Nature Park

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Abstract: Indonesian government believed in the potential of natural tourist attractions, thus they determined to target the foreign tourist arrivals of 20 million by the end of 2019. However, it is known that behind the extraordinary beauty of nature, there must be disaster risks to be considered. However, cultural differences between the domestic and foreign tourists will affect perceptions of security and disaster. This study aims to compare the disaster knowledge between domestic and foreign tourists as well as to see its effects towards tourists' intention to re-visit the destination. This research was conducted by distributing online questionnaires to 192 domestic tourists as well as offline questionnaires to 44 foreign tourists who have visited Tangkuban Parahu Nature Park. The method used in the research was independent t-test statistical data to process the different perceptions of two sample groups, followed by a multi-regression test to analyze the effect of disaster knowledge variable on intention to re-visit. The results showed a significant difference between the perceptions of domestic and foreign tourists about disaster mitigation and intention to re-visit Tangkuban Parahu Nature Park (t count: 3.691 and sig.: 0.000). The test also showed two contradict results. The results showed that domestic tourists have higher orientation disaster knowledge of destinations, while foreign tourists have a higher knowledge of the action to do when and after the disaster appear in the destination.

1 INTRODUCTION

Tourism is the easiest and cheapest contributor to GDP, foreign exchange earnings and employment (Yahya, 2016). It becomes a leading sector for some countries to improve the nation's economy (Durberry, 2004). In Indonesia, tourism sector ranks 4th or 5th as a producer of foreign exchange. This sector will tend to replace the "non-renewable" product sector at the end of 2019. Currently the Indonesian government was setting a target of 20 million of foreign tourists' and 275 million of domestic tourists' visits (Yahya, 2017).

The target obviously can be achieved only by utilizing the various tourist attractions which are supported by factors such as beauty, authenticity, tourist's activity, social culture, etc. Nevertheless, security is one of the most important motivational factors of tourism (Rittichainuwat et al., 2007). The notion of security means the sense of tranquility, comfort, and safe from all disturbances and vulnerabilities (Moghadam et al., 2014) within the

tourist destinations. The disturbance means either physical or psychological disruption, and in the kinds of natural or social disruption (Bland et al., 1997). Lack of attention to security factors can change the motive of tourists in visiting a destination, outside the factor of new experience, response, and also recognition (Dann, 1981).

For Indonesia, it is not a significance challenge to provide and offer amazing natural tourist destinations that already widespread. Based on data from the Central Bureau of Statistics of Indonesia (BPS, 2017), there are 11 provinces that most visited by foreign tourists, one of them is West Java.

Nature Park (NP) of Mount Tangkuban Parahu is one of nature destinations located in West Java. Tangkuban Parahu has good natural attractions, formed in active craters such as Ratu Crater, Domas Crater and Upas Crater. But of course, the attraction of the active craters is commensurate its natural disasters potential (Ry et al., 2016). The natural disasters that may occur in Tangkuban Parahu requires more attention.

Anticipation and prevention is certainly important to be showed by both managers and tourists. To strengthen the awareness, first of all, of course both managers and tourists should have basic knowledge about disaster. This basic knowledge of disaster is certainly part of the effort to mitigate potential disaster. The basic knowledge of disaster can be divided into 3 critical times that will affect the individual successful action in cope the occurred disaster (Triatmadja, 2010). The first critical time zone is the before the disaster occur, the second is during the disaster, and the last is after the disaster occurs. This basic knowledge is necessary so that every person who is in tourist destinations during a natural disaster can perform a self-saving action so as to minimize the loss or the occurrence of casualties.

Related with the disaster knowledge owned by tourists, countries that often experienced disasters have more qualified disaster knowledge. For example is Japan, this country has instilled disaster awareness knowledge in early on, both in the preschool environment and in the community (Takahashi et al., 2011). Japanese society is familiar with the habit of checking earthquake information every day. Likewise, the most countries in Europe which are their communities very used to utilize the facilities of emergency first responses (IFRCRCS, 2009).

Although the disaster knowledge is very important, in Indonesia, the culture of public disaster awareness is still low (BNPB, 2016). People often ignore the risk aspects of disaster in everyday life, likewise in tourism activities. It makes a clear view of the knowledge of domestic tourists who have no disaster risk sensitivity including disaster mitigation.

