Understanding Visitor Perspectives on Volcano Tourism at Mount Pinatubo, Philippines: A Mixed Methods Study

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<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of variance</td>
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<tr>
<td>AUTEC</td>
<td>Auckland University of Technology Ethics Committee</td>
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<tr>
<td>Brgy</td>
<td>Barangay</td>
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<tr>
<td>CAQDAS</td>
<td>Computer-assisted qualitative data analysis software</td>
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<tr>
<td>DENR</td>
<td>Department of Environment and Natural Resources</td>
</tr>
<tr>
<td>KMO</td>
<td>Kaiser-Meyer-Olkin</td>
</tr>
<tr>
<td>NCR</td>
<td>National Capital Region</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
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<tr>
<td>PCA</td>
<td>Principal Components Analysis</td>
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<tr>
<td>PHIVOLCS</td>
<td>Philippine Institute of Volcanology and Seismology</td>
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<tr>
<td>PIS</td>
<td>Participant Information Sheet</td>
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<td>SDT</td>
<td>Self-Determination Theory</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<tr>
<td>SPT</td>
<td>Social Psychological Theory</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>UNWTO</td>
<td>United Nations World Tourism Organization</td>
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<td>US</td>
<td>United States</td>
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<td>USGS</td>
<td>United States Geological Survey</td>
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ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Richard Aquino

Signed: [Signature]

February 2015
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ABSTRACT

Despite the risks involved, travel to undertake leisure activities on active volcanoes is a growing form of special interest tourism. Some argue that this is due to the increased accessibility of these landforms and the popularisation of global volcanic activities through traditional and social media. In addition to the attraction of tourists to volcano tourism, tourism researchers have also increasingly focused their attention on this phenomenon. However, there is a lack of research on understanding volcano tourists including their motivations, experience expectations, and actual experiences. By researching visitors to Mount Pinatubo, an active volcano in the northern Philippines, the primary aim of this study is to gain insight into these issues.

A multiphase mixed methods research design with concurrent/parallel phases was adopted for this study. The first phase (QUAN/qual) was a pre-tour survey of visitor motivations and expectations of volcano tourism experiences. A survey with 26 five-point Likert-type scale items based on a push-pull motivation framework, embedded with open-ended qualitative questions was developed. This was administered to a quota sample of visitors on-site at Mount Pinatubo, prior to them undertaking a volcano tour.

Statistical analysis of 204 valid survey responses reveals four push motives, namely, escape and relaxation, novelty-seeking, socialisation, and volcano knowledge-seeking; and two pull motives, namely, dark and activities-induced, and volcanic and natural attribute-driven motives. Novelty-seeking is found as the core motivation factor for visiting the volcanic site. Statistical testing also reveals differences in terms of gender, prior experience of volcanic sites, and visitor types. Females were discovered to have higher motives to learn about volcanoes. Visitors who have visited other volcanoes prior to their Mount Pinatubo tour report higher attraction to the volcanic and natural features compared to first-time volcano tourists. Domestic visitors are more likely to escape and relax compared to international visitors, while international visitors are more likely to seek unique experiences compared to their domestic counterparts. A qualitative content analysis of the reported experience expectations reveals that visitors anticipate fun and hedonic experiences prior to the tour.

The second phase (QUAL) entails post-tour semi-structured qualitative interviews to explore the actual volcano tourism experiences of the visitors. Those who had a recent experience of the tour were purposely selected to participate in the interviews. A
thematic analysis of the 12 interviews show varied perceptions, emotions, and views on the experience. A conceptual framework was developed based on interactional theory, which suggests these experiences are found to be influenced by Mount Pinatubo’s natural, recreational, and socio-cultural dimensions.

Thereafter, findings from the two phases of the study were analysed together to draw inferences based on convergence and divergence of findings. Convergences across findings were found except in the educational aspect of the tour which is absent on the post-tour narratives of the interviewees. Likewise, findings reveal that the pre-tour hedonic expectations are more likely to be exceeded by the spiritual and transformative outcomes of the experience. The implications of this study may aid tourism administrators in marketing and managing the volcanic site. Finally, practical recommendations for management and suggestions for future research are provided.

Keywords: push-pull motivations, expectations, volcano tourism experience, Mount Pinatubo, Philippines, mixed methods
Chapter 1  INTRODUCTION

Volcanoes are unique geological formations that, for some locations, have aesthetic, cultural, and economic value. Travel to view these landforms has long existed. This study is focused on understanding the consumption of volcanoes as tourism resources.

Employing a tourist-centred approach provides a deeper understanding of the demand side within the context of volcano tourism. This introductory chapter provides a background of volcano tourism, contextualises the research, presents the statement of the problem as well as the purpose of the study, and outlines the study’s significance. This chapter concludes by providing an overview of the remaining parts of this thesis.

1.1  Background to the study

Each year, the world experiences natural disasters. Among all these, volcanic eruptions are considered to be one of the most dangerous for “they are unpredictable, sudden, and often catastrophic” (Grattan & Torrence, 2007, p. 4). The negative impacts they bring to communities include physical, economic, social, cultural, and a range of environmental consequences affecting climate and ecology (Dalsgaard et al., 2007; Grattan & Torrence, 2007; Zielinski, 2002; Zuccaro, Leone, Del Cogliano, & Sgroi, 2013).

In times of natural calamities, tourism is one of the most vulnerable industries. This was evident in Iceland during the eruption of Eyjafjallajökull in 2010. Ash clouds covered much of Europe which resulted in disrupted international flights, human inconvenience and economic losses to industries (e.g. airlines). Conversely, the images of this disaster placed Iceland on the international tourist map. Tours were organised for tourists to view the eruption from a safe location and witnesses reported that they were ‘inspired’ by the volcanic activity (Benediktsson, Lund, & Huijbens, 2010; Karlsdóttir, 2013).

In reference to the Icelandic case, it is implied that despite being potentially dangerous, active volcanic landforms and volcanic activities are popular tourist attractions (Erfurt-Cooper, 2010a; Sigurdsson & Lopes-Gautier, 2000). At the time of writing, there are about 1,300 active volcanoes documented worldwide varying in terms of geographical location and geological features (Erfurt-Cooper, 2011). These attributes together with each destination’s geological heritage contribute to the uniqueness of each volcano. Thus, a variety of recreational and leisure activities are found in different volcanic destinations today.
There is no existing record on the total number of annual visitors to active volcanoes worldwide. In some of the most notable volcanic attractions, recent figures reflect the existing demand for tourism to these environments. In the US, there were 3,447,729 visitors to Yellowstone National Park; 1,483,928 visitors to Hawaii Volcanoes National Park; and 1,049,178 visitors to Mount Rainier National Park for the year 2012 alone (National Park Service, 2014a, 2014b, 2014c). In New Zealand, the Department of Conservation (2014) reported 114,000 international visitors to Tongariro National Park in 2012, while for the whole country, there were about 460,816 visitors to volcanic and geothermal attractions in the same year (Tourism New Zealand, 2013).

Erfurt-Cooper (2010) proposes volcano tourism as a category of geotourism; the tourism of geology and landscape (Dowling & Newsome, 2006). Furthermore, Robinson and Novelli (2005) characterise geotourism as a form of special interest tourism under the environmental category. Referring to these concepts, volcano tourism can be considered as a micro-niche tourism component under the wider umbrella of nature-based tourism. It is important to recognise that a special interest product like volcano tourism is a distinct selling point for destinations with multiple attractions and an important product for destinations with a single attraction (McKercher & Chan, 2005). However, the argument in volcano tourism as a specialised form of tourism is whether this phenomenon is product and activity-induced, or consumer-induced (Perkins & Grace, 2009; Robinson & Novelli, 2005). Thus, the drivers of volcano tourism as a phenomenon can be summarised in two dimensions.

First in supply development, Erfurt-Cooper (2014a) asserts that the increase in number of visitors to volcanoes is in part due to the increase of volcanic activities worldwide and the popularisation of these events in traditional and social media. Moreover, the improved accessibility of these places through low-cost flights and better physical infrastructures contributed to the boost of tourist influx to volcanic sites (Erfurt-Cooper, 2011, 2014a).

Volcano tourism is a multi-faceted special interest form of tourism, as well. It overlaps with other forms of tourism such as adventure tourism, health and wellness, and other nature-based recreation which makes it more attractive (Erfurt-Cooper & Cooper, 2010). The establishment of volcanoes as national parks at the national level, such as those mentioned previously, and as geoparks at the regional and global level (e.g. Katla Geopark, Iceland) has also contributed to the interest in volcanic environments (Erfurt-
Cooper & Cooper, 2010). These initiatives promote the protection, conservation and sustainable development of these sites, as well as geological hazard awareness through tourism (UNESCO, 1999, April 15)

Secondly, on the demand-side perspective, it is claimed that the changing demands of tourists has led to the diversification of tourism products in general. Nowadays, tourists’ perceptions of high quality trips are those that are extraordinary, adventurous, and sustainable. This concept of new tourists alongside the development of special interest products is viewed as a response to the negative effects of mass tourism (Robinson & Novelli, 2005). Also known as the Fordist production in tourism, this entails a large-scale packaging of trips, such as the usual ‘sun, sea and sand’ holidays that offer generic types of activities that limit the options for tourists (Sharpley, 2006).

Given this, it is important to note that travel motivations and the individual pursuit of authentic travel experiences are important predictors in choosing special interest holidays (Cooper & Hall, 2013; Robinson & Novelli, 2005). Thus, McKercher and Chan (2005) claim that special interest tourism studies should focus more on travel motivations. Likewise, Sheng and Chen (2013) suggest that the visitor expectations of the various forms of special interest tourism should be investigated. Moreover, analysing actual tourism experiences are equally important to explore, as satisfaction levels in destinations are determined by these outcomes. Therefore, this study integrates visitor motivations, experience expectations, and actual experiences to perform a deeper understanding of consumer perspectives on volcano tourism at Mount Pinatubo in the Philippines.

1.2 Volcano tourism in the Philippines

The Philippines is an archipelago of 1,700 islands located in Southeast Asia. The country is divided into three main groups of islands, namely: Luzon (northern), Visayas (central) and Mindanao (southern). Geologically, the archipelago belongs to the Pacific Ring of Fire, a region of interconnected volcanic arcs running southwest to northwest from New Zealand through Indonesia, the Philippines, and Japan (see Figure 1.1) (Allaby, 2013; Edelmann, 2010; Erfurt-Cooper & Cooper, 2010; Lockwood & Hazlett, 2010). This setting makes the Philippines a country having one of the most active volcanic and geothermal environments. Moreover, earthquakes, volcanic eruptions, and other geological activities are apparent in the country caused by its active subduction
zones, namely, the Manila Trench, the Negros Trench, and the Philippine Trench (Edelmann, 2010).

![Map showing the location of the Philippines and Mount Pinatubo in the Pacific Ring of Fire. Source: USGS (1999)](image)

**Figure 1.1** Map showing the location of the Philippines and Mount Pinatubo in the Pacific Ring of Fire. *Source: USGS (1999)*

At present, there are 23 active volcanoes, 26 potentially active volcanoes (dormant), and 358 inactive volcanoes (extinct) according to the listing and classification of the Philippine Institute of Volcanology and Seismology (PHIVOLCS); this is the government agency responsible for predicting volcano eruptions and formulating disaster-response strategies in the Philippines. Based on the PHIVOLCS (2008a) classification, active volcanoes have documented eruptions in the past 600 years. Potentially active ones have no records of recent eruptions but have young-looking morphology. Inactive volcanoes have no evidence of recent eruptions and are highly eroded and weathered. In 2013, the agency reported a major volcanic activity involving Mayon Volcano in the Albay Province. The volcano erupted unexpectedly while tourism operations on-site were carrying on. Five were declared dead including four foreign tourists and one local tour guide, and seven were reported hurt (Bacani, 2013, May 7).
Tourism is one of the top economic priorities of the Philippine government as observed in the ratification of the Tourism Act of 2009 which declares a national plan for tourism as a main economic driver. A key step that has been performed since then was the launching of the new tourism campaign *It’s more fun in the Philippines* in 2011 (Porter, 2013). In effect, significant growth in tourist arrivals is generated. From 2011 to 2013, the annual growth rate reached 9.31%, with 4.48 million tourists arriving to the country. In 2012, the estimated visitor receipts amounted to US$ 3.8 million according to the Department of Tourism (Department of Tourism, 2013, 2014a).

Aside from beaches, water activities, lifestyle and culture, nature-based tourism is one of the Philippines’ major tourism product categories. The natural attractions are called ‘ecotourism’ products in general, and these sites are being developed, usually through the community, with the help of the Department of Environment and Natural Resources (DENR) as part of the National Ecotourism Strategy (Department of Tourism, 2009). Furthermore, ecotourism is linked to adventure tourism in the tourism agency’s recent campaign.

In the Philippine setting, volcanic attractions are considered ecotourism products. Thus, the term ‘volcano tourism’ is not being utilised or regarded as an independent category for product development (Edelmann, 2010). Volcanic attractions are classified into two: “popular and easily accessible volcanoes” and “volcanoes for the more adventurous” (Edelmann, 2010, p.189). Mount Pinatubo, the research area, is categorised as popular and easily accessible; this categorisation is mainly based on visitor motivation and attitudes.

Together with Mount Pinatubo, the two other most famous volcanic attractions in the Philippines include the Taal Volcano and Mayon Volcano. These three are known to be some of the world’s most prominent volcanoes included in the lists of Lockwood and Hazlett (2010), and Erfurt-Cooper (2010c). Specific tourist activities at these sites vary depending on the geography and volcanic features. Some of these activities comprise tramping, viewing volcanic activities such as lava flows and geothermal vents, collecting volcanic rocks, bathing in hot springs, and photography, to cite a few (Edelmann, 2010).
1.3 Volcano tourism at Mount Pinatubo

1.3.1 Overview of the eruptions and socio-economic impacts

Mount Pinatubo is located at the boundaries of the provinces of Tarlac, Pampanga, and Zambales in the Central Luzon region of the Philippines (see Figure 1.2). This strato-volcano has an elevation of 1,445 metres above sea level and its major and most devastating eruption occurred on 12 June 1991 (PHIVOLCS, 2008b). This eruption is considered as the second-largest of the 20th century (Newhall, Hendley II, & Stauffer, 1997). This eruption unfortunately coincided with a typhoon (Wolfe & Hoblitt, 1996); significant damage to towns and villages resulted due to lahar, pyroclastic debris flow, and ash fall (Gaillard, 2008).

![Figure 1.2 Map showing the geographical location of Mount Pinatubo and the extent of the physical impacts of the 1991 eruption. Adapted from Gaillard (2008). Reprinted with permission](image)

Substantial socio-economic consequences were also generated by Mount Pinatubo’s eruption. The country suffered almost USD 1 billion worth of economic losses from
damaged properties, infrastructure, businesses, crops, and natural resources. In addition, negative human effects included 329,000 affected families, and approximately 320 direct and 500 indirect casualties (Mercado, Lacsamana, & Pineda, 1996; Rehkopf, 2003).

Amongst the people affected are the Aeta; the indigenous people who live on the slopes of Mount Pinatubo. They are hunters and gatherers, and are recognised as one of the pioneer ethnic minorities in the Philippines. The Aeta people believe that Mount Pinatubo is the dwelling place of their God, ‘Apo Namalyari’, and some other spirits. During the eruption, the majority of them refused to evacuate for they believed that the ‘Supreme Being’ would protect them (Tayag, Insauriga, Ringor, & Belo, 1996; Zeppel, 2006).

1.3.2 Post-eruption tourism development at the study site

After the major eruption, lahar flows have consistently threatened the provinces in the region especially during the typhoon seasons. It took years to rebuild after the devastation and to restore the economy. Tourism was not an immediate option as an economic regeneration tool until the year 2000 (Department of Tourism, 2004).

During this period, increasing numbers of both domestic and international visitors were reported at the research site: Brgy1 Sta. Juliana in the Municipality of Capas, Tarlac Province. This less-developed and poverty-stricken community serves as the ‘jump-off” point for visitors going up to the crater-lake, which is Mount Pinatubo’s main attraction, and which was formed after the eruption (see Figure 1.3). This activity urged the villagers to establish the Sta. Juliana Tourism Council, Inc., that later launched the Kabuhayan sa Turismo (Livelihood in Tourism) project. Its first programme was the Mount Pinatubo Millennium Trek which generated 150 supporters and raised PHP 100,000 (equivalent to USD 3,300 that year) as initial funds (Department of Tourism, 2004). This community-based initiative also acts as a source of income to enhance the socio-economic status in Brgy Sta. Juliana. In 2004, this became part of the National Ecotourism Strategy formulated by the Department of Tourism and DENR.

Funding was then provided by the government in order to develop and maintain the tourist site. To complement the grant, fees were also imposed on visitors. The target

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1 Abbreviation for ‘barangay’, the basic political and geographical unit in the Philippines comprising about 2,000 residents. Each unit is administered by a council that is led by a ‘kapitan’ (captain) (Porter & Orams, 2014).
beneficiaries are mainly the villagers who are composed of 80% Aeta and 20% non-indigenous people (Sta. Juliana Tourism Council, 2004). Furthermore, tourism activities in the area produce jobs for the community, especially to the Aeta who today serve as local guides. These opportunities enabled the indigenous people to reconnect to their aboriginal homeland after being relocated to evacuation sites following the disaster (Marler, 2011).

Figure 1.3 Mount Pinatubo crater-lake. Source: Author’s photograph

1.3.3 Present-day volcano tours at Mount Pinatubo

Since the inauguration of the Mount Pinatubo ecotourism strategy, visitor numbers have significantly increased. Today, the volcanic site attracts an average of 17,000 visitors\(^2\), annually; the number of tour operators organising day-trips has also increased. Overnight stays are available in nearby accommodation and are also allowed at designated campsites by the crater-lake.

The overlaps of volcano tourism with other forms of tourism that were mentioned earlier are evident with the Mount Pinatubo volcano tours; therefore, it is a very good example to adapt for this study. The local tourism council describes their product as:

a. significant and varied ecotourism adventure experience;

b. quiet backcountry retreat;

\(^2\) Average calculated based on visitor numbers from 2007 to 2013. Source: Department of Tourism (2014b)
c. quick escape from the city to experience hard and soft impact adventure travel; and


These descriptions alone embody the relationship of volcano tourism with adventure, rural, and cultural heritage tourism. The other overlaps can be observed from the specific components of the volcano tour.

![Figure 1.4](image)

**Figure 1.4** Four-wheel drive (4x4) jeepneys in line at the ‘jump-off’ site at Brgy Sta. Juliana.

*Source: Author’s photograph*

The day trip starts from the Capas Tarlac Municipal Tourism Satellite office located at Brgy Sta. Juliana (see Figure 1.4). This is where the registration and briefing is held. After completing these pre-requisites, visitors embark on a 45-minute 4-wheel (4x4) drive jeepney ride to navigate the lahar paths, passing through the physical destruction caused by the eruptions and encompassing a dark tourism spectrum. This ride is also known as the adventurous part of the tour (see Figure 1.5). In addition, a ‘moon-like’ landscape is featured in this component.

After the 4x4 ride, day-trippers start a 90-minute trek to the caldera. In this segment, visitors have the opportunity to interact with the *Aeta* community. Moreover, the trek also features the natural area consisting of flora and wildlife-viewing. The most important part of the tour, which is the crater-lake, is at the end of the hike. Here, visitors have the chance to experience a close-up encounter of the volcano’s geological features.
Originally, activities such as swimming and boating were allowed in the crater-lake (depending on the chemical levels of the lake water and the current volcano activity alerts). In January 2013, a visitor was reported to have drowned in the crater-lake after diving into the water (Orejas, 2013, January 4). Following the accident, these activities were officially banned to ensure public safety. Also previously, tourists ended the trip at the ‘Spa Town’ where they could experience ‘lahar spa treatments’; unfortunately, this facility stopped its operations in 2013.

**Figure 1.5** A 4x4 jeepney dwarfed by the lahar cliffs while traversing the landscape created by Mount Pinatubo’s eruption. *Source: Author’s photograph*

As a general rule, tours are suspended whenever heavy rainfall or a typhoon is forecast; this is to prevent accidents caused by flash-floods and landslides. The start of the peak season for Mount Pinatubo tours is in November every year and extends into summer, until the start of the rainy season, which is usually in June. At the time of writing, a profile of the tourists to the volcanic site was not available.

### 1.4 Statement of the problem

Volcano tourism is a relatively new area of study and it has been the interest of few researchers in recent years. This is evident from the collection of cases compiled from Erfurt-Cooper and Cooper’s (2010) *Volcano and geothermal tourism: Sustainable ge-resources for leisure and recreation* and Erfurt-Cooper’s (2014b) *Volcanic tourist destinations*, which are so far the only academic books on this topic. Thus, there is little extant literature specifically on volcano tourism; this literature is currently developing.
Most of the current publications on volcano tourism focus on: its main concepts and definition (Erfurt-Cooper, 2010a, 2011; Erfurt-Cooper & Cooper, 2010); feasibility studies for potential volcanic attractions (Dóniz-Páez, Becerra-Ramírez, González-Cárdenas, Guillén-Martín, & Escobar-Lahoz, 2011; Moufti & Németh, 2013); development and management of existing attractions (Ghazi, Ólafsdóttir, Tongkul, & Ghazi, 2013); and assessment of volcanic risk and hazard readiness (Bird, Gisladottir, & Dominey-Howes, 2010; Heggie, 2009, 2010). With regard to volcano tourist behaviour, investigations on risk perceptions and tourist satisfaction have been carried out (Covelli, Burns, & Graefe, 2005; Davis et al., 2013). Studies on tourist behaviour that are not directly focused on volcano tourism but have adapted volcanic attractions as examples are also present (Martin, 2010; Martin & Woodside, 2008). To date, little is known about visitor perspectives on volcano tourism.

It is also important to understand that volcano tourism is regarded as a category of geotourism (Dowling & Newsome, 2010; Newsome & Dowling, 2006). At present, a call for research is expressed to understand geotourist attitudes and behaviour (Newsome & Dowling, 2010a). Recent developments in this aspect of the study include the understanding of potential visitors, market typologies, motivations, needs, experiences and satisfaction (Allan, 2011; Fairweather & Swaffield, 2002; Gordon, 2012; Gorman, 2007; Hurtado, Dowling, & Sanders, 2013; Mao, Robinson, & Dowling, 2009). However, it is vital to recognise that these studies may not directly relate to consumer perspectives on volcano tourism and each provides a partial view on the issues. Therefore, this research presents a holistic examination in adapting a convergent/parallel multiphase mixed methods design by performing a quantitative study of motivations complemented by a qualitative exploration of experience expectations, and a qualitative inquiry of actual experiences.

Travel motivations have been studied since an independent focus on tourism as a discipline started. Although a vast range of literature can be found on this aspect, identifying motivations is key in understanding the phenomenon especially that demand is constantly changing. In addition, it is important to recognise that tourism demand is not imaginable without these motivations (Sharpley, 2006). At the time of writing, motivations for volcano tourism is an under-researched area; thus, this study aims to alleviate this gap in literature.
Tourist expectations are primarily studied to examine how individuals evaluate tourism products before consumption. These pre-conceptions are important aspects in understanding tourists in general. Recently, several studies narrowed and directed expectations towards understanding anticipations for a tourism experience (Andereck, McGeehee, Lee, and Clemmons, 2012; Sheng & Chen, 2012, 2013). These studies re-introduced the construct as *experience expectation*, which serves as a supplementary concept investigated for this study.

Tourist experiences are complex and fundamental in understanding the process of tourism consumption (Walls, Okumus, Wang, & Kwun, 2011). These experiences vary in different settings and individuals (Beverland & Farrelly, 2010; Wang, 1999). Given that volcanoes like Mount Pinatubo have multifaceted environments, visitor experiences in these attractions have different dimensions too. Furthermore, evaluating visitor experiences is essential in managing tourism businesses and destinations. Thus, it is imperative for students, researchers, frontline service staff, managers, marketers, tourism planners, tourism operators, and business owners to understand the motivations, experience expectations, and actual experiences of volcano tourists.

### 1.5 Purpose of the mixed methods study

The primary purpose of this study is to gain an understanding of visitor perspectives on volcano tourism in a non-erupting active volcano. Overall, it aims to address the central research question,

**What are the motivations, experience expectations, and actual experiences of visitors to Mount Pinatubo, Philippines?**

To answer this, this study is guided further by the following objectives:

1. identify the push and pull motives of visitors for visiting non-erupting active volcanoes;
2. test for differences in push and pull motivation factors for gender, age, and prior experience of volcanic sites;
3. explain the differences in motivations for domestic versus international visitors;
4. analyse the visitors’ experience expectations for a Mount Pinatubo tour;
5. explore the visitors’ actual experiences of Mount Pinatubo; and
6. interpret complementarities/non-complementarities between the findings from the pre-tour investigation of visitor motivations and experience expectations, and post-tour analysis of actual experiences.

The mixed methods study adopts a concurrent multiphase convergent design for achieving these objectives. This design is composed of two parallel study phases and an emergent study phase.

*Phase 1 – Visitor motivations and experience expectations* intends to address research objectives 1, 2, 3, and 4. This phase is primarily a quantitative survey that measures visitor motivations, embedded with qualitative components to explore the additional motives and experience expectations of visitors. *Phase 2 – Actual experiences* is directed toward achieving research objective 5. Qualitative research is exclusively employed in this study phase in order to understand the actual experiences of visitors through their rich and detailed narratives about the tour experience.

A supplementary phase, *Phase 3 – Overall interpretation*, is integrated. This is an emergent phase in order to address the purpose of mixing methods for this study. Specifically, complementarities and non-complementarities across visitor motivations, experience expectations, and actual experiences are analysed through identifying the convergence and divergence of the findings. This final interpretive phase presents a holistic overview of the visitor perspectives on volcano tourism at Mount Pinatubo.

1.6 Significance of the study

This study is one of only a few studies to tackle visitor perspectives on volcano tourism, and in doing so contributes to the literature on the subject. Moreover, this has both theoretical and practical significance. Firstly, the quantitative research tool could possibly be adopted by future studies of visitor motivations for volcano tourism at other volcanic sites. Also, the themes that emerged in the qualitative study of visitor experiences are useful for future studies that aim to measure experiences.

Secondly, the practical benefits of the study arise from the discovery of different tourist perspectives which is useful to the tour operators and tourism administrators in marketing and managing the research site. In having a deeper insight of the participants’ experiences, the interpretation of the volcano tourism product may be enhanced in order to maximise the educational benefits for future visitors. In addition, the study will be the
first formal academic study for the research site which will look at these aspects and which are necessary for the continuation of business and economic profit for the community of Brgy Sta. Juliana. Lastly, the methodological framework of this study may be adopted in understanding consumer attitudes in other volcanic destinations.

1.7 Structure of the thesis

This initial chapter introduces the thesis by providing the background to the study. Thereafter, the context of the study is presented. Following this the research problem, central research question, and research objectives are outlined. The significance of this research is also presented.

Chapter 2 aims to contextualise this study. The term volcano tourism is defined and is further conceptualised. Existing studies and gaps in knowledge on volcano tourism are also underscored in this chapter, leading to the main purpose of this study.

Chapter 3 focuses on explaining the key concepts of travel motivations, experience expectations, and tourism experience. Moreover, existing studies on the motivations for and experiences of volcano tourism are reviewed. This chapter also presents the adopted theories for the various components of the research, including a conceptual framework for this study.

Chapter 4 outlines the methodology of this study. It discusses the philosophical foundations of the research, the rationale for mixing methods, and the chosen mixed methods design for the study. Furthermore, this chapter explains in detail the specific methods used for each phase of the study.

Chapter 5 presents the findings and analysis for Phase 1 that pertain to the study of motivations and experience expectations for volcano tourism at Mount Pinatubo. This is divided into three major parts: survey results for the motivations, qualitative content analysis findings for the additional motives, and experience expectations.

The findings and analysis for Phase 2 that capture the inquiry on the actual experiences of visitors are interpreted in Chapter 6. Here, the themes from a thematic analysis are defined and supported by the extracted data from the interviews. Moreover, the operationalisation of the conceptual framework for the experiences can be observed in this chapter.
While the two preceding chapters provide the findings of various analysis techniques, Chapter 7 provides a discussion of these findings. This chapter is composed of three main discussion parts. The first two parts tackle the discussion of findings on Phase 1 and Phase 2 of the study. The final part synthesises these findings into one whole and refers to the overall interpretation of the findings.

Chapter 8 is the study’s conclusion. Along with conclusions, it summarises the key findings of the thesis, and presents the implications of the study. In this chapter, the limitations of the study are also acknowledged. Finally, recommendations and considerations for future research are suggested.
Chapter 2  LITERATURE REVIEW PART ONE  
Tourism in Volcanic Environments

Chapter 2 presents the first part of the literature review for this thesis. Primarily, this chapter further contextualises the study and identifies gaps in the literature on volcano tourism. Initially, this chapter describes the complexity of volcanoes and provides the definition of volcano tourism. Secondly, this chapter categorises volcano tourism as a sub-type of geotourism. This is followed by a section exploring the various relationships of volcano tourism with other special interest forms of tourism. Furthermore, this chapter covers the critical factors involved in managing volcanic attractions, namely, risk management, interpretation, and geoconservation. Finally, this chapter reviews what is currently known about volcano tourists.

2.1 Volcanoes and volcano tourism

Volcano tourism activities take place in volcanic and geothermal environments. Given this, it is important to understand that volcanoes vary in geophysical formations, types of eruption, and eruptive history (Lockwood & Hazlett, 2010). The classifications of these landforms have different aspects too.

The most common categorisation of volcanoes is based on their volcanic activity, namely, active, dormant, and extinct (Weil, 2013). Active volcanoes are those with ongoing seismic activities or eruptions. Dormant volcanoes are those without any ongoing activity but are believed to erupt in the future, while extinct volcanoes are described as never erupting again (Rothery, 2010). However, it should be noted that these classification criteria are not universal; they vary from country to country.

The first and so far the only definition of volcano tourism is in line with this typology. This definition, proposed by Erfurt-Cooper (2010c), reads:

Volcano tourism involves the exploration and study of active volcanic and geothermal landforms and processes. Volcano tourism also includes visits to dormant and extinct volcanic regions where remnants of activity attract visitors with an interest in geological heritage. (p. 3).

This definition differentiates tourism activities and attractions based on two settings: active volcanoes, and dormant and extinct volcanic environments. On the one hand, it should be noticed that a special focus is given to the geological activities and phenomenon generated by active volcanoes including volcanic eruptions. It has been
shown that active volcanoes, especially those with ongoing eruptions, stimulate “feelings of awe, excitement, and to a greater or lesser extent, concern and fear for those nearby” (Lockwood & Hazlett, 2010, p. 21). Furthermore, geothermal attractions often associated with active volcanic regions display an awe-inspiring spectacle.

On the other hand, it is implied that the main attractions at dormant and extinct volcanic sites are the landscapes and scenery produced by previous volcanic eruptions. This is focused on in the interpretation of a volcano’s geological heritage. Mount Pinatubo, although it is classified as an active volcano (PHIVOLCS, 2008b), can be regarded as falling under this category because it is at its dormant stage during the tours. This means that there are no ongoing volcanic eruptions on-site, which is a pre-requisite for Mount Pinatubo tours to continue. This opens up the question as to whether Mount Pinatubo is an active or a dormant volcano. Therefore, the ‘active-dormant-extinct’ classification should be interpreted with caution because it is very subjective.

Another way of understanding the complex nature of volcanoes is by classifying them by type of eruption. In a simplified illustration, Lockwood and Hazlett (2010) identify volcanoes into two types: red and grey. Red volcanoes’ eruptions are more subtle and frequent. An example of these landforms is the Kilauea volcano in Hawaii, US. Its eruption type, technically called hawaiian eruption, is known to create slow streams of lava that can be viewed at a safe distance (USGS, 1997).

Conversely, grey volcanoes’ eruptions are more explosive and more devastating, but less frequent. Mount Pinatubo is an example of a grey volcano which is known to have a plinian type of eruption. This identifies the volcano to have the capacity to produce pyroclastic flows that could reach up to 50 km (USGS, 1997). This explains why it is dangerous to get close to Mount Pinatubo when it erupts. Therefore, for the purpose of this study, Mount Pinatubo is labelled as a non-erupting active volcano. The term ‘non-erupting’ describes the state of Mount Pinatubo when the tours and research were held, while the term ‘active’ mirrors the PHIVOLCS classification of the volcano (see Section 1.2).

Nevertheless, the special focus on leisure activities in volcanic environments is in general recognisable in this definition, as these are considered to be the major attractions in volcano tourism (Erfurt-Cooper, 2011). Below are ten of the most popular geologic features in volcano tourism outlined by Erfurt-Cooper (2010c):
1. active lava flows;
2. strombolian eruptions;
3. geysers and hot springs;
4. lava lakes;
5. crater lakes;
6. boiling ponds;
7. fumaroles and vents;
8. boiling mud pools;
9. hot rivers and streams; and
10. sinter terraces (p. 7).

Finally, it is important to mention that volcanoes have always been part of human existence and these have shaped the world’s natural and cultural heritage. In some instance, volcanoes act as cultural icons representing a place (e.g. Mount Fuji, Japan). It has been stated that the world would be less exciting without the volcanoes (McNutt, 2000). Thus, the existence of a volcanic attraction adds to the diversity of a destination.

2.2 Volcano tourism as a sub-type of geotourism

Another significant aspect of volcano tourism is its recognition as a sub-type of a more widely-recognised tourism niche called *geotourism*. Described in simplest terms as “travel to and appreciation of natural landscapes and geological phenomena” (Newsome & Dowling, 2010b, p.1), geotourism is known as a global activity and is currently researched extensively. This is evident from the number of publications in the international journal *Geoheritage* (Hose, 2012b; Reynard, Coratza, & Giusti, 2011). These are supplemented by a number of books featuring the main concepts and case studies of worldwide geotourism (Dowling & Newsome, 2006; Dowling & Newsome, 2010; Newsome & Dowling, 2010a). In addition, Global Geotourism Conferences were held in the past seven years including the first conference in Perth, Australia in 2008, the second in Miri Mulu, Malaysia in 2010, and the most recent in Muscat, Oman in 2011. However, like in other nature-based tourism such as ecotourism, there is a lack of uniformity in terms of defining geotourism (Dowling & Newsome, 2010).

The term geotourism may be defined either in its *geographical* or *geological* dimension (Pralong, 2006; Reynard, 2008). The *National Geographic* (n.d.) provides the
‘geographical definition’ of geotourism as, “tourism that sustains or enhances the geographical character of a place – its environment, culture, aesthetics, heritage, and the well-being of its residents” (p.1).

Adopted by Boley, Nickerson and Bosak (2011) in the development of the Geotraveler Tendency Scale, it is suggested that the geographical geotourism definition is specific in terms of providing a strong basis for predicting visitors’ geotourism tendencies, namely, cultural heritage attitude, cultural heritage behaviour, aesthetic attitude, aesthetic behaviour, well-being attitude, environmental attitude, environmental behaviour, and well-being behaviour. However, it is important to note that this definition entails both physical and human geographies (Boley & Nickerson, 2013); involving several other forms of tourism such as ecotourism, cultural heritage tourism, and sustainable tourism. Therefore, this geographical tourism aspect is somewhat appropriate to the study of volcano tourism at Mount Pinatubo as the tourism product features the environment represented by the volcano, and the people and its culture embodied by the indigenous Aeta people.

