

The impact of risk perception on the motivation to visit an active volcano

– The case of volcano Villarrica in Chile

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Though a visit to a volcano involves hazard risks, such as possible eruptions, lava flows, landslides and acid rain, (Sagala, Rosyidie, Pratama, Wimbardana, & Wijayanti, 2012; Heggie, 2009; Pan, Shi, Ye, Xu, & Wang, 2015) people seek for an experience of this natural phenomenon. One example is the ice-coated and active volcano *Villarrica* in Chile, which is climbed by thousands of inhabitants, domestic and international tourists each year, although it is known to be dangerous (Erfurt-Cooper & Cooper, 2010).

Whereas, the majority of research on volcanic tourism focuses on popular volcano destinations, such as Iceland, Indonesia and the US (Bird, Gisladottir, & Dominey-Howes, 2010; Benediktsson, Lund, & Huijbens, 2011; Sagala et al., 2012; Perry & Lindell, 2008), only little information is known about volcanic tourism in South America, although the hazard risks and expected fatality rate due to volcanic eruptions is very high in Chile for instance (Pan, Shi, Ye, Xu, & Wang, 2015). Especially, the recent eruption of volcano Villarrica is an important reason to research the effect of hazard risks of volcanoes on tourist motivation (Franklin, 2015).

To understand the motivation of tourists to visit the active volcano of Villarrica, despite potential risks, it can be looked at research from similar volcanoes in terms of tourism motivation. While some academics argue that the potential motivation factors for visiting a volcano are among others: sightseeing, leisure, outdoor activities, curiosity, scientific interest, educational purpose and the collection of volcanic rocks (Erfurt-Cooper & Cooper, 2010; Sagala et al., 2012; Davis, et al., 2013), other researchers claim that the motivation of volcano visitors has a deeper meaning (Noy, 2004; Davis et al., 2013; Dixon, Hawkins, & Straughan, 2012). In their view, tourists want to extend their own capabilities and seek for sensation, challenges and inspiration, when visiting an active volcano. Also religious beliefs are a motivational factor for tourists (Dove, 2008; Davis et al., 2013) as well as the aim to become more patient, tolerant and mature in everyday life (Noy, 2004).

A further intention for tourists to visit a volcano is to witness a post-eruption site. Thereby, the level of motivation increases with the fatality rate and stage of destruction (Sagala et al., 2012). Due to this motivation, volcanic tourism is often associated with dark tourism (Erfurt-Cooper & Cooper, 2010; Weber, 2001). Moreover, the possible participation of an eruption motivates tourists to visit a volcano and enriches their travel experience at the destination (Benediktsson et al., 2011). According to Davis et al. (2013, p. 86), "An attraction must be risky enough to appear exciting [...]". Nonetheless, the fascination of a natural attraction only lasts as long as the tourist

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is actually safe, otherwise visitor numbers can decrease immediately (Bird et al., 2010). Therefore, it goes without saying that it is important to enable tourists to feel safe, even though dangers are present. A possible method is to educate tourists about the potential risks and advise how to react, when approaching an active volcano, since accidents have been reported as a consequence of disregarding warnings (Hansell, Horwell, & Oppenheimer, 2006; Bird et al., 2010).

Several studies have dealt with the risk perception and hazard knowledge of local communities, who live near an active volcano (Johnston, Bebbington, Lai, Houghton, & Paton, 1999; Chester, Duncan, & Dibbe, 2008; Perry & Lindell, 2008). Many locals show religious faith during an eruption (Chester et al., 2008) and threat awareness can be related to the degree of past damage and importance of the hazard. Hence, personal experience of a natural hazard, such as a volcanic eruption, increases the perception of risk (Johnston et al., 1999; Wachinger, Renn, Begg, & Kuhlicke, 2013). But also personal factors, such as media reporting, gender, age and imagination of the effects of an eruption can influence the level of risk perception (Wachinger et al., 2013). Though, the risk perception of local communities concerning natural hazards has been researched, little is known about the risk perception of tourists and the possible fears that hinder additional tourists from visiting an active volcano (Bendiktsson et al., 2011; Lepp & Gibson, 2011).

Another aspect scholars have focused on is risk as a motivation factor to travel. According to Maslow (1943) safety is the basic need of human beings and many scholars support this view by stating that tourists try to avoid risky destinations (Wachinger 2011; Yang 2014). Other researchers see a risky destination as a special pull factor for tourism motivations (Bendiktsson, 2010; Weber, 2001). A recent volcanic eruption can be a threat for tourism, as the case of Iceland shows that many international tourists feared to travel to Iceland and the volcano scenery, due to the latest Eyjafjallajökull eruption (Bendiktsson, 2010). On the other hand, it can be seen as an opportunity, since risk taking is a crucial factor for the level of satisfaction with an experience as well as the motivation to be part of an adventurous activity (Weber, 2001). Thus, tourists may be inspired by an eruption and are encouraged to be part of a deeper experience (Bendiktsson, 2010) and perceive risky countries even more exciting than safe ones (Lepp & Gibson, 2011).

Due to the fact, that volcanic tourism is still a new concept within tourism, and researchers have only focused on this subject in recent years, results are based on the studies of a small number of scholars and destinations only. Hence, comparable studies should be undertaken to approve or criticize present studies. Besides that, most publications deal with the risk hazards of visiting volcanoes (Noy, 2004; Sagala et al., 2012; Heggie, 2009; Hansell et al., 2006), but only a few

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studies investigate on the volcano tourists' characteristics, their risk perception before experiencing a volcano and how this perception influences their motivation to approach an active volcano (Davis et al., 2013; Bird et al., 2010; Johnston et al., 1999). Therefore, future inquiries should focus on how tourists prepare for a visit to an active volcano and if education programs can have an influence on their risk perception.

Especially due its frequent eruptions every two to three years and its proximity to the touristic towns Pucon and Villarrica, more attention should be paid to volcano Villarrica in Chile, rather than volcanos in remote areas that erupt less often, such as Eyjafjallajökull in Iceland (Bird & Guorun, 2014; Dzierma & Wehrmann, 2010). Since there is a lack in research about the relation between the frequency of eruptions and the risk perception of tourists, investigations on Villarrica can be an essential contribution to fill this gap.

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**The impact of risk perception on the motivation to visit an active volcano
– The case of volcano Villarrica in Chile**

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