Seen from the case above, then the cultural inequality between domestic tourists and foreign tourists is very clearly visible. The implication of the difference for tourism destination is the priority needs between domestic tourists and foreign tourists, in term of managerial sensitivity related to disaster. However, area managers must be able to maintain and meet the needs of every tourist who comes, not one-sided. Especially when viewed that the number of tourists each year has increased. Especially the new target of foreign tourists' visits is 20 million people in 2019 (Yahya, 2017).

Seen from the domiciles of foreign tourists in Tangkuban Parahu, it is dominated by the tourists from Malaysia (12%), then Singapore (11.42%), Australia (11.03%), and Japan (4.13%) (Tangkuban Parahu Report, 2016). The increasing trend of foreign tourists visit proves high interest to travel to Indonesia. It can also be interpreted that they believe

the destinations in Indonesian can provide a sense of security for tourism activities.

The phenomenon of the inequality above is a compelling reason to compare the perception of domestic tourists and foreign tourists towards their knowledge of disaster mitigation related to the motivation in visit tourist destinations of Indonesia. The results will be used in order to give recommendation for disaster mitigation policy. Therefore, researchers interested in conducting research based on the phenomenon with the title "Comparative study between domestic and foreign tourists' perception: The influence of disaster knowledge towards intention to visit Tangkuban Parahu Nature Park".

The purposes of this research was to identify disaster mitigation facility in Tangkuban Parahu natural tourism destination, analyze the disaster knowledge of domestic and foreign tourists in Tangkuban Parahu, and compare the disaster knowledge with the intention to re-visits destination based on perception of domestic and foreign tourists in Tangkuban Parahu.

2 METHODS

The study was conducted at Tangkuban Parahu Nature Park and written using quantitative descriptive method to describing all phenomena that occur in society with systematic, factual and accurate using mathematical model with statistical analysis (Sugiyono, 2011: 8).

The population of the research is all tourists' visit to Tangkuban Parahu Nature Park, including 28,221 of foreign tourists and 1,856,623 of domestic tourists. While the sample was taken using the incidental sampling which determining the sample by chance or coincidentally met the researcher. The closed-ended questionnaire was distributed to 100 respondents of domestic tourists and 44 respondents of foreign tourists during 2016 to 2017. The data were analyzed using an Independent T-Test then was continued with multiple linear regression tests.

3 RESULTS AND DISCUSSION

Tangkuban Parahu Nature Park has an aesthetic value in the form of mountain forest landscape that often looks foggy and has active calderas. The Park has a function to maintain local microclimate.

As a tourist destination, the Park has its own tourist segmentation. Tourists who came are usually aged 18-25 years, because the terrain of the park can be categorized as quite steep and requires high physical strength. Viewed from the origin of the domicile, then the most tourists came from the archipelago, but if seen from abroad, then the majority of tourists came from Malaysia and Netherlands. They visited a lot because have psychological closeness with the Indonesia.

3.1 Disaster Knowledge

With the provided facilities, of course, mitigation activities will run well and smoothly if the tourists also understand the disaster basic knowledge. Disaster knowledge is divided into 3, i.e. knowledge before a disaster, during a disaster, and after a disaster.

The results of the tourists' perception analysis on disaster knowledge before the disaster occurred can be seen in Table 1.

Table 1: Knowledge before the disaster occurs.

| No | Indicator | Scores | | Sig. (2 tailed) | Note | |
|---------|--|-------------------|------------------|-----------------|-----------------|----------------|
| | | Domestic Tourists | Foreign Tourists | | | |
| 1 | Indonesia is prone to natural disasters | 4.02 | 3.11 | | | |
| 2 | This destination is prone to disasters | 3.43 | 3.11 | | | |
| 3 | Characteristics of the disaster that will occur in the destination | 2.85 | 3.34 | | | |
| 4 | Signs of disaster | 3.11 | 3.00 | | | |
| 5 | Information of management related to disaster | 4.31 | 3.77 | | | |
| 6 | Management policies related to disasters | 2.87 | 2.70 | | | |
| Average | | 3.43 | 3.17 | | | |
| T-Test | Scores | | | | Sig. (2 tailed) | Note |
| | Local Tourists | | Foreign Tourists | | | |
| | x | sb | x | sb | | |
| | 3.43 | .583 | 3.17 | .410 | .000 | Sig. Different |

Based on Table 1, domestic tourists have an average score higher than the foreign tourists. The domestics' perception is included in category "high" with the highest point on the indicator of disaster information given by the management. The lower score of foreign tourists' perception happen because they were not

living in the neighborhood, thus they didn't know about the characteristic and potential of disaster in the destination. They're not familiar with that, including the signs when the disaster will occur.