In contrast, Newsome and Dowling (2010b) imply that the disadvantage of the geographic concept of geotourism is its general meaning. Moreover, it is also known that there are overlaps between environmentally-induced tourism such as ecotourism (Weaver, 2000), geotourism (Dowling & Newsome, 2006), and volcano tourism (Sigurdsson & Lopes-Gautier, 2000). Thus, it can be considered that the geographic definition leans more on promoting general tourism rather than a more specialised area of tourism study.

Hose (1995) provides the first ‘geological definition’ of geotourism and according to him, geotourism entails “the provision of interpretive and service facilities to enable tourists to acquire knowledge and understanding of the geology and geomorphology of a site beyond the level of mere aesthetic appreciation” (p.17). This is followed by a working definition given by Joyce (2006, July) showing that geotourism involves “people going to a place to look at and learn about one or more aspects of geology and geomorphology” (p.2). Newsome and Dowling (2010b) further develop these definitions stating that geotourism is

a form of natural area tourism that specifically focuses on landscape and geology. It promotes tourism to geosites and the conservation of geo-diversity and an understanding of earth sciences through appreciation and
learning. This is achieved through independent visits to geological features, use of geo-trails and viewpoints, guided tours, geoactivities and patronage of geosite visitor centres. (p.4).

In these conceptualisations, it appears that the geological aspect of geotourism is mainly focused on the nature of its attractions and resources, namely, geology (study of the Earth), geomorphology (study of landforms), landscapes, and ‘geomorphosites’ or ‘geosites’ (e.g. rock formations) (Dowling, 2011). Moreover, these definitions are targeted towards the niche classification of geotourism as a form of special interest tourism (Novelli, 2005). Thus, this specialisation distinguishes the geological concept of geotourism to its geographical concept.

Newsome and Dowling (2006) conceptualise the nature and scope of geotourism by integrating geological form, process, and tourism. In the volcano tourism context, it shows that the geotourism process may involve volcanoes (form), volcanic eruption (process), and organised tours and recreational activities (tourism). This is further supported by Erfurt-Cooper (2010a; 2011) and Heggie (2009) by identifying volcano tourism as geotourism in volcanic and geothermal settings. Therefore, it is essential for this study to consider volcano tourism as a sub-type of geotourism mainly due to the nature of its attractions, volcanic and geothermal environments, and to the consideration of volcanoes as part of geological and geomorphological disciplines.

2.2.1 Volcanic attractions as geoparks

The provision of geoparks and various geopark networks is important for geotourism (Farsani, Coelho, & Costa, 2011). Geoparks are defined by Turner (2006) as “territories that include a particular geological heritage and a sustainable territorial development strategy (most likely to be based on geotourism) supported by a programme (at some level of government) to promote development” (p. 353). Aside from natural conservation and sustainable development of these attractions, economic development through geotourism, especially in rural areas, is one of the principal benefits of establishing geoparks (Farsani et al., 2011; Ólafsdóttir & Dowling, 2013; Turner, 2013).

This has been the main focus of research for volcano tourism. These studies entail the inventory of volcanic attributes and the assessment of their tourism values in different countries such as Australia (Turner, 2006), China (Gao, Li, Mao, & Li, 2013), Iran (Ghazi et al., 2013), the Kingdom of Saudi Arabia (Moufti & Németh, 2013), and Peru (Paulo, Galaś, & Galaś, 2014). Furthermore, it appears that the inclusion of a volcanic
geopark adds to a destination’s tourism products and may serve as a unique selling point (Dóniz-Páez et al., 2011). Therefore, this opens up the importance of volcanoes which is beyond the aesthetic dimension.

<table>
<thead>
<tr>
<th>Global Geopark</th>
<th>Country</th>
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<tbody>
<tr>
<td>Aso Global Geopark</td>
<td>Japan</td>
</tr>
<tr>
<td>Batur Global Geopark</td>
<td>Indonesia</td>
</tr>
<tr>
<td>El Hierro Global Geopark</td>
<td>Spain</td>
</tr>
<tr>
<td>Itoigawa Geopark</td>
<td>Japan</td>
</tr>
<tr>
<td>Jeju Island</td>
<td>South Korea</td>
</tr>
<tr>
<td>Katla Geopark</td>
<td>Iceland</td>
</tr>
<tr>
<td>Kula Geopark</td>
<td>Turkey</td>
</tr>
<tr>
<td>Leiqiong Geopark</td>
<td>China</td>
</tr>
<tr>
<td>Monts d’Ardèche Global Geopark</td>
<td>France</td>
</tr>
<tr>
<td>Oki Island Geopark</td>
<td>Japan</td>
</tr>
<tr>
<td>Toya Caldera and Usu Volcano</td>
<td>Japan</td>
</tr>
<tr>
<td>Unzen Volcanic Area Geopark</td>
<td>Japan</td>
</tr>
<tr>
<td>Vulkaneifel European Geopark</td>
<td>Germany</td>
</tr>
<tr>
<td>Wudalianchi Geopark</td>
<td>China</td>
</tr>
</tbody>
</table>

Notes: Compiled by Author; Source: UNESCO (2014)

Geopark networks can be found in the national, regional and global levels. The Global Geopark Network is launched by UNESCO in 2004 from an agreement with the pioneer European Geopark Network (Farsani et al., 2011; Turner, 2006). To date, there are 111 geoparks worldwide that are recognised by UNESCO in accordance to their requirements; of these, 14 are volcanic in nature (see Table 2.1). It is argued that being globally-listed, a geopark’s economic, sustainable and educational benefits will be maximised (Ghazi et al., 2013).

2.3 The relationships between volcano tourism and other forms of tourism

Aside from the scenery and the spectacle of viewing a volcanic activity, Sigurdsson and Lopes-Gautier (2000) suggest that tourists may enjoy hot springs and spas, black and green sand beaches, and other activities including climbing, skiing, guided tours, and archaeological exploration in volcanic settings. Nevertheless, it is essential to consider that the range of activities in volcano tourism is not limited to those mentioned, given the abundance of volcanic destinations worldwide. The diversity of volcanoes, volcanic
processes, and the range of recreational activities in volcano tourism create overlaps with other forms of tourism.

These relationships, shown in Figure 2.1, include the following: *ecotourism, adventure tourism, dark tourism, wellness tourism, and heritage tourism*. These linkages are conceptualised mainly from the supply-side perspective of volcano tourism and are derived from the volcanic destination attributes and product components. The following discussion considers, in turn, each of these alternative forms of tourism that shares some commonality with volcano tourism.

![Diagram showing the relationship of volcano tourism with other forms of tourism](image)

**Figure 2.1** The relationship of volcano tourism with other forms of tourism, based on Newsome and Dowling’s (2010b) model. Solid lines represent strong relationships; dashed lines represent inter-linkages.

### 2.3.1 Ecotourism

The popularity of ecotourism as a tourism segment and a research topic began in the latter part of the 1980s (Diamantis, 1999; Weaver, 2002; Weaver & Lawton, 2007). Since then, numerous definitions have been presented in literature and the lack of unity has been identified. To address this, Donohoe and Needham (2006) thematically analysed the contemporary concepts of ecotourism finding out that these are based on the following principles: nature-based, preservation/conservation, environmental education, sustainability, distribution of benefits, and ethics/responsibility. These themes appear to be parallel to those defined by Blamey (2000) and Dowling (2001).
However, if there is a principle that has frequently occurred in all these definitions, it is the one that recognises that ecotourism should take place in the natural environment (Donohoe & Needham, 2006). Given that the settings, attractions, and activities of volcano tourism are nature-based, it can therefore be strongly associated with ecotourism.

Newsome and Dowling (2010b) take on the principles of ecotourism in conceptualising geotourism concepts. These are the principles identifying geotourism as “geologically-based, environmentally educative, generating tourist satisfaction, sustainable, and being locally beneficial” (Newsome & Dowing, 2010b, p.4). Although this is the case, it should be clarified that geotourism is not synonymous with ecotourism (Dowling, 2011). It has been argued that the latter leans more towards the appreciation of the biotic features of the environment (i.e. flora and fauna), whereas geotourism is focused more on the geological formations and landscapes (Dowling & Newsome, 2006).

Conversely, it is important to consider that in some cases of volcano tourism especially with dormant and extinct volcanoes, wildlife and vegetation are apparent (e.g. Rangitoto Island, New Zealand). In addition, volcanoes and wildlife may co-exist even in active volcanic environments, citing the case of the Galapagos Islands (Cooper, 2010) and the Volcanoes National Park in Rwanda (Munanura, Backman, & Sabuhoro, 2013). Thus, the strong linkage between volcano tourism and ecotourism may also be traced to the volcanic destination’s specific natural biotic attributes.

2.3.2 Adventure tourism

The scope of adventure tourism is wide and it is seen to cover all kinds of outdoor recreation activities (Buckley, 2010). In the geotourism context, Newsome and Dowling (2006) propose that geosites serve as the backdrop for these commercial adventure activities. This notion corresponds to the volcano tourism context as some of these activities are evident in volcanic settings (e.g. skiing on Mount Ruapehu, New Zealand).

Aside from the activity, the setting appears to be an important factor in the adventure tourism spectrum for it is argued that the setting defines the level of adventure (Swarbrooke, Beard, Leckie, & Pomfret, 2003). For example, the challenge involved in mountain climbing and rock climbing is highly influenced by altitude, steepness, and obstacles (Cater, 2013). In active volcanic environments, it appears that in those with ongoing volcanic activities, the setting dictates the risks and hazards involved (Erfurt-
Cooper, 2010). Conversely, a volcano more often serves as the focal point of a tour instead of just being the background (Newsome & Dowling, 2006). Therefore, a strong linkage can be established between volcano tourism and adventure tourism.

Perhaps, the involvement of risk in both volcano tourism and adventure tourism is the most essential commonality that bridges the two. The level of risk determines whether an adventure activity is to be considered as a soft adventure (low risk) or a hard adventure (high risk) (Swarbrooke et al., 2003). This is congruent with the classification of volcanic attractions in the Philippines where volcanoes with extreme risk involved are distinguished as “volcanoes for the more adventurous” (Edelmann, 2010, p.189). Furthermore, intensified volcanic processes are more appealing to visitors (Sigurdsson & Lopes-Gautier, 2000). Citing Benediktsson et al. (2010) from their study of volcano tourists’ experiences in Iceland, they claim that risk is “about sensing and experiencing places through the aesthetics of the sublime” (p. 83). Thus, as these studies imply, risk is observed to be an important and inseparable factor in volcano tourism that may affect the overall visitor experience.

### 2.3.3 Wellness tourism

Aside from geothermal energy, the occurrence of hot springs is one of the positive manifestations of active volcanism in a region. Believed to have health benefits, these natural resources are being developed as spa facilities which are one of the primary requirements of wellness tourism (Cooper, 2009). Similarly, these geothermal spring facilities act as integral components of volcano tourism (Erfurt-Cooper, 2010a, 2010b). Thus, an inter-linkage can be recognised between volcano tourism and wellness tourism from the utilisation of natural hot springs to re-inventing the environment for the spa and wellness industry.

Smith and Puczkó (2009) argue that apart from curative purposes, tourists nowadays patronise wellness tourism products primarily to promote healthy living and holistic well-being which is the concentration of wellness, of the body, mind and spirit. This is congruent with the findings of Erfurt-Cooper (2014c) from multiple case studies of Japan’s wellness tourism where hot springs or onsens have been acclaimed for centuries as important attractions in embodying these attributes. Furthermore, it is apparent in Japan’s wellness industry that even though their hot springs are centrally recognised to advocate the totality of a person’s health, these uphold the recreational and cultural aspects as well. Thus, this creates an inter-linkage with cultural tourism.
The situation of these facilities in the natural environment, despite being physically enhanced, creates a significant destination pull factor. For example, in Iceland, ‘nature’ is discovered as the primary motive of tourists to Mývatn, a geothermal spring destination (Huijbens, 2011). Therefore, this phenomenon constitutes an overlap with ecotourism as well. These interconnections are shown in Figure 2.1.

2.3.4 Dark tourism

The inevitability of natural disasters puts tourism at risk. On the one hand, these generate ‘economic losers’ due to the destruction of resources and infrastructures; on the other hand, disasters may turn these losers into ‘economic winners’ if proper post-disaster recovery measures are carried out (Porttorff & Neal, 1994). This is viable for it appears that humans are naturally attracted to the spectacle of natural catastrophes and their aftermaths (Timothy, 2011).

Disaster tourism is more popularly considered as ‘dark tourism.’ Foley and Lennon (1996) define this activity as “the presentation and consumption (by visitors) of real and commodified death and disaster sites” (p. 198). Tarlow (2005) implies that dark tourism includes “visitations to places where tragedies or historically noteworthy death has occurred and that continue to impact our lives” (p. 48). Likewise, Stone (2006) implies that this phenomenon covers visits “to sites associated with death, suffering and the seemingly macabre” (p. 146). Therefore, it can be summarised that the existing definitions of dark tourism revolve around the idea of people being attracted to dark sites.

In the context of volcano tourism, communities that are affected by eruptions are considered dark sites. Visitors to these sites are drawn by the negative physical by-products and human effects of volcanic eruptions. This phenomenon can be observed in the examples of Pompeii, Italy due to the eruption of Mount Vesuvius in AD 79 (Darley, 2011), and Montserrat in 1995 (Petford, Fletcher, & Morakabati, 2010). To some extent, disaster sites mirror “poverty on display and the chance to feel the pain of the others” (Miller, 2008, p.127). At one point, volcanoes can also be considered as the ‘causes’ of death and suffering. Consequently, an inter-linkage can be proposed between dark tourism and volcano tourism, given the disaster-generating dimension of volcanoes.
2.3.5 **Heritage tourism**

Heritage can be defined either in its *natural or cultural* aspect. Timothy (2011) suggests that nature and culture are inseparable, and that people’s way of life is influenced by the environment they live in. Volcanoes are an integral part of the Earth’s natural history and in some parts of the world, volcanoes have shaped human history. This is evident during the Grand Tour, the first mass movement of tourists that started in the 16th century, when affluent Europeans are drawn to the exoticism of volcanoes such as Mount Vesuvius and “underwent a process of re-evaluation” (Towner, 1996, p. 196). This phenomenon allowed humankind to change their way of thinking through first-hand experience of these landscapes. Moreover, Petford et al. (2010) point out that volcanoes are not just educational sites but heritage sites as well. Thus, it can be argued that volcanoes may function as a bridge between a destination’s natural heritage and its cultural heritage.

Volcanoes have also shaped people’s beliefs over time. On some occasions, volcanoes are the centre of various cultures’ religions. This has been manifested in Hawaii where the natives, before they were Christianised, believed that the Kilauea volcano was home to their goddess ‘Pele’ (Sigurdsson & Lopes-Gautier, 2000). In addition, volcanoes are also home to the world’s indigenous peoples. When focused on showcasing the indigenous relationship between these people and the environment, another form of tourism called *indigenous ecotourism* is apparent (Zeppel, 2006). Moreover, it has been implied that tourists are also attracted by encountering people’s living culture aside from the material manifestations of culture (Timothy, 2011). Therefore, if situated on a volcano as indigenous land, an overlap with volcano tourism exists.

2.4 **Risk management, interpretation and conservation**

The involvement of risk in volcano tourism has been previously outlined. It is argued that this is an important factor in the totality of the visitor experience. Accordingly, there is a need to manage this risk. Rothery (2010) describes risk as the calculation of potential destruction caused by natural calamities to a locality that is expressed by “multiplying hazard by vulnerability (which is estimated on a scale from 0.0 to 1.0)” (p. 348).

Volcanic risk is different from volcanic hazard. To estimate volcanic risk, it is vital to initially evaluate the different hazards involved in a volcano tourism operation. Perhaps
the most obvious volcanic hazard in active volcano tourism is volcanic eruption, unexpected or not (Bird et al., 2010; Erfurt-Cooper, 2011). However, Heggie (2009) asserts that health hazards are imposed on volcano tourists regardless of the type of eruption. These hazards comprise acid rain, earthquakes, lava flows, landslides/mudflows, laze, pyroclastic density, tephra and ash, and emissions of volcanic gases. Most of the time, these hazards cannot be prevented; yet, reducing vulnerability is fundamental to managing risk in volcano tourism (Rothery, 2010).

One way of doing this in the context of volcano tourism is the provision of on-site rules and regulations. An example of this is a prohibition in Mount Aso in Kyushu, Japan where visitors with chronic respiratory illnesses are not allowed to view the crater due to the health hazard imposed by volcanic gases (Nomura, Yamaoke, Okano, & Yano, 2004). At some point, it can be observed that the visitor experience may potentially be altered in a negative way by restricting visitors from witnessing an important volcanic feature. Nevertheless, it is the goal of volcano tourism to provide the safest experience possible (Erfurt-Cooper, 2011).

Making local communities, authorities, tourism administrators, and tourists aware of these potential hazards is a way of mitigating volcanic risk. Past research has assessed the risk awareness of tourism stakeholders in active volcanic environments, and this has been an important segment of volcano tourism literature. Nomura et al. (2004) evaluated the risk perception, risk-taking attitude, and hypothetical behaviour of tourists at Mount Aso, Japan. Their findings suggest that volcano tourists who are not aware of the health hazards coming from volcanic gases are more likely to ignore the regulation cited above. This lack of awareness of volcanic risk on the part of the volcano tourist is also evident in Bird et al.’s (2010) study of visitors to volcanic regions in southern Iceland. On a positive note, employees catering to these visitors in Iceland have a high perception of volcanic risk and are willing to receive proper emergency education, and yet the study reveals that these employees lack knowledge about emergency measures.

Several recommendations are made to address the lack of hazard knowledge amongst visitors to volcanic regions. The most crucial one is information dissemination either before the tourists travel or during on-site tours (Erfurt-Cooper, 2011). It has been suggested that these could be achieved through a range of media such as travel guidebooks, educational videos, and emergency handbooks (Bird et al., 2010). Coratza and De Waele’s (2012) assessment shows that these strategies are effective not just in
educating tourism stakeholders but for the larger community as well. Therefore, this establishes a valuable link between interpretation and risk management.

The role of interpretation in nature-based tourism has long been studied. Interpretation is described as “an approach to communication” (Ham, 1992, p.3) that transforms technical terminologies into simple and understandable words. Tilden (1977) defines this concept as an educational activity that uses creativity in passing on information. To effectively do this, Ham (1992) proposes the EROT (entertaining, relevant, organised, thematic) approach in environmental interpretation utilising different media. Some of these interpretive techniques used in various nature-based attractions are also applicable in volcanic attractions (e.g. education centres, information panels, posters, and guided tours) (Coratza & De Waele, 2012).

In volcano tourism, the concept of geo-interpretation may be adopted as this is defined as “the art or science of determining and then communicating the meaning or significance of a geological and geomorphological phenomenon, event, or location” (Hose, 2012a, p.17). Wittlich and Palmer (2010) investigate the effectiveness of geo-interpretation on Rangitoto Island, a volcanic island/shield volcano in New Zealand. Their findings revealed that visitors preferred information panels as the most effective medium. These panels are located along a trail and serve as information boards containing images and texts about the geology of the attraction. In addition, a test on the same visitors showed a 20% increase in knowledge about the volcano. Thus, interpretation in volcano tours can provide an educational experience.

Aside from its function in leisure and recreation in natural areas, interpretation is often advocated as a tool for conservation and sustainability (Moscardo, 1998; Wearing, 2008). Several studies imply that interpretation can be useful in shaping visitor conservation attitude and behaviour. In evaluating the effectiveness of the Lindblad Expeditions (LEX) Galapagos interpretation programme in the Galapagos Islands, it appears that interpretive strategies may affect visitors’ pro-conservation behaviour and may positively influence their intentions to financially support conservation projects (Powell & Ham, 2008). However, it is important to acknowledge the difficulty in monitoring these activities especially when most studies linking interpretation and conservation are done on-site (Munro, Morrison-Saunders, & Hughes, 2008). Thus, to say that environmental interpretation programmes are effective ways to conserve nature is problematic as studies are limited in assessing visitor behaviour in situ.
Conservation at volcanic sites comes under the concept of *geoconservation*. Hose (2012a) identifies this term as “the act of protecting geosites and geomorphosites from damage or loss through the implementation of protection and management measures” (p.16). As with the issue in risk management, any measure or policy that is imposed may potentially affect the visitor experience. Conversely, although active volcanoes have the potential to self-destruct at any time, it is always imperative to preserve the natural environment while having the opportunity to generate financial profit and enhance visitor experiences (Munanura et al., 2013).

### 2.5 The volcano tourist

At the time of writing, little is known about volcano tourists. This can be associated with the infancy of research about geotourists, their behaviour, and attitude (Mao et al., 2009). While there are existing studies about geotourists, little research has been specifically conducted to explore volcano tourists. Because volcano tourism is proposed as a sub-type of geotourism, this section initially discusses things that are currently known about geotourists.

A conceptual classification by Hose (2007) identifies geotourists as dedicated or casual. Dedicated geotourists are described as visiting geosites purposefully for intellectual and leisure benefits while casual geotourists are assumed to visit geosites mainly for leisure with some educational interests. In a quantitative study of potential geotourists in Australia, Mao et al. (2009) report that geotourists are individuals with a heightened desire to explore a geosite, learn about history and geology, interact with people of varied cultures, enjoy outdoor recreation, and patronise simple accommodation. Therefore, in examining these concepts, geotourists can be defined as visitors to geological sites for the purposes of learning and recreation.

To further understand geotourists, Hurtado et al. (2013) adopt McKercher’s (2002) *Typology of Cultural Tourists* to develop a typology of geotourists from a survey investigating visitors’ characteristics, attitude, behaviour, and satisfaction in Crystal Cave, Australia. Their model is a modified McKercher’s typology where five types of geotourists were identified, namely, purposeful (very high motivation/positive experience), intentional (high motivation/positive experience), serendipitous (medium motivation/positive experience), accidental (low motivation/positive experience), and incidental (low motivation/negative experience). This characterisation presents a
starting point of future studies in understanding geotourists. Although adoptable, it can be argued that the applicability of this typology to characterise volcano tourists may vary because that study was limited to cave geotourists.

There is a lack of research in understanding volcano tourists as the majority of the literature about volcano tourists is descriptive. Erfurt-Cooper (2010c) identifies the various types of volcano tourists as: “individuals (domestic and international visitors); couples, families and retirees; adventurers and thrill seekers; scientists and students; hikers, trekkers, climbers and skiers; repeat visitors (mountain collectors); geotourists and ecotourists; and photographers and writers” (p. 6). Furthermore, a categorisation of volcano tourists is outlined based on visitors’ existing knowledge and experience on volcanoes, level of activity, and time frame, namely, ‘day trip visitors’, ‘excursionists’, and ‘explorers’. This categorisation suggests that the first segment comprises the majority of volcano tourists while the second one is an expanding market. The smallest segment comprises explorers but they are emphasised to be the most risk-educated volcano tourists (Erfurt-Cooper, 2010c). Nonetheless, these classifications of volcano tourists are mainly conceptual and are not empirically tested. Thus, it is the primary goal of this study to add to the literature by understanding volcano tourists through their motivations, experience expectations, and actual experiences.

### 2.6 Conclusion

The main goal of this chapter is to further contextualise this study. This chapter also aims to add to the current development of volcano tourism concepts by re-conceptualising the main principles of volcano tourism, its attractions, and management implications. The overlap between volcano tourism and other forms of tourism – ecotourism, adventure tourism, wellness tourism, disaster tourism and heritage tourism – has been discussed. Furthermore, this chapter identifies the gap in volcano tourism literature. The focus of current research on the supply side of volcano tourism can also be observed in this chapter. Moreover, this chapter argues that management strategies in volcano tourism may affect the visitor experience. Finally, this chapter outlines the importance of understanding and the lack of research on the volcano tourist; thus, the focus for this study.
Chapter 3  LITERATURE REVIEW PART TWO
Travel Motivations and Tourism Experiences

This chapter presents the second part of the review of related literature for this thesis. Specifically, this chapter explores the existing theories, concepts and relevant studies on tourist motivations, experience expectations, and actual experiences – these are the core visitor perspectives investigated in this thesis. It begins by reviewing the theories of travel motivation and explaining the adopted framework for the study of pre-tour visitor motivations. This is followed by a discussion of the existing research on visitor motivations for nature-based tourism and volcano tourism. Subsequently the concepts of experience expectations in the tourism context are outlined.

This chapter revisits the concepts of the tourist experience as well. This explores the current research on tourist experiences in volcanic environments followed by a discussion of the conceptual framework that has been adopted to aid in understanding visitor experiences. Furthermore, the objectives of this thesis are identified and synthesised as the chapter develops.

3.1 Theories of travel motivation

There are a large number of studies on this topic, many of which argue that the motivational stage is the initial level in the tourism process. Although this research area may seem saturated, analysing tourism motivations is still vital to understand how people make destination choices that may reflect on their travel attitude (Crompton, 1979; Mansfeld, 1992). Thus, for this study of visitor perspectives on volcano tourism, analysing travel motivations serves as the first step in understanding volcano tourists.

Goossens (2000) supports this, arguing that “to market tourism services and destinations well, marketers must understand the factors that lead to decisions and consumption behaviour” (p. 316). However, Mansfeld (1992) points out that destinations are different from each other, and the theoretical concepts and approaches in understanding motivations may vary between destination types. In relation to this, Fodness (1994) cites a lack of uniformity in understanding these motives.

For example, in the Social-Psychological Theory (SPT) of travel motivation (Iso-Ahola, 1982), it is argued that people travel in order to potentially attain intrinsic and extrinsic satisfaction. This further explains that travel, as an experience, is psychological and
occurs in a social context (Iso-Ahola, 1983). This model explains that a person travels “to escape his personal world and/or interpersonal world and he may seek personal rewards and/or interpersonal rewards” (Iso-Ahola, 1982, p. 260).

Two main constructs, namely approach (seeking) and avoidance (escaping), are conceptualised in this theory (Iso-Ahola, 1982). Particularly, these are explained as: “(1) the desire to leave the everyday environment behind oneself; and (2) the desire to obtain psychological (intrinsic) rewards through travel in a contrasting (new or old) environment” (Iso-Ahola, 1982, p. 259). This illustrates that the motivation for travel is inherent in the individuals’ minds; hence, the focus of this theory is limited in understanding the traveller.

The individual is also the focus of the Self-Determination Theory (SDT) (Deci & Ryan, 2000, 2008), which suggests that humans are active and innately involved in social activities in order to satisfy needs that are vital for self-development (Deci & Ryan, 2000). These psychological needs refer to autonomy, competence, and relatedness. In the tourism context, these can be associated with the need for novelty (autonomy), the need for challenge (competence), and the need to socialise (relatedness). Higher levels of self-determined motivations indicate that these psychological needs are fulfilled (Sweet, Fortier, Strachan, & Blanchard, 2012).

SDT proposes three levels of motivation, namely, intrinsic, extrinsic, and amotivation (Deci & Ryan, 1985). The intrinsic-extrinsic motivation framework is one of the most adopted concepts in the leisure tourism context. Intrinsic motivations are distinguished by the greatest extent of autonomy and self-determination on participating in doing something interesting while extrinsic ones are classified by varying degrees of autonomy (Deci & Ryan, 2000). Furthermore, intrinsic motivations are referred to as psychological factors having strong associations with escape and relaxation while extrinsic motivations are sociological factors related to societal influences and work-leisure relationship (Robinson, Lück, & Smith, 2013; Sharpley, 2002, 2006). Also, to be extrinsically motivated means “doing something because of an outcome that is separable from the activity itself” (Cini, Kruger & Ellis, 2013, p. 47). In relation with Iso-Ahola’s (1982) SPT, it is implied that people travel because of anticipated psychological rewards.
These concepts, SPT and SDT, suggest that intrinsic and extrinsic motives for travel are factors that stem from the individual (Robinson et al., 2013). Thus, these theories are limited in analysing person-specific motives. The importance of the visited destination and its influence on travel motivations are not assessed by these models. Therefore, to consider these constructs, a push-pull motivation framework is adopted to identify the motivations of visitors for volcano tourism at Mount Pinatubo.

3.1.1 Push – Pull Motivation Framework

The push and pull motivation theory is recognised as the most applied theory in understanding travel motivation (Cohen, Prayag & Moital, 2013). This framework utilises two major constructs identified as push and pull factors (Dann, 1977). Push factors are described as person-specific variables that motivate people to engage in touristic activities while pull factors are explained as destination-specific attractors that draw people to travel to places where these activities are executed. In other words, push factors are intangible factors arising from the traveller while pull factors are tangible resources exhibited by a destination (Uysal & Jurowski, 1994). Thus, it is important to analyse the interaction and relationships of these individual inner motives and destination attributes.

Dann (1977), through his sociological perspective, points out that motivations for travel can be easily studied by investigating push factors specifically utilising the concepts of anomie and ego-enhancement. He argues that anomic motives can be associated with escape and socialisation, which are factors also mentioned by Iso-Ahola (1982) in SPT (i.e. avoidance and approach). Furthermore, ego-enhancement is a motive that basically pertains to “boosting the tourist’s ego” (Dann, 1977, p. 190) through embarking on prestigious holidays. This is further supported by the argument,

A guess is that many individuals like to share their personal travel experiences not only in order to compare them to those of others and because such experiences provide a convenient topic for conservation, but also because they may be perceived to be one way of increasing one's social status and self-esteem. (Iso-Ahola, 1983, p. 48).

Pull factors are conceptualised to follow push factors in the travel decision-making process (Dann, 1977). Likewise, these destination attractors are claimed to affect destination choice once a person is pushed to travel (Dann, 1981). In relation, it has been implied that the destination perception formation is a process involving the following factors in sequence: push – pull – perception (Correia & Oom do Valle,
Therefore, in this regard, pull factors are argued to act as mere ‘determinants’ that induce travel to a particular destination, rather than real ‘motives’.

Analysing push and pull factors simultaneously is essential to destinations (Uysal & Jurowski, 1994). It appears that destination attributes act as tourism products that cater to tourists’ socio-psychological and physical needs once in the destination, and that “tourists want to experience more than one attribute in a destination” (Pyo, Mihalik, & Uysal, 1989, p. 278). Although seen as separate constructs, it is therefore proposed that push and pull factors should not be studied independently as these are complementary and interrelated with each other (Crompton, 1979).

Previous empirical studies have analysed the relationships between push and pull motives. For example, Pyo et al. (1989) through a canonical correlation analysis approach reveal four underlying dimensions that combine motives and destination attributes. The first dimension pertains to ‘novelty’ needs for travel that may be satisfied by major ‘tourist products and infrastructures’. The second dimension refers to ‘intellectual’ needs that may be fulfilled by ‘cultural attractions’. Two visitor segments composed of ‘budget-conscious’ and those ‘into experiencing others’ cultures’ entail the third dimension. The final dimension represents the ‘wellness’ motive which may be satisfied by ‘nature-based’ attractions. This multivariate approach has also been utilised by succeeding studies with similar aims (see Baloglu & Uysal, 1996; Chul Oh, Uysal, & Weaver, 1995; Kim & Lee, 2002; Uysal & Jurowski, 1994).

Aside from such a utilisation, the push and pull framework for segmenting visitors is also observed to have been effectively employed on identifying motivations for various tourism contexts and market research studies. Conversely, these studies operationalise this theory differently. On the one hand, ‘push factors’ and ‘pull factors’ are treated as ‘motives’ and ‘destination attractors’, respectively.

For example, Wang (2004) evaluates push and pull factors in two separate sections. Respondents were presented 17 push factor items asking them about the ‘reasons’ for visiting Huangshan Mountain, and 17 pull factor items asking them to evaluate the attractiveness of the destination’s attribute. Two separate factor analyses were performed on each group of push and pull items. This method has been orthodox in the application of the push-pull motivation framework leading to the argument that
criticises how pull factors are viewed, as attributes rather than as motives (see Table 3.1).

**Table 3.1 Studies applying the push-pull framework, pull factors as ‘destination attractors’**

<table>
<thead>
<tr>
<th>Author/s (Year)</th>
<th>Study Purpose</th>
<th>Push Factors</th>
<th>Pull Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnbull and Uysal, (1995)</td>
<td>Explores German tourists’ motivation for visiting the Caribbean</td>
<td>Cultural experiences; Escape; Re-experiencing family; Sports; and prestige</td>
<td>Heritage/culture; City enclave; Comfort-relaxation; Beach resort; Outdoor resources; and Rural and inexpensive</td>
</tr>
<tr>
<td>Kim, Lee, and Klenosky (2003)</td>
<td>Identifies the influence of push and pull factors of visitors to National Parks in Korea</td>
<td>Family togetherness and study; Appreciating natural resources and health; Escaping from everyday routine; and Adventure and building friendship</td>
<td>Key tourist resources; Information and convenience facilities; and Accessibility and transportation</td>
</tr>
<tr>
<td>Wang (2004)</td>
<td>Investigates the push and pull factors’ influence in visiting Huangshan Mountain as a world heritage site</td>
<td>Relaxation and health; Appreciating natural beauty and acquiring knowledge; Enhancement of human relationships; Prestige; and Adventure and novelty</td>
<td>High quality tourist resources; Comfortable tourist environment; Availability of information and convenient facilities; and Management and service</td>
</tr>
<tr>
<td>Correia and Oom do Valle (2007)</td>
<td>Provides an insight on the decision-making process of the Portuguese market for visiting exotic places</td>
<td>Knowledge; Leisure; and Socialisation</td>
<td>Facilities; Core attractions; and Landscape features</td>
</tr>
<tr>
<td>Pan and Ryan (2007)</td>
<td>Explores the motivations of mountain-areas visitors to Pirongia Forest Park, New Zealand</td>
<td>Relaxation; Social; Belonging; Mastery; and Intellectual</td>
<td>Nature/accommodation; and Infrastructure</td>
</tr>
<tr>
<td>Sangpikul (2008)</td>
<td>Identifies the motivations of the Japanese senior market to Thailand</td>
<td>Novelty and knowledge-seeking; Rest and relaxation; and Ego-enhancement</td>
<td>Cultural and historical attractions; Travel arrangements and facilities; Shopping and leisure activities; and Safety and cleanliness</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Title</td>
<td>Motivations</td>
<td>Factors</td>
</tr>
<tr>
<td>-----------</td>
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</tr>
<tr>
<td>Mohammad and Som (2010)</td>
<td>Understands the motivations of foreign visitors to Jordan</td>
<td>Fulfilling prestige; Enhancing relation; Seeking relaxation; Enhancing social circles; Sightseeing variety; Fulfilling spiritual needs; Escaping from daily routine; and Gaining knowledge</td>
<td>Events and activities; Easy access and affordable; History and culture; Variety-seeking; Adventure; Heritage sites; and Sightseeing variety</td>
</tr>
<tr>
<td>Prayag (2012)</td>
<td>Analysis of senior tourists’ motivations in visiting the city of Nice in France</td>
<td>Cosmopolitan experiences; Novelty; Socialisation; Escape and relaxation; Multifarious motives; and Cultural experiences</td>
<td>Cultural attractions and accommodation; Transport and value for money; Cuisine, restaurants and language; Water and beach activities; Shopping and entertainment; and Scenery and natural attractions</td>
</tr>
<tr>
<td>Damijanic and Sergo (2013)</td>
<td>Determines the motivations for wellness tourism</td>
<td>Experience related to tourism destination; Relaxation and escape; and Experience related to local people</td>
<td>Culture; and Nature</td>
</tr>
<tr>
<td>Phau, Lee, and Quintal (2013)</td>
<td>Explores the influence of push and pull factors on the decision-making process of visitors to private parks, by utilising the case of Araluen Botanic Park</td>
<td>Escape and health; Appreciating cultural and natural resources; and Curiosity</td>
<td>Easy access to educational, historical and natural resources; Destination information and facilities; and Relaxation and nature appreciation</td>
</tr>
<tr>
<td>Tawil and Al Tamimi (2013)</td>
<td>Understands Chinese tourists’ motivation to visit Jordan</td>
<td>Novelty and knowledge-seeking; Rest and relaxation; and Prestige and ego-enhancement</td>
<td>Weather, safety and cleanliness; Cultural and historical attractions; and Travel arrangements and convenience</td>
</tr>
</tbody>
</table>

Compiled by Author

On the other hand, some studies view the ‘push’ and ‘pull’ dimensions as ‘person-specific’ and ‘destination-driven’ motives, respectively. Crompton (1979) states pull “motives reflected the influence of the destination in arousing them (tourists)” (p. 410). Awaritefe (2004) supports this arguing that “...destination components (‘pull factors’),
may similarly reflect in their (tourists) travel goals or aspirations (the ‘push’ motives) that they associate with these destination attributes” (p. 308). Therefore, destination attributes may also be transformed into intrinsic motives (Cini et al., 2013) and labelled as pull motives. This present study of visitor motivation for volcano tourism adopts this approach by evaluating and analysing push and pull items altogether in order to capture both constructs as ‘motives’ rather than putting them separately as ‘motives’ (push) and ‘destination attributes’ (pull).

