PAST DISASTER EXPERIENCE AS A TRAVEL BARRIER: A QUALITATIVE STUDY

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Abstract- This study has explored the impact of past disaster experience as a part of internal information sources on traveller's risk perceptions from the domestic tourist perspective in a natural disaster context. Using a semi-structured interview of 33 Indonesian domestic travellers, this study found four major themes of natural disaster experience types and 19 sub themes of disaster experience that formed traveller's risk perceptions.

Keywords- past disaster experience, travel intentions, qualitative, travel risk perceptions

I. INTRODUCTION

Past experience is an pivotal factor that likely to change tourist's perceptions and feeling about destination during decision making process (Mayo & Jarvis, 1981; Seddighi & Theocharous, 2002; Tasci & Gartner, 2007). Their role as an internal information process, is important as tourist are expected to use it as an an internal source of information prior to preparing for a vacation (Decrop, 2006; Fodness & Murray, 1999) . Conchar et al. (2004, p. 429) concluded that "internal information includes scanning information that is stored in memory about risk learning and previous experience with risk that pertains to the current situation". This means that the learning process and past or personal experiences influence risk perceptions (Moutinho, 2000). Therefore, past or personal experience influences pre-decision making (Woodside & Lysonski, 1989) and predicts future decision making (Mazursky, 1989).

The relationship between past experience and risk perception was investigated by researchers including Conchar et al. (2004), Moutinho, (1987: 2000), and Slovic (1987), who found that the role of past experience functions as an internal source of information that assists in the process of risk perception information. Boo and Gu (2010), Creyer (2003), and Lepp and Gibson (2003) found that the more experience an individual has, the less risk they will perceive when visiting a particular destination.

Some scholars have highlighted the importance of experience in forming risk perception. As Cunningham (1967) noted, "true or actual probabilities of loss are not relevant to the consumer's reaction to risk except insofar as past experience is the basis for present perception. The consumer can only react to the amount of risk she actually perceived, and only to her subjective interpretation of that risk" (p. 84). Clearly, past experience is a fundamental element in shaping risk perceptions, which in turn has an impact on future decision-making, yet there is no clear definition of past experience that include: past visit; experience in travelling; personal experience; or personal disaster experience which dominated by international travel research. However, limited discussion exists on disaster experiences in tourism studies, and on whether crises and disasters negatively impact on tourists particularly if the tourists have been a victim of a disaster themselves (the loss of family members; SARS infection; experienced a natural disaster). This paper reports the qualitative study of 33 respondents with wide range of natural disaster experiences that impact on their travel risk perceptions.

II. LITERATURE REVIEW

The literature investigates how crises or disasters that happen elsewhere shape risk perceptions, but not how actual experience of the risks shapes the future risk perception of tourists who experience them (Sonmez & Graefe, (1998a); Lepp & Gibson, (2003). In the case of crises and disasters, scholars have pointed out that the role of actual risk that individuals experience might determine how the level of perceived risk is seen in the future (Slovic, 1987; Sönmez & Graefe, 1998a) . As Richardson, Sorensen, and Soderstrom's (1987) study of mega-damage crises showed (e.g., nuclear power plant accidents), the experience of disasters is crucial in forming people's risk perceptions.

Park and Reisinger (2008) highlighted the need for future studies to measure risk perceptions based on recent personal experiences of a specific natural disaster. It is not clear if the effects of tourist experiences of natural disasters at a destination may create a negative image and negative long-term memories about that specific destination (Obasi & Frangialli, 1998, in Lehto et al., 2008). Research has also shown that during the crises or disasters, less experienced tourists are much more prone to becoming exposed to risk. As Rittichainuwat and Chakraborty (2009) noted, the activities of less experienced tourists are much more frequent than

those of experienced tourists, as less experienced tourists prefer to visit more attractions. Therefore, the probability that less experienced tourists will be affected by crises (e.g., SARS) is higher than that of experienced or repeat tourists who are more involved in shopping, dining, and being with family and friends than visiting attractions (Rittichainuwat & Chakraborty, 2009).

In addition, the literature suggests that natural disasters may result in post-traumatic stress disorder, panic, and depression for survivors who have experienced the disaster (Freedy, Saladin, Kilpatrick, Resnick, & Saunders, 1994; Kun et al., 2009; Udwin, Boyle, Yule, Bolton, & O'Ryan, 2000). The measurement of the disaster experience does not only apply to the actual natural disaster victims, but also to those who have also witnessed the actual disaster. For example, Weidmann, Fehn, & Fydrich (2008) found that journalists experienced post-traumatic stress syndrome and depression symptoms after they travelled to several countries that were affected by the 2004 Southeast Asian tsunami. Sonmez and Graefe (1998b) postulated that "experiencing or witnessing a terrorist attack just once, for example, is likely to colour future behaviour, regardless of the extent of past experience" (p 128).

However, how personal experiences of crises or disasters should be measured is still unclear (Barnett & Breakwell, 2001). Greening et al. (1996) presented a wide range of disaster experience effects on the measurement of risk perceptions. In their study, Greening et al. measured the "Personal disaster experience" which ranged from being a witness, to experiencing personal and family injuries, to personal financial damages. They used a 36-item questionnaire that covered three types of natural disasters in order to determine whether the respondents experienced events ranging from hearing about a disaster to witnessing a weather-related fatality. Greening et al. (1996) studied a group of adolescents who had witnessed disasters ranging from floods to tornado deaths, and maintained that disaster experience strongly predicts the risk perceptions of disasters. They explained that the rationale for their study was that personal disaster experience is created by one's own imagination and memories. Furthermore, they emphasised that witnessing the event was more memorable than simply hearing about the fatality.