Statistically, the Independent T-Test between two groups, domestic and foreign resulted in significantly different. Scores obtained from the domestics group is on high category, while the score from foreign tourists included in the category of so-so. The orientation of disaster characteristic in Indonesia, of course, is more easily understood by local people, so it is reasonable that the level of knowledge before disaster appears is higher in the group of domestic tourists.

While the results of analysis on the perception of disaster knowledge during the disaster, giving a different perspective. The foreign tourists tend to know better how to cope disaster. The detail about indicators assessed can be seen in Table 2.

Table 2: Knowledge during the disaster.

| No | Indicator | Scores | | Sig. (2 tailed) | Note | |
|---------|--|-------------------|------------------|-----------------|-----------------|----------------|
| | | Domestic Tourists | Foreign Tourists | | | |
| 1 | Well managed attitude in facing disaster | 3.68 | 3.41 | | | |
| 2 | Survival technique facing disaster | 2.65 | 2.86 | | | |
| 3 | Knowledge related to evacuation route in destination. | 2.33 | 2.50 | | | |
| 4 | Knowledge related to meeting point in destination | 2.28 | 2.73 | | | |
| 5 | Know how to contact the destination manager in order to getting help or informing disasters. | 2.47 | 2.59 | | | |
| 6 | The level of trust on mitigation facilities in the destination | 2.70 | 3.23 | | | |
| Average | | 2.69 | 2.89 | | | |
| T-Test | Scores | | | | Sig. (2 tailed) | Note |
| | Local Tourists | | Foreign Tourists | | | |
| | x | sb | x | sb | | |
| | 2.69 | .590 | 2.89 | .612 | .000 | Sig. Different |

As seen in Table 2, the perception of knowledge for both domestics and foreign tourists are lower. However, the score of foreign is higher, almost in

each indicator. They knew better about mitigation process while it's quite unfamiliar for domestic tourists. In Nederland, for example, the community already familiar with survival technique, the terms of evacuation route and meeting point because the government usually did some disaster simulation of wildfire, earthquake, and so on. While in Indonesia, those kinds of things seem new and not knowing by a large amount of community. The score also affected by the notion that foreign tourists will only go to destinations if they already know that the place has a good security and safe. That's why the level of trust of foreigner is higher than the domestic tourists itself.

Statistically, after the independent T test, the data also showed significant differences from both groups. It can be said that the domestic tourists are still lacking knowledge on how to save themselves and calm in facing disaster. The panic response will only make the focus on rescue is more difficult.

Knowledge related to the mitigation facility of both groups gives a low value because of the lack of sign installation on the evacuation route and the assembly point. This should be one of concern to the managers. Although from interview, they said Tangkuban Parahu is a safe destination because always monitored by the information center with the early warning system runs.

The action taken after the disaster occurred also very important to save many lives. The results of analysis on the perception of disaster knowledge after the disaster occurred can be seen in Table 3.

Table 3: Knowledge after the disaster occurred.

| No | Indicator | Scores | | | | |
|---------|---|----------------|------------------|------|-----------------|------|
| | | Local Tourists | Foreign Tourists | | | |
| 1 | Contacting important team of disaster alert | 3.81 | 3.98 | | | |
| 2 | Confidence that the destination will improve mitigation after a disaster occurred | 3.13 | 3.68 | | | |
| Average | | 3.47 | 3.83 | | | |
| T-Test | Scores | | | | Sig. (2 tailed) | Note |
| | Local Tourists | | Foreign Tourists | | | |
| | x | sb | x | sb | | |
| | 3.47 | .738 | 3.83 | .763 | .000 | |

Table 3 shows the level of knowledge of domestic and foreign tourists. In the third critical time, foreign tourists show the higher level of knowledge than the domestics. They both knowing how to contacting the emergency first response, but domestic tourist tend to

not really trust that the destination will make an improvement after the disaster occurred. This kind of knowledge is very important to accelerate the evacuation process.