3.2 Motivations for visiting volcanic sites

3.2.1 Nature-based tourism motivations

Motivation studies for nature-based tourism have been applied on different natural settings. Most of these fall under the category of eco-tourism. Some of these studies utilise self-developed scales that are tailor-made depending on the context of each study. For example, Luo and Deng (2008) explain the relationship between environmental attitudes and nature-based tourism motivations; they identify four distinct motives: ‘novelty – self-development’, ‘return to nature’, ‘knowledge and fitness, and ‘escape’. These constructs are complemented by Kil, Holland, Stein, and Ko’s (2011) findings labelling ‘physical fitness’, ‘nature exploration’, ‘escape from pressure’, and ‘nostalgia’ as recreation benefits desired – a concept that also pertains to intrinsic motives.

Motivation theories, such as the push-pull motivation framework, are also applied in studying nature-based tourism motives (see Meng & Uysal, 2008; Meng, Tepanon, & Uysal, 2008; Pan & Ryan, 2007). Aside from the natural dimension, these studies capture the social dimension of nature-based travel addressing ‘family and friendship’ motives. In addition, activity-driven (Meng & Uysal, 2008; Meng et al., 2008) and skills mastery motives (Pan & Ryan, 2007) are also considered.

However, the nature motive has been observed as the most important factor for nature-based tourism. This motive pertains to experiencing and being close to nature (Mehmetoglu, 2005, 2007b). In investigating travel motivations to South Africa’s Tsitsikama National Park, the nature experience motive emerges as the unique motive for travel to the attraction (Kruger & Saayman, 2010). Between the general consumers and experienced ecotourists in North America, no differences are found on the nature motive (Nvight, 1996). Likewise, ‘enjoying nature’ is discovered as the primary motive
and core factor in the ecotourism experiences of trekkers in Annapurna, Nepal (Holden & Sparrowhawk, 2002). Therefore, it can be implied that the ‘nature’ dimension is the foundational motive for nature-based tourism. This dimension can be represented by Mount Pinatubo’s natural attributes, and thus these features should be considered when analysing volcano tourism motivations.

In the geotourism context, Allan (2011) considers several intrinsic motivations including ‘gaining knowledge’, ‘enjoyment’, ‘relaxation’, ‘experiencing sense of wonder’, ‘escape’, and ‘friendship’. In his study, *sense of wonder*, pertaining to exploring new places and being in an exotic place, is a concept that is introduced as a special interest motive for geotourism attractions for “the feeling of wonder is considered a crucial factor in attracting tourists to undertake a geotourism experience” (Allan, 2011, p. 73). In relation to this, the items analysed under this construct can also be associated with novelty-seeking motives.

### 3.2.2 Volcano tourism motivations

The existing work on travel motivation, although extensive, fails to tackle the motivations for volcano tourism. Similarly, the research on nature-based tourism motivations does not reflect volcano tourism motives specifically. Moreover, as discussed in Chapter 2, volcano tourism research is currently still developing.

Erfurt-Cooper (2010c) lists the following possible motives for visiting volcanic sites:

1. sightseeing, part of trip agenda, leisure activity;
2. mountain climbing, hiking, general outdoor activities;
3. ambition and curiosity, photography;
4. collecting information, field research;
5. scientific interest, study, education; and
6. collecting rock samples (p. 6).

These proposed motives cover a number of push and pull motives. For example, curiosity and education may be referred to as novelty-seeking and knowledge-seeking push motives, respectively. Furthermore, sightseeing and mountain climbing may act as activity-driven pull motives. Conversely, it is important to note that these are conceptualisations and not empirically tested.
Martin and Woodside (2008) present a grounded theory of international tourism behaviour that unveils a number of motivations to visit Big Island in Hawaii, USA. Some of these motives entail the ‘volcano itself’ (Volcanoes National Park) and ‘place-attachment’. Martin (2010) utilises the same methodology in studying the Japanese international tourism behaviour. He finds out that Japanese travellers are motivated to escape and relax, to spend time with family, and to expose their family members to the destination’s natural attractions and local culture. These findings reflect the push motives on individuals for visiting erupting active volcanoes. It can be implied that visitor motivations differ as far as seeing active volcanoes without any ongoing volcanic activity.

It is also worth noting that the above studies are not directly aimed at, and may have only partially captured, visitor motivations for volcano tourism. However, recent studies that particularly aim to understand volcano tourists, their recreation patterns, and perceptions satisfaction of volcanic sites emerge. In the case of visitors to the Newberry National Volcanic Monument, a dormant volcanic destination in Central Oregon, US (Covelli et al., 2005), it has been discovered that ‘experiencing the nature’ is the topmost rated reason for visiting the park. For tourists in Big Island in Hawaii, US, an active volcanic region (Davis et al., 2013), findings from qualitative interviews reveal that seeing the volcano itself is the core motive for travel, referring to a pull motive. Thus, aside from the natural or ‘green’ features of Mount Pinatubo, the volcanic and geological attributes as pull factors are proposed for inclusion in the measurement of volcano tourism motivations for this study.

This thesis aims to generate insights about volcano tourists by explaining their underlying motives for volcano tourism at Mount Pinatubo in the Philippines. To achieve this, a push-pull motivation framework is operationalised. Based on the above literature, push motives – escape, relaxation, novelty-seeking, and knowledge-seeking – are considered as a priori themes for measurement. To complement these, pre-conceived pull factors stemming from the natural and volcanic attributes are incorporated. The activities that can be experienced at the volcanic site are considered as well; however, these are confirmed by the researcher’s on-site evaluation before inclusion in the survey instrument. The development of the survey scale items are explained in detail in the next chapter.
3.2.2.1 The influence of socio-demographic characteristics and prior experience

The descriptions made by Erfurt-Cooper (2010c) about volcano tourist types posit a range of visitor characteristics. Like all other travellers, volcano tourists can be characterised by gender, age groups, education, occupation, and levels of travel experience. Several studies show that motivation may vary across these socio-demographic variables, and understanding these differences is essential for examining the influence of these motives to visitors (see Ewert, Gilbertson, Luo & Voight, 2013; Meng & Uysal, 2008; Jönsson & Devonish, 2008; Kim et al., 2003; Phau et al., 2013). It has been previously suggested as well that gaining insight into motivational differences in terms of socio-demographic characteristics is useful in managing a nature-based attraction (Saayman & Saayman, 2009). Hence, one of the objectives of this study is to test for differences in visitor motivations in terms of their socio-demographic characteristics in the context of visiting volcanic sites.

Prior experience or prior involvement in a tourism activity is proposed to influence travel motivations, as well. In relation to the Travel Career Ladder approach (Pearce & Caltabiano, 1983; Pearce & Moscardo, 1985; Pearce & Lee; 2005), motivations vary as travellers increase their travel experience. This pattern is frequently observed in specialised forms of travel such as skiing (Holden, 1999) and backpacking holidays (Paris & Teye, 2010). This has also been supported by Lehto, O’Leary, and Morrison (2004) in explaining the effect of prior experience on the activity involvement attitude. Thus, it is imperative in the context of volcano tourism to understand the influence of prior experience of volcanic sites on visitor motives.

3.2.2.2 Motivation differences for domestic versus international visitors

This study classifies volcano tourists as either domestic or international visitors. According to the United Nations World Tourism Organisation (UNWTO) International Recommendations for Tourism Statistics 2008, these two visitor segments are distinguished by their usual place of residence (within a country) (United Nations, 2010). Domestic visitors are individuals (e.g. citizens, residents, expatriates) travelling within their usual country of residence while international visitors are those travelling to a country where they do not usually reside. Furthermore, it is important to note that the term ‘country of residence’ is not synonymous to one’s nationality or citizenship (United Nations, 2010) although nationality is also a variable that may affect travel motivations (Jönsson & Devonish, 2008; Kozak, 2002; Pizam & Sussmann, 1995).
Following the parameters set by UNWTO (United Nations, 2010), this study considers domestic visitors as those who are currently living and working in the Philippines. This means that this segment is not limited to the population of ‘locals’ or ‘Filipino’ citizens, rather this also covers non-locals (e.g. foreigners/expatriates) who identify the Philippines as their usual country of residence. International visitors, however, are individuals classified as currently living and working in another country, and are travelling inbound to the Philippines.

It has been suggested that cultural backgrounds shaped by tourists’ current places of residence critically influence travel motivations between domestic and international visitors (Eftichiadou, 2001), and this factor is considered in the study. Further, the visitors’ proximity to a travel destination or attraction may influence their motives in visiting that place, as well. Therefore, three critical factors are observed to differentiate domestic and international tourists that may impact their motivations to travel to a destination: the current place of residence, the distance travelled, and their cultural background.

The research on these two visitor types is currently developing. Several studies reveal differences in characteristics and attitudes of domestic versus international visitors in various tourism contexts and issues such as tourist usage and risk management in natural areas (Johnston, 1989; Shultis, 1989); shopping behaviour (Yuksel, 2004); perceptions of de-militarised zone for tourism utilisation (Shin, 2007); wine tourism (Alonso, Fraser, & Cohen, 2007); experience of natural sites (McNamara & Prideaux, 2010); and interpretation of built heritage attractions (Ballantyne, Hughes, Ding, & Liu, 2013).

Perhaps the study of tourism demand for Nigeria (Awaritefe, 2004), and the research on destination loyalty for Chiang Mai, Thailand (Mechinda, Serirat & Gulid, 2009) mirror the objectives of this thesis. In the former, it appears that domestic visitors are more influenced by pull motives such as attractions, accommodation and other facilities, and affordable food when travelling around Nigeria compared to international visitors (Awaritefe, 2004). In contrast, push motives namely self-actualisation, belonging, nature education, and nature appreciation and aesthetics influence international visitors more compared to their domestic counterparts.
In the latter case, it has been found out that domestic tourists to Chiang Mai have higher motivations to seek novelty and status, and to strengthen family ties compared to international visitors. In contrast, international tourists are more likely to seek escape and relaxation, and experiences with different lifestyle and people, than domestic tourists in Chiang Mai (Mechinda et al., 2009). However, little is known about the differences in motivations between domestic and international visitors for volcano tourism. Therefore, this thesis addresses this insufficiency by measuring their respective push and pull motives for visiting Mount Pinatubo.

### 3.3 Expectations for a tourism experience

The Expectancy Theory (Vroom, 1964) was originally conceptualised as a theory of work motivation. Identified as a ‘process’ theory, it aims to identify the essential aspects for motivating employees (Heery & Noon, 2008). Borrowed from cognitive psychology, the theory is applied to tourism to analyse tourist behaviour by primarily using two constructs: *expectancy* and *valence* (Gnoth, 1997).

The degree of anticipation for an outcome to manifest following a performance or engagement in an activity pertains to expectancy. Valence refers to the anticipated value of this outcome (Kominis & Emmanuel, 2007). The interaction of these two constructs informs individual attitudes and behaviour toward an action (Hsu, Cai, & Mimi, 2010). This theory is conceptualised as a cognition-based approach mainly because expectations are future-oriented aspects of behaviour that are motivated by anticipated positive outcomes, which in turn predict selective behaviour (Gnoth, 1997).

Like motivations, expectations in tourism are individual processes that are perceived before the actual trip experience. It has been implied that these expectations should be understood prior to the investigation of actual trip experiences (Larsen, 2007). Therefore, this research follows this suggestion by making a pre-tour inquiry and analysis of the visitors’ experience expectations for volcano tourism at Mount Pinatubo.

However, expectations for tourism can be understood in various ways. For example, it is worth noting that individuals do not have the knowledge of exactly what they are getting when they purchase a tourism product. Thus, the degree of anticipating or the beliefs that a particular outcome will result from undertaking a tourism activity may vary (Hsu et al., 2010). This simply refers to having *high* or *low* expectations from the purchased tourism product. This has been illustrated in the study of adventure tourists’
expectations in Himachal Pradesh, India particularly by measuring what tourists thought of the adventure experience (Bansal, Gautam, & Thakur, 2013). High levels of expectations are revealed from statistical results; hence, this implies that individuals anticipate desirable outcomes whenever they engage in a tourism activity.

Consequently, some tourists would have higher levels of familiarity with the destinations they are travelling to. They would have existing knowledge including information about specific attractions, tour activities, food, or local culture gained through guidebooks, advertisements, or other media. This prior knowledge is found to influence visitor expectations which in turn affect motivations and attitudes (Hsu et al., 2010). In simple terms, their pre-conceived knowledge of the visited destination prior to the actual experience inform them of exactly what to see (how things look) and do (what activities can be performed) as the basis of what sort of outcomes (perceived value) and affective experiences (emotions) can be anticipated from the trip. Pull factors or destination stimuli are argued to form expectations for a tourism experience (Gnoth, 1997). As mentioned in Section 3.1.1, pull factors stem from the visited destinations especially including specific attractions, activities, facilities, and service providers.

Analysing experience expectations or those expectations directed to the tourism experiences has recently attracted the interests of some researchers and has been explored in different tourism contexts. For example, Andereck et al. (2012) evaluate the expected experiences and outcomes of prospective volunteer tourists. They found that the respondents expect to have engaging experiences from their interaction with a destination’s local people as participation outcomes. Varying levels of affective outcomes and physical activities are also anticipated by these tourists.

In a study of museum visitors, Sheng and Chen (2012) measured expectations for a museum experience by using a priori items that primarily evaluate anticipated affective states and outcomes when visiting a museum. Five factors were discovered, namely, “easiness and fun, cultural entertainment, personal identification, historical reminiscence and escapism” (Sheng & Chen, 2012, p. 58). Easiness and fun as a factor was found to be the primary expectation for experience in museums.

However, in contrast with the studies above, an exploratory and qualitative approach is adopted in this research by specifically looking at the anticipated types of experiences that visitors look forward to prior to their participation in a volcano tour. Practically, in
this way, expectations for a volcano tourism experience are allowed to naturally emerge and be communicated by visitors. This approach is also directed to ask the specific nature of experiences the visitors expect rather than enquiring about their general expectations or levels of anticipation from their trips. Finally, at the time of writing, it has been recognised that little is known about individual expectations for volcano tourism experiences; this is one of the items on the agenda for this thesis.

3.4 Concepts of the tourist experience

The tourism industry is considered as a “marketplace of experience” (Volo, 2009, p. 21). These experiences are unique from the tangible manifestations and other services that compose a tourism product (Pine & Gilmore, 1998). Most often, it is argued that tourists seek out these experiences from their travels (Walls et al., 2011).

Experiences are “defined as ‘mental, spiritual and physiological outcomes’ resulting from on-site recreation engagements” (Schänzel & McIntosh, 2000, p. 37). Some of the practical implications illustrated for understanding the actual experiences of individuals include the designing and improving of tourism product offerings in order to deliver the most positive outcomes to tourists. Therefore, it is imperative for this study to explore and analyse the actual experiences of visitors to Mount Pinatubo.

It is argued that the tourist experience is a state of mind and thus, it “cannot be bought” (Andersson, 2007, p. 46). The tourist, as an active consumer, is involved in the production and consumption of what they experience. Hence, these arguments propose that the tourist experience is a multi-dimensional construct. This complexity has been widely recognised and studied (Larsen & Mossberg, 2007; Uriely, 2005; Volo, 2009).

As the literature on the experiential nature of tourism develops, a variety of inter-relational approaches are introduced. Three eras are identified in investigating the historical development of these perspectives (Goytia & de la Rica, 2012). The first era pertains to a tourist-centred approach where the tourist is treated as a client who is to be satisfied by products and services. The second period refers to the “selling of memorable experiences” or the ‘first generation experience economy’ while the third period focuses on the “co-creation of experiences and emotions” or ‘second generation experience economy’ (Goytia & de la Rica, 2012, p. 11). Following these analyses, the ‘third generation experience economy’ is introduced where products and services are
suggested to provide transformational tourism experiences; this is a paradigm shift that centres on tourists’ capacity to self-develop.

This has also been previously argued by Uriely (2005) who identifies the four patterns involved in the conceptual developments of the tourist experience. These trends include modernist to postmodernist theorising, tourist typology construction to deconstruction, objectivity to the subjectivity of experiences, and competing to complementing standpoints. In reference to the first three trends, Uriely (2005) asserts that “postmodernity is underway” (p. 210) and that postmodernist thinking should be utilised in extending the knowledge generated by the earlier theories.

Subsequently, Walls et al. (2011) review the three main categories in tourism and hospitality experience studies. The first category depicts the development of tourist experience typologies. The second group examines the influence of the tourist’s situational factors (e.g. preferences) to the experience while the third group of studies analyse the relationships between product attributes and experience outcomes. In turn, they develop a theoretical framework implying that the consumer experience in tourism is influenced by the physical experience and human interaction factors, as well as the tourist’s individual characteristics and situational factors.

Citing these evaluations of the literature, it can be agreed that the two general approaches in studying the experiential nature of tourism revolves around either the social sciences or management studies (Quan & Wang, 2004; Volo, 2009). The visitor experiences studied in this thesis mainly adopt the social sciences approach (Cohen, 1972, 1979; Larsen, 2007; Mannell & Iso-Ahola, 1987; Quan & Wang, 2004; Uriely, 2005; Wang, 1999). Particularly, the concepts of peak experiences, authenticity and subjectivity of the tourism experience guide in exploration of visitor experiences of volcano tourism; these are discussed below. As the discussion develops, it is evident that the three concepts have a strong interrelationship.

3.4.1 Peak experience

Tourism as a form of peak consumption has been critically explored by Wang (2002). He postulates that in modern society, annual consumption is characterised into two temporal stages: daily and utopian. The daily level suggests that consumers spend in a self-constrained way while the utopian stage implies that consumers tend to free themselves of spending boundaries; hence, it is called ‘peak consumption’. In this type
of consumption, consumers try to get away from the quest to satisfy basic necessities rather they get into the pursuit of ‘peak experiences’. These experiences are associated with the consumption of dreams, fantasies, and things that cannot be experienced in daily life (Wang, 2002).

As previously noted, escape from the daily routine to seek out tourism experiences, is one of the fundamental constructs of travel motivation (Cohen, 2010). In Wang’s (2002) discussion, it appears that recreation may take place either on a daily or weekly basis depending on a person’s disposable time and income. Given this, it can be argued that recreation tends to become a routine and habitual activity (i.e. a daily walk on the beach or a weekly restaurant dining). Therefore, it is necessary that peak experience can be more appropriately described as an *amusement* rather than mere recreation (Lengkeek, 2000).

However, even yearly escapism may, in turn, become routine. As observed by Cohen (2010) from lifestyle travellers’ experiences, escape may not be viewed as escape at all if it is done frequently. Furthermore, since peak consumption is conceptualised as de-routenisation of a person’s consumption pattern, the novelty of the toured destination or purchased holiday is crucial at this point (Wang, 2002). It is imperative that the tourism products to be consumed have a certain degree of uniqueness from past experiences which is variable with the consumer. Hence, a simple diversion from the routine may not be necessary at all. A complete change of environment (Lengkeek, 2000) and “*contrast* or opposition to the daily experience” (Quan & Wang, 2004, p. 300), when travelling, is vital to achieve climatic experiences of tourism.

With these conceptualisations, it can be summarised that the quest for peak tourism experiences relies on three important factors: free time, disposable income, and the uniqueness of the destination. The first two factors are consumer-dependent and the final factor is destination-influenced.

Tourism destinations vary in terms of what is available to be consumed (e.g. activities and attractions) and the level of novelty they provide to the consumer (the tourist); thus, they are context-bound (Wang, 2002). In relation to these, the attractions and activities that provide peak experiences should be complemented by supporting consumer products (e.g. food and accommodation), and these supporting features are implied to extend and intensify a tourist’s daily experiences when at home. However, although
complementary, peak experience products and supporting consumer products should reciprocate each other’s roles for the travelling individual (Quan & Wang, 2004).

### 3.4.2 Authenticity

Several interpretations of authenticity have emerged since MacCannell’s (1973) conceptualisation of this construct for tourism. These concepts were conceived as a result of the attempt to move away from simplistic thinking that tourists search for the ‘authenticity’ that pertains to the search for the original. For example, as Wang (1999) puts it, “…even if toured objects are totally inauthentic, seeking otherwise is still possible, because tourists can quest for an alternative” (p. 365). This so-called pursuit of an *alternative* authenticity can be more easily understood by examining the three concepts: objective, constructive (symbolic), and existential authenticity (Wang, 1999).

Objective authenticity in tourism is a concept derived from an object-related view of authenticity (Wang, 1999). In its base form, objective authenticity pertains to the unquestionable originality of toured objects which is often validated by non-contentious data (Reisinger & Steiner, 2006). Consequently, this concept may also be drawn out from anything (original or replica) that represents a culture.

Di Betta (2014) defends authenticity as a state of mind because it is achieved through a process of perception called mental matching. This is critical for objective authenticity to be realised because individuals attempt to make sense of what they see and experience. Mental matching occurs when,

> The way in which this elaboration is made gives form to the authentication process. The way in which the tourism industry stages the experience prepares the terrain for the encounter with the way in which people’s minds manipulate the experience. (Di Betta, 2014, p. 88).

This argument can be related towards constructive authenticity. This concept directs authenticity from the individual’s images, perceptions, expectations, beliefs and feelings of the toured objects; therefore, they are symbolic (Wang, 1999). Moreover, this constructivist perspective may serve as an alternative to the objective view point. It also appears that constructive authenticity best represents the proposition that authenticity is a mental state and is variable to tourists; therefore, it results in the pluralisation of experiences (Di Betta, 2014; Uriely, 2005; Wang, 1999).
With these conceptions, however, the question of who makes an object ‘authentic’ rises again. Is it the tourists, tourism providers, or the object provided for tourism consumption? Given this, the rejection of object-related authenticity for the study of tourism experiences due to practical reasons and the multiplicity of its interpretations is asserted (Reisinger & Steiner, 2006), and the movement towards activity-related authenticity is proposed (Wang, 1999).

The focus of activity-related authenticity is the quest for the existential authenticity or the “existential state of Being activated by certain tourist activities” (Wang, 1999, p. 359). The self is the most important factor of existential authenticity rather than the genuineness of touristic objects. Therefore, it can be assumed that existential authenticity in tourism involves the search for the ‘authentic self’.

Wang (1999) further classifies this concept into two parts: intra-personal and inter-personal. The former refers to the search for ‘bodily sensations’ while the latter pertains to the quest for one’s own self (self-making). Furthermore, the inter-personal authenticity can be influenced by touristic ‘communitas’ defined by escaping from the mundane environment and deconstructing social structures amongst tourists. Hence, in order for tourists’ experience to become existentially authentic, Rickly-Boyd (2013) implies that place (toured destination) matters. This is supported by Di Betta (2014) in stating that the “scenery is animated and enriched by the tourists’ whole recollection of past experiences and by the future possibilities they envision for themselves” (p. 88). Consequently, it can be argued that authentic tourist experiences are subjective experiences that are shaped by the setting (destinations) and tourism providers, and are central to the actors (tourists) and their interpretations.

3.4.3 Subjectivity

Whenever tourists travel, they gaze upon objects and scenery that are unique from their usual living environments (Urry, 2002). Most often, this gaze is constructed by the meanings associated by individuals on what is being witnessed. However, tourists come from different cultural and social backgrounds, and they have different past tourism experiences; hence, the meanings derived from travel encounters vary. As Urry (2002) implies, “there is no single tourist gaze as such” (p. 1).

Thus, it can be argued that tourism experiences are subjective experiences; this subjectivity is influenced by three factors: the tourism experience itself (product or
event), the way tourism providers interpret and deliver the tourism experience, and the way tourists interpret and reflect on their own experiences (Ritchie, Tung, & Ritchie, 2011). This asserts that even a group of individuals travelling to a single destination and partaking of the same tourism activities or events all at the same time, the meanings they derive from what they see and experience may differ.

Varying degrees of existing knowledge and interest may influence the way tourists consume and benefit from tourism experiences. This has been illustrated in a study of museum visitor experience consumption (Chan, 2009). Tourists with low levels of interest in the museum contents show that the benefits from the experience are leaning toward fun, leisure and entertainment. In contrast, those with high levels of interest and knowledge about the museum and its context consume the experience with higher levels of cognition and with a more intense affective state and recollection. Hence, the focus of the experience is on the personal, emotive, and symbolic context which in turn leads to educative and appreciative experiences (Chan, 2009).

Emotions are essential aspects of and are viewed as benefits from a tourism experience (Schänzel & McIntosh, 2000). These subjective affective responses are seen to be stimulated by the previously mentioned factors given by Ritchie et al. (2011) that are further proposed to be rooted in the Appraisal Theory. This theory explains that emotions “are not determined by intrinsic stimulus features but by features or factors characterising the interaction between the stimulus and the internal or external context” (Moors, 2014, p. 304), and that emotional experiences may occur without labelling them. Therefore, it is important for this study to explore the visitors’ affective responses and emotional benefits from a volcano tourism experience.

Imagination and the variation of representations add to the subjectivity of the tourism experience as well. Imagination is conceptualised as the ability to form mental images that are absent from reality (Colman, 2006). However, imagination also entails the capacity of individuals to replace and reconstruct existing images into their own metaphorical representations (Lengkeek, 2000). This is intensified in the context of geotourism where the attractions (e.g. canyons, rock formations) that tourists view are manifestations and remnants of previous non-existing geological phenomena (Pralong, 2006). Through imagination, tourists are able to reconstruct images on how the currently viewed geological objects would have looked like in the past. These imaginative experiences depend on how tourists gaze on what they see, and as
previously mentioned, these instances are subject to the tourists’ individual characteristics, backgrounds, and state of mind.

Understanding these subjective perceptions, reflections, meanings, imagination, emotions, and benefits of the experiences aids in analysing the volcano tourism experience of visitors to Mount Pinatubo. These aspects are so diverse that measurement, although possible, seems problematic. Hence, this study adopts a qualitative and exploratory approach due to its complexity and also because of the infancy of research on the tourism experiences in volcanic settings.

3.5 The volcano tourism experience

As mentioned in the previous chapter, little is known about volcano tourists and their experiences. To date, existing research on this topic explores experiences of individuals in visiting active volcanic sites and regions having ongoing volcanic activities. For example, Davis et al. (2013) investigate visitor risk perception and satisfaction at Big Island, Hawaii, which is an active volcanic destination popular for viewing actual lava flows. Overall, research participants are discovered to have ‘rewarding’ experiences. Visitors report to having enjoyed witnessing the geological phenomenon. In addition, although in general tourists are reported to feel safe during the experience, older visitors are found to have more safety concerns compared to younger visitors (Davis et al., 2013).

The role of risk in the volcano tourism experience has been analysed by Benediktsson et al. (2010) by interviewing international tourists in the midst of ash falls coming from the eruption of Eyjafjallajökull in 2010. In their study, it has been argued that “risk is always inherent in travel, and is part and parcel of the tourist experience” (Benediktsson et al., 2010; p. 78). However, the sense of risk in volcano tourism during heightened geological phenomena is discovered to act as a binding force between tourists and the landscape.

Conversely, there is no single factor that affects visitor experiences at volcanic sites. These factors differ between volcano tourism experiences situated on currently erupting and non-erupting active volcanoes. For example, as illustrated in the examples above, viewing the spectacle and being part of a geological event are seen to impact the experience of visitors to erupting active volcanoes. For non-erupting ones, the remnants of previous volcanic activities and unique scenery and landscapes may influence visitor
experiences (Erfurt-Cooper, 2014a). However, it is also important to again mention that tourism experiences are not exclusively affected by the attractions visited or events witnessed. Service providers and the tourists’ own perceptions and interpretations play important roles as well (Ritchie et al., 2011). Thus, the interaction of these factors is suggested to form tourism experiences.

This argument can be supported by the interactional theory applied in nature-based tourism (Powell, Kellert, & Ham, 2009). This approach proposes that experiences and outcomes are derivatives of an interactional system composed of the tourists and the visited environment. Particularly, they propose that the interplay between the visitors’ travel characteristics (e.g., motivations), the tour activities and the natural attributes of the destination influence tourism experience outcomes.

![Conceptual framework: Interactional model of the volcano tourism experience at Mount Pinatubo](image)

**Figure 3.1** Conceptual framework: Interactional model of the volcano tourism experience at Mount Pinatubo

In wilderness landscapes such as Antarctica, Powell, Brownlee, Kellert, and Ham (2012) assert that the tourism environment that affects the tourist experiences is formed by the interaction between the social, tour, and site characteristics. For an example of ecotourism in Sabah in Malaysia, Chan and Baun (2007) define the experience as a multi-dimensional one that is shaped by activities in nature, engagement with tourist providers and fellow tourists, and the acquired knowledge from the tours. Thus, the
adoption of the interactional theory is observed to illuminate understanding of nature-based tourism experiences.

Applying the interactional framework for this study of volcano tourism experiences, three factors are identified and proposed. These are the *natural*, *recreational*, and *socio-cultural* dimensions of a Mount Pinatubo tour. Figure 3.1 shows the interactional model that serves as the *conceptual framework* for this study. Following Powell et al.’s (2012) approach, the dimensions discussed below primarily serve as the ‘lens’ in further analysis of visitor experiences of volcano tourism.

3.5.1 Natural dimension

In volcanic sites, visitor experiences can be perceived differently due to the exoticism of the landscapes and the wilderness of the settings. Moreover, the natural features viewed in these settings affect experiences. The influence of these natural attributes have been examined in research of visitor experiences in Little Sandy Desert, Western Australia (Webb, 2002), which is an example of a wilderness landscape. Visitors reveal that the ‘nature of the landscape’ provided them a sense of enjoyment and fascination. These experiences reflect the hedonic nature of travel to nature-based destinations (Chan & Baum, 2007).

In addition, romanticising nature is an important element of how individuals perceive nature in tourism experiences. The outcomes generated from these experiences are referred to as the *genuine* (Vespestad & Lindberg, 2010). In wild landscapes, this concept basically refers to how individuals connect themselves to the environment (Webb, 2002). This is illustrated by the impressions of being ‘insignificant’ when situated in a vast landscape.

In geotourism, Gordon (2012) asserts that romanticising nature entails man’s reverence for the non-living world. In turn, experiencing real nature by reconnecting and by recognising one’s co-existence with the natural environment is argued as one of the positive manifestations of this phenomenon (Karlsdóttir, 2013) This is proposed as the essence of nature-based experiences (Vespestad & Lindberg, 2010). To some extent, spiritual and emotional experiences can emerge through deeply connecting with wild nature (Webb, 2002). Thus, experiencing wilderness moves beyond the hedonic experiences gained from utilising the natural environment as spaces for leisure.
Volcanic environments are powerful landscapes. The aesthetics of volcanic landforms tell stories of the past and present, and the visuals these formations provide to visitors can stimulate feelings and emotions. The sublime nature of wild landscapes, like volcanoes, creatively influences the experiences of those having actual physical encounters with these environments (Lund, 2013). Therefore, it can be assumed that apart from having utilitarian benefits from nature, deeper spiritual, emotional, and immersive experiences can be drawn from being situated in Mount Pinatubo’s volcanic environment.

3.5.2 **Recreational dimension**

This dimension pertains to the general leisure and physical activities that influence visitor experiences. In this dimension, the tourist is observed as an actor who performs activities such as trekking, climbing, or other physical activities in volcanic settings. To some extent, participation in such activities may result in entertainment through staged experiences in nature (Pine & Gilmore, 1998; Vespestad & Lindberg, 2010). In some instances, engaging in activities with nature may result in therapeutic effects (Olafsdottir, 2013).

For example, long-distance walking is analysed as a stress-reliever for some by enabling individuals to get away from their daily responsibilities (Saunders, Laing, & Weiler, 2013). Furthermore, participation in tourist activities in nature can be viewed as a state of being (Vespestad & Lindberg, 2010). Activities become instruments in order to experience mentally and physically challenging activities, and nature serves as the setting that sets the parameters of difficulty. As a result, stimulating experiences of risk, challenge, and adventure are apparent in this dimension.

These stimulating experiential outcomes have been previously discussed by Pomfret (2006). Conceptualising the mountaineering adventure tourist experience, he suggests that participating in hiking activities generate contrasting emotions – flow and peak experiences. Since Mount Pinatubo has the same features of a mountain and the activities performed to reach the crater-lake (summit) are similar to mountaineering (e.g. trekking, climbing), the same experiential outcomes like those presented by Pomfret (2006) can be assumed from the trip.

The varying degrees of emotive outcomes from performing activities can be shaped by the tourist perceptions of challenge imposed by the environment. Likewise, experiential
outcomes can be shaped by physically experiencing pain and struggle as evident in the experiences of visitors in the Inca Trail experience in South America (Quinlan Cutler, Carmichael, & Doherty, 2014). As a result, visitor reflections confronting their identity and existence during the experience were apparent aside from emotional outcomes. However, physical pain can also be ignored by some individuals during hiking or trekking experiences. In this sense, ‘flow experiences’ can emerge enabling people to forget about their surroundings with enjoyment and being focused (Csikszentmihalyi, 2008). Further, successfully completing a challenge results in a sense of achievement that stimulates peak and optimal experiences (Chan & Baum, 2007; Pomfret, 2006). In a Mount Pinatubo tour, the tourism activities involved are the 4x4 jeepney ride, trekking, and hiking activities that are performed on the lahar trail leading to the crater-lake. It is assumed that varying degrees of challenge and adventure can emerge by visitors’ engagement with these activities situated in a volcanic landscape.

Aside from emotional stimulation, intellectual stimulation through nature-based learning is also apparent in this dimension (Chan & Baum, 2007). Evidence of gaining knowledge in visiting wild landscapes has been previously illustrated, and in fact, an educational experience is discovered as a core experience in this tourism context (Webb, 2002). As discussed in Chapter 2, one of the goals of geotourism and also of volcano tourism is to provide visitors educational experiences through effective interpretation. Therefore, an environmentally educative experience may also be generated from the Mount Pinatubo experience.

3.5.3 Socio-cultural dimension

While the first two dimensions above talk about human-to-nature interactions, the socio-cultural dimension pertains to the human-to-human interactions in the volcano tourism phenomenon. This could be explained in three ways. Firstly, most of the volcano tours are guided since they are situated in wild settings. A previous study of ecotourists’ experiences reveals positive experiential outcomes gained from the interaction of the tourists with the guides and other service providers (Chan & Baum, 2007). To these tourists, this interactive experience provides them with the opportunity to meet other people.