Studies by Ho et al. (2008) pointed out that different types of natural disasters influence the risk perceptions of natural disaster victims and of the public. Their study was different from Park and Reisinger's (2008), who measured the influence of different types of natural disasters on risk perceptions of a group of non-disaster experienced individuals. The risks were from earthquakes, floods, landslides, fire, environmental pollution, and contagious diseases. Ho et al., (2008) found that the groups with different disaster experiences rate risk differently from the public group. Their study confirmed that groups with disaster experience perceive natural hazards as the most risky events, while the public group rate anthropogenic risk as the most risky event (fire, environmental pollution, and contagious diseases). Nevertheless, earthquakes received the highest rating among other types of natural disaster risks.

III. METHODOLOGY

Using the domestic tourist market, this study applied a qualitative approach by conducting semi-structured interviews. 33 eligible participants were selected from a combination of purposive and snowball sampling techniques. Participants were recruited from two different provinces of Indonesia, consisting of Greater Jakarta and Pekanbaru. A pilot test was conducted initially to test the interview protocol, while the interview was between 20-40 minutes. In terms of research sites, this study selected West Sumatra, Indonesia, as it is considered one of the highest tsunami risks in the world (Tucker, 2013) and also ranked as one of the top ten domestic tourist destinations. This destination also has a record of a massive earthquake, which killed more than 1195 people in 2009 (Central Bank of Indonesia for West Sumatra, 2010).

IV. RESULTS AND DISCUSSION

Thematic analysis is used to identify the type of disaster experienced by respondents. There are four types of natural disaster experienced by travellers: earthquake, flood, landslide and tsunami, where earthquake is the type of disaster mostly experienced by respondents. Two respondents had experienced a tsunami, three respondents had experienced a landslide, and two respondents had experienced a flood. The extent of respondents' disaster experience ranged from light to heavy (see Table 1.1). A "light" disaster experience included witnessing a disaster, while a "heavy" disaster experience included being present during the disaster and losing loved ones in the disaster. The level of disaster experience could then influence perceived physical, psychological, and financial risks of disasters.

Table 1.1 Disaster Experience Types and Measurement

Type of Disaster	Disaster Experience
Earthquake	Experience an earthquake <5 magnitude on scale
"During the event"	Experience the panic situation of earthquake
	Experience an earthquake between 5<x<8.5 magnitude on scale
"Post	Family member /friend died in the

event"	earthquake Relative /friend injured in the earthquake Relative /friend experienced the earthquake 5<x<8.5 magnitude on scale Seeing corpses, destruction of the city, victims' cries, get involved with family victim's sadness
Flood	Experienced the flood Some damage to property Witnessing the flood from television or pictures on social network
Landslide	Witnessing the landslide, 2 days trapped in the landslide, experiencing logistic (basic food), communication, encountering difficulty during the disaster, Witnessing people buried in the avalanche
Tsunami	Witnessing the tsunami Separated from family during the tsunami Property damaged Sunk in the Aceh tsunami wave for 30 minutes, but survived 5 family members passed away in the Aceh tsunami
"Post event"	Property lost /house heavily damaged. Evacuated in the tent Seeing corpses/bodies, experienced difficulty in communication, clean water, electricity, logistic, accommodation.

These disaster experiences found to impact their travel plan to destination that prone to natural disasters. The Aceh tsunami was identified as the main factor that contributed to almost all of the respondents' risk perceptions."Since the first time I saw tsunami in Aceh, I feel scared to visit Padang" (JK-01, 33, Jakarta, previous visitor, disaster experience).
The experience in earthquake also lead respondent's trauma. PK-23, a previous visitor from Pekanbaru, expressed his anxiety:

It's a 50/50 chance for me on whether to visit West Sumatra because last year I heard the earthquake was almost 8 on the Richter scale. I was there when it happened, so I am traumatized when I hear about earthquakes.

Similarly, landslide experienced create travel risk perception of respondent. One of respondent said "A few months ago I had to cancel my trip to West Sumatra. The main reason in cancelling the trip is because some road connections from one city to another are prone to landslide"(PK-15, Pekanbaru, 22, previous visitor, disaster experience). Interestingly, post event had created another negative impact of disaster experience in travel risk perception, such as the spread of disease. PK-14 (34 years, from Pekanbaru, previous visitor) was affected by the Aceh tsunami.

Despite my experience with the Aceh tsunami.. I leave everything to God's hand. Whenever I travel, I am much more concerned with the health effect of post-disaster like the spread of disease. Like what happened in Aceh last time, corpses were everywhere.. a team who sprayed disinfectant all around the area in anticipating decompose corpses.
This study revealed that past disaster experiences have an influence over a tourist travel risks. Exploring a range of disaster experiences from travellers, has demonstrated that travellers are concern with some risks that can be a barrier for their travel plan. Therefore, this study is one of the first that contributes the exploration of past disaster experience impact's on travel risk and travel intentions, in a natural disaster context. Future studies are recommended to assess the influence of past disaster experience on travel risks in a larger population using quantitative method.

ACKNOWLEDGMENTS

This paper is a part of author's Ph.D thesis. The author would like to thanks to Dr Lee Slaughter and Assc/Prof Brent W.Ritchie who acted as her supervisors. Research was funded by DIKTI scholarship and partially funded by UQI Award, The University of Queensland, Australia.

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