Statistically, Table 4 also shows the results of Independent T-Test between two groups, domestic and foreign tourists toward the knowledge in coping disaster after it occurred. Group of foreign tourists is more familiar with emergency first response. This service is available in some countries, especially Europe, so the foreign tourists have been accustomed and understand whom the parties to be contacted when the disaster happened. The next indicator also shows that foreign tourists trust the Indonesian government that after a disaster appear, the mitigation will be developed better both structurally and non-structurally. The structural mitigation development that can be applied in Tangkuban Parahu include the construction of the anti-earthquake building, a better crater barrier, evacuation paths to reduce panic. For non-structural form, the management give first direction about the disaster characteristics of Tangkuban Parahu, guidance on self-saving techniques along with explanation of the important numbers that can be contacted if there is an accident or something that is not desirable and fatal in this tourist destination.

3.2 Disaster Knowledge and Interest to Re-visit Destination

A multiple linear regression tests have been done and the statistic shows that the value of R Square is 0.377, which means that the variables of disaster knowledge (before, during, and after disaster) significantly affect the tourist interest by 37.7% with the accuracy of the model of 99.39% (0.60523x100%). Table 4 shows the results of multiple regression tests using SPSS.

Table 4: Multiple regression test results.

| Model | R Square | Std. Error of the Estimate | ANOVA | |
|------------|-----------------------------|----------------------------|--------|-------|
| | | | F | Sig. |
| 1 | 0.377 | 0.60523 | 12.791 | 0.000 |
| Model | Unstandardized Coefficients | | t | Sig. |
| | B | Std. Error | | |
| 1 Constant | 2.014 | 0.304 | 6.631 | 0.000 |
| Before | 0.105 | 0.083 | 1.266 | 0.207 |
| During | 0.127 | 0.068 | 1.852 | 0.065 |
| After | 0.269 | 0.058 | 4.599 | 0.000 |

Table 4 shows the sig. value of ANOVA listed as 0.000 (<0.05), it can be concluded that the variables

of knowledge before, during, and after the occurrence of disasters simultaneously affect the intention to revisit of tourists. Likewise when viewed from the F value (12.791) > F table (2.65) it can be concluded also that all independent variables influence together on the interest of tourists.

However, if viewed partially (one by one variable) from three independent variables, only variable of knowledge after a disaster that significantly affect the intention of tourists to revisiting. The multiple regression equations generated are as follows:

$$Y = 2.014 + 0.104x_1 + 0.127x_2 + 0.269x_3 \quad (1)$$

From the above equation, one unit of the level of knowledge variable (before, during, and after the disaster) will increase the intention to return to visit as much as 2,514 units. The higher the level of disaster knowledge, the more intention of tourists to return visiting the destination.

Although statistically the effect of the disaster knowledge is only 37.7% to influence the intention to revisit, but seen from the results of simple mathematical calculations, the foreign tourist have a high desire to return to visit Tangkuban Parahu (3.93, high) while domestic tourists tends to answers with a moderate level (3.35). The aspect that has a high appraisal is the desire to re-enjoy the natural scenery, the beauty of mountain panorama, the scene of the active craters that are very rare to find.

Based on the test results, it is known that disaster knowledge only affects 37.7% of interest to return to visit Tangkuban Parahu destination, while the rest is influenced by other factors. As for these factors must certainly be tested its validity in future research.

4 CONCLUSION

From three critical times of disaster, domestic and foreign tourists of Tangkuban Parahu show different responses. Domestic tourists have higher score than the foreign tourists for the knowledge before the disaster happened. It happens because foreign tourists were not familiar with the place, while the disaster characteristic is more easily understood by the local. The perception of knowledge during and after the disaster for both domestic and foreign tourists are lower. However, the score of foreign is higher. They knew better about mitigation process while it's quite unfamiliar for domestic tourists.

Statistically, disaster knowledge consisting of knowledge before, during, and after the disaster has a simultaneous influence on the level of desire to return

to the destination positively. The higher the level of knowledge, the higher the interest to return to visit Tangkuban Parahu.

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