Secondly, engaging in opportunities with other tourists appears to influence the same interactive experiences. Sharing experiences with ‘like-minded’ individuals creates a sense of community. This was apparent in a group of rural tourists who found
“communal spirit and bonding between them (people) either involved in a group activity and or others that were met along the way” (Sharpley & Jepson, 2011, p. 65). It is argued that the same sense of *communitas* can be discovered between and amongst volcano tourists at Mount Pinatubo.

Finally, the interaction between tourists and the local people may influence nature-based tourism experiences as well. Similarly, this type of interaction can provide tourists the opportunity to immerse themselves in the local people’s culture. Conversely, it appears that culture is recognised as shaping a human’s view of nature. Vespestad and Lindberg (2011) put nature-based tourism as *socio-cultural community* and they further emphasise:

Symbolism connected to nature and landscapes within some groups or cultures would then influence how individuals perceive the same phenomena. One could say that cultural meaning and social relations between tourists and providers would influence how tourists construct the meaning of nature and nature experiences. (p. 573-574).

Mount Pinatubo is revered as the ‘Supreme Being’ by the *Aeta* people. Moreover, this indigenous group of people have a deep attachment to the volcanic site as it is their ancestral domain. In fact, they even choose to return and continue their lives on the slopes of the volcano after the eruption. Hence, the cross-cultural exchange between visitors and the *Aeta* of Mount Pinatubo may influence the way the visitors perceive nature and their volcano tourism experiences.

### 3.6 Conclusion

The primary aim of this chapter is to explore in-depth the three key tourist behaviour aspects examined in this study; namely, *motivations, experience expectations*, and *actual experiences*. This chapter has discussed the various theories and concepts pertaining to these three constructs. Examples of previous research addressing visitor perspectives that are both directly and indirectly situated in the context of volcano tourism are given as the chapter progresses. This, in turn, has identified the main objectives and the position of this study by highlighting the gaps and distinguishing the approaches of past research.

In line with the three key constructs for visitor perspectives on volcano tourism, three important theories are identified for operationalisation. These are the *push-pull motivation framework* and the *expectancy theory* for the pre-tour study of visitor
motivations and experience expectations, respectively. Supplementary to these is the adoption of the interactional theory which serves as the basis for constructing the conceptual framework for the post-tour study of visitor experiences. This framework illustrates that the Mount Pinatubo experience is composed of the interaction of the natural, recreational, and socio-cultural dimensions of the tour. The next chapter explains the methodological approach adopted for this study and provides the specific research methods performed in order to address the research objectives outlined in this chapter.
Chapter 4 METHODOLOGY

The primary purpose of this study is to understand visitor motivations and experience expectations for, and actual experiences of, volcano tourism at Mount Pinatubo, Philippines. This chapter outlines the research methodology that was undertaken in order to address the study aim. Mixed methods research, as a methodology, was adopted for this study.

The specific methods of inquiry and research tools utilised for this study were influenced by the overall research paradigm; the paradigm or theoretical approach adopted for this study is initially discussed. This is followed by a presentation of specific mixed methods approaches (QUAN³/qual⁴ + QUAL) embedded in the methodological framework. After this, the development of the research tools for data gathering is presented. A discussion of the data collection and data analysis techniques performed for this study then follows. Finally, this chapter summarises the ethical issues considered for conducting the research.

4.1 Research paradigm

A paradigm is described as a way of “experiencing and thinking about the world” (Morgan, 2007, p. 50); broadly, it entails one’s philosophical worldview (Bergman, 2010). It has been argued that this worldview shapes the way a research is conducted (Creswell, 2009). Thus, it is essential to first define the paradigm for this study.

Post-positivism is the paradigm adopted in undertaking this research. The emergence of this paradigm in the social and behavioural sciences is viewed as a response to the limitations posited by and as a replacement to positivism, which is known as the traditional and scientific form of research (Creswell, 2009; Teddlie & Johnson, 2009). Conversely, post-positivism is defined as a philosophical perspective that is a ‘development’ rather than a counter to positivism (Giddings & Grant, 2007). Hence, post-positivism as a worldview is also known as “a modified form of positivism” (Lincoln, Lynham, & Guba, 2011, p. 102) and as a “divergence from pure positivism” (Giddings & Grant, 2007, p. 55).

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³ Refers to the predominantly ‘quantitative’ strand of the study. Numerical data is collected and statistically analysed (Denscombe, 2014).
⁴ Refers to the ‘qualitative’ strand of the research. Textual data collected from interviews are analysed using qualitative techniques. The lower case letters means a less important strand and are supplementary to all-capitalised letters (Denscombe, 2014).
In addition, Morgan (2007) implies that a paradigm refers to a set of epistemological stances; these stances are identified as the *metaphysics* or basic beliefs that belong to a paradigm as a worldview (Giddings & Grant, 2007; Lincoln et al., 2011). Teddlie and Tashakkori (2010) describe these stances as *ontology*, *epistemology*, and *axiology*, which shape a *methodology* (Gray, 2014; Lincoln et al., 2011; Teddlie & Tashakkori, 2010). Table 4.1 outlines the metaphysical assumptions for the post-positivistic foundation of inquiry adopted for this study.

**Table 4.1 Epistemological stances for the post-positivism paradigm adopted for this study**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Post-positivism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontology</strong></td>
<td>Critical realism – “real” reality but only imperfectly and probabilistically apprehensible. Recognises that nature can never be fully understood (Lincoln et al., 2011, p. 100, 102).</td>
</tr>
<tr>
<td><strong>Epistemology</strong></td>
<td>Modified dualism – Interaction with research subjects should be kept to a minimum (Lincoln et al., 2011, p. 103). However, researcher objectivity is impossible (Giddings &amp; Grant, 2007, p. 54).</td>
</tr>
<tr>
<td><strong>Axiology</strong></td>
<td>Value-laden – values in inquiry but their influence may be controlled (Teddlie &amp; Tashakkori, 2009, p. 88).</td>
</tr>
<tr>
<td><strong>Methodology</strong></td>
<td>Mixed methods – primarily quantitative including the use of statistics in the attempt to produce new knowledge (Teddlie &amp; Tashakkori, 2009). However, qualitative methods can be integrated (Lincoln et al., 2011).</td>
</tr>
</tbody>
</table>

A philosophical assumption that defines the nature of reality pertains to *ontology*. This answers the question “What can be known and how?” (Hesse-Biber & Leavy, 2011, p. 4). For the post-positivist paradigm, the ontological position involves *critical realism* referring to a reality that exists ‘out there’. Similar to positivism, it is believed that there is a single reality that can be measured. However, this ontological belief for post-positivism asserts that even though there is an objective reality, it can only be understood imperfectly and probabilistically (Lincoln et al., 2011; Teddlie & Tashakkori, 2009). Fundamentally, this ontological belief suggests deductive or quantitative research to be performed in understanding the nature of reality. However, Lincoln et al. (2011) imply that “we may not be able to fully understand what it (reality) is or how to get to it because of the hidden variables and a lack of absolutes in nature” (p. 102). Thus, this argument also allows inductive/constructive or qualitative strategies to be utilised in understanding the nature of reality.
An *epistemology* is a philosophical standpoint referring to the relationship between the researcher and the research participants (Teddlie & Tashakkori, 2009). This philosophical perspective “tries to understand what it means to know” (Gray, 2014, p. 19). Absolute *objectivism* is identified as the epistemological foundation for positivists. Lincoln et al. (2011) emphasise that there should be no interaction between the knower and those being known within the positivist paradigm. For the post-positivist paradigm, minimum interaction is possible although objectivity is the goal of research (Creswell, 2009). This has been recognised by Giddings and Grant (2007) who assert that objectivity is impossible for post-positivism because post-positivists also believe in a socially-constructed nature of reality. In relation, this epistemological belief suggests that, in some instances, researchers in the post-positivist paradigm should have a subjective point of view in doing research, hence modifying absolute objectivism. Therefore, using a *modified dualist* epistemology, this study is not limited to the objective thinking of research but it also adopts the subjective viewpoint enabling the researcher to empathise with research participants and thus better understand the meanings of their experiences. As a result, it is suggested that post-positivists are confident in doing both quantitative and qualitative research.

The ‘role of values’ in social inquiry describes *axiology* (Denzin & Lincoln, 2011; Teddlie & Tashakkori, 2010). Value-free research is essential for positivists which means that a researcher’s values should in no way affect the results of an inquiry (Guba & Lincoln, 2005). However, for post-positivists, the research process can be influenced by the values of the researcher (Teddlie & Johnson, 2009), hence, suggesting a *value-laden* axiological standpoint. In conjunction with the modified dualist epistemology, the axiological belief for post-positivism allows researchers to distance themselves from the subject as long as it is controlled (Guba & Lincoln, 2005; Teddlie & Tashakkori, 2009).

Giddings and Grant (2007) define *methodology* as either belonging “within a certain paradigm” or as a “thinking tool”, and *methods* serves as the “doing tool” (p. 56). It has been argued that the researcher’s worldview, values, and epistemological stances (i.e. ontology, epistemology, and axiology) influence the choice of a research methodology and methods (Gray, 2014; Hesse-Bieber & Leavy, 2011).

Although the methods used by post-positivist researchers are primarily quantitative and the logic applied is deductive (Tashakkori & Teddlie, 1998, 2009), they are also capable of using qualitative tools and applying inductive thinking. This is influenced by post-
positivists’ *critical realist* and *modified dualist* beliefs. With these epistemological stances, post-positivism legitimises researchers to divert from thinking using a narrow point of view into a more holistic way of looking at meanings to better resolve problems (Henderson, 2011). This allows the inquirer to be more flexible in doing research. It has also been argued that “the social sciences are often fragmented, that knowledge is not neutral (and really never has been), and that all knowledge is socially constructed” (Henderson, p. 342). These philosophical assumptions illustrate that post-positivism allows researchers to perform *mixed methods research* (Guba & Lincoln, 2005). Thus, based on the post-positivist stance of the researcher, mixed methods research is adopted as a methodology for this study. The following section details the mixed methods research framework designed for this thesis.

### 4.2 Mixed methods research

*Mixed methods research* has been viewed as a methodological development that aims to move away from the traditional use of mono-method research approaches (i.e. quantitative or qualitative) within a study (Denscombe, 2014). As a *methodology*, it has been defined in different but interrelated ways. A simple definition is given by Teddlie and Tashakkori (1998) citing mixed methods research to “combine quantitative and qualitative approaches” (p. ix). This has been further developed by Johnson, Onwuegbuzie, and Turner (2007) who propose that:

> Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration. (p. 123).

Since it is a methodology that combines both theoretical perspectives and specific methods (Hesse-Biber & Leavy, 2011), mixed methods research allow a researcher’s paradigm to dictate the various tools and techniques designed for each study phase (Creswell & Plano Clark, 2007). Therefore, based on these definitions, three main elements for conducting mixed methods study can be derived. These are the researcher’s *philosophical beliefs* (worldview), the *rationale* for mixing methods, and the chosen mixed methods *design* including the specific research stages (e.g. data collection and analysis techniques) applied to the study. Since the researcher’s worldview has been previously discussed, the last two elements for this mixed methods study are explained in the sub-sections below.
4.2.1 Rationale for mixing methods

There is an increasing popularity for the use of *mixed methods research* in tourism studies (see Puhakka, Cottrell, & Siikamäki, 2013; Rittichainuwat & Rattanaphinanchai, 2015). This methodology is often employed in understanding human behaviour in tourism (e.g. host community perspectives, tourist behaviour). This practice is demonstrated in recent tourism research.

For example, both qualitative and quantitative approaches are employed to understand local perspectives on sustainability in the Oulanka National Park, Finland (Puhakka et al., 2013). Parallel qualitative data from interviews and quantitative data from surveys were collected from local stakeholders. Concurrent analyses were performed on both data sets, and results show that both type of data “supplemented each other” (Puhakka et al., 2013, p. 480). In the context of film tourism, a triangulation mixed method design was applied to understand tourist motivations (Rittichainuwat & Rattanaphinanchai, 2015). A series of concurrent surveys, interviews, and participant observations was conducted of film tourists travelling to a film-induced destination in South Korea. It has been discovered that using mixed methods allows the limitations of one approach (e.g. quantitative) to be enhanced by the other (e.g. qualitative). Therefore, as these studies exemplify, the use of *mixed methods research* helps researchers to gain a holistic understanding of complex tourism phenomena.

Tourism is described as a multi-dimensional phenomenon. Moreover, tourism is an inter-disciplinary study. This is one of the reasons why mixing methods suits the analysis of research problems especially those involving the human dimension of tourism (McIntosh, 1998; Oppermann, 2000). Similarly, this practice can be influenced by the application of the post-positivist paradigm in tourism research. As Henderson (2011) puts it:

> A post-positivist paradigm also acknowledges that fixing meaning(s) is not a neutral act, and that the questions raised reflect particular interests. Further, this paradigm allows for the use of natural settings and situational/contextual data, and enables the possibilities of solutions to important problems. Qualitative data and mixed methods are often essential in this context. (p. 343).

Thus, it can be proposed that the utilisation of *mixed methods research* in tourism is shaped by two aspects, the context of the study (setting), and the complexity of the research problems (phenomenon).
As discussed in Chapter 2, volcano tourism is a multi-faceted form of special interest tourism. It is shaped by various relationships with other special interest forms of tourism. Similarly, in Chapter 3, the complexity of analysing visitor motivations, experience expectations, and actual tourism experiences was outlined. Therefore, in line with the primary purpose of this study (that is, to understand visitor perspectives on volcano tourism), a mixed methods research approach is appropriate in addressing this research purpose.

Aside from drawing out a justification based on the study purpose, the primary rationale for mixing methods for this study is to seek complementarities or non-complementarities across the visitor perspectives explored for volcano tourism at Mount Pinatubo. According to Greene, Caracelli, and Graham (1989), identifying complementarities through mixing methods allows the “elaboration, enhancement, illustration, clarification of the results from one method with the results from the other method” (p. 259). Since the various facets of a phenomenon can be studied using different lenses, a complete picture of perspectives on visiting a non-erupting active volcano can be achieved.

Another purpose for adopting mixed methods research is for methodological expansion. Employing this approach allows the application of multiple forms of inquiry that are appropriate for each construct of a study (Greene et al., 1989). Denscombe (2014) describes this to build up findings where “different methods are used to investigate separate components of the overall question. When brought together, these add new dimensions to what is known about the topic” (p. 153). This study addresses the overall research question:

**What are the motivations, experience expectations and actual experiences of visitors to Mount Pinatubo, Philippines?**

This question specifically asks for an exploration of the three main constructs of this study: motivations, experience expectations, and actual experiences. Based on previous research, different methodological approaches are adopted in investigating these constructs. Hence, this study adopts those research strategies which are viewed as appropriate and effective methods for analysing these issues.

Quantitative approaches have dominated the research for visitor motivations. Additionally, the study of motivations for tourism has been well established as
illustrated by the extant literature related to tourist behaviour (recent publications include Biran, Liu, Li, & Eichhorn, 2014; Oviedo-García, Castellanos-Verdugo, Trujillo-García, & Mallya, 2014; Phau et al., 2013). Thus, a quantitative survey method is applied in order to examine visitor motivations in the context of volcano tourism.

In contrast, little is known about the experience expectations and tourist experiences of volcano tourism. This suggests an exploratory approach which has been viewed as an effective strategy in understanding these constructs especially for newly emerging tourism niches (see Quinlan Cutler et al., 2014; Sharpley & Jepson, 2011). Therefore, since the literature regarding the volcano tourism experience and expectations is currently developing, qualitative methods are adopted for this study.

In summary, both deductive and inductive logic are applied to the different visitor perspectives in order to provide a holistic understanding of the volcano tourism phenomenon. The strengths of both approaches can be maximised depending on the issue being addressed. Likewise, the weaknesses of one approach can be compensated by the strengths of the other (Creswell & Plano Clark, 2011).

Finally, although it should be noted that there are three main constructs, triangulation is not the reason why mixed methods research is used for this study. Teddlie and Tashakkori (2009) describe triangulation as combining and comparing data coming from different sources, analyses, methods, and investigators. However, a caution for doing triangulation has been implied, as Oppermann (2000) argues that this should only be performed on data of the same orientation. Following this argument, data triangulation for this study is impossible because the data collected are of different orientations (QUAN & QUAL). This study rather aims for convergence or divergence of findings in order to discover complementarities or non-complementarities from the two phases (pre-tour & post-tour) of the research.

4.2.2 Mixed methods design

This study conducts a convergent/parallel multiphase mixed methods design (see Figure 4.1). Creswell and Plano Clark (2011) describe a multiphase design as a methodological framework that combines multiple strands of different timing orientations in order to address multiple research objectives. A strand is a mixed methods element that identifies the fundamental processes of a research, including objectives/questions, data
collection, analysis, and interpretation; common mixed methods designs have both quantitative and qualitative strands.

The multiphase design for this study is composed of two distinct phases. Phase 1 or the ‘pre-tour’ phase pertains to a study of visitor motivations and experience expectations for volcano tourism. This phase addresses the following research objectives: (1) identify the push and pull motives of visitors for visiting non-erupting active volcanoes; (2) test for differences in push and pull motivation factors for gender, age, and prior experience of volcanic sites; (3) explain the differences in motivations for domestic versus international visitors; and (4) analyse the visitors’ experience expectations for a Mount Pinatubo tour. Phase 2 or the ‘post-tour’ phase explores the actual experiences of visitors to Mount Pinatubo, and hence this addresses research objective (5). In addition, different strands are incorporated into these parallel phases.

Phase 1 is primarily a quantitative strand (QUAN) with smaller qualitative elements (qual). This exemplifies an embedded technique (QUAN/qual) that involves the addition of a smaller research strand to a larger one during data collection and/or analysis (Creswell & Plano Clark, 2011). For example, in this study, a quantitative survey questionnaire with 26 five-point Likert-type scale items that asks for visitor motivations is developed. In addition, two open-ended questions that ask for the visitors’ additional motives and experience expectations are embedded into this questionnaire. The second phase of this study is exclusively a qualitative strand (QUAL). This post-tour inquiry of volcano tourism experiences entails semi-structured one-on-one interviews. The qualitative data collected are then thematically analysed. Overall, the multiphase design for this study is a combination of embedded and qualitative strands (QUAN/qual + QUAL). However, aside from determining the strands for a design, there are other aspects that need to be identified in designing a mixed methods study. These aspects include the level of interaction, priority, timing, and mixing (Creswell & Plano Clark, 2011).

A decision as to whether the study strands are independent or interactive needs to be considered. This refers to the level of interaction for a mixed methods design (Creswell & Plano Clark, 2011). Since the study phases are distinct from each other, an independent interaction level is implemented for this study. According to Creswell and Plano Clark (2011), although independence is sought between the study phases, the interaction usually manifests at the end of the study during the overall interpretation.
Figure 4.1 Methodological framework – A convergent/parallel multiphase mixed methods design
Given this, the interaction aspect of a design relates to what Teddlie and Tashakkori (2009) define as the ‘functions of the research’ criterion. Primarily, convergence of findings, or the exploration for complementarities between the pre-tour and post-tour phases of this research are aimed for. However, Denscombe (2014) asserts that even though most mixed methods studies assume that findings from different phases will coincide, contradictions are also apparent and sometimes unexpected. Consequently, this study also considers the non-complementarities between the two phases from the divergence of the research findings.

Another important aspect that needs to be considered is priority which is described as the ‘relative importance’ of the mixed methods phases or strands within a research project (Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009). For this study, equal importance is given to the two research phases. However, Phase 1 (pre-tour) is an embedded design in itself, meaning that one strand is highly prioritised over the other. As illustrated in Figure 4.1, the quantitative strand is given more importance than the qualitative strands within the pre-tour phase.

Deciding upon the timing or the temporal element of the mixed methods design is also essential. This pertains to the implementation process of the research phases (Teddlie & Tashakkori, 2009). There are two common implementation approaches for mixed methods research. The first one is concurrent or parallel timing when both research strands are implemented at once. The second approach is sequential timing when one phase is implemented after completion of the other (Creswell & Plano Clark, 2011). The latter implies that all research processes (data collection, analysis, and interpretation) for one phase have been completely performed before proceeding to the next one, and usually, the initial research phase informs the implementation of the next phase (Creswell & Plano Clark, 2011). At an initial glance, it could be perceived that this study follows a sequential approach given the ‘pre-tour’ and ‘post-tour’ phases. However, this is not the case for this study’s mixed methods design, although technically, the first three research processes (data collection, analysis, and interpretation) for each phase are performed in a sequential manner. For example, in the data collection stage, survey questionnaires were administered before each tour started and one-on-one interviews were conducted after the tours. Even if this is the case, it should be noted that the two research phases are parallel and distinct. Thus, this study adopts a multiphase combination timing approach where “the researcher implements
multiple phases that include sequential and/or concurrent timing over a programme of study” (Creswell & Plano Clark, 2011, p. 66).

The final consideration for a mixed methods design is mixing or the integration approach of the research phases (Creswell & Plano Clark, 2011). This aspect posits the question “Will the study be mixed in the experiential stage only, or across stages, or other combinations?” (Teddlie & Tashakkori, 2009, p. 141). This study performs mixing during interpretation only at the final stage of the research process; this is the ‘overall interpretation’ phase that leads to research objective 6: interpret complementarities/non-complementarities between the findings from the pre-tour investigation of visitor motivations and experience expectations, and post-tour analysis of actual experiences. This is only possible after data has been collected, analysed, and interpreted within each study phase or strand.

4.2.3 A case-based approach

As in other social science disciplines, the case study approach has been frequently applied in tourism research (Mason, 2014; Veal, 2006). Most commonly, this ‘research strategy’ evaluates a single example or compares multiple examples of a phenomenon being studied (Dul & Hak, 2008). Inquiry in the case study approach is undertaken in a ‘real-life’ context (Yin, 2003). Given this, the example or case should naturally occur without manipulation (Dul & Hak, 2008). A case can be an event, organisation, policy, location, or a process (Denscombe, 2014).

In tourism research, most case studies investigate a phenomenon within a geographical location. Veal (2006) explains that research of visitors to a specific tourist attraction is considered a case study of that particular tourism site. This reflects the primary goal of case study research which is “to illuminate the general by looking at the particular” (Denscombe, 2014, p. 54). This thesis adopts the same strategy by researching actual visitors to Mount Pinatubo (the case study site), in order to provide an insight of visitor perspectives into volcano tourism.

There are different reasons for utilising this approach for this mixed methods study. First is for illustration, a theory-led purpose that aims to look at how different theories operate in a real-life context (Denscombe, 2014). This is most appropriate for Phase 1 where deductive logic is applied by operationalising a push-pull motivation framework in the context of volcano tourism at a currently non-erupting active volcano.
The second reason is for exploration or a discovery-led purpose (Denscombe, 2014) that involves qualitative research methods and inductive logic. These are implied as the nature and core essence of the case study approach (Mason, 2014). This is apparent for Phase 2 of this study where a primarily inductive approach for understanding visitors’ actual experiences is implemented.

The final reason is, again, to have a holistic view of the overall visitor perspectives for volcano tourism. This goes back to the rationale for mixing methods for this study because as Denscombe (2014) implies, “case study approach allows the researcher to use a variety of types of data (qualitative or quantitative) and a combination of research methods (observation, interviews, documents, questionnaires) as part of the investigation” (p. 56). This assertion mirrors the nature of mixed methods research. Thus, this thesis can be considered as a ‘case-based’ mixed methods study. In citing that, selecting the case or the study site in order to contextualise the research is an important aspect for this strategy.

4.2.3.1 Selecting Mount Pinatubo as the study site

There are different factors to be considered in selecting a study site for a case study. Mount Pinatubo is chosen as the study site because it is a combination of a typical and atypical/extreme example of volcano tourism (Denscombe, 2014; Veal, 2006). As synthesised in Chapter 2, it is implied that a Mount Pinatubo tour encompasses the interrelationships of volcano tourism with other special interest forms of tourism, namely, ecotourism, adventure tourism, dark tourism, and heritage tourism. Thus, volcano tourism at Mount Pinatubo can be regarded as a typical case of volcano tourism at a non-erupting active volcano because its components can be observable and may apply to other volcanic sites.

On the contrary, the overlap of volcano tourism with heritage tourism, due to the presence of the indigenous Aeta people in the case of Mount Pinatubo, can be considered as an atypical/extreme example of volcano tourism. This is one of the reasons for selecting Mount Pinatubo for this is a unique component of the case study site that is not usual in other volcanic sites. Hence, this provides an opportunity to explore the influence of this least likely component to the motivation, experience expectations, and actual experiences of visitors.
The final considerations for choosing Mount Pinatubo as the study site are practical in nature. Firstly, the researcher is originally from the geographical region where Mount Pinatubo is located. This provides a more convenient access to the study site compared to research being conducted in other volcanic sites. This factor also made the communication with the local administrators, tour operators, tour guides, and local population of the volcanic site easier because the researcher speaks the local dialect of these stakeholders. In turn, request for permission to conduct the study, engagement with the local people, and the actual administration of the research activities on site has gone smoothly.

Secondly, the case is viewed to have the potential to attract wider readership and thus, it is regarded as intrinsically interesting (Denscombe, 2014). Mount Pinatubo’s 1991 eruption is known globally as the second most powerful eruption of the 20th century. Now that it is a tourist attraction, analysing the perspectives of individuals on visiting this volcano can be of interest to a wider audience. Finally, the findings of this research can practically benefit tourism managers and marketers of Mount Pinatubo. The implications of the study, outlined in detail in the final chapter of the thesis, may help these stakeholders in their future plans and strategies for managing the volcanic site.

4.2.3.2 Gaining access to the study site and research participants

A critical question to ask when doing research is how to gain access to a study site? Most countries require the application of research permits before conducting research. However, this is not the case for the Philippines. Thus, the absence of this policy is convenient for conducting the research.

Conversely, and out of courtesy, the researcher perceives the importance of asking for permission from Ms Marissa Vidal, the Tourism Officer who is responsible for managing the tourism projects of the Municipality of Capas in Tarlac province. Hence, a Letter of Intent was written and sent through e-mail to the respective authority. Telephone conversations were also made in order to explain the specific research activities of the researcher at the site. In turn, email correspondence granting the support of the Capas Municipal Tourism Office for the research project was received on 11 November 2013 (see Appendix A). Furthermore, this supported the intention of the researcher to cover the clients sourced from travel agencies to become part of the survey sample.
To gain greater access to a larger number of visitors to Mount Pinatubo, the researcher contacted the tour operator who had the highest number of visitor receipts located at Brgy Sta. Juliana. An email stating the intention of researcher was sent to Ms Sonia Bognot, Tour Operator and Owner of the Majestic Mount Pinatubo Tour and Homestay. The request of the researcher was approved and the tour operator agreed to incorporate the survey questionnaire during pre-departure briefings with visitors (see Appendix B). Also, the researcher was offered a special rate to stay at the tour operator’s local homestay facility. During his stay, the researcher and the study regarding visitor experiences was to be introduced to homestay guests. Therefore, this provides an access to potential interviewees for Phase 2 (post-tour) study of visitors’ actual experiences at Mount Pinatubo.

4.3 Phase 1 (pre-tour) methods: Motivations and experience expectations survey

The first phase of this mixed methods study adopts a survey design. Specifically, the type of survey adopted is descriptive in nature. Gray (2014) defines descriptive survey as a research technique used to answer what research questions. In this study, the survey design primarily adopts a quantitative approach embedded with qualitative elements in order to measure visitor motivations, and to explore additional motives and experience expectations, respectively. There are various reasons for choosing this approach for the research phase.

First, the survey approach allows the quantification of complex information through collection of simple data from individuals who are directly involved in the phenomenon being studied (Denscombe, 2014; Veal, 2006). This provides the opportunity to explore the characteristics, and measure the attitudes and behaviour of actual tourists in a concise and succinct way. This objective approach, according to Creswell (2009), also enhances the generalisability of the results for this is one of the purposes of quantitative research.

Furthermore, the methods performed and the information produced in a quantitative survey are highly transparent so that it can be re-analysed, interpreted, and replicated by others using the same measures. Veal (2006) suggests that the methods used in previous research highly influence the choice of methods in conducting a study. In understanding travel motivations, previous studies show that adopting the survey approach is effective and replicated over time (see Table 3.1 in Chapter 3). Therefore, the use of survey
methods is an appropriate approach for this first phase of the study because visitor motivations are well-explored.

Second, there are practical reasons. Data collection was conducted before each tour started, in order to capture the real motives and anticipated experience outcomes of the visitors. This was undertaken to reduce the bias of the responses that could be influenced by the trip experience if the survey was administered after each tour (Hyde & Harman, 2011).

Given this, timing was important for conducting the survey. It has been discovered from initial enquiries with tour operators on-site that the pre-departure processes, namely registration, briefing, and vehicle allocation for a Mount Pinatubo tour take place between 20 to 30 minutes after the arrival of visitors to the jump-off site. Therefore, a survey questionnaire that can be incorporated and administered within these pre-departure processes is ideal.

Finally, the utilisation of a survey questionnaire allows the collection of qualitative data aside from quantitative data (Denscombe, 2014). Since the study of experience expectations for volcano tourism is in an exploratory stage, a qualitative approach is suitable for addressing this gap. Thus, a qualitative open-ended question is embedded in the survey questionnaire in order to gain insight into pre-experience expectations from a large number of individuals.

4.3.1 Research instrument

4.3.1.1 Survey questionnaire development

The research instrument for Phase 1 is a three-part self-administered survey questionnaire (see Appendix C). The first part (Part A) asks the question ‘Why are you participating in a Mount Pinatubo Tour?’ This includes 26 five-point Likert-type scale items to measure visitor motivations. It is suggested that Likert-type scale items are effective in assessing attitudes and behaviour (Nardi, 2003). Therefore, the survey questionnaire adopts this approach and asks respondents to rate their level of agreement with the close-ended motivation items using the following scale: 1 = ‘Strongly disagree’; 2 = ‘Disagree’; 3 = ‘Neither’; 4 = ‘Agree’; and 5 = ‘Strongly agree’.

Various sources were used in developing the scale items in accordance with the aim of operationalising the push-pull motivation framework. For the push motives, the items
measured are based on previous studies. These items are also adopted because they have been tested over time. Most of the items are based on the research of Pearce and Lee (2005), and Lee and Crompton (1992). Also, to contextualise these push motive items on geotourism and volcano tourism, the scale items developed by Allan (2011) and the concepts suggested by Erfurt-Cooper (2011) are integrated, respectively. The discussion below reveals, in turn, the development of these scale items for each push motivation factor.

a. Escape and relaxation – Although considered as different from each other, escape and relaxation are two interrelated motives that have been frequently measured in the study of travel motivations. Escape refers to being away from one’s usual environment and responsibilities either at home or work (Crompton, 1979). Further, relaxation as a motive does not necessarily pertain to seeking activities in order to relieve stress only in the physical aspect but also in the mental state (Pearce & Lee, 2005). In some cases, these factors act as a single occurring push motive (see Kruger & Saayman, 2010; Pearce & Lee, 2005; Prayag, 2012; Van der Merwe, Slabbert & Saayman, 2011). Therefore, the items shown in Table 4.2 are proposed to measure the escape and relaxation motive.

<table>
<thead>
<tr>
<th>Push motive item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To be away from my daily routine</td>
<td>Pearce and Lee (2005)</td>
</tr>
<tr>
<td>2. I want to get away from stress and pressure</td>
<td>Pearce and Lee (2005)</td>
</tr>
<tr>
<td>3. To get away from the usual demands of life</td>
<td>Pearce and Lee (2005)</td>
</tr>
<tr>
<td>4. I want to rest and relax</td>
<td>Pearce and Lee (2005)</td>
</tr>
<tr>
<td>5. In order to give my mind a rest</td>
<td>Pearce and Lee (2005)</td>
</tr>
<tr>
<td>6. To refresh my mental and physical state</td>
<td>Pearce and Lee (2005); Allan (2011)</td>
</tr>
</tbody>
</table>

b. Novelty-seeking – This motivation factor refers to an individual’s desire to encounter unfamiliar environments, and sometimes people or objects. In spite of this, the novelty-seeking motive being measured for this study excludes the human dimension and focuses on the novel experiences sought from viewing geological objects in volcanic environments. Hence, it is necessary to adopt the scale items proposed by Lee and Crompton (1992) in their study of novelty as a travel motivation construct where the underlying dimensions delineated are ‘thrill’, ‘change from routine’, ‘boredom alleviation’, and ‘surprise’. This particular study measures the items shown in Table 4.3.
Table 4.3 Scale items and sources to measure ‘Novelty-seeking’ as a push motive

<table>
<thead>
<tr>
<th>Push motive item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. I want to experience new and different things</td>
<td>Lee and Crompton (1992)</td>
</tr>
<tr>
<td>8. I enjoy looking at things I have not seen before</td>
<td>Lee and Crompton (1992)</td>
</tr>
<tr>
<td>9. I want there to be a sense of discovery</td>
<td>Lee and Crompton (1992)</td>
</tr>
</tbody>
</table>

c. **Socialisation** – Pearce and Lee (2005) label this motive as ‘relationship-enhancement’. However, aside from measuring the motivation to strengthen relationships with family and friends as part of a visitor’s travelling party, the desire to meet unfamiliar faces during the tour has also been captured by the socialisation motive. Thus, the human dimension excluded from the novelty-seeking motive is considered in the socialisation motive for visiting Mount Pinatubo, and is included in the scale items presented in Table 4.4.

Table 4.4 Scale items and sources to measure ‘Socialisation’ as a push motive

<table>
<thead>
<tr>
<th>Push motive item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. To do something with my family/friends</td>
<td>Pearce and Lee (2005)</td>
</tr>
<tr>
<td>11. I want to have a good time with my family/friends</td>
<td>Pearce and Lee (2005)</td>
</tr>
<tr>
<td>12. To be with others who enjoy the same things as I do</td>
<td>Pearce and Lee (2005)</td>
</tr>
</tbody>
</table>

d. **Knowledge-seeking** – The motivation to learn from the travel experience is regarded as one of the main travel motives (Pearce & Lee, 2005). This is apparent especially in the contexts of geotourism and volcano tourism because these special interest forms of tourism focus on imparting knowledge about geology, geological formations, and geoheritage to visitors (Dowling, 2011; Erfurt-Cooper, 2010c; Newsome & Dowling, 2010b).

Table 4.5 Scale items and sources to measure ‘Knowledge-seeking’ as a push motive

<table>
<thead>
<tr>
<th>Push motive item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. To increase my current knowledge about volcanoes</td>
<td>Allan (2011); Erfurt-Cooper (2011)</td>
</tr>
<tr>
<td>14. To fulfill my scientific knowledge interest on volcanoes</td>
<td>Erfurt-Cooper (2011)</td>
</tr>
<tr>
<td>15. In order to learn other new things</td>
<td>Pearce and Lee (2005)</td>
</tr>
</tbody>
</table>

Measured as an intrinsic motivation, Allan (2011) examines ‘gaining knowledge’ as increasing one’s current knowledge of the geological formations. Moreover, Erfurt-Cooper (2011) proposes that there is a ‘scientific interest’ motive involved in touring
volcanic landforms. However, it is also suggested that individuals might want to
discover and learn ‘new things’ apart from the geological aspects of the tour (Allan,
2011); thus, this learning dimension should be taken into consideration (see Table 4.5).

Unlike push motives, pull motives are inherent and unique for each tourist destination.
Therefore, the scale items developed for the pull motive dimension of the study are
based on a careful investigation of potential destination attractors of Mount Pinatubo.
Two stages were undertaken in developing the pull motive items.

**Table 4.6 Initial destination features for developing the pull motive items**

<table>
<thead>
<tr>
<th>Tour/Destination features</th>
<th>Special interest tourism dimension</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volcano itself</td>
<td>Volcanic and geologic</td>
<td>Tripinas (2013); Filipino Travel Center (2013); Majestic Mount Pinatubo Tour and Homestay (2013)</td>
</tr>
<tr>
<td>Crater-lake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land and rock formations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural scenery</td>
<td>Ecotourism</td>
<td>Tripinas (2013); Filipino Travel Center (2013); Majestic Mount Pinatubo Tour and Homestay (2013)</td>
</tr>
<tr>
<td>Natural attributes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4x4 jeepney ride</td>
<td>Adventure</td>
<td>Tripinas (2013); Filipino Travel Center (2013); Majestic Mount Pinatubo Tour and Homestay (2013)</td>
</tr>
<tr>
<td>Trekking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahar trails</td>
<td>Dark</td>
<td>Tripinas (2013)</td>
</tr>
<tr>
<td>Local living conditions at the disaster landscapes</td>
<td>Wellness</td>
<td>Filipino Travel Center (2013); Visit My Philippines (2013)</td>
</tr>
<tr>
<td>Pinatubo Spa Town</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahar spa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aeta interaction</td>
<td>(Cultural) Heritage</td>
<td>Filipino Travel Center (2013)</td>
</tr>
<tr>
<td>Visit at the local village</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Compiled by author from various websites*

The first stage entails an assessment of the Mount Pinatubo tour components based on
how the major tourism enterprises and administrators advertise a typical Mount
Pinatubo tour in their websites. Three enterprises were chosen, two travel agencies that
operate in Manila – Tripinas (2013) and Filipino Travel Center (2013) – and a tour
operator situated on site at the jump-off point – the Majestic Mount Pinatubo Tour and
Homestay (2013). The website advertisement for Mount Pinatubo used by the
Department of Tourism Region III (Visit My Philippines, 2013) was also assessed.
Table 4.6 shows the result of the initial websites evaluation. This assessment illustrates
that Mount Pinatubo’s destination attractors or features reflect the interrelationships of volcano tourism with other special interest forms of tourism.

The second stage for developing the pull motive items is an actual site evaluation. The researcher joined a Mount Pinatubo tour on 15 March 2014 in order to validate the candidate items for measurement as pull motives. This research activity is also considered as a study site immersion day where the researcher situated himself at the volcanic site in order to assess the tour timings from the pre-departure registration and briefing, up to the actual trip experience. Moreover, through this stage, the researcher was able to finalise the pull motive items.

Almost all of those visible at the tourism enterprises and administrators’ websites are present in a typical Mount Pinatubo tour except the attractors involving the wellness dimension of the tour. It was found that the Pinatubo Spa Town, which was originally owned by a foreign investor, stopped its operations mid-August 2013. Therefore, the wellness dimension was not included in the finalised scale items.

In total, 11 pull motive scale items were derived and incorporated into the survey questionnaire (see Table 4.7). The items proposed here originally are destination attractors that are later transformed into motives (i.e. crater-lake as an attractor transformed into “Because of the crater-lake” as a motivational statement). Most of these items are self-developed although some items were previously conceptualised in the current literature. For example, the first three items drawn from the volcanic and geological attributes were previously outlined by Erfurt-Cooper (2010c) as the volcanic features that may appeal to visitors. In the case of Mount Pinatubo, the ‘crater-lake’ and ‘land and rock formations’ can be regarded as the most prominent volcanic features.

In addition, considering Mount Pinatubo’s popularity of having the second most powerful eruption of the 20th century, it can be derived that visitors are motivated to visit the volcano itself. Moreover, Nvight (1996) proposes that the motives for ecotourism are induced by an attraction’s scenery and natural attributes, including plants and wildlife. Since Mount Pinatubo is located in a natural setting and these attributes are present, items covering the ecotourism dimension of the tour are also considered. The remaining items, referred to as the adventure, dark, and cultural heritage of the tour, uniquely stem from Mount Pinatubo.
The second part (Part B) of the survey questionnaire embeds two qualitative open-ended items. The first item asks for the respondents’ additional motives for it has been recognised that the visitors may have been motivated by factors apart from those measured. This provides the respondents the opportunity to include other motivation factors that may have been overlooked by the researcher. This is followed by another open-ended item that enquires as to the visitors’ experience expectations. Particularly, the item asks the respondents to describe the type of experiences they expect on the tour.

The final part (Part C) of the survey questionnaire is the demographics section. This aims to provide personal information about the respondents. According to Nardi (2003), these items should be placed at the end of the questionnaire because these can be easily completed. Therefore, questions about the respondents’ gender, age, prior experience of volcanic sites, place of residence, travelling party, education, and occupation were incorporated into the latter part of the questionnaire.
4.3.1.2 Pilot test

Pilot testing a drafted questionnaire is essential to any study that employs survey methods. This is a process where the specific items in the research instrument are tested with various individuals (Nardi, 2003). This is different from a ‘pilot study’ where a ‘dry-run’ of the survey is performed to a smaller sample size of the actual population being studied (Veal, 2006). Moreover, a pilot study aims to perform some statistical tests on the data collected and estimates the response rate in order to polish the survey administration procedures.

A pilot test, however, is different because the test is mainly conducted with individuals that can provide useful remarks in fine-tuning a survey questionnaire (Mason, 2014). Aside from the potential respondents of the study, these individuals can be the researcher’s friends, colleagues, or possibly tourism administrators, tour operators, and tour guides at the research site. Furthermore, in a pilot test, the researcher should critically evaluate the sequence of the questions, the accuracy of instructions, the appropriateness of word choice and format, and the amount of time needed to complete the questionnaire (Nardi, 2003).

The survey questionnaire for this study was pilot tested on 26 March 2014. It was conducted with the following individuals: one Mount Pinatubo tour operator, two local tourism office staff, two local tour guides, two actual tourists, and a researcher’s colleague who had previously experienced a Mount Pinatubo tour. In terms of timing, the questionnaires were completed in five to 10 minutes. This means that the survey could easily be incorporated into the pre-departure processes of the tour.

Moreover, the scale items were consistently answered, and the pilot test participants commented that the items were properly worded. However, it was noticed that there were inconsistent responses in Part B, item number two, that originally read “What type of experiences are you looking forward to on this tour?” In turn, the question was rephrased into a more specific open-ended item, namely, “Please describe the experiences that you expect on this tour” in order to get a better insight into the experience expectations of the visitors.
4.3.2 Data collection

4.3.2.1 Sampling

A cross-sectional survey was conducted on the actual visitors to Mount Pinatubo, as the population for this study. These actual visitors are individuals who travelled to Brgy Sta. Juliana – the jump-off point. These visitors could be booked through on-site tour organisers, travel agencies, or as walk-in tour participants. Specifically, the research targeted actual visitors aged 18 plus years old, in the process of registration, who were waiting for safety briefings and 4x4 jeepney allocations before the actual trip embarkation to Mount Pinatubo.

A quota sampling method was employed to determine the respondents that represent the research population. Primarily, this non-probability sampling method was chosen because there was a lack of information regarding the research population (Denscombe, 2014). The particular data about individuals visiting the volcanic site on a day-to-day basis is unknown for this study, as they were coming from various locations and were clients of different tour organisers and travel agencies.

Also, a quota sampling technique was adopted in order to produce some representativeness of those individuals studied based on given criteria or strata (Nardi, 2003). This study segments the visitors into domestic and international; the sampling technique aims to collect data from an equal number of respondents per segment in order to generate comparisons between the two strata.

With regard to the sample size, different criteria can be found in the literature. Mason (2014) suggests that for a thesis or dissertation project, the size of the sample should realistically be between 50 and 100 cases. Based on a non-probability approach, Denscombe (2014) proposes that there should be between 30 and 250 respondents. However, this is not the case for probability sampling methods where statistical techniques are carried out in order to determine the appropriate sample size for a survey study.

This study determines the sample size primarily based on requirements of the statistical analyses performed on the data (Nardi, 2003). For example, a rule of thumb for a factor analysis is that there should be at least five cases for each scale item (Hair, Black, Babin, Anderson, & Tatham, 2006). Since there are 26 scale items in the questionnaire, if multiplied by five, the sample size should be at least 130. To improve the reliability
of findings, an initial quota of 300 respondents composed of 150 domestic and 150 international visitors was proposed for this study.

4.3.2.2 Survey administration

The survey was administered on-site during registration and pre-departure briefings for a Mount Pinatubo tour. Firstly, the survey was introduced during the pre-departure processes conducted by the tour organisers who agreed to support the research project. Participant information sheets (PIS) (see Appendix D) and survey questionnaires were attached to the registration forms and those who agreed to participate in the study were given instructions for filling out the research instruments. These were conducted either at Parking Area 1 across from the Capas Tarlac Municipal Tourism Satellite Office (Mount Pinatubo Visitor Centre), or at the two local homestay facilities (Homestay 1 and Homestay 2) owned by the tour organisers.

Secondly, the researcher performed the role of a ‘stationary interviewer’ as in a site survey proposed by Veal (2006). The researcher was stationed at the visitor centre waiting for travel agency\textsuperscript{5} and walk-in visitors. When visitors approached the registration booth, the researcher assists in distribution of the registration forms with the attached PISs and survey questionnaires. In addition, the researcher conducted the pre-departure briefings and then introduced the research to the visitors. Those interested in participating were further given the directions for completing the survey. These research activities were either conducted at the visitor centre’s registration booth or at Parking Area 2 located across from the former Mount Pinatubo Spa Town. Permission to conduct these activities was approved by the Capas Municipal Tourism Office and the Auckland University of Technology Ethics Committee (AUTEC) on 28 January 2014 (see Appendix E).

The survey administration methods were performed during the months of March, April, and May of 2014. These months are considered the tourist peak months in the Philippines. In particular, survey respondents were recruited during weekdays, weekends, and holidays, namely, Holy Week and the Day of Valour (9\textsuperscript{th} of April - Araw ng Kagitingan) holidays. However, minor changes were made during the course of data collection for practical reasons.

\textsuperscript{5} Visitors brought by travel agencies are different to those booked directly through on-site tour organisers. Technically, travel agency visitors are considered ‘walk-in’ visitors by the tourism staff as they do not usually have prior bookings made directly to the visitor centre, unlike tour organiser-visited visitors.
The researcher chose to stay in a local homestay during data collection in order to recruit eligible interview participants\(^6\) for the post-tour study of visitor experiences. It was found that most visitors stayed overnight during weekends. This imposed a lower chance of recruiting interview participants on weekdays; thus, the researcher decided to stay in the site mostly on weekends in order to maximise financial resources.

In effect, it was perceived that the number of recruited survey respondents on weekdays would be affected. To address this, one tour organiser and one member of the tourism staff volunteered to act as Research Assistants on behalf of the researcher. This amendment was re-applied and later on approved by AUTEC (see Appendix F). The Research Assistants were then trained in administering the survey and were asked to sign Confidentiality Agreements (see Appendix G). Thereafter, they facilitated the survey data collection procedures during the absence of the researcher at the research site.

A total of 250 questionnaires were distributed to visitors. Six visitors were reported to have refused to answer the questionnaire. This led to a total number of 244 survey participants with a high response rate of 97.6%. Of these questionnaires, 15.6% were collected by the research assistants (23 from the tour organiser and 15 from the tourism staff). However, 204 questionnaires were accepted for final coding as the remainder were partly finished and contained incomplete data; this led to a survey completion rate of 83.6%. This was resulted by the immediate processing of pre-departure requirements especially during busy operation days in order to accommodate a large number of groups in a timely manner. This quick turn-over of the visitors for trip embarkations shortened the opportunity for them to successfully accomplish the survey questionnaires.

Finally, it can be observed that the quota of 300 respondents was not achieved. This was primarily because Mount Pinatubo tours were temporarily discontinued to give way to the Visiting Forces Agreement *Balikatan* military exercises. These exercises between the Philippines and US militaries blocked the access ways to the crater-lake. These exercises started on 5 May 2014 and ended on 15 May 2014, halting almost two weeks of the tour operations and affecting the research activities. Also, the goal to balance the number of respondents between domestic and international respondents was not attained.

\(^6\) As approved by AUTEC, eligible interview participants are those staying in the homestay facilities where the researcher was staying as well. This was initiated in order to minimise the potential interruptions that the researcher might cause to other visitors.
mainly because there were fewer international visitors to Mount Pinatubo. The researcher observation confirms an early case study of Mount Pinatubo which cites that only 10% of the annual visitor numbers are international with the remaining 90% coming from Manila and nearby provinces (Department of Tourism Region III, n.d.).

4.3.3 Quantitative data analysis

4.3.3.1 Coding

The data collected for this study were coded and analysed using the Statistical Package for the Social Sciences (SPSS) version 22. The initial step is to prepare the data set through coding, where the variables measured in the questionnaire are given corresponding numerical values (Gray, 2014). These variables are allocated SPSS names and labels in a codebook. Also, the types of measurement assigned and the numerical values for each variable were identified in this process. A codebook was created in order to ensure that all variables in the questionnaire are represented in the SPSS data file (Ho, 2014).

The Likert-type scale items were treated as ordinal variables, in order to prepare the items for factor analysis (Ho, 2014). Gender, prior experience of volcanic sites, and current place of residence were coded as dichotomous variables because these contain two categories each. Variables for age, education, occupation, travel party, and residence in the Philippines were coded as nominal variables since these are used in classifying the respondents into three or more categories (Bryman & Cramer, 2011). Questionnaire items that ask for qualitative data (i.e. open-ended questions) were coded as string variables.

The next step is to transfer the data from the survey questionnaires to the SPSS data file. Each of the respondents was allocated a unique code number for easy identification of their respective accomplished survey questionnaires. Only those questionnaires with complete responses on the Likert-type scale items were coded in order to eliminate the treatment of missing data, although missing data for the dichotomous and nominal variables were considered in this study. Once the initial data file was created, the data entered were re-checked in order to ensure the consistency of coding.
4.3.3.2 Exploring and transforming the data

This procedure was mainly employed on the socio-demographic variables. According to Bryman and Duncan (2011), the initial step to perform this is to run a series of frequency analysis. This provides information on how the respondents are distributed across categories in each socio-demographic variable. Results reveal that the respondents are well distributed into the categories of most of the socio-demographic variables except for age group and education. Thus, these variables were re-coded (see Table 4.8). This process of re-coding combines categories with a small number of cases into new variables or larger groups (Veal, 2006).

### Table 4.8 List of re-coded nominal variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Old values</th>
<th>New values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group</td>
<td>1 = 18 to 29</td>
<td>1 = 18 to 29</td>
</tr>
<tr>
<td></td>
<td>2 = 30 to 39</td>
<td>2 = 30 to 39</td>
</tr>
<tr>
<td></td>
<td>3 = 40 to 49</td>
<td>3 = 40 plus</td>
</tr>
<tr>
<td></td>
<td>4 = 50 to 59</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 = 60 plus</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>1 = High School graduate</td>
<td>1 = Secondary</td>
</tr>
<tr>
<td></td>
<td>2 = Technical College degree</td>
<td>2 = Tertiary</td>
</tr>
<tr>
<td></td>
<td>3 = University/Bachelor’s degree</td>
<td>(Bachelor’s/Technical)</td>
</tr>
<tr>
<td></td>
<td>4 = Postgraduate diploma</td>
<td>3 = Postgraduate</td>
</tr>
<tr>
<td></td>
<td>5 = Master’s degree</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 = Doctoral/PhD degree</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7 = Other</td>
<td></td>
</tr>
</tbody>
</table>

Several qualitative variables were also transformed and re-coded into quantitative variables. The first one is ‘volcanoes visited’, where respondents are asked to list the names of any volcanoes that they have travelled to prior to their visit to Mount Pinatubo. This string variable was transformed into a nominal variable, namely, ‘number of volcanoes visited’. The volcanoes listed by each respondent were counted and coded as follows: 1 = ‘None’; 2 = ‘1’; 3 = ‘2 to 3’; and 4 = ‘4 plus’. Thereafter, the string variable that enquires after international visitors’ current ‘country of residence’ was transformed into a nominal variable that distributes each listed country into their continents. The following numbers are assigned for each continent: 1 = ‘Asia’; 2 = ‘Oceania’; 3 = ‘Europe’; 4 = ‘North America’; 5 = ‘South America’; and 6 = ‘Africa’.
4.3.3.3 Statistical data analysis

After the data set was prepared and refined, various statistical analyses were performed. Table 4.9 outlines the corresponding statistical tests applied based on the objectives or purpose of this study. First, frequency analyses were performed on the transformed socio-demographic variables to describe the characteristics of the survey respondents. Missing data were included in the interpretation and categorised as ‘Not specified’.

Thereafter, cross-tabulation analysis was run to investigate the frequency distributions in socio-demographic variables, namely, gender, age, education, and occupation, by visitor types. A similar technique was conducted in order to examine the prior experience of volcanic sites and the number of volcanoes previously visited by the domestic and international visitors. It should be noted that these are not part of the research objectives. Conversely, these were considered mainly to gain an insight into the characteristics of the visitor types in order to interpret their differences in motivations.

Next, descriptive statistics were run on the 26 Likert-type scale items in order to investigate how these were rated by the respondents in general. The mean scores and standard deviations of each scale item were computed. Subsequently, the mean scores were ranked from highest to lowest to reveal the items that were rated most highly by the sample.

Following these are two separate factor analyses to delineate the underlying push and pull motives for volcano tourism at Mount Pinatubo. Factor analysis is performed to reduce a number of a priori items that have a certain degree of correlation with each other into factors for further analyses (Ho, 2014). This analysis is popularly applied in understanding complex social attitudes (Bryman & Cramer, 2011) and is commonly used in tourism research (Baggio & Klobas, 2011). Particularly, exploratory factor analyses were conducted mainly because the survey is descriptive and exploratory in nature (Williams, Onsman, & Brown, 2012). Particularly, Principal Components Analysis (PCA) as a factor extraction method is applied to both sets of push and pull motive items since ‘data reduction’ is aimed by the research (Hair et al., 2006). In terms of factor rotation, varimax rotation methods, which is tested as a successful orthogonal rotation technique, was applied concurrently, assuming a degree of independency between the extracted factors.
<table>
<thead>
<tr>
<th>Purpose/Research objective</th>
<th>Statistical test</th>
</tr>
</thead>
<tbody>
<tr>
<td>To describe the sample</td>
<td>Frequency analysis</td>
</tr>
<tr>
<td>To explore the characteristics and the levels of experience of volcanic sites between domestic and international visitors</td>
<td>Cross-tabulation analysis</td>
</tr>
<tr>
<td>To investigate how the scale items are rated in general</td>
<td>Descriptive statistics and mean ranking</td>
</tr>
<tr>
<td>To identify the push and pull motives of visitors for visiting non-erupting active volcanoes</td>
<td>Separate Principal Components Analysis with varimax rotation of the 15 push motive and 11 pull motive items</td>
</tr>
<tr>
<td>To assess the reliability of the scale items</td>
<td>Cronbach alpha coefficient calculation</td>
</tr>
<tr>
<td>To test for differences in push and pull motivation factors for gender</td>
<td>Independent samples t-test</td>
</tr>
<tr>
<td>To test for differences in push and pull motivation factors for age</td>
<td>One-way ANOVA with Games-Howell post-hoc analysis</td>
</tr>
<tr>
<td>To test for differences in push and pull motivation factors for prior experience of volcanic sites</td>
<td>Independent samples t-test</td>
</tr>
<tr>
<td>To explain the differences in motivations for domestic versus international visitors</td>
<td>Independent samples t-test</td>
</tr>
<tr>
<td>To analyse the interaction of visitor types, age, and prior experience of volcanic sites on the motivation factors where the visitor types significantly differed</td>
<td>2-way factorial ANOVA</td>
</tr>
</tbody>
</table>

For delineating push motivation factors, an initial PCA with varimax rotation was performed on the 15 push motive items. This initial factor solution has a significant Bartlett’s test of sphericity ($\chi^2(105) = 2396.28$, $p < .001$) and a meritorious Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (.88). According to Hair et al. (2006), the KMO measure should be above .50. The items analysed also met the communality criterion, as all had extracted communalities >.60. Moreover, the eigenvalue criterion of $\geq 1$ was applied in determining the factors to be retained (Bryman & Cramer, 2011). This resulted in three factors being extracted. All scale items for each
factor met the criterion for factor loadings which is >.50 suggested by Hair et al. (2006). However, during interpretation, overlapping factors were discovered during the assessment of the individual items composing each extracted factor. Specifically, ‘factor 2’ has both scale items for measuring novelty and socialisation. These two factors were analysed as independent motivation factors in previous studies.

Therefore, instead of extracting factors with eigenvalue \( \geq 1 \), a four-factor PCA with varimax rotation was performed on the 15 push motive items. Hair et al. (2006) propose that this technique is appropriate when the factors extracted are theoretically supported and have been previously studied. According to Baggio and Klobas (2011), this widely recognised technique easily allows the researcher to extract and interpret factors.

In this technique, the number of factors is pre-determined by the researcher. A four-factor solution was considered because there are four pre-conceived motivation constructs for this study. The solution is revealed to have significant Bartlett’s test of sphericity and a KMO statistic <.80. The items analysed have communalities >.60 and factor loadings >.50. However, one item that reads “In order to learn other new things” has a high cross-loading; thus, this item was eliminated. The remaining 14 scale items were re-analysed using the same four-factor solution. The items extracted met all the above mentioned criteria except for the eigenvalue. One extracted factor (factor 4) had an eigenvalue less than 1. This factor was still considered because according to Hair et al. (2006), the eigenvalue criterion need not be applied strictly if the number of items factor analysed is less than 20 because fewer factors will be derived.

For identifying pull motives, a PCA with varimax rotation was performed on the 11 pull motive items. The factor solution met the rules of thumb for the Bartlett’s test of sphericity, KMO statistic (>50), communalities (>50), and factor loadings (>50). Further, the \( \geq 1 \) eigenvalue criterion was applied to the extraction method revealing two pull motivation factors. In total, six motivation factors were extracted from the factor analyses for the push and pull dimensions. These are interpreted in Chapter 5.

To evaluate the internal consistency of the scale items, the Cronbach alpha coefficients of each extracted factor were calculated. Results show that the factors exceed the minimum requirement of .60 for the reliability coefficient (Hair et al., 2006). Thereafter, the scale items for each factor were summated, and the mean scores and standard deviations were computed. These summated scale factors were later on ranked in order
to analyse how the items were rated overall. Subsequently, diagnostic tests for normality were run to assess if the factors were normally distributed, in preparation for parametric statistical testing. In this procedure, the Kolmogorov–Smirnov and the Shapiro-Wilk statistic tests are run and the rule of thumb suggests that the significance levels for each test on each factor should exceed .05 to assume normal distribution (Ho, 2014). Results reveal that the summated scale factors violate this assumption as both tests are significant in the <.001 level; hence, these are not normally distributed. To address this, factor scores for each motivation factor were computed.

Factor scores are calculated “based on the factor loadings of all variables on the factor, whereas the summated scale is calculated by combining only selected variables” (Hair et al., 2006, p. 139). Used in exploratory factor analysis procedures, this method adjusts the mean and standard deviations of each factor to 0 and 1, respectively (Di Stefano, Zhu, & Mindrilá, 2009). Therefore, this method normalises the distribution of each factor which is a requirement for parametric statistical analyses.

In adopting this, refined methods for computing factors scores are recommended. In this study, the regression method was performed, which is appropriate when the factors are extracted through PCA. Moreover, this computes the position of each respondent on each extracted factor (Di Stefano et al., 2009). The computed factor scores were used for further testing.

The next step after normalising the data is conducting several bivariate and univariate statistical tests. The significance level set for this study is 5% or lower ($p < .05$). This is a criterion for determining if the results revealed in the analyses can be accepted as significant using a certain probability level. In this case, it has been set that the “probability of the difference(s) occurring by chance is less than five times out of a hundred” (Ho, 2014, p. 4). All tests for significance levels in this study are two-tailed since the differences predicted are not directional (Gray, 2014).

To investigate the differences in motivation for gender, an independent samples t-test was performed. Also known as ‘unrelated t-test’, this type of analysis is applied to compare the scores of two independent groups (Bryman & Cramer, 2011; Ho, 2014), in this case, females versus males. The same statistical test was applied to analyse motivation differences between first time volcano tourists and experienced volcano tourists.
A one-way Analysis of Variance (ANOVA) was conducted to compare the motivation factor scores of the three age groups. This test is applied when comparing scores of three or more unrelated groups (Ho, 2014). Post-hoc analysis is not considered since no statistically significant results are found on this test.

Following these, the differences in motivations for visitor types were analysed. Initially, an independent samples t-test was performed to compare the motivation factor scores for domestic versus international visitors. After discovering the motivation factors where these visitor types significantly differed, a series of 2-way factorial ANOVA was run to delineate the interaction of age and visitor types on these factors.

### 4.3.4 Qualitative data analysis

**Content analysis** was carried out for the qualitative data gathered from the survey questionnaires. This form of analysis is described as an unobtrusive, systematic, and objective way of analysing written and visual data (Gray, 2014; Smith, 2010). In this study, a combination of the frequency and summation types of content analysis was employed.

The frequency type was initially performed on the raw qualitative responses. This is perceived as one of the most appropriate ways of analysing textual data from surveys because it involves the counting of instances of a word or phrase mentioned within a data set (Jennings, 2001). Moreover, this is an empirical method that provides information regarding the most frequently utilised words by the survey participants in expressing their responses to the open-ended items in the questionnaire (Smith, 2010).

Thereafter, the summation process was applied to the frequency-analysed data. Jennings (2001) explains that this process entails the reduction of the data into broader categories that compose a data set. This is in line with the researcher’s post-positivist paradigm, adopting a reductionist approach. In this procedure, the specific theories adopted for this study are incorporated into reducing the data into broader categories.

Two open-ended items are embedded in the survey questionnaire composing the *qual 1* (additional motives) and *qual 2* (experience expectations) elements of the pre-tour study phase. Of the 204 valid questionnaires, 65 and 93 responses addressing *qual 1* and *qual 2* items were analysed, respectively. At first, these qualitative responses were coded in an SPSS data file as *string* variables. Later on, these were transferred into a Microsoft Excel sheet, a file format required for the further analyses discussed below.
4.3.4.1 Brush-up analysis

This step entails the interrogation of the data using NVivo 10, a computer-assisted qualitative data analysis software (CAQDAS). The search or ‘query’ features of this computer software aid in performing an overview analysis of the data, also known as brush-up analysis. It has been asserted that the rigour of analysis can be enhanced by utilising these software features (Welsh, 2002). However, it should be noted that the results generated by these computer-assisted analytic tools should be interpreted with caution because the software does not fully analyse the data for the researcher, and personal impressions of the data should still be created. As Jennings (2001) comments:

In using such programs, you should remember that they are only tools, and they are only as ‘good’ as the person who is using them. Qualitative software programs will not take over your role as the researcher/analyst – you have to effectively use the tools to get the best out of them. (p. 212).

For this particular analysis step, the ‘use’ of NVivo is only to inform the researcher of the overall structure of the data by looking at how words are used in the qualitative survey responses.

![Figure 4.2](image)

**Figure 4.2** Sample result of a ‘word frequency query’ run on the **qual 1** (additional motives) data set. *Generated using NVivo 10*

This was done by running the word frequency query feature of the software on the **qual 1** and **qual 2** data sets separately. The outcomes of these queries provide information regarding the particular words used and the number of times each word is used. A sample result of the queries is shown in Figure 4.2.
Following this, word clouds were generated from the results of the word frequency queries. These word clouds visually present the structure of the data based on word frequency. This means that the more frequent a word is cited, the larger and thicker the word is illustrated in the word cloud. In general, these strategies helped the researcher in terms of data familiarisation which is a pre-requisite for the next steps of the analysis.

4.3.4.2 Coding and frequency analysis

The next step in analysing the qualitative survey data is coding. This is a step where the responses are transformed manually into codes by labelling the “interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code” (Braun & Clark, 2006, p. 87); the codes so generated act as the basic units for this analytic method.

In detail, inductive coding was performed on the qualitative survey data. This technique allows the researcher to make inferences about the raw data without the influence of a priori concepts; hence, this approach is data-driven (Braun & Clarke, 2006; Jennings, 2001). Furthermore, the coding process was conducted at the semantic level which is synonymous with descriptive coding, by looking at the surface level of the data. In this approach, the researcher generates codes based on the exact words or similar/synonymous words and phrases used in the responses.

Most of the responses to the open-ended questions are short and direct. This data structure allows a mixture of data-derived and researcher-generated codes from the coding process. The former are one-word responses to the qualitative items asking for the respondents’ additional motives and experience expectations for volcano tourism (i.e. “adventure” coded as adventure). In contrast, the latter involves a semantic analysis of phrases and gives them appropriate labels. For example, a response that reads “a new place to see in the Philippines” was coded as Exploration of the Philippines.

The coding process was performed manually using pen and paper. As the researcher examines the responses one-by-one, codes were generated and listed. At the end of the process, the frequency of each code was computed. This involves the tallying of the number of times a code was noted. Afterwards, the percentage of the respondents who mentioned each code, against the total number of respondents (n) for each qualitative item were calculated (% of respondents = code frequency / n x 100). This approach
provides an insight into the most frequently mentioned additional motives and experience expectations for volcano tourism.

4.3.4.3 Data reduction

This is the final step where the theory-laden approach of the researcher as a post-positivist is incorporated. After applying inductive logic to the coding process, a hypothetico-deductive approach was carried out on categorising the codes. These broad categories are based on the theories adopted for this study. This is the step where the researcher’s impressions of the data are created.

In order to be consistent with the larger quantitative component of the visitor motivation study, the same theory was applied in analysing qual 1. The push-pull motivation framework is operationalised in delineating the additional visitor motives. Motivation codes that are perceived as intrinsically-inclined are categorised as push motives or person-specific motives. In contrast, those interpreted to stem from the destination or are induced by the destination features are categorised as pull motives.

For qual 2, or the experience expectations for volcano tourism, the expectancy theory serves as the foundational theory of inquiry. Some of the most frequently cited codes are interpreted as ‘general anticipated outcomes’. However, it appears that most of the generated codes resemble the constructs in the conceptual framework (interactional model) for the volcano tourism experience conceptualised for this study. Thus, this framework was adopted instead. Apart from the general anticipations of the visitors, the codes were distributed among the three main dimensions of the volcano tourism experience conceptual framework: natural, recreational, and socio-cultural.

4.4 Phase 2 (post-tour) methods: Visitor interviews on actual experiences

This phase of the study explores the actual experiences of visitors to Mount Pinatubo. To address this goal, an exclusively qualitative approach was adopted. Creswell (2009) defines this approach as “a way of looking at research that honors an inductive style, a focus on individual meaning, and the importance of rendering the complexity of the situation” (p. 4). There are two main reasons which influence the adoption of a qualitative approach for this study phase.

Firstly, as highlighted in the literature review chapters, little is known about the volcano tourism experience. Exploratory research, which often utilises qualitative approaches, is
recognised as one of the most appropriate techniques to gain a better understanding of a fragmented social phenomenon (Mason, 2014). Specifically, qualitative research aims to gain an insight of the subjective constructions and meanings associated by the individuals who are directly involved in the phenomenon being studied (Creswell, 2009).

In performing these, the researcher has to be personally involved in the study (Denscombe, 2014). This means that the researcher should have the ability to empathise with the research participants and subjectively interpret their narratives in order to better understand their experiences. Moreover, adopting the post-positivist research paradigm, this study recognises that while ‘absolute’ objectivity is impossible (Denzin & Lincoln, 2008; Giddings & Grant, 2007), this is in line with the philosophical foundations of this study. The goal of the researcher is to interact with the participants (modified dualist approach) and to incorporate personal values (value-laden approach).

Secondly, a qualitative approach was carried out for this study phase in reference to the nature of the phenomenon being studied. It has been described that tourism entails the interaction of people within a setting. Hence, tourism is a ‘qualitative experience’ and such qualitative research puts ‘real people’ in the study (Veal, 2006). This is one of the limitations of quantitative research because the scientific approach treats research participants as research subjects like that of an experiment.

It has been suggested that qualitative techniques should be adopted in studying tourist experiences. McIntosh (1998) depicts these experiences as subjective in nature. Qualitative approaches allow the collection of the ‘rich’ and ‘thick’ descriptions of these experiences, which cannot be gathered by the ‘ticks’ coded in quantitative instruments (Mason, 2014). Also, previous studies illustrate that qualitative approaches are effective in understanding tourism experiences (see Quinlan Cutler et al., 2014; Reis, 2012; Sharpley & Jepson, 2011; Webb, 2002). This is because most of these studies were carried out in ‘natural settings’. In this way, deeper insights can be gathered because the interaction with the participants is done in the real-life context of the phenomenon being studied (Creswell, 2009).

4.4.1 Qualitative interviews

Interviews were conducted to collect qualitative information for exploring the visitor experiences at Mount Pinatubo. This is one of the popular methods of gathering primary
 qualitative data from key informants where the researcher extracts information by asking questions that are in line with a study’s objectives (Creswell, 2009). There can be varied reasons for conducting interviews.

This study targeted individuals who had an immediate experience of a volcano tour at Mount Pinatubo. Interviews, particularly one-on-one interviews, allow the researcher to personally interact with target participants who can provide useful information to address research problems (Denscombe, 2014). Through this approach, it can be assured that the data collected is based on the first-hand tourism experience of the interviewed individuals.

In addition to the visitor experiences, their feelings, emotions, and views on volcano tourism are also elicited. By conducting interviews, these perspectives can be investigated using an in-depth approach (Denscombe, 2014). As explained previously, tourist experiences are complex in nature, and in-depth approach aids in understanding the complexity of these perspectives (DiCicco-Bloom & Crabtree, 2006). Thus, this study conducts a one-on-one approach when interviewing research participants.

Conducting one-on-one interviews is one of the forms of face-to-face interviews. As the term implies, ‘one-on-one’ interviews involve two actors: the researcher and the interviewee. An advantage of this is that the process is intended to be ‘personal’ and ‘private’, giving the opportunity for the researcher to ask direct and specific questions to the interviewee (DiCicco-Bloom & Crabtree, 2006). Moreover, this can be viewed as a natural process of inquiry because one-on-one conversations are events that occur normally in daily life (Mason, 2014). Interviewees may better convey their views and messages about what they have experienced because they have the opportunity to interact with a person, as opposed to quantitative questionnaires that limit their answers through the use of a priori items.

Lastly, practical reasons are considered in adopting one-on-one interviews. In contrast to focus groups, Denscombe (2014) proposes that one-on-one interviews are easy to organise because each session only requires one interview participant. This is related to the issue of how to gain access to target participants.

Taking into consideration the enjoyment of the visitors to Mount Pinatubo, as much as possible the researcher aims to minimise the potential impacts of the study on the visitors’ experiences. It has been recognised that the ‘pre-tour survey’ is already an
intervention into their volcano tourism experience. The facilitation of another ‘survey’ or ‘focus groups’ after the tours is perceived as excessively intruding on the main purpose of their trip as ‘visitors’. Given this, the researcher aimed to interview visitors who experienced the tours and who chose to stay in homestay facilities. In this manner, the recruitment of participants would be easier for the parameters to participate in the interviews were narrowed down.

4.4.2 Semi-structured interviews and questions

Creswell (2009) states that one-on-one interviews can be performed by following any of these approaches: structured, semi-structured, or unstructured. This study used the semi-structured interview approach. This interview method requires that a number of questions with a pre-determined sequence needs to be asked of the interviewees, in response to the issues surrounding the research problem (Denscombe, 2014). In contrast to structured interviews, semi-structured interviews do not follow a standardized approach in asking questions. According to Gray (2014), the questions can be asked depending on the flow of the conversation and may not strictly follow their pre-determined order. Hence, reflexivity is given to the researcher.

Veal (2006) suggests that a ‘checklist’ of the issues to be addressed serves as a research instrument, separate from the researcher. In this study, this checklist serves as the interview guide. Most often, this checklist includes a series of open-ended questions that should start with the what, why, or how questions. While structured interviews with close-ended questions require single word responses, semi-structured interviews with open-ended questions provide interviewees the opportunity to narrate long responses depending on the topic raised. Therefore, a crucial factor that needs to be considered in the semi-structured approach is the design of the questions for the interviews.

Different techniques have been introduced to effectively compose these types of interview questions. In general, these questions should be adjacent to the conceptual framework of the study (Veal, 2006). Thus, this suggestion was adopted in designing the main interview questions.

Furthermore, the sequence of asking these questions needs to be properly defined. As opposed to a survey questionnaire, simple questions such as those concerning demographics should be asked at the beginning of the interviews (Mason, 2014). Alternatively, for this study, the interviewees’ travel background (reasons for visit) and
travel party characteristics were asked at the start of each interview session because these are relatively easy to answer. The full set of the interview questions in sequence are shown in Appendix H, and are discussed below.

After the introductory questions, the first question asked reads ‘Before the start of your tour, what experiences were you expecting of Mount Pinatubo?’ This question is considered in order to enquire about the participants’ views regarding their experience expectations prior to the commencement of their Mount Pinatubo tour. This also serves as a supplementary question to the introductory questions that aim to investigate the interviewees’ nature of travel.

Thereafter, the enquiry was diverted to the visitors’ actual experiences: ‘How would you describe your actual experiences of Mount Pinatubo?’ Of the questions designed, this acts as the main one that is specifically directed at the research objective which aims to understand the actual experiences of visitors to Mount Pinatubo. In addition, because this study considers the emotive context of the visitors’ experiences, a supplementary question reads ‘Can you tell me how you felt about the experiences?’ is attached to the main question. In conjunction, one of the merits of semi-structured interviews is that the interviewer is permitted to ask probing questions such as ‘why?’ to allow interviewees to expand on their points (Gray, 2014).

Following these, the third main question asked is ‘What are the highlights of your Mount Pinatubo experience’. The purpose of this question is to validate this study’s conceptual framework regarding the Mount Pinatubo volcano tourism experience. By asking interviewees about the specific features of the volcano tour that highlighted their experiences, it can be evaluated whether the conceptual framework and its accompanying theory work in understanding visitor experiences. The questions ‘Why was this a highlight?’ and ‘How did it make you feel?’ were subsequently asked in order to reveal the interviewees justifications and feelings about their tour highlights.

Consequently, the fourth main question designed for the interviews asks ‘Which parts of the tour do you think should be improved in order to enhance your experience?’ This was accompanied by the probing question that reads ‘Why do you think that?’ At first, it can be observed that these questions lead to a more managerial enquiring of the visitor experiences. However, these were considered in order to understand the underlying factors that may have affected any potential negative experiences. Moreover, the
responses that can be gathered by this question can be used in the practical aspects of managing the volcanic site.

The fifth main question relates to the first main question. Specifically, this asks ‘Was there anything that you were not expecting? Why?’ The purpose of asking this question is to understand whether there was anything which occurred unexpectedly during their tours at Mount Pinatubo.

Finally, an exit question that asks ‘Would you like to add anything else about your tour today?’ is designed for the semi-structured interviews. Creswell (2009) recognises that exiting an interview is as important as introducing and entering one. This question is framed to enquire about any other factors that may have not been asked by the researcher (Denscombe, 2014). Thus, this can also be a cue for the participants that the interview session is ending.

4.4.3 Data collection

After each tour, the semi-structured interviews were conducted on-site at the Mount Pinatubo tour jump-off point. These were conducted in conjunction with the pre-tour survey on visitor motivations and experience expectations. While research assistants helped the researcher in facilitating the survey, the interviews were conducted exclusively by the researcher.

4.4.3.1 Sampling

Purposive sampling was employed for this phase of the study. This sampling method is popularly used in qualitative interviews; it involves the deliberate selection of interviewees based on the criteria set for the study (Braun & Clarke, 2013). The predetermined criteria are based on the goals of the study.

Since this study phase aims to understand the actual volcano tourism experiences of visitors, the potential participants should have immediate first-hand experiences of a Mount Pinatubo Tour to qualify for the interviews. Moreover, ‘immediate experiences’ are required to ensure that the visitor narratives are based on fresh experiences of the tour. In this study, the interviewees were recruited within 24 hours of their Mount Pinatubo experience.
As in the quantitative surveys, potential interviewees should be 18 years old and above. Furthermore, the interviews were pre-determined to be conducted in English\textsuperscript{7}. Hence, visitors who are confident in conversing in English are recruited for the interviews, although it has been recognised that there could be some potential Filipino interviewees. Practical reasons and circumstances are considered for this decision. Primarily, the task of translating the interviews conducted in Filipino is avoided. This mixed methods study requires multiple phases, and to translate after transcription may limit the time allotted for the thesis to be completed. Moreover, consultations are required by AUTEC if interviews are to be translated. Limited time\textsuperscript{8} was given for the study to be given ethical approval since the researcher aimed to conduct the data collection by March 2014.

The recruitment of the interview participants was conducted at the two accommodation facilities of the Majestic Mount Pinatubo Tour and Homestay. In addition to the above criterion, homestay guests were the only ones qualified for the interviews in order to minimise the impacts of the study on the experiences of the other visitors. Some homestay guests arrived at the accommodation a night before the tour, stayed overnight, joined the tour, and left the same day right after the tour. Other homestay guests arrived on the day of the tour, joined the tour, stayed overnight, and left the following day.

Accommodation owners aided the recruitment of interviewees during the researcher’s stays at their facilities. The owners introduced the researcher and the study to homestay guests, either during their arrival at the homestays or after they returned from the tours. Apart from this, the researcher also approached potential participants at the common areas of the accommodation facilities, namely, the verandas and dining halls, during snack and dinner periods. Moreover, other potential participants, especially those leaving for Manila on the same day of the tours, were approached right after they returned to their accommodation from a Mount Pinatubo tour. Those who agreed to participate in the study were given a set of the following documents: Interview PIS (see Appendix I), Consent Forms (see Appendix J), and Interview Guide.

Overall, 12 individuals were approached. All of whom agreed to be interviewed regarding their volcano tourism experiences. This led to a 100% response rate, which means that the recruitment technique is effective and successful. Moreover, it has been suggested that the sample size for qualitative studies depends on data saturation or the

\textsuperscript{7} The researcher is proficient in speaking both Filipino and English languages.

\textsuperscript{8} The researcher aimed to submit an ethical application to AUTEC on 25 November 2013 in order to commence the fieldwork by March 2014, the start of the peak tourist season in the Philippines.
redundancy of the responses being collected (Gray, 2014). It can be perceived that this approach is based on the flow of the research and on the judgment of the researcher. Since the interviews were conducted and recorded by the researcher himself, it was observed that data saturation occurred by the 12th interview session.

4.4.3.2 Conducting face-to-face interviews

Interviews were conducted in various parts of the homestay facilities. Following Smith (2010), the participants were asked regarding their preferred locations for the interviews to ensure that they were relaxed and comfortable. The majority of the interviewees chose to be interviewed in the common areas while two participants preferred to have the sessions in their respective accommodation rooms. Table 4.10 shows the pseudonyms given to the interviewees, their interview locations, interview dates, and interview durations.

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Location of the interview</th>
<th>Date of interview</th>
<th>Duration of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic visitor 1</td>
<td>HS1 – Private room</td>
<td>17 April 2014</td>
<td>15:33</td>
</tr>
<tr>
<td>Domestic visitor 2</td>
<td>HS1 – Dining hall</td>
<td>18 April 2014</td>
<td>10:46</td>
</tr>
<tr>
<td>Domestic visitor 3</td>
<td>HS1 – Dining hall</td>
<td>17 April 2014</td>
<td>17:44</td>
</tr>
<tr>
<td>Domestic visitor 4</td>
<td>HS1 – Dining hall</td>
<td>20 April 2014</td>
<td>18:56</td>
</tr>
<tr>
<td>Domestic visitor 5</td>
<td>HS1 – Lounge area</td>
<td>25 May 2014</td>
<td>10:18</td>
</tr>
<tr>
<td>Domestic visitor 6</td>
<td>HS1 – Dining hall</td>
<td>25 May 2014</td>
<td>14:47</td>
</tr>
<tr>
<td>Domestic visitor 7</td>
<td>HS2 - Veranda</td>
<td>19 May 2014</td>
<td>14:00</td>
</tr>
<tr>
<td>Domestic visitor 8</td>
<td>HS2 - Veranda</td>
<td>25 May 2014</td>
<td>7:43</td>
</tr>
<tr>
<td>International visitor 1</td>
<td>HS1 – Dining hall</td>
<td>20 April 2014</td>
<td>9:03</td>
</tr>
<tr>
<td>International visitor 2</td>
<td>HS1 – Private room</td>
<td>1 May 2014</td>
<td>8:49</td>
</tr>
<tr>
<td>International visitor 3</td>
<td>HS2 - Veranda</td>
<td>2 May 2014</td>
<td>9:29</td>
</tr>
<tr>
<td>International visitor 4</td>
<td>HS2 - Veranda</td>
<td>3 May 2014</td>
<td>11:41</td>
</tr>
</tbody>
</table>

Notes: a. Measurement of interview duration is ‘minutes’: ‘seconds’; HS = Homestay

Before the start of each interview, the interviewees were oriented about the purpose and objectives of the qualitative study, and the interview procedures and guidelines. This briefing included asking permission whether or not the interviews could be audio-recorded to avoid intimidation and discomfort (Smith, 2010). Moreover, the researcher answered any questions that were raised by the interviewees during the pre-interview orientations. Thereafter, the participants were asked to sign a Confidentiality Agreement to finalise their participation in the study.
The interviews were audio-recorded digitally using a smartphone. During the sessions, the researcher utilised the spaces on the interview guide to write notes about the conversation. Note-taking is an effective way of recording some important points raised during the interviews (Smith, 2010). This assures participants that the interviewer is listening attentively.

While follow-up questions can be asked of participants, it should be noted that the interviewer should not lead the participants to their answers during semi-structured interviews (Veal, 2006). Given this, probing or follow-up questions such as ‘Why is that?’ or ‘Can you explain further on what you meant by...?’ were framed for the participants. Also, both verbal and non-verbal responses, such as uh-huh and ‘that’s interesting!’ were made in order to invite the participants to explain further on the topic being discussed. This technique shows that the interviewer is interested in the point being explained. Overall, the semi-structured interviews range from approximately 8 minutes to 19 minutes.

4.4.4 Qualitative data analysis

Braun and Clarke’s (2006) thematic analysis approach was adopted as the method for analysing the qualitative information gathered from the interviews. Thematic analysis is defined as “a method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clark, 2006, p. 79). Furthermore, thematic analysis is conceptualised to mainly see and make sense of qualitative data (Boyatzis, 1998). Although a post-positivist approach grounded this research, the thematic analysis approach for this study phase does not aim to transform the collected qualitative data into quantitative information unlike that of Boyatzis (1998).

This study phase primarily applied to the steps below proposed by Braun and Clarke (2006), which are exclusively aimed towards a rich interpretation of the patterns across the qualitative dataset:

1. Familiarising yourself with the data;
2. Generating initial codes;
3. Searching for themes;
4. Reviewing themes;
5. Defining and naming themes; and
6. Producing the report (p. 87).
Most of these steps were performed using NVivo 10. The following sub-headings explain in detail, the particular approaches conducted by the researcher in executing the steps for thematic analysis.

4.4.4.1 Data familiarisation

The initial step for thematic analysis requires the researcher to familiarise himself with the available qualitative information (Braun & Clarke, 2006). Before getting into further steps of the analysis, it is important for the researcher to be immersed with the extent of the qualitative information. Since the data is collected by the researcher, the data familiarisation stage becomes a relatively easy task. Two different techniques were performed in this step.

The first one involves the transcription of the recorded interviews. This strategy prepares the dataset or transcripts by transforming verbal data into written data (Halcomb & Davidson, 2006). Obviously, textual formats of the interviews are easier to investigate compared to audio-recorded formats (Boyatzis, 1998). Generating quality and accurate interview transcripts enhances the rigour of qualitative data analysis (Poland, 1995). Also, textual formats are required for uploading to NVivo 10. Therefore, this technique can be regarded as a key step in performing thematic analysis (Braun & Clarke, 2006).

In this study, verbatim transcription of the recorded interviews was conducted. This transcribing technique converts spoken words and expressions into textual formats, in a word-for-word manner (Poland, 1995). Technically, the transcriptions are typed into Microsoft Word documents. The verbatim approach was applied completely on the recorded interviews because this study aims to look at patterns throughout the entire dataset. Transcribing the interview data, although described as a rigorous task and time-consuming, benefitted the researcher in terms of gaining an overview of the dataset.

The second technique for data familiarisation undertaken in this step involves reading and re-reading the interview transcripts. It has been recognised that the ‘immersion’ of the researcher in the data occurs at this stage (Braun & Clarke, 2006). Active reading, which involves a preliminary or ‘brush-up’ analysis of the data while reading, was applied in this technique. This reading strategy, which entails the initial ‘search’ for meanings across the dataset (Braun & Clarke, 2006), informs the subsequent steps of analysing the qualitative information for this study phase.
4.4.4.2 Coding

The next step of thematic analysis involves the **coding** of the raw qualitative information. This process is considered an important step that needs to be undertaken before the dataset is segmented into broader categories or themes (Coffey & Atkinson, 1996). Particularly, *codes* are developed from the raw data during this process. These are ideas that serve as the basic elements or ‘building blocks’ that are sorted to reveal themes in thematic analysis.

Several decisions need to be considered, depending on the specific aims of the analysis, in order to be consistent throughout the process. Firstly, this study aims to perform a complete description of the collected qualitative information. Thus, a complete coding procedure was applied to the entire dataset.

Secondly, an *inductive thematic analysis* was employed on the dataset. As the term suggests, inductive logic is needed for the process (Braun & Clarke, 2006). Given this, an *inductive coding* procedure should be adopted. This is a *data-driven* approach for coding where the process and the codes generated are not influenced by any pre-determined theoretical conceptions (Boyatzis, 1998; Braun & Clarke, 2006). Through this approach, the researcher assumes to have a ‘clean slate’ so that the real meanings can be extracted from the data and collated.

The data coding was performed using NVivo 10. This was considered due to the large amount of textual data produced from the transcriptions. A CAQDAS, such as NVivo 10, is an effective medium for organising ideas generated from the analysis (Veal, 2006).

The first step is exporting the transcriptions, which are in Word Document format, into an *NVivo project*. Thereafter, the actual coding step, which refers to the creation of *nodes*, was conducted. Nodes are synonymous with ‘codes’, being the basic units of analysis that contain collated data extracts from the dataset. The data that can be stored in a node may include a word or phrases that pertain to a single idea (Edhlund, 2011). Therefore, using Nvivo 10 can be an effective technique for reducing the raw qualitative information into smaller units of analysis, which is the goal in coding according to Boyatzis (1998).

The reduction of the raw data starts by reading and reviewing the transcripts. Once an important phrase or statement is identified, the researcher then highlights the
information. Afterwards, this information is given a node label or assigned to an existing node. Nodes can be renamed, re-adjusted, or discarded as the analysis progresses. An example of a node (fascinating experience) containing a coded phrase extracted from the dataset is shown in Figure 4.3. At the completion of this procedure, 81 initial codes were created. In NVivo 10, these initial codes are called child nodes (Edhlund, 2011).

![Figure 4.3 Data extracts coded for the node/code labelled, ‘fascinating experience’.](Generated using NVivo 10)

4.4.4.3 Transforming codes into potential themes

This step entails the searching for themes step proposed by Braun and Clarke (2006). This involves the actual analysis of codes by identifying and grouping them into broader concepts. In NVivo 10, this procedure refers to the assignment of child nodes (codes) into their corresponding parent nodes (themes) (Edhlund, 2011).

In this stage, the analysis is focused on the identification of codes with similar ideas that may form potential themes. This was performed by looking at relationships between codes in reference to the data extracts corresponding to each code (Braun & Clarke, 2006). Moreover, this technique entails a series of investigations and re-investigations of the coded data in relation to the candidate themes.

In total, 40 initial codes were identified and considered for sorting; these were those recognised as addressing the actual experiences of visitors to Mount Pinatubo. The codes are a mixture of the visitors’ perceptions, emotions, and views towards the tourism experience at the volcanic site.

NVivo 10 was an effective tool in searching for themes for this study. Through this software, codes can be visualised and prepared for sorting. The interface of this CAQDAS is similar to that of a filing cabinet in a computer operating system. Using
this, the researcher assigned codes by dragging them into corresponding themes that were created and analysed. Some of these codes where re-assigned or deleted if they seemed to diverge from the initially assigned themes.

Figure 4.4 shows example themes or parent nodes created using NVivo 10. In this figure, the parent nodes are labelled Appreciation of nature and Awe in the power of nature. Below these ‘parent nodes’ are their corresponding ‘child nodes’ located at the lower level of the analysis. This structure in NVivo 10 where nodes are arranged as headings and sub-headings produce the so-called hierarchal nodes (Edhlund, 2011).

![Figure 4.4 ‘Parent nodes’ and their ‘child nodes’. Generated using NVivo 10](image)

4.4.4.4 Finalising themes and operationalising the Conceptual Framework

This step involves the reviewing and refining of the candidate themes generated from the previous step (Braun & Clarke, 2006). This is undertaken to further make sense of the qualitative dataset. Two stages are performed for this step.

The first stage entails the reviewing of themes in accordance with the extracted data of their respective codes (Braun & Clarke, 2006). This involves the gathering of data extracts per theme and examining whether the raw information forms a pattern within each theme. Aside from reading the extracted data, an effective strategy involves the visualisation of the themes. This is where an initial thematic map is created showing themes and their respective codes.

For this study, an initial thematic visualisation containing ‘mind maps’ was created through NVivo 10 (see Figure 4.5). This provided the researcher a complete overview of the themes. At this stage, the themes were easy to examine. As a result, some of the themes were discarded and some were collated with other themes. For example, the candidate theme labelled challenge was collated with a larger theme named Hedonism and physical stimulation.
Figure 4.5 An initial visualisation of the themes represented by ‘mind maps’. *Green* boxes show themes influenced by the volcano tour’s ‘natural’ dimension, *blue* boxes by the ‘recreational’ dimension, and *yellow* boxes by the ‘socio-cultural’ dimension. *Generated using NVivo 10*

The following stage for refining the themes pertains to the examination of the validity of the themes in association with the entire dataset. A way of doing this is to investigate whether or not each theme “accurately” reflects the meanings evident in the data set as a whole” (Braun & Clarke, 2006, p. 91). At this stage particularly, the researcher re-read the transcripts and assessed the correspondence of the themes to the views that the participants communicated.
To further refine the themes, the operationalisation of the conceptual framework (see Figure 3.1) for the volcano tourism experience composed by the researcher was incorporated as an additional stage. It should be noted that the thematic analysis for this study is of an inductive nature. This stage was added in order to infuse the researcher’s reductionist approach as a post-positivist.

The researcher reviewed the data extracts and identified which of the experiential dimensions (natural, recreational, and socio-cultural) influenced the narrated perceptions, emotions, and views of the visitors. After investigating the contents of each theme, these were collated and distributed to each of the pre-conceived dimensions of the volcano tourism experience at Mount Pinatubo. The themes were colour-coded according to their respective experience dimension (see Figure 4.5). The themes’ experiential dimensions act as larger categories within the hierarchy of the nodes. A visualisation of this hierarchy is shown in Figure 4.6.

At the end of this stage, a final thematic map containing the finalised themes was created and presented in Chapter 6. This chapter also includes the names/alternative names and definitions given for each theme. Moreover, this chapter contains the write up of the report which is proposed as the final step of thematic analysis.

4.5 Phase 3: Overall interpretation

The question how to interpret the two phases as one is central in the final phase of this mixed methods study. Various techniques can be applied to this actual ‘mixing process’.

Figure 4.6 Hierarchy of nodes under the ‘Natural’ dimension of the visitors’ volcano tourism experience. Generated using NVivo 10
This phase is also known as the *mixed methods interpretation* stage where assertions are made based on the results of the preceding study phases (Creswell & Plano Clark, 2011). These assertions or conclusions, which are made exclusively or across study phases, pertain to *inferences* or *meta-inferences*, respectively.

This study aims to look at *complementarities* and *non-complementarities* across the findings of the pre-tour and post-tour phases. Hence, a *convergent/parallel* mixed methods design is devised for this study. Based on this design, a framework is created to illustrate the analysis and interpretation of these findings (see Figure 4.7).

The framework shows the merging of the first (QUANT/qual) and second (QUAL) study phases. This was done at the ‘findings’ level, which is after the completion of parallel analyses for both study phases. It should be noted that the merging is not aimed at comparing the results or identifying how the first phase’s results confirm the second phase’s findings (or vice versa) (Creswell & Plano Clark, 2011). These techniques are observed to be more appropriate if there is only one sample for both phases. Since this study has two different sets of surveyed and interviewed individuals, comparisons and confirmatory strategies are problematic. Therefore, the inferences should be based on the congruence or discrepancy across findings.

**Figure 4.7** Analytical framework for mixed methods interpretation
The initial step of the process assesses the convergence of motivations with the experience expectations. The codes for the latter are identified and then distributed to the motivation factors that more likely inform them. This procedure entails the ‘embedding’ of the experience expectations in the visitor motivations.

Thereafter, complementarities or non-complementarities are evaluated as the polished findings for the first phase is merged with the second phase. The experiential themes are placed side-by-side with the converged motivation and experience expectation concepts. These experiential themes are then linked with the latter dimensions that they more likely converge with. This is the ‘first-level’ analysis procedure where ‘candidate sets’ for finding complementarities are identified.

The ‘second-level’ analysis examines the congruence of the candidate complementarities within each volcano tourism dimension. Here, the researcher’s reductionist approach was applied. Here the conceptual framework that assumes the experience to be influenced by the natural, recreational, and socio-cultural dimensions of the tour was operationalised. To do this, the details of each candidate set are re-visited and evaluated for consistency within a volcano tourism dimension.

For example, novelty-seeking (motivation factor) is more likely directed towards looking at different things. This can be anticipated as a unique (experience expectation) experience. Based on the thematic analysis, novel experiences (actual experience) have taken place by gazing upon the geological formations. This set of findings is consistent within the natural dimension of a Mount Pinatubo tour. Thus, inferences are made across these findings according to these patterns. The final sets of inferences are discussed, in detail, in Chapter 7.

4.6 Ethical considerations

The adopted ethical principles for research vary depending on academic institutions. For AUT University, the principles of partnership, participation, and protection are the key ethical considerations when conducting research with human participants. This study satisfies these principles, as explained below.

For partnership, it is important that the participants are well-informed about the research. This refers to obtaining informed consent from the participants (Gray, 2014). To address this, PISs are distributed to potential participants. Moreover, the aim,
objectives, research design, and potential outputs of the project are verbally explained to them. Should the approached individuals understand the nature and mechanics of the research, and agree to participate in the project, informed consent is given to the researcher by: 1) filling out the survey form (for survey respondents); and 2) signing a Consent Form (for interview participants). Thus, in conducting these, mutual respect between the researcher and participants can be encouraged.

In the principle of *participation*, the role of the participants should be outlined. For this study, the participants as actual visitors to Mount Pinatubo act as ‘key informants’. Their role is limited to communicating their views on their participation in volcano tourism at the research site. As specified in the PISs, participation is voluntary and there will be no consequences should an individual refuse to be involved in the research.

The final principle considers the *protection* of the research participants. This research upholds a high degree of confidentiality of the participants’ identity. There is no way that their responses, both in the survey and interviews, are linked to their personal details. Furthermore, their responses and details are kept secure. During the course of data collection, they are given the opportunity to not answer any questions that may cause discomfort, intimidation, or potential harm to them. Also, participants can terminate any survey or interview session should they wish to, without any consequences. These are specified in the PISs. The abovementioned protocols received final approval from AUTEC (see Appendix E).

In addition, it was mentioned earlier that Research Assistants volunteered to help the researcher with collecting survey data. It is vital for these individuals also to treat participant identities with utmost confidentiality. Thus, the researcher made sure that the Research Assistants were well-informed on how to exercise this principle. Likewise, Confidentiality Agreements were signed to formalise this conduct. This is an amendment that was approved by AUTEC on 28 April 2014. Formal correspondence from AUTEC was received on 13 May 2014 (see Appendix F).

### 4.7 Conclusion

This chapter explains the methodology adopted for this study. Initially, the researcher’s philosophical standpoint is discussed to support the decision in choosing *mixed methods* as the research methodology. Thereafter, the adopted mixed methods design is explained in line with the specific research objectives. The two major phases of this
study including the respective data collection methods, tools, and analysis procedures are illustrated in detail. Likewise, the mixed methods analysis and integration techniques are outlined. Finally, this chapter synthesises the research ethical considerations. The following chapters reveal the findings from the phases of this study.
Chapter 5  FINDINGS & ANALYSIS: PHASE ONE
Motivations and Experience Expectations for Volcano Tourism

The purpose of this chapter is to present the findings and analysis from the pre-tour survey of visitor motivations and experience expectations for volcano tourism at Mount Pinatubo. Specifically, this chapter provides both the quantitative results from the statistical analyses of scale items and the qualitative findings from the content analyses of the textual responses to the embedded open-ended questions.

Initially, this chapter provides general information about the survey respondents. Thereafter, this chapter investigates the differences in characteristics between the two visitor segments: domestic and international. This is followed by the presentation of findings from the factor analyses, descriptive statistics, and reliability analysis of the five-point Likert-type scale items. Following these is the presentation of the results regarding differences in motivations in terms of socio-demographic characteristics, prior experience of volcanic sites, and visitor types.

Furthermore, this chapter provides the findings from the content analysis of the responses to the embedded open-ended survey question that explores visitor motives that were not captured by the close-ended questionnaire items. This is followed by the results from the analysis of the qualitative responses to a question asking the visitors’ experience expectations are presented. The profile of those who responded to each of the open-ended question is also provided.

5.1  Visitor Motivation Survey – Respondent profile

5.1.1  General sample description

The data analysed for this study were collected from a total of 204 respondents. As shown in Table 5.1, these individuals have different socio-demographic characteristics. Regarding gender, the number of males (52.5%) is slightly higher compared to females (47.5%). In terms of age, more than half of the sample belongs to the 18 to 29 age category (56.4%); the remaining respondents are within the 30 to 39 (25.5%) and 40 plus (18.1%) age groups. Most of the respondents are classified as domestic visitors (62.3%) while the remainder are from overseas. According to travelling party, those who travelled with friends (56.4%) are the highest number followed by those who were with their families (17.1%), colleagues (9.8%), partners (9.8%), and those who travelled
alone (3.9%). Those who were with classmates, other people, and those who did not specify their travelling party represent 3% of the sample.

Table 5.1 Description of the sample

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>107</td>
<td>52.5</td>
</tr>
<tr>
<td>Female</td>
<td>97</td>
<td>47.5</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
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<td></td>
</tr>
<tr>
<td>18 to 29</td>
<td>115</td>
<td>56.4</td>
</tr>
<tr>
<td>30 to 39</td>
<td>52</td>
<td>25.5</td>
</tr>
<tr>
<td>40 plus</td>
<td>37</td>
<td>18.1</td>
</tr>
<tr>
<td><strong>Visitor Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>127</td>
<td>62.3</td>
</tr>
<tr>
<td>International</td>
<td>77</td>
<td>37.7</td>
</tr>
<tr>
<td><strong>Travelling Party</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td>115</td>
<td>56.4</td>
</tr>
<tr>
<td>Family</td>
<td>35</td>
<td>17.1</td>
</tr>
<tr>
<td>Colleagues</td>
<td>20</td>
<td>9.8</td>
</tr>
<tr>
<td>Partner</td>
<td>20</td>
<td>9.8</td>
</tr>
<tr>
<td>Travelling Alone</td>
<td>8</td>
<td>3.9</td>
</tr>
<tr>
<td>Classmates</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Not specified</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>17</td>
<td>8.3</td>
</tr>
<tr>
<td>Tertiary (Technical or Bachelors)</td>
<td>117</td>
<td>57.3</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>66</td>
<td>32.4</td>
</tr>
<tr>
<td>Not specified</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>87</td>
<td>42.6</td>
</tr>
<tr>
<td>Manager</td>
<td>39</td>
<td>19.0</td>
</tr>
<tr>
<td>Administrative worker</td>
<td>12</td>
<td>6.0</td>
</tr>
<tr>
<td>Technical &amp; Trades worker</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td>Labourer</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>Sales worker</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Community or Personal service</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Other</td>
<td>49</td>
<td>24.0</td>
</tr>
<tr>
<td>Not specified</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>204</td>
<td>100</td>
</tr>
</tbody>
</table>
Moreover, the majority reported that they had completed either a tertiary degree (57.3%) or a postgraduate degree (32.4%), while the remainder had completed secondary education. Regarding occupation types, 42.6% work as professionals, 19% as managers, and 5.9% as administrative workers. The remainder are in other work categories.

Furthermore, the respondents report having varying degrees of experience of volcanic sites prior to visiting Mount Pinatubo (see Table 5.2). The number of those who had not travelled to a volcano before (65.2%) is higher compared to those who had visited volcanic sites at least once prior to joining a Mount Pinatubo tour. In addition, 27% had visited one, 6.8% two to three, and 1% of the sample had visited four or more volcanoes.

Table 5.2 Indicators of the respondents’ levels of experience of volcanic sites

<table>
<thead>
<tr>
<th>Indicator</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Volcanic Site Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>71</td>
<td>34.8</td>
</tr>
<tr>
<td>No</td>
<td>133</td>
<td>65.2</td>
</tr>
<tr>
<td>Number of Volcanoes Visited</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>133</td>
<td>65.2</td>
</tr>
<tr>
<td>1</td>
<td>55</td>
<td>27.0</td>
</tr>
<tr>
<td>2 to 3</td>
<td>14</td>
<td>6.8</td>
</tr>
<tr>
<td>4 plus</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100</td>
</tr>
</tbody>
</table>

5.1.2 Demographic profile of domestic and international visitors

5.1.2.1 Visitors’ current place of residence

An *a priori* segmentation categorised respondents into domestic and international visitors. It had been previously shown that domestic visitors or those whose usual country of residence is the Philippines, were higher in number than international visitors or those currently residing overseas. Table 5.3 gives further details of the exact regional and continental origins of these two visitor types.

It was discovered that international visitors originate from four continents including Europe (18.1%) and Asia (13.7%). The least percentage of international visitors belongs to those from Oceania and North America, each composing 2.9% of the total number of respondents. Further examination revealed that the 127 domestic visitors surveyed live
in the National Capital Region (NCR) ($n = 93, 74.4\%$), Central Luzon Region ($n = 12, 9.6\%$) where Mount Pinatubo is located, Southern Tagalog Region A ($n = 8, 6.4\%$), Bicol Region ($n = 6, 4.8\%$), and other Philippine regions ($n = 6, 4.8\%$).

Table 5.3 Respondents current place of residence

<table>
<thead>
<tr>
<th>Country/Continent</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines (Domestic Visitors)</td>
<td>127</td>
<td>62.3</td>
</tr>
<tr>
<td>Europe</td>
<td>37</td>
<td>18.2</td>
</tr>
<tr>
<td>Asia</td>
<td>28</td>
<td>13.7</td>
</tr>
<tr>
<td>Oceania</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td>North America</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100</td>
</tr>
</tbody>
</table>

5.1.2.2 Visitor types, characteristics and levels of experience of volcanic sites

To analyse the characteristics and levels of experience of volcanic sites between domestic and international visitors, cross-tabulation analyses were performed (see Table 5.4). Results show that the number of female domestic visitors (56.7\%) is slightly higher than their male counterparts. In contrast, male international visitors (67.5\%) are somewhat higher in number compared to female international visitors.

More than half of the domestic visitors are aged 18 to 29 years old (65.4\%). For international visitors, those within the 18 to 29 age category (41.6\%) are slightly higher in number compared to the remaining age groups. In terms of education, the majority of domestic visitors reveal that they are tertiary degree holders (63\%). Similar findings were identified for international visitors where more than half of the respondents report to have completed tertiary education (50.7\%). For occupation, more than half of the domestic visitors are working as professionals (51.2\%) and the remainder in other work categories. For international visitors, 30.7\% work as professionals and 25.3\% as managers. The remainder work in other job categories.

Cross-tabulations were also conducted in order to examine the differences between visitor types and their level indicators of experience of volcanic sites (see Table 5.5). It was discovered that the majority of domestic (66.9\%) and international (62.3\%) visitors were first time volcano tourists. However, results show that more than a quarter of domestic visitors (28.4\%) and about a quarter of international visitors (24.7\%) have previously visited a volcano prior to their trip to Mount Pinatubo.
Table 5.4 Cross-tabulations of visitor types by socio-demographic characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Domestic % (f)</th>
<th>International % (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender(^a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>56.7% (72)</td>
<td>32.5% (25)</td>
</tr>
<tr>
<td>Male</td>
<td>43.3% (55)</td>
<td>67.5% (52)</td>
</tr>
<tr>
<td>Age Group(^a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 29</td>
<td>65.4% (83)</td>
<td>41.6% (32)</td>
</tr>
<tr>
<td>30 to 39</td>
<td>18.9% (24)</td>
<td>36.3% (28)</td>
</tr>
<tr>
<td>40 plus</td>
<td>15.7% (20)</td>
<td>22.1% (17)</td>
</tr>
<tr>
<td>Education Level(^b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>6.3% (8)</td>
<td>12.3% (9)</td>
</tr>
<tr>
<td>Tertiary</td>
<td>63.0% (80)</td>
<td>50.7% (37)</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>30.7% (39)</td>
<td>37.0% (27)</td>
</tr>
<tr>
<td>Occupation(^b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>16.0% (20)</td>
<td>25.3% (19)</td>
</tr>
<tr>
<td>Professional</td>
<td>51.2% (64)</td>
<td>30.7% (23)</td>
</tr>
<tr>
<td>Technical</td>
<td>1.6% (2)</td>
<td>5.3% (4)</td>
</tr>
<tr>
<td>Community</td>
<td>0% (0)</td>
<td>1.3% (1)</td>
</tr>
<tr>
<td>Administrative</td>
<td>6.4% (8)</td>
<td>5.3% (4)</td>
</tr>
<tr>
<td>Sales worker</td>
<td>0% (0)</td>
<td>2.7% (2)</td>
</tr>
<tr>
<td>Labourer</td>
<td>1.6% (2)</td>
<td>2.7% (2)</td>
</tr>
<tr>
<td>Other</td>
<td>23.2% (29)</td>
<td>26.7% (20)</td>
</tr>
</tbody>
</table>

Notes: a. N = 204; b. N = 200; Column percentages are calculated.

Table 5.5 Differences in prior experience of volcanic sites for visitor types

<table>
<thead>
<tr>
<th>Visitor Type</th>
<th>Domestic % (f)</th>
<th>International % (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Volcanic Site Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>33.1% (42)</td>
<td>37.7% (29)</td>
</tr>
<tr>
<td>No</td>
<td>66.9% (85)</td>
<td>62.3% (48)</td>
</tr>
</tbody>
</table>

Notes: N = 204; Column percentages are calculated.
5.2  Factor analysis

To address Research objective 1 – identify the push and pull motives of visitors for visiting non-erupting active volcanoes, two separate factor analyses were conducted. The following sub-sections present the results from these analyses.

5.2.1  Factor analysis of push motive items

Principal component analysis (PCA) with four-factor solution and varimax rotation was applied on the 14 push motivation items (KMO = .872; Bartlett’s test $p < .001$) (see Table 5.6). These items have communalities and factor loadings $\geq 0.5$ revealing four push motives. These extracted factors represent 79.76% of the variance and eigenvalue $\geq 1.0$ except for factor 4. Despite not having met the eigenvalue criterion, factor 4 was considered because the number of items factor analysed is fewer than 20. If this is the case, the eigenvalue criterion need not be applied strictly because fewer factors will be derived (Hair et al., 2006). Moreover, the four factors emerging from this analysis are theoretically and empirically supported, as these are recognised as the core motives for travel (Pearce & Lee, 2005), namely, escape and relaxation, novelty-seeking, socialisation, and learning – labelled as volcano knowledge-seeking for this study.

The first push motive is escape and relaxation. Visitors with high mean scores on this factor are motivated to visit Mount Pinatubo out of a desire to escape from their daily commitments and to improve their well-being. Factor 2 represents the novelty-seeking motive. Those reported to score highly on this push motive are into the exploration of things different from their usual environment. Socialisation accounts for the third push motive. Those who are motivated to spend time with family and friends, and to socialise with other visitors to Mount Pinatubo have higher mean scores on this motive. The final push motive explains the visitors’ volcano knowledge-seeking motive. Respondents with high mean scores on this dimension are motivated by the perceived benefit of learning more about volcanoes from a Mount Pinatubo tour.

5.2.2  Factor analysis of pull motive items

Table 5.7 shows the results from a PCA with varimax rotation performed on 11 pull motivation scale items (KMO = .867; Bartlett’s test $p < .001$). Two pull motives were identified accounting for 69.81% of the total variance. All items met the criteria for communalities ($\geq 0.5$), factor loadings ($\geq 0.5$), and eigenvalues ($> 1.0$).
Table 5.6 Principal component factor analysis with varimax rotation of push motive items

<table>
<thead>
<tr>
<th>Push motives</th>
<th>Factor Loadings</th>
<th>Communalities</th>
<th>( M (SD) )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Escape and relaxation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be away from my daily routine</td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to get away from stress and pressure</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To get away from the usual demands of life</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to rest and relax</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In order to give my mind a rest</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To refresh my mental and physical state</td>
<td>.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Novelty-seeking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to experience new and different things</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy looking at things I have not seen before</td>
<td>.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want there to be a sense of discovery</td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Socialisation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To do something with my family and friends</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to have a good time with my family &amp; friends</td>
<td>.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be with others who enjoy the same things as I do</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Volcano knowledge-seeking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To increase my current knowledge about volcanoes</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To fulfill my scientific knowledge interest on volcanoes</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Eigenvalue | 7.10 | 1.91 | 1.39 | .77 |
| % of variance | 50.74 | 13.62 | 9.92 | 5.48 |
| Cronbach’s α | .91 | .91 | .87 | .89 |
The first pull motive is a *dark and activities-induced* motive. Visitors having high scores on this factor are motivated to visit Mount Pinatubo because of the adventure and cultural activities at the volcanic site and because of the disaster implications caused by its recent eruption. The second and final factor extracted corresponds to a *volcanic and natural attribute-driven* pull motive. Those scoring highly on this factor indicate that they are motivated by the attraction’s volcanic and natural attributes.

### Table 5.7 Principal component factor analysis with varimax rotation of pull motive items

<table>
<thead>
<tr>
<th>Pull Motives</th>
<th>Factor Loadings</th>
<th>Communalities</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dark &amp; activities-induced</strong></td>
<td></td>
<td></td>
<td>3.67 (.84)</td>
</tr>
<tr>
<td>For the adventure of riding a 4x4 jeep</td>
<td>.73</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>For the challenge of trekking Mt Pinatubo</td>
<td>.67</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Because of the disaster landscapes</td>
<td>.77</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Because of the negative human effects</td>
<td>.84</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>For the <em>Aeta</em> interaction</td>
<td>.89</td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>For the <em>Aeta</em> cultural experience</td>
<td>.88</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td><strong>Volcanic &amp; natural attribute-driven</strong></td>
<td></td>
<td></td>
<td>4.05 (.69)</td>
</tr>
<tr>
<td>Because of the volcano itself</td>
<td>.83</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Because of the volcano's crater-lake</td>
<td>.89</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>Because of the volcano's land &amp; rock formations</td>
<td>.81</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>For the scenery &amp; nature</td>
<td>.71</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>For viewing plants &amp; wildlife</td>
<td>.57</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
<td>6.14</td>
<td>1.55</td>
<td></td>
</tr>
<tr>
<td><strong>% of variance</strong></td>
<td>55.77</td>
<td>14.04</td>
<td></td>
</tr>
<tr>
<td><strong>Cronbach’s α</strong></td>
<td>.92</td>
<td>.88</td>
<td></td>
</tr>
</tbody>
</table>

### 5.3 Descriptive statistics and reliability analysis

Descriptive statistics were performed in order to examine how the 26 five-point Likert-type scale items were rated by the respondents in general. In particular, the means of these scale items were calculated and later ranked from highest to lowest (see Table 5.8). The motivation items rated most highly are: *I enjoy looking at things I have not seen before* (*M = 4.54, SD = .69*); *I want to experience new and different things* (*M = 4.49, SD = .71*); *I want there to be a sense of discovery* (*M = 4.42, SD = .75*); *For the scenery and nature* (*M = 4.35, SD = .75*); and *I want to have a good time with my family and friends* (*M = 4.31, SD = .78*). In contrast, the sample least agreed with the statement,
Because of the negative human effects ($M = 3.57$, $SD = 1.06$) as a destination-driven motivation item.

**Table 5.8 Descriptive statistics of Likert-type scale items**

<table>
<thead>
<tr>
<th>Items</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy looking at things I have not seen before</td>
<td>4.54</td>
<td>.69</td>
</tr>
<tr>
<td>I want to experience new and different things</td>
<td>4.49</td>
<td>.71</td>
</tr>
<tr>
<td>I want there to be a sense of discovery</td>
<td>4.42</td>
<td>.75</td>
</tr>
<tr>
<td>For the scenery &amp; nature</td>
<td>4.35</td>
<td>.75</td>
</tr>
<tr>
<td>I want to have a good time with my family &amp; friends</td>
<td>4.31</td>
<td>.78</td>
</tr>
<tr>
<td>To do something with my family and friends</td>
<td>4.24</td>
<td>.82</td>
</tr>
<tr>
<td>In order to learn other new things</td>
<td>4.17</td>
<td>.75</td>
</tr>
<tr>
<td>Because of the volcano's crater-lake</td>
<td>4.10</td>
<td>.84</td>
</tr>
<tr>
<td>To be with others who enjoy the same things as I do</td>
<td>4.08</td>
<td>.87</td>
</tr>
<tr>
<td>To refresh my mental and physical state</td>
<td>4.05</td>
<td>.86</td>
</tr>
<tr>
<td>In order to give my mind a rest</td>
<td>4.05</td>
<td>.85</td>
</tr>
<tr>
<td>To be away from my daily routine</td>
<td>4.00</td>
<td>.87</td>
</tr>
<tr>
<td>Because of the volcano itself</td>
<td>4.00</td>
<td>.89</td>
</tr>
<tr>
<td>For the challenge of trekking Mt Pinatubo</td>
<td>3.97</td>
<td>.95</td>
</tr>
<tr>
<td>I want to rest and relax</td>
<td>3.97</td>
<td>.84</td>
</tr>
<tr>
<td>Because of the volcano's land &amp; rock formations</td>
<td>3.91</td>
<td>.89</td>
</tr>
<tr>
<td>For viewing plants &amp; wildlife</td>
<td>3.90</td>
<td>.86</td>
</tr>
<tr>
<td>I want to get away from stress and pressure</td>
<td>3.89</td>
<td>.96</td>
</tr>
<tr>
<td>To get away from the usual demands of life</td>
<td>3.83</td>
<td>.87</td>
</tr>
<tr>
<td>To increase my current knowledge about volcanoes</td>
<td>3.79</td>
<td>1.00</td>
</tr>
<tr>
<td>For the adventure of riding a 4x4 jeep</td>
<td>3.72</td>
<td>1.03</td>
</tr>
<tr>
<td>Because of the disaster landscapes</td>
<td>3.71</td>
<td>1.00</td>
</tr>
<tr>
<td>To fulfill my scientific knowledge interest in volcanoes</td>
<td>3.64</td>
<td>.99</td>
</tr>
<tr>
<td>For the Aeta cultural experience</td>
<td>3.59</td>
<td>.99</td>
</tr>
<tr>
<td>For the Aeta interaction</td>
<td>3.57</td>
<td>.99</td>
</tr>
<tr>
<td>Because of the negative human effects</td>
<td>3.45</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Notes: $N = 204$. a. 1 = “Strongly disagree” 2 = “Disagree” 3 = “Neither” 4 = “Agree” 5 = “Strongly agree”

The grand means of the six motives extracted were also ranked from highest to lowest in order to analyse how the respondents scored on these factors. In general, the respondents scored the highest on novelty-seeking ($M = 4.48$, $SD = .66$) and lowest on the activities and disaster-induced ($M = 3.67$, $SD = .84$) motives. This finding confirms
that discovering and experiencing new and different places is the main motive for volcano tourism at Mount Pinatubo.

To test the internal consistency of the rating scale items, the Cronbach $\alpha$ coefficient for each extracted motivation factor was computed (see Table 5.6 and Table 5.7). The coefficients of each of the factors range from 0.87 to 0.92, surpassing the acceptable criteria of .70 (Hair et al., 2006). Overall, the reliability coefficient of all the scale items combined is .95. This indicates that the scale items are reliable in predicting motivations for volcano tourism.

5.4 Comparisons for socio-demographic characteristics and prior experience of volcanic sites

This section presents the findings to address Research objective 2 – test for differences in push and pull motivation factors for gender, age, and prior experience of volcanic sites.

5.4.1 Comparisons of motivations for gender

An independent samples t-test was performed in order to identify the differences in motivation between females and males (see Table 5.9).

<table>
<thead>
<tr>
<th>Table 5.9 Mean factor differences for gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors</td>
</tr>
<tr>
<td>Factor scores M</td>
</tr>
<tr>
<td>Push motives</td>
</tr>
<tr>
<td>Escape &amp; relaxation</td>
</tr>
<tr>
<td>Novelty-seeking</td>
</tr>
<tr>
<td>Socialisation</td>
</tr>
<tr>
<td>Volcano knowledge-seeking</td>
</tr>
<tr>
<td>Pull motives</td>
</tr>
<tr>
<td>Dark &amp; activities-induced</td>
</tr>
<tr>
<td>Volcanic &amp; natural attribute-driven</td>
</tr>
</tbody>
</table>

Notes: N = 204. Factor scores are utilised for analysis. All significance levels are two-tailed. *p < .05

A significant difference was indicated on the volcano knowledge-seeking motive ($t$ (202) = 2.11, $p < .05$). Female visitors (.154) score highly on this factor compared to their male counterparts (-.140). Hence, this finding suggests that females are more likely
to seek more knowledge about the volcano compared to males. There were no significant differences found for escape and relaxation \( (t(202) = .42, p = .675) \), novelty-seeking \( (t(202) = -.13, p = .894) \), socialisation \( (t(202) = .50, p = .616) \), dark and activities-induced \( (t(202) = 1.39, p = .165) \), and volcanic and natural attribute-driven \( (t(202) = 1.23, p = .222) \) motives.

### 5.4.2 Comparisons of motivations for different age groups

To explore the differences in push and pull motives across age groups, a one-way Analysis of Variance (ANOVA) was performed (see Table 5.10). No statistically significant results were found from the ANOVA procedure for all the motivational factors: escape and relaxation \( (F(2,201) = .43, p = .649) \), novelty-seeking \( (F(2,201) = 1.63, p = .199) \), socialisation \( (F(2,201) = .45, p = .640) \), volcano knowledge-seeking \( (F(2,201) = 2.21, p = .112) \), dark and activities-induced \( (F(2,201) = 2.30, p = .103) \), and volcanic and natural attribute-driven \( (F(2,201) = .99, p = .374) \). This means that age did not influence the motivations of visitors to Mount Pinatubo.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Group 1 ((n = 115))</th>
<th>Group 2 ((n = 52))</th>
<th>Group 3 ((n = 37))</th>
<th>(F)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push motives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escape &amp; relaxation</td>
<td>-.054 4.02</td>
<td>-.099 3.87</td>
<td>-.027 3.93</td>
<td>.43</td>
<td>.649</td>
</tr>
<tr>
<td>Novelty-seeking</td>
<td>.106 4.57</td>
<td>-.093 4.39</td>
<td>-.200 4.36</td>
<td>1.63</td>
<td>.119</td>
</tr>
<tr>
<td>Socialisation</td>
<td>.052 4.27</td>
<td>-.030 4.12</td>
<td>-.120 4.14</td>
<td>.45</td>
<td>.640</td>
</tr>
<tr>
<td>Volcano knowledge-seeking</td>
<td>-.036 3.71</td>
<td>-.133 3.58</td>
<td>.299 3.92</td>
<td>2.21</td>
<td>.112</td>
</tr>
<tr>
<td>Pull motives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dark &amp; activities-induced</td>
<td>-.075 3.62</td>
<td>-.060 3.59</td>
<td>.317 3.91</td>
<td>2.30</td>
<td>.103</td>
</tr>
<tr>
<td>Volcanic &amp; natural attribute-driven</td>
<td>.086 4.09</td>
<td>-.128 3.95</td>
<td>-.087 4.06</td>
<td>.99</td>
<td>.374</td>
</tr>
</tbody>
</table>

Notes: \(N = 204\). (Group 1 = 18 to 29 years old; Group 2 = 30 to 39 years old; and Group 3 = 40 plus years old). Factor scores are utilised for analysis. One-way ANOVA \(p\)-values not significant.
5.4.3 Comparisons of motivations for prior experience of volcanic sites

To delineate motivational differences for those who have prior experience of volcanic sites versus those who do not have the same experience prior to their visit to Mount Pinatubo, independent samples t-tests were performed (see Table 5.11). No significant differences were found for escape and relaxation ($t(202) = -0.85, p = 0.395$), novelty-seeking ($t(202) = 0.53, p = 0.595$), socialisation ($t(202) = 0.28, p = 0.784$), volcano knowledge-seeking ($t(202) = 0.40, p = 0.693$), and the dark and activities-induced ($t(202) = -0.35, p = 0.730$) motives. A significant difference was revealed for the volcanic and natural attribute-driven pull motive ($t(202) = 2.35, p < 0.05$). Visitors who have travelled to volcanoes at least once (0.223) prior to their visit to Mount Pinatubo have higher factor scores than first-time volcano tourists (-0.119).

### Table 5.11 Mean factor score differences for prior experience of volcanic sites

<table>
<thead>
<tr>
<th>Factors</th>
<th>Yes (n = 71)</th>
<th>No (n = 133)</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Push motives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escape &amp; relaxation</td>
<td>-.033</td>
<td>.018</td>
<td>202</td>
<td>-0.35</td>
<td>0.730</td>
</tr>
<tr>
<td>Novelty-seeking</td>
<td>.051</td>
<td>-.027</td>
<td>202</td>
<td>.53</td>
<td>0.595</td>
</tr>
<tr>
<td>Socialisation</td>
<td>-.026</td>
<td>.014</td>
<td>202</td>
<td>-.28</td>
<td>0.784</td>
</tr>
<tr>
<td>Volcano knowledge-seeking</td>
<td>.038</td>
<td>-.020</td>
<td>202</td>
<td>.40</td>
<td>0.693</td>
</tr>
<tr>
<td><strong>Pull motives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dark &amp; activities-induced</td>
<td>-.082</td>
<td>.044</td>
<td>202</td>
<td>-0.85</td>
<td>0.395</td>
</tr>
<tr>
<td>Volcanic &amp; natural attribute-driven</td>
<td>.223</td>
<td>-.119</td>
<td>202</td>
<td>2.35</td>
<td>.020*</td>
</tr>
</tbody>
</table>

Notes: N = 204. ‘Yes’ = with prior experience vs ‘No’ = without prior experience. Factor scores are utilised for analysis. All significance levels are two-tailed. *p < 0.05

5.5 Comparisons of motivations for domestic versus international visitors

To explain how the domestic and international visitors differed in terms of their motives for a Mount Pinatubo tour or to address Research objective 3, independent samples t-tests were performed (see Table 5.12). These visitor types significantly differed on two motivational factors. The first one is on the escape and relaxation motive ($t(202) = 2.99, p < 0.05$) due to domestic visitors being more motivated to escape and relax than international visitors. The second motive where these two visitor segments significantly differed is on the novelty-seeking motive ($t(202) = -2.60, p < 0.05$). International visitors are more likely to be motivated
to seek novel experiences as part of their decision to engage in the volcano tour compared to their domestic counterparts. There are no further significant results found for socialisation ($t(202) = 1.78, p = .007$), volcano knowledge-seeking ($t(202) = .18, p = .858$), dark and activities-induced ($t(202) = 1.93, p = .055$), and volcanic and natural attribute-driven motives ($t(202) = -.39, p = .701$).

Table 5.12 Differences in motivations for visitor types

<table>
<thead>
<tr>
<th>Factors</th>
<th>Domestic ($n = 127$)</th>
<th>International ($n = 77$)</th>
<th>$df$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push motives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escape &amp; relaxation</td>
<td>.160</td>
<td>-2.64</td>
<td>3.80</td>
<td>202</td>
<td>2.99</td>
</tr>
<tr>
<td>Novelty-seeking</td>
<td>-.140</td>
<td>.231</td>
<td>4.54</td>
<td>202</td>
<td>-2.60</td>
</tr>
<tr>
<td>Socialisation</td>
<td>.096</td>
<td>-1.159</td>
<td>4.10</td>
<td>202</td>
<td>1.78</td>
</tr>
<tr>
<td>Volcano knowledge-seeking</td>
<td>.001</td>
<td>-.016</td>
<td>3.67</td>
<td>202</td>
<td>.18</td>
</tr>
<tr>
<td>Pull motives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities &amp; disaster-induced</td>
<td>.104</td>
<td>-.172</td>
<td>3.53</td>
<td>202</td>
<td>1.93</td>
</tr>
<tr>
<td>Volcanic &amp; natural attribute-driven</td>
<td>-.021</td>
<td>.035</td>
<td>4.04</td>
<td>202</td>
<td>-.39</td>
</tr>
</tbody>
</table>

Notes: N = 204. Factor scores are utilised for analysis. All significance levels are two-tailed. *p < .05

Thereafter, the motivation factors where the visitor types significantly differed are further investigated through a series of two-way ANOVA. The interaction of visitor types by age group on the escape and relaxation and novelty-seeking motives are explored. These are supplementary analyses in order to further delineate the motivation differences between the two visitor segments.

There is a significant effect found on the interaction of visitor type by age group ($F(2,201) = 5.13, p < .001$) on the escape and relaxation motive. Domestic visitors aged 18 to 29 years old are more likely motivated to get away from their usual environments and seek opportunities for relaxation at Mount Pinatubo compared to international visitors within the same age group. Figure 5.1 graphically illustrates this finding. No main effects are found further from this statistical test.

The same two-way analysis was conducted on the novelty-seeking motive. As expected, there is a main effect found on visitor type ($F(1,202) = 9.07, p < .001$). Similar to the
result found on the \( t \)-test, international visitors are more motivated to experience new and different things in their trip to Mount Pinatubo compared to domestic visitors. There are no main and interaction effects discovered further from this statistical test.

![Visitor type by age group factor score differences on the escape and relaxation motive](image)

**Figure 5.1** Visitor type by age group factor score differences on the escape and relaxation motive

### 5.6 Additional motives for visiting Mount Pinatubo

It is recognised in this study that the survey respondents may have additional motives aside from those measured in the Likert-type scale items. Thus, an open-ended item that reads *Kindly state any other motives that you have aside from those stated above* was embedded in the survey questionnaire.

#### 5.6.1 Sample description

Of the 204 survey respondents, a total of 65 (31.9%) stated that their visit to Mount Pinatubo is motivated by factors different from the *a priori* items designed by the researcher. Table 5.13 shows the demographic characteristics of these individuals.

Males (53.8%) are slightly higher in number than females. More than half are young, aged 18 to 29 years old (52.3%). However, those aged 30 to 39 years old (26.2%) are slightly higher in number compared to those aged 40 years old and above. The majority are first-time volcano tourists (63.1%) with no prior experience of volcanic sites. Most of the respondents indicate that they are currently residing in the Philippines hence they
are classified as domestic visitors (73.8%). The remainder reveal that they are travelling from overseas.

Table 5.13 Sample profile - Additional motive respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>35</td>
<td>53.8</td>
</tr>
<tr>
<td>Female</td>
<td>30</td>
<td>46.2</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 29</td>
<td>34</td>
<td>52.3</td>
</tr>
<tr>
<td>30 to 39</td>
<td>17</td>
<td>26.2</td>
</tr>
<tr>
<td>40 plus</td>
<td>14</td>
<td>21.5</td>
</tr>
<tr>
<td><strong>Prior Experience of volcanic sites</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>24</td>
<td>36.9</td>
</tr>
<tr>
<td>No</td>
<td>41</td>
<td>63.1</td>
</tr>
<tr>
<td><strong>Visitor Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>48</td>
<td>73.8</td>
</tr>
<tr>
<td>International</td>
<td>17</td>
<td>26.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>65</td>
<td>100.0</td>
</tr>
</tbody>
</table>

5.6.2 Findings

A content analysis of the textual responses was performed in order to reveal the additional motives of the respondents for undertaking a Mount Pinatubo tour. Of the 65 respondents, 12 (18.5%) commented ‘none’ as a response. These comments were not included for further analyses.

In a word frequency analysis using NVivo 10, the most frequently cited words used in the descriptions were extracted. A word cloud was generated to illustrate these words (see Figure 5.2). It can be observed that the words “adventure” and “experience”, and places like “Manila” and the “Philippines” are frequently mentioned in the responses. This informs the further evaluation of the texts which is a case-by-case textual analysis.

Adopting a *push-pull* motivation framework, the responses were coded and distributed into two main themes: push motives and pull motives. In total, nine codes were identified as push motives while five as pull motives (see Table 5.14). Some of the motives identified echo the motives revealed in statistical analyses. Conversely, some of these are newly emergent factors complementing the statistical findings.
Table 5.14 Additional motives for volcano tourism at Mount Pinatubo

<table>
<thead>
<tr>
<th>Motive</th>
<th>Number of times mentioned</th>
<th>% of the respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Push motives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adventure-seeking</td>
<td>8</td>
<td>12.3</td>
</tr>
<tr>
<td>Exploration of the Philippines</td>
<td>7</td>
<td>10.8</td>
</tr>
<tr>
<td>Nature-seeking</td>
<td>7</td>
<td>10.8</td>
</tr>
<tr>
<td>Relationship-enhancement</td>
<td>6</td>
<td>9.2</td>
</tr>
<tr>
<td>Escaping Manila</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td>Special interest</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td>Freedom and reflection</td>
<td>2</td>
<td>3.1</td>
</tr>
<tr>
<td>Altruistic</td>
<td>2</td>
<td>3.1</td>
</tr>
<tr>
<td>Revisit intention</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Pull motives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exotic nature</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td>Church/Company activity</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td>Photography</td>
<td>2</td>
<td>3.1</td>
</tr>
<tr>
<td>Proximity</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>Walking</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>None</td>
<td>12</td>
<td>18.5</td>
</tr>
</tbody>
</table>

Notes: a. Total number of respondents = 65 (100%); One respondent may indicate multiple answers.

Figure 5.2 Word cloud representing the most frequently cited words describing the respondents’ additional motives. Generated from NVivo 10
5.6.2.1 Push motives

The push motives revealed are a combination of newly emergent codes and those factors that confirm the motivational dimensions identified from the factor analyses. These motives include the desire of escaping Manila that confirms the escape and relaxation motive. It has been indicated that a desire for escape is specifically a desire to escape the urban life in Manila, the capital of the Philippines. It should be noted that the majority of the respondents (45.6%) come from this region (see Section 5.1.2.1). Thus, it can be assumed that these respondents consider their participation in a Mount Pinatubo tour as an opportunity to get away from the stress and demands of city life, as illustrated by this comment: “get away from the polluted, noisy and hot Manila”.

The second push motive discovered is also one of the most commonly cited ones: the nature-seeking motive. This complements the volcanic and natural attribute-driven motive, a pull motive revealed from factor analysis. Experiencing nature and being with nature, not just to view its manifestations, appears to be an intrinsic motive for visitors. Moreover, the nature-seeking motive is shown to be associated with the newly emergent push motive - freedom and reflection. This has been illustrated by this response: “To feel ‘that’ beautiful sense of freedom and just going back to where everything started – nature”.

These are followed by the relationship-enhancement motive that complements the socialisation motive extracted from the factor analysis. This also confirms the findings from previous studies of visitor motivations to a mountain attraction (Wang, 2004). It indicates that the respondents decided to participate in a Mount Pinatubo tour not just to have a good time with family and friends but also to strengthen ties with their friends and companions. These are evident from the following responses: “To have more bonding moments with friends” and “I want to spend time with my girlfriend”.

Adventure-seeking is indicated as a newly emergent motive. Results show that the desire to have adventurous experiences is the most frequently mentioned amongst the additional motives. As discussed in Chapter 2, volcano tourism is strongly associated with adventure tourism. In the context of volcano tourism at Mount Pinatubo, it can be asserted that the desire to experience adventure stems from the experiences that can be anticipated in performing the tour activities, namely, the 4x4 jeepney ride, trekking and climbing.
Another newly emergent motive is the further exploration of the Philippines. It is important to note that the respondents are a mixture of domestic and international visitors, and come from different places of origin. These visitors may have different travel purposes. For example, an international visitor may want to visit multiple attractions during their short stay in the country, and Mount Pinatubo may be only one of those attractions. Similarly, for an individual currently living in the Philippines, travel to the volcano may act as a day trip or part of long-term travel plan that includes multiple attractions to visit within the country. These are supported by the following respondent statements: “To explore the beautiful nature and countryside of the Philippines” and “I'm travelling around the Philippines and its one of the places that I've checked back home”.

The final set of additional push motives discovered includes the following: special interest, revisit intention, and altruistic motive. The special interest motive indicates that some of the visitors surveyed have a high interest in volcanoes. Some respondents reveal that they either want to remove Mount Pinatubo from their travel ‘bucket list’ or want to compare the attraction with other volcanic sites that they had already visited. One respondent, however, specifically mentions a desire to re-live a previous experience of the volcano.

A unique newly emergent motivational factor identified is the altruistic motive, as shown by this comment: “To donate goods for the Aeta children”. It appears that the volcano tour is a channel for individuals who want to give something that would be of help to the indigenous population affected by the volcano’s eruption. Therefore, this shows that the Aeta interaction opportunity in the tour is not just for visitors to immerse themselves in the indigenous culture, but it is also an avenue for them to fulfil their altruistic intentions.

5.6.2.2 Pull motives

Like the additional push motives analysed, the respondents have indicated pull motives that are a mixture of newly discovered factors, and a complementing one. The latter is identified as the exotic nature motive that complements the novelty-seeking and the volcanic and natural attribute-driven motives derived from the factor analyses. The surveyed visitors show that they are motivated by Mount Pinatubo’s unusual environment; thus, they have decided to participate in the volcano tour and be immersed in its unique landscape.
The other set of pull motives pertains to a range of activities that ‘pulled’ them to the volcanic attraction. Some of the respondents indicate that their visit is part of a church/company activity. Therefore, it can be assumed that a visit to Mount Pinatubo is not necessarily getting away from the responsibilities and other people at work; rather it is a venue to build ties amongst colleagues and social affiliations by conducting organisational activities. In addition, its proximity to major cities is a factor in choosing the volcanic site to conduct these activities. This is evident in the following response: “team event with work, closest activity from Manila open on public holiday.” Finally, other activities in the site and personal hobbies, namely walking and photography are analysed as additional pull motives for visiting Mount Pinatubo as well. Photography has been previously identified in past research as an important motive for visiting a national park (Saayman & Saayman, 2009).

5.7 Experience expectations of visitors to Mount Pinatubo

5.7.1 Sample description

To gain an insight of the experience expectations of visitors for volcano tourism at Mount Pinatubo, or to address research objective 4, an open-ended item that reads Please describe the experiences that you expect on this tour was embedded in the pre-tour Visitor Motivation Survey. In total, 93 (45.6%) of the 204 survey respondents answered this question. The demographic profile of these individuals is shown in Table 5.15.

The number of female respondents (51.6%) is slightly higher than male respondents. More than half of the respondents belong to the 18 to 29 age group (55.9%) followed by those within the 30 to 39 age group (29%). The remainder report that they are 40 plus years old. As in the study of motivations, the majority are domestic visitors (65.6%) and are first time volcano tourists (64.5%).

5.7.2 Findings

A content analysis of the qualitative responses to the survey item that investigates the visitors’ experience expectations was performed. A word frequency analysis using NVivo 10 shows the most frequently used words in these responses. A word cloud is generated to represent these frequently mentioned words (see Figure 5.3). In summary, it can be observed that the words used frequently include “fun”, “nature”, “exciting”, “experience”, and “adventure”.
Table 5.15 Sample profile - Experience expectations respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>48.4</td>
</tr>
<tr>
<td>Female</td>
<td>48</td>
<td>51.6</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 29</td>
<td>52</td>
<td>55.9</td>
</tr>
<tr>
<td>30 to 39</td>
<td>27</td>
<td>29.0</td>
</tr>
<tr>
<td>40 plus</td>
<td>14</td>
<td>15.1</td>
</tr>
<tr>
<td><strong>Prior Experience of volcanic sites</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>33</td>
<td>35.5</td>
</tr>
<tr>
<td>No</td>
<td>60</td>
<td>64.5</td>
</tr>
<tr>
<td><strong>Visitor Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>61</td>
<td>65.6</td>
</tr>
<tr>
<td>International</td>
<td>32</td>
<td>34.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>93</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 5.3 Word cloud representing the most frequently cited words describing the respondents’ experience expectations. Generated from NVivo 10

Following this is a case-by-case analysis and coding of the responses to the open-ended question. The findings from this analysis reveal 19 initial codes composed of
researcher-generated codes and in vivo codes (see Table 5.16). The number of mentions for each of these codes and the percentages against the total number of responses are shown. However, it is important to note that the objective of this analysis is to describe the visitors’ personal perspectives rather than to quantify their responses, following Schänzel and McIntosh (2000).

There is a diversity of experience expectations discovered from the content analysis. Findings reveal that these expectations are influenced by the three main components that primarily construct a Mount Pinatubo tour, namely, the natural and geological setting, general leisure and physical activities, and the human dimension of the tour. Following a reductionist approach, the generated codes are categorised into each tour component for better understanding and ease of interpretation.

The experience expectations are described by the participants in two ways. Firstly, the participants communicate their expectations that entail direct participation with the tour components. Secondly, the respondents indicate their anticipated experiential outcomes from directly engaging in these tour components. General anticipated experiential outcomes are also revealed from the analysis. Five (5.4%) of the 93 respondents report that they do not have any expectations at all.

5.7.2.1 Experience expectations from the natural dimension

Expectations to directly experience Mount Pinatubo’s natural and geological setting including its features can be described in two ways. First, the respondents mostly expect to experience viewing the scenery and the geological attributes of the volcanic site. This is illustrated by the following responses: “To witness Earth formations 20 plus years after the explosion” and “To see interesting landscape and volcano itself”. Secondly, participants point out their expectations to “feel nature as it is”, by expecting to be physically situated in a natural setting. In short, the respondents expect to have two complementing roles in experiencing Mount Pinatubo’s natural and geological setting, either as witnesses of nature or as part of nature.

Anticipated experiential outcomes for having a volcanic tourism experience at Mount Pinatubo’s natural and geological setting are also discovered. Respondents reveal that they expect to have awesome, unique, and relaxing experiences. The expectations to have an experience of nature are illustrated by the statements: “to be amazed and excited by nature” and “to have breathtaking views”.

129
Table 5.16 Experience expectations for a volcano tourism experience at Mount Pinatubo

<table>
<thead>
<tr>
<th>Domains and descriptions</th>
<th>Number of times mentioned</th>
<th>% of the respondents a</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Natural dimension (nature and geological setting)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viewing scenery and geological landscapes</td>
<td>15</td>
<td>16.1</td>
</tr>
<tr>
<td>Experiencing nature</td>
<td>8</td>
<td>8.6</td>
</tr>
<tr>
<td><strong>Anticipated experiential outcomes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awesome</td>
<td>5</td>
<td>5.4</td>
</tr>
<tr>
<td>Unique</td>
<td>4</td>
<td>4.3</td>
</tr>
<tr>
<td>Relaxing</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Recreational dimension (general leisure and physical activities)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performing tour activities (i.e. trekking)</td>
<td>9</td>
<td>9.7</td>
</tr>
<tr>
<td>Discovery and exploration</td>
<td>4</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Anticipated experiential outcomes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exciting</td>
<td>14</td>
<td>15.1</td>
</tr>
<tr>
<td>Adventurous</td>
<td>14</td>
<td>15.1</td>
</tr>
<tr>
<td>Challenging</td>
<td>10</td>
<td>10.8</td>
</tr>
<tr>
<td>Educational</td>
<td>7</td>
<td>7.5</td>
</tr>
<tr>
<td>Healthy</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Safe</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Socio-cultural dimension (local people &amp; co-travellers)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction with the locals and co-travellers</td>
<td>3</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Anticipated experiential outcomes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Cultural</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>General anticipated experiential outcomes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fun</td>
<td>18</td>
<td>19.4</td>
</tr>
<tr>
<td>Fulfilment</td>
<td>3</td>
<td>3.2</td>
</tr>
<tr>
<td>Memorable</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>None</strong></td>
<td>5</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Notes: a. Total number of respondents = 93 (100%); One respondent may indicate multiple answers.

These are aspects that can be associated with the visitor motive to have novel experiences. Consequently, expectations to have mentally and physically relaxing experiences in a natural setting can also be perceived and linked with the motive for escapism as illustrated by the response, “spend good time in nature (sic) environment”.
5.7.2.2 Experience expectations from the recreational dimension

Direct experiences of the actual tour activities are expected either as a structured performance or an exploration. Obviously, it appears that most of the respondents show that they expect to perform tour activities such as trekking and riding a 4x4 jeepney, prior to engaging in a Mount Pinatubo tour. This is illustrated by direct responses such as “the usual trekking experience” and “adventure on 4x4, trekking”. However, it was also stated that they expect to have an experience to explore and discover ‘things’ while on tour.

In conjunction with these, most of the respondents explain that they expect to have exciting, challenging, and adventurous experiences by participating in the actual tour activities. Challenge and adventure are linked to the perceived level of difficulty of the actual performance of trekking the slopes of the volcano. Respondents indicate this as a “challenging physical experience” and “an arduous but fun and adventurous trek”.

Excitement, however, is linked with the discovery of the unknown. This can be perceived as an emotion because the respondents were asked prior to the tours, and excitement can be a current affective state during the query. In addition, the respondents anticipate that the actual tour activities will provide them educational and healthy experiences. They expect to have an “educational experience of the volcano” through first-hand explorations, and be “more physically fit” by undertaking a trek atop the crater-lake. Also, one respondent indicate a safe journey throughout his participation in tour activities as an experience expectation.

5.7.2.3 Experience expectations from the socio-cultural dimension of the tour

Interaction with their co-travellers and the local people of Mount Pinatubo during the tour is one of the visitors’ expected experiences stemming from the human dimension of the volcano tour. ‘Co-travellers’ are referred to either as individuals that are part of the respondents’ travel parties, or other tourists that are not part of their group. This is supported by the statement “I imagine there will be more people than usually like on hikes but that is also part of the experience”.

Similarly, an interaction opportunity with the local people, particularly the Aeta, is an expected experience as well. The respondents anticipate that these interactions will provide them a social and a culturally-enriching experience. Furthermore, they expect
“to break barriers – make friends” and to experience the authentic culture of the indigenous people.

5.7.2.4 General anticipated experiential outcomes

Positive affective outcomes from a Mount Pinatubo experience are revealed by the visitors in general. Three concepts were cited referring to these expected outcomes. The first and the most commonly mentioned is expectation to experience fun. It appears that having fun and enjoyable experiences are perceived by the visitors prior to their actual participation in the tour. This is followed by the expectations to have fulfilling experiences. This is associated with the expectation to have a ‘sense of satisfaction’ from engaging in the tour itself or as an outcome of doing something that is challenging. For example, one respondent expects that the tour could be “tiring but the view will be worth it”. Finally, there is also the expectation to have memorable experiences in general. Respondents indicate “unforgettable” and “life-long moments” can be generated as a consequence of their participation in a Mount Pinatubo tour.

5.8 Conclusion

This chapter addresses the research objectives regarding the pre-tour visitor perspectives on volcano tourism at Mount Pinatubo. At first, the push and pull motives of visitors to Mount Pinatubo are identified. In addition, the relationships between these motivational constructs are delineated. Further, it has been indicated that gender and prior experience of volcanic sites have an influence on volcano tourism motivations. Some motives are found to vary between domestic and international visitors. Additional motives that were not measured by the quantitative scale items are also identified and these are analysed as either ‘newly emergent’ factors or ‘to complement’ the pre-conceived factors.

Aside from these motives, the experience expectations for volcano tourism at Mount Pinatubo are explored in this chapter. It was shown that these expectations were influenced by the three dimensions conceptualised for the Mount Pinatubo experience: natural, recreational, and socio-cultural. Furthermore, it is implied that the visitors experience expectations are either directed to the specific tour dimensions or entailed the anticipated experiential outcomes from these dimensions. General experience expectations are revealed as well. Overall, this chapter provides an insight into what drives individuals to engage in volcano tourism. The next chapter explores the visitors’ actual volcano tourism experiences.
Chapter 6 FINDINGS & ANALYSIS: PHASE TWO
Experiences of Volcano Tourism at Mount Pinatubo

The aim of Chapter 6 is to present the findings and analysis of the qualitative data gathered from the post-tour semi-structured interviews regarding the visitors’ actual experiences of Mount Pinatubo. Initially, the profile of the interview participants is provided. This is followed by an investigation of their individual trip backgrounds in order to have an overview of their experiences. Thereafter, the findings from a thematic analysis of the participants’ actual experiences are discussed.

6.1 The participants

Purposive sampling was performed to determine the participants for the exploration of the actual experiences of Mount Pinatubo. On-site post-tour semi-structured interviews were conducted with visitors who had an immediate experience of a Mount Pinatubo tour. In total, 12 individuals participated in the study. Their demographic profile is shown in Table 6.1

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age group</th>
<th>Occupation</th>
<th>Visitor Type</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>18 to 29</td>
<td>Human resources</td>
<td>Domestic visitor 1</td>
<td>Filipino</td>
</tr>
<tr>
<td>Female</td>
<td>18 to 29</td>
<td>Sales</td>
<td>Domestic visitor 2</td>
<td>Filipino</td>
</tr>
<tr>
<td>Female</td>
<td>18 to 29</td>
<td>Lecturer</td>
<td>Domestic visitor 3</td>
<td>Chinese</td>
</tr>
<tr>
<td>Male</td>
<td>30 to 39</td>
<td>Blogger/Writer</td>
<td>Domestic visitor 4</td>
<td>Filipino</td>
</tr>
<tr>
<td>Male</td>
<td>18 to 29</td>
<td>Civil service</td>
<td>Domestic visitor 5</td>
<td>Filipino</td>
</tr>
<tr>
<td>Female</td>
<td>30 to 39</td>
<td>Civil service</td>
<td>Domestic visitor 6</td>
<td>Filipino</td>
</tr>
<tr>
<td>Female</td>
<td>18 to 29</td>
<td>Professional</td>
<td>Domestic visitor 7</td>
<td>Vietnamese</td>
</tr>
<tr>
<td>Male</td>
<td>40 plus</td>
<td>Professional</td>
<td>Domestic visitor 8</td>
<td>German</td>
</tr>
<tr>
<td>Male</td>
<td>18 to 29</td>
<td>NGO</td>
<td>International visitor 1</td>
<td>Australian</td>
</tr>
<tr>
<td>Male</td>
<td>30 to 39</td>
<td>Professional</td>
<td>International visitor 2</td>
<td>Slovakian</td>
</tr>
<tr>
<td>Female</td>
<td>18 to 29</td>
<td>Professional</td>
<td>International visitor 3</td>
<td>Singaporean</td>
</tr>
<tr>
<td>Male</td>
<td>40 plus</td>
<td>Geologist</td>
<td>International visitor 4</td>
<td>German</td>
</tr>
</tbody>
</table>

The numbers of male and female interviewees are equal. As in the pre-tour motivation and experience expectations study, the majority of the participants are within the 18 to 29 age group (7 out of 12) followed by those within the 30 to 39 age group (3 out of 12). The remainder are aged 40 plus years old. Most of the participants are currently residing in the Philippines; hence they are classified as domestic visitors (8 out of 12).
However, it can be observed that this group of travellers have a diverse ethnicity. Five of the eight domestic visitors are Filipinos while the three remaining domestic participants are Chinese, Vietnamese, and German expatriates. Likewise, there is a diversity of ethnicity of the international visitors. Hence, it can be implied that the visitor experiences captured in this study are from individuals with multiple cultural backgrounds.

Table 6.2 Travel characteristics and experience background of the interview participants

<table>
<thead>
<tr>
<th>Visitor Type</th>
<th>Travel Party</th>
<th>Reasons for travel</th>
<th>Tour highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic visitor 1</td>
<td>Friends</td>
<td>Part of a long-term travel plan</td>
<td>4x4 ride &amp; Crater-lake</td>
</tr>
<tr>
<td>Domestic visitor 2</td>
<td>Partner</td>
<td>To do something for the Holy Week</td>
<td>Crater-lake</td>
</tr>
<tr>
<td>Domestic visitor 3</td>
<td>Colleagues</td>
<td>To do something different aside from going to a beach or island</td>
<td>Natural landscape</td>
</tr>
<tr>
<td>Domestic visitor 4</td>
<td>Friends</td>
<td>Because of the volcano itself; To pay respects to the disaster caused by the volcano’s eruption</td>
<td>Disaster landscape</td>
</tr>
<tr>
<td>Domestic visitor 5</td>
<td>Friends</td>
<td>To re-live previous experience of Mount Pinatubo</td>
<td>Trek</td>
</tr>
<tr>
<td>Domestic visitor 6</td>
<td>Friends</td>
<td>Invited by a friend</td>
<td>Trek</td>
</tr>
<tr>
<td>Domestic visitor 7</td>
<td>Friends</td>
<td>To do something out of Manila; To trek on a volcano</td>
<td>Local people</td>
</tr>
<tr>
<td>Domestic visitor 8</td>
<td>Friends</td>
<td>Because of the volcano itself</td>
<td>Crater-lake</td>
</tr>
<tr>
<td>International visitor 1</td>
<td>Alone</td>
<td>A friend’s recommended activity while in the Philippines</td>
<td>Trek</td>
</tr>
<tr>
<td>International visitor 2</td>
<td>Alone</td>
<td>A friend’s recommended activity while in the Philippines</td>
<td>Natural landscape</td>
</tr>
<tr>
<td>International visitor 3</td>
<td>Friends</td>
<td>To do trekking at Mount Pinatubo</td>
<td>Crater-lake</td>
</tr>
<tr>
<td>International visitor 4</td>
<td>Family</td>
<td>To visit volcanoes on the Pacific Ring of Fire</td>
<td>Crater-lake</td>
</tr>
</tbody>
</table>

The travel characteristics of the participants for this study vary as well (see Table 6.2). The majority of them identify as having travelled with friends (7 out of 12) during their visit to Mount Pinatubo. Two of the 12 interviewees, however, travelled alone. The remainder travelled with their family, colleagues and partner.
6.2 Background of the visitor experiences

6.2.1 Reasons for travel

At the start of each interview, the introductory question ‘Why did you go on tour today?’ was asked of the participants. The rationale of this inquiry is for the researcher to gain a background of the participants’ specific reasons for travelling to the volcanic site and for participating in a Mount Pinatubo tour. Their travel purpose is assumed to inform their experiences. As shown in Table 6.2, there is an array of reasons identified.

Domestic visitor 1 and International visitor 4 indicate their trip to Mount Pinatubo as part of their travel career plans. This can be associated with the Travel Career Ladder (Pearce & Moscardo, 1985; Pearce & Caltabiano, 1983) theory of motivation implying that individuals have a structured pattern of travelling depending on their previous experience or as part of a travel career. Moreover, intrinsic motives such as escapism as reported by Domestic visitor 2 and Domestic visitor 7, and novelty-seeking as indicated by Domestic visitor 3 appear as specific reasons for travel as well. Domestic visitor 4 and Domestic visitor 8 show that Mount Pinatubo’s reputation and popularity as a tourism destination is a pull motive for visiting the volcanic site. In conjunction with these, specific activities such as trekking (as stated by Domestic visitor 7 and International visitor 3) that can be experienced at the site seem to influence their reasons for participation as well.

However, an external factor from both the participants and the visited attraction appear to become a reason for travel. This refers to the ‘influence of friends’ being shown as a major factor for the participants (Domestic visitor 6, International visitor 1 and International visitor 2) to experience a Mount Pinatubo tour.

A unique reason is also stated by Domestic visitor 4:

“*There is a very important history in Pinatubo and I guess I want to go there to pay respects to that certain aspect*”.

This particularly referred to the volcano’s most recent eruption that resulted in catastrophic damages. Finally, a repeat visitor (Domestic visitor 5) is also identified as wanting to have a similar experience to his previous visit.
6.2.2 Tour highlights

During each interview, the participants were asked about the important highlights of their experience in order to explore the aspects of the tour that mainly impacted their actual experiences of Mount Pinatubo. Multiple responses were captured from the participants (see Table 6.2). In general, the tour highlights reported reflect the three major aspects that constitute the volcano tourism environment at Mount Pinatubo: natural dimension, recreational dimension, and socio-cultural dimension.

Figure 6.1 Thematic map of the visitors’ volcano tourism experience at Mount Pinatubo

For the natural and geological setting, the majority of participants indicate several geological attributes at the site which served as highlights of their experiences. The attributes mentioned include the crater-lake, natural landscapes, and disaster landscapes. Similarly, the ‘process’ or the trek to Mount Pinatubo’s crater-lake as part of the tour activities, is revealed to be a highlight to some participants as well. Likewise, the local people living on Mount Pinatubo emerge as important individuals to influence the overall experience of visitors. Hence, it can be asserted that these three main dimensions and their interactions can be argued to construct the Mount Pinatubo experience.
This also implied the validity for operationalisation of the conceptual framework based on the interactional theory. This framework serves as the researcher’s lens in further analysis of the experiential themes that are categorised into three main experiential dimensions: natural, recreational, and socio-cultural. A thematic map illustrates the experiential themes that correspond to each volcano tourism experience dimension (see Figure 6.1).

6.3 Natural dimension

The themes emerging in this dimension are those shaped by Mount Pinatubo’s natural attractions and geological setting. These themes capture the actual experiences of visitors that are formed by gazing at the geological formations and by being situated in a natural landscape. During these instances, the participants report their experiences of being ‘awed’ by the natural features and scenery they witnessed. The uniqueness of these attributes and of the experience of being part of the landscape is also reported. Finally, perceptions on the power of the landscapes viewed by the participants have also been narrated.

6.3.1 Appreciation of nature

A mixture of responses on the appreciation of the aesthetic wonders of Mount Pinatubo is captured by this theme. The experiences discovered here are based on the “romantic notions of sublime and picturesque landscapes” (Gordon, 2012, p. 65). This appears as a common experience amongst all the participants.

Firstly, the participants perceive the geological features they viewed as fascinating, amazing, and breathtaking scenery. This is evident in the following quotes:

“It’s really amazing because you know the sand formations, the first time I saw them is really ‘wow’. It’s like, ‘really? For real?’ These are sand but they are formed into cones!” (Domestic visitor 5, male)

“The crater! Oh, it was amazing because it’s basically filled with water. It’s very beautiful and very picturesque.” (Domestic visitor 6, female)

“Of course the highlight was when I saw the crater. It looks like a painting. Actually it is hard to choose a word for (to describe) that.” (Domestic visitor 2, female)

The participants indicate their roles as ‘witnesses’ of natural wonders based on their perceptions. These responses were triggered as they recognise and appreciate the geological features of the volcanic site. Likewise, being ‘part’ of nature or being
situated at the setting of the volcanic site resulted in appreciation of nature. In this sense, captivating and overwhelming instances are reported:

“I was overwhelmed. There was also a hike going down the crater which was also an added experience because I wasn’t expecting to go down the crater. I was only expecting to see the view from afar.” (Domestic visitor 1, female)

“But, it was amazing that we would be able to get that experience of being on a crater.” (Domestic visitor 6, female)

Unexpected experiences of being in a wild and exotic environment emerge. It appears that when confronted with unusual landscapes, the participants report emotionally impacting experiences.

6.3.2 Novel experiences

Being situated in wild landscapes like that of a volcano and seeing exotic scenery are perceived to shape novel experiences. Part of these experiences is the instance when individuals tend to compare what they currently witness to their previous travel experiences (volcanic-related or not) and existing knowledge. Therefore, novel experiences at Mount Pinatubo are not exclusively influenced by the viewed attractions, but these are constructed by the witnesses themselves.

This theme suggests that novel experiences emerging from the analysis are in two forms: objective and experiential. The ‘uniqueness’ of Mount Pinatubo’s volcanic features and geological environment encapsulates the objective or object-related novelty of the visitor experience. At the basic level, the distinctiveness of the toured objects and setting has been recognised:

“Well, it was nice to see different nature. It was actually nice to see the river, with the river pit. It was actually interesting and also I could feel like the river changes itself as we walk up and down”. (International visitor 2, male)

From a different perspective, geological features are illustrated in comparison with the visitors’ existing images of Mount Pinatubo, as shown by the following responses:

“It was nice to suddenly see the lake of it. Of course I knew it from photos before so it was not a total surprise but still when you see it in real life, it is something else.” (Domestic visitor 8, male)

“I have seen a lot of videos and pictures of the place. But once you do the actual trail and trek, and the crater, it is different from just seeing it pictures.” (Domestic visitor 1, female)
Here, digital images differentiated from reality are observed to construct novel experiences. Although pre-conceived digital images are present in the visitors’ minds prior to their actual experiences, first-hand and on-site images of Mount Pinatubo amaze them at a more intense level.

Furthermore, participants also compare the landscape and environment of Mount Pinatubo with their previous travel experiences and home environments. This is illustrated by the following quotes:

“Most of the time, I hiked on mountains with greeneries and rainforests but this one (Mount Pinatubo) is dry and all you see is granite and stones.” (Domestic visitor 2, female)

“Like in Vietnam, we have some very high (tall) mountains but I think it’s easier for climbing, not like this one (Mount Pinatubo).” (Domestic visitor 7, female)

“It (crater-lake) was amazing. It’s really really big. We thought it’s a bit smaller. It’s nice so we swim around the lake...but there are also lakes in Kamchatka (in Russia) but they are all acidic and really hot, so it’s impossible to swim on the crater-lakes. (International visitor 4, male)

Hence, it can be suggested that the objective novelty of the experiences at Mount Pinatubo is based on the interplay between the uniqueness of the toured objects itself, and the subjectivity of the visitors’ pre-conceived images of the destination, and their previous travel experiences.

Conversely, the experiential novelty here refers to the ‘novel experience’ of being situated in a wild landscape in its basic sense. For some, this could be a positive and exciting experience especially if it is a first-time experience. This has been narrated in the comment below:

“There were a lot of stones, mountains, rock formations and very simple; there was a stream throughout the entire trail. I had fun seeing that because I’ve never been in a large landscape with a stream, rock formations, mountains and those things...It’s a new experience for me and every experience is different”. (Domestic visitor 1, female)

There is also ‘imagination-in-play’ which emerges as an important element in the experiential novelty of the visitors’ actual experiences. Using one’s imagination appears to be a predominant way of consuming the geological features and landscape. For example, in the experience of looking and being at the landscapes and scenery caused
by the volcanic eruption, it was evident that the participants made their imagination work, as illustrated by the following quotes:

“I was really amazed by that (volcanic stones). It comes in different sizes especially when you see the big ones, you’re gonna think how much pressure or how powerful the eruption was.” (Domestic visitor 2, female)

“It was fascinating. I was thinking it could have been quite incredible when it erupted.” (International visitor 1, male)

Here, it shows that the evidences of the previous eruptions of Mount Pinatubo trigger the imaginative experiences of the participants. An ongoing volcanic eruption is not apparent on site during the volcano tours when data collection was performed. Therefore, imagination serves as a medium for the participants to construct their own experiences and perceptions of the intensity of the volcano’s most recent eruption. This is implied as a distinct way of experiencing non-erupting active volcanoes, which is not the case in witnessing those erupting ones where volcanic activities are the centre of the spectacle (Sigurdsson & Lopes-Gautier, 2000).

6.3.3 Personal reflections on nature

In this theme, the participants indicate deeper emotional bonding with nature. This has been illustrated by Domestic visitor 2 (female) when she describes her feelings upon seeing the crater-lake:

“It’s really captivating like when you see that, you won’t look at anything else anymore. You would not mind your friends anymore. You would just look at it. It’s really calm. It’s perfect, just perfect.”

What contributes further to the experience of forgetting reality is the tranquillity of the place. It has been frequently cited that the scenery on Mount Pinatubo exudes a peaceful, calm, quiet, and serene ambience, as described by the quotes below:

“...today was not a crowded day, so for most of the time there was just three of us, four of us including the other guide (trail guide). So it was pretty good because it was just so quiet, so serene, so peaceful...” (International visitor 3, female)

“I just want to sleep because it’s very peaceful. After I took I rest, I just see the view. It’s really amazing because the water in the lake is very calm. It makes me relax so much.” (Domestic visitor 7, female)

Experience of solitude has been previously explored to provide individuals the opportunity “to contemplate life’s meaning and purpose” (Sharpley & Jepson, 2011, p.
It shows that when individuals are relaxed, they enter a reflective state. This is specifically indicated by the following comment:

“We had a look at the crater. We set on the shore and then we had picnic, and contemplated the beauty of the landscape. Contemplate means to get impregnated by the beauty of the scenery.” (Domestic visitor 8, male)

Therefore, what appears to further provoke participants to reflect are the beautiful and pleasant attributes of Mount Pinatubo’s natural environment. Together with the ambience, the totality of this set-up inspires people to recollect, reassess, and develop “new meanings of life and provide new perspectives about an individual’s existence” (Powell et al., 2012, p. 148).

With regard to the personal assessments of Mount Pinatubo, one participant narrates:

“It’s a pretty enlightening experience because everywhere you go, like we went to Nagsasa Cove – it’s the beauty of the place; if we go to Mount Kanlaon - it’s the beauty of the view. But here (Mount Pinatubo), yes, it’s beautiful in its own way that you can see the darker side of nature and how nature can be cruel. It’s like a person. A person there looks nice when you meet him or her for the first time. He is pretty. He is good looking. You know, but of course there’s another side of a person – the bad side of a person.” (Domestic visitor 4, male)

Based on this response, the natural environment of Mount Pinatubo is ‘humanised’ or metaphorically interpreted as a human being. This humanistic outcome of reflecting on nature occurs when individuals express their emotional attachment to the place (Kellert, 1996). As individuals are intimately positioned with the toured landscape, they tend to transform non-living objects into humanistic beings in order to further relate to them.

### 6.3.4 Awe in the power of nature

Volcanoes are known to have varying degrees of eruptive capacity. Perhaps, the destructive power of these geological formations adds to their uniqueness and exoticism as tourist attractions. Witnessing this power is perceived to be more intensified when viewing and being at active volcanoes with ongoing volcanic activities, and in turn, mixed affective outcomes can be experienced during these events.

However, this power is also apparent in the narratives of visitors to Mount Pinatubo even though the volcano did not have any ongoing eruptive activities during the tours. This destructive power has been highlighted by the participants as they describe their experiences, as shown by the following quotes:
“When we went to the lahar trail, you (we) can actually see how the water carved the way to Mount Pinatubo. That alone told us how devastating the eruption was.” (Domestic visitor 4, male)

“The rocks were really big like. How would these come out of the volcano if the eruption is not that much? It means that the eruption was so powerful.” (Domestic visitor 2, female)

On-site material evidences inform participants of the intensity of Mount Pinatubo’s most recent eruption. The remnants of this eruption have shaped these awe-inspired experiences of visitors. This dimension of the natural setting inspired by nature’s power is also discovered to influence different experiential outcomes.

The first one involves a feeling of uncertainty which resulted from an overwhelming experience of being in close proximity to the geological formations caused by the eruption. Particularly, this includes feelings of fear and helplessness as narrated below:

“Also a little bit scared because I don’t know...some of the soil (pyroclastic deposits) is very soft and these might fall.” (Domestic visitor 7, female)

“It tells a story about how strong Mother Nature is and how helpless we are. There were no greens left except on the side of course. You can actually see the cracks. The mountainside, they have been washed away...Actually, right now you can still see the effects if you see the walls there with the danger of collapsing. It’s like you’re helpless there walking on the channel along the canyons. It’s that you’re at the mercy of Mother Nature itself. If those fall, you’ll die.” (Domestic visitor 4, male)

While there appears a concern for safety, the co-existence of what appears the ‘beauty’ and ‘ugliness’ of the place inspire a spiritual connection between the visitors and the landscape. This is illustrated by the quote below referring to a spiritual experience upon reaching the crater-lake:

“You know that the explosion (eruption) killed lots of people. That explosion destroyed businesses. It affected the Philippines quite tremendously. So let’s just say it’s a very spiritual experience knowing that you’re there looking at the beauty of that thing (crater-lake) but you know in your mind that that ‘beauty’ killed a lot of people. It’s like I felt the spirit of the mountain itself.” (Domestic visitor 4, male)

Thus, it can be implied that the crater-lake, based on this response, is perceived as both a positive and negative by-product of the volcanic eruption. In a positive sense, the crater-lake creates feelings of fascination and a sense of nature appreciation. In contrast, this volcanic feature also reminds people of its destructiveness. Consequently, the co-
existence of these impressions constructs the spirituality of the place in general, which in turn inspires awe experiences.

Feelings of enlightenment are also indicated as influenced by being at the disaster landscapes. This outcome can also be associated with experiencing both the spirituality and the power of the place at the same time. This is narrated in the following quote:

“It was devastating. I mean the scenery is very nice but you can actually feel the immense power of nature...The place tells a lot of lessons. One is the power of nature that we can’t control; we really can’t control. (Domestic visitor 4, male).

Nature is realised as not just a resource to provide necessities for human survival or an avenue for conducting leisure and touristic activities. The manifestations of nature not only provide feelings of enchantment through appreciation, but rather they also produce more intensified emotional reactions from a sense of feeling humbled to negative feelings of uncertainty and even dark experiences. Based on the responses, these negativistic outcomes are perceived to further illuminate individuals on the very essence of humans’ relationship with nature (Powell et al., 2012). Therefore, it is asserted that witnessing and feeling the destructive power of nature resulted in the refinement of this relationship drawn out of the negative attributes of the tour and the deeper immersive experiences occurring while in a disaster landscape.

6.4 Recreational dimension

Various experiences and emotional outcomes can emerge in active participation with recreational activities in a volcanic environment. This dimension discusses the experiential outcomes that resulted by engaging oneself in the tourism activities designed for a Mount Pinatubo tour. These activities include a guided tour, a 4x4 jeepney ride, trek to the crater-lake, and other general leisure and physical activities.

6.4.1 Hedonism and physical stimulation

This theme encapsulates basic recreational experiences where the volcanic setting is viewed as a ‘playground’ for activities during the tour. The typical leisure experiences of excitement, relaxation, having fun, and enjoyment are revealed in this theme. It appears that these experiential outcomes mainly occurred during the ‘process’ of touring Mount Pinatubo. This refers to the events that involve the 4x4 jeepney ride while traversing the lahar trail, and the trek on the slopes of the volcano.
At first, performing these activities in the wilderness has been observed to provide opportunities for escaping one’s usual environment and responsibilities:

“The trekking part after the ride in the 4x4; it’s wonderful! I would recommend it to most of those working in the city, in the office, to at least experience once in their life to go to Mount Pinatubo for trekking. You just tend to enjoy walking which is not often. I mean you tend not to do that in the city because every time you walk, there is pollution, there is traffic, and there are the chores that you have to do both at home and in the office. But here, while trekking, all those were gone.” (Domestic visitor 6, female)

Here, walking the trail up to Mount Pinatubo’s crater-lake is perceived as a ‘stress-reliever’ (Saunders et al., 2013). Moreover, it can be observed that the notions of having fun and enjoyment while engaging in tour activities are apparent and are analysed as the initial reactions to the experience.

“We’re just having fun. We enjoyed the 4x4. We enjoyed the long trek even though I think it is seven kilometres of trek.” (Domestic visitor 5, male).

Further investigation of these fun and enjoyable experiences reveal positive feelings of experiencing a machinery-assisted tourism activity. For example, an initial physiological response of riding the 4x4 jeepney is described by Domestic visitor 8 (male), as a “rough but a fun experience”. In relation to this, excitement, combined with fun and enjoyment, is emerging as well in reference to those uncomfortable physiological feelings while riding the 4x4 jeepney:

“And it was really a hardcore 4x4 jeep ride because we were just going over the rocks, streams. And it’s really bumpy but it was really good. I enjoyed it.” (International visitor 3, female).

“It was exciting because it was a bumpy ride, and our driver and tour guide were very nice.” (Domestic visitor 6, female)

In contrast to these positivistic manifestations of the tourism experience, negativistic feelings of uncertainty also emerged. These can be perceived from the participants’ sudden experiences of things that have high levels of unexpected intensity. This is illustrated by Domestic visitor 7 (female) during her experience of the 4x4 ride:

“It really made me scared because (it’s my) the first time. The rocks were very very difficult to drive but I think he (the driver) has much much experience to drive on those rocks. And my heart was pounding when he drives on the streams.”
Visitors’ experiential states while testing physical skills in a geological environment, or performance/task-oriented experiences are captured as well. Although some of participants mentioned that the trail is easy to trek given their high levels of experience as trekkers, others mention that the task is a challenging experience. This can be recognised in the following quote:

“*It’s not easy to go (do the trek). I think it’s very difficult because of so many stones, the big ones and the streams. It’s so difficult.*” (Domestic visitor 7, female).

Perhaps, it can be perceived that the feeling of uncertainty combined with the difficulty of completing a task shapes adventurous experiences. As implied by Coghlan, Buckley, and Weaver (2012), adventure is an experiential dimension that “combines novelty with daring action” (p. 1712).

6.4.2 **Spiritual performance**

While feelings of easiness, fun, and some degree of adventure were revealed previously, the experiences discussed in this theme move beyond the hedonistic outcomes resulting from the recreational activities at Mount Pinatubo. Deeper reflections while performing physical activities indicate that the process of touring Mount Pinatubo is more of a spiritual journey rather than a fun activity.

Moreover, a contemplative state influenced by the ambience and environment of Mount Pinatubo is captured in the theme labelled *personal reflections on nature*. Conversely, the performance of a task appears to shape the reflective instances in this theme. Initially, flow experiences emerge while participants devote themselves to the recreational activity. This is evident in the description of the experience while trekking:

“*While trekking, my experience personally is you tend to forget about the world.*” (Domestic visitor 6, female)

When walking, individuals are perceived to detach themselves from reality especially if they are strongly engaged with a physical activity. Keeping up with performing the task is referred to as a challenge itself. This in turn forces people to neglect their surroundings as the challenge requires trekkers to be persistent with the physical hardships experienced while trekking (Saunders et al., 2013).

According to Heintzman (2010), the recreational activities experienced by visitors are asserted to shape spirituality. In this case, trekking Mount Pinatubo appears to influence
these spiritual experiences. The difficulty of this task enables people to construct the meanings of their journey. This is illustrated by the following narration:

“Actually, the highlight is the trekking; the long walk. I related it to ‘life’. It is like before you reach the top of your life, it will really be a long trek. You will feel the pain, the heat of the sun, the sun will kiss your skin, and something like that. I enjoyed it (the trek) because I related it to life. That in life, before you will reach the success or true happiness, you will really encounter challenges and all the pain along the way before reaching the top. I really enjoyed it though it’s tiring. Instead of complaining, I related it to life.” (Domestic visitor 5, male)

In this comment, the participant is observed to divert himself from the physiological state of experiencing pain and difficulty. Further, this personal experience encapsulates the transformation of a negativistic affective state caused by an intense physical activity into a more positivistic outcome by learning from his reflections about the experience. Saunders et al. (2013) suggest that this ‘meaning-making’ behaviour is a “sense of growth associated with the discovery of new meaning or the intensification of existing attitudes, values and beliefs” (p. 137). In relation, Powell et al. (2012) identify this as a ‘goal-clarification’ outcome where people re-assess and recollect about the nature of life and human existence.

6.4.3 Sense of fulfilment

Feelings of satisfaction after completing a task undertaken in the volcanic site are shown by the participants and are revealed in this theme. Particularly, these positive outcomes are generated upon reaching the peak of Mount Pinatubo or at the end of the trek. The following are participant responses about their personal feelings upon completing the task:

“...a bit of relief. It was good to finally get there”. (International visitor 1, male)

“Well, it’s fulfilling. That’s the feeling I thought when I reached the crater. IT’s fulfilling because after the seven kilometres, it’s like ‘Oh! I made it again’- for the second time”. (Domestic visitor 5, male)

“After trekking, I feel proud of myself”. (Domestic visitor 7, female).

It is particularly evident from these responses that performing and completing the walk give visitors a sense of personal achievement. This is synonymous with the emotional outcomes conceptualised by Pomfret (2006), suggesting ‘peak experiences’ emerge from individuals who engage in adventure mountaineering tourism activities.
Also, the aesthetics of the volcanic site are discovered to contribute to these positive outcomes. Here, it can be perceived that the scenery at the end acts as an added value for facing and completing the challenge, as shown in the following quote:

“The crater-lake is at the very end of the trek, so it’s like a sense of satisfaction when you see something beautiful at the end of a trek that is not hard but also not very simple. So it’s a kind of reward. It’s a rewarding experience.” (International visitor 3, female).

It can be asserted that the emotional stimulation experienced by the visitors is a result of the interplay between the perceived challenge dictated by the terrain and the attractiveness of the geological landscape. However, it is important to note, as mentioned earlier, that individuals have different levels of trekking experience. It is assumed that the experiential outcomes discovered above may not be evident for those with a high level of skills or those who did not perceive a high level of challenge in trekking the slopes of Mount Pinatubo.

6.4.4 Lack of interpretation

One of the goals of geotourism is to provide interpretive and educational nature-based experiences. Most often, these are in the form of a guided tour or interpretive provisions (e.g. information panels) on site. It appears that the Mount Pinatubo tour fails to deliver these environmentally educative experiences to visitors:

“I expect to know more things about the volcano, about the eruption, etc. I’m quite interested with those things and I actually expected to learn more about that, or at least about the last eruption. We had to really ask for those kinds of questions.” (International visitor 2, male)

It is a requirement for all trekkers at Mount Pinatubo to be assisted by experienced staff who know the trail and the surroundings very well. To many, a tour guide is perceived as having an in-depth knowledge about a destination and is expected to share this information with visitors. A Mount Pinatubo tour is a guided tour and visitors anticipated the same from the guides since the guiding staff are labelled as ‘tour guides’. This is evident from the above quote. However, one participant recognised that these individuals are actually ‘trail guides’ functioning as ‘tour escorts’:

“The thing there is that I understand that they are just ‘trail guides’. They’ll show you the trail. They accompany you there and they accompany you back. That’s it. That’s ok. That’s not bad but it would be better if they would be trained about the history.” (Domestic visitor 4, male)
Since the trail guides referred to here are locals and are actually residents of the locality, it can be assumed that they have knowledge about the volcano and its history. Also, some of the guides might also have actually experienced Mount Pinatubo’s 1991 eruption, and thus they could share some stories with visitors. This is apparent in the following quote:

“When were up there, there was one guy coming and he was telling us some interesting facts but it was some combination between Tagalog and English, so I could get like 60% to 70%. But when he couldn’t explain himself, express himself he just say everything in Tagalog and everything was understood.”
(International visitor 2, male)

Therefore, it is implied that language barrier is another contributing factor to the lack of interpretation in a Mount Pinatubo tour.

6.5 Socio-cultural dimension

This dimension of the visitors’ actual experiences of volcano tourism entails the shared experiences and social interactions with local people on site. The themes discussed here illustrate that the people surrounding a volcano tourist impact visitor experiences. Likewise, engaging with these people, namely, the service providers and indigenous people, during the tour shapes various experiences.

6.5.1 Solidarity with the local people

It is recognised that service providers are crucial to any tourism experience. Likewise, the local people have the same impact especially in the case of community-based or rural tourism. In their comments, the interview participants express their admiration for both the tourism staff and the local people. This is illustrated by the following quotes:

“Our driver and tour guide were very nice. The Kapampangan or the people in this place are very hospitable, courteous and very kind. That is one of the things that I enjoyed about the trip.” (Domestic visitor 6, female)

“I really admire the tour guides and the driver. I think for tourism that they are very important. I really admire them.” (Domestic visitor 7, female)

The friendly and genuine hospitality of the staff and the local people are perceived to impact positive experiences. Particularly, visitors appreciate the service provided by these people. Moreover, the importance of the roles of the service providers has been recognised by the visitors as shown above.
Further positive outcomes are also realised from the interaction between the visitors and the hosts. These are apparent given the presence of mutual understanding between individuals, as shown below:

“I would like to say that the people here were very friendly. I mean the owners of the lodge are very nice people. The tour guides even though he did not speak English but he was very nice and considerate, and the driver. Everything was kind of smooth and polite. That’s very important because you have this kind of respect between the tourists and the tour guides. Both sides respect each other and it’s a nice tourist experience.” (Domestic visitor 8, male)

Reciprocity in terms of respect is illustrated as an important factor in the social interactions between visitors and the host community. As also narrated above, even though there is a language barrier, the universal language of ‘respect’ is seen as an underlying factor in generating harmonious experiences on site.

6.5.2 Compassion

Mount Pinatubo is home to the Aeta people. The indigenous population is known to have a strong sense of attachment to the volcano and this is evident as they continue their ways of living in spite of the calamity caused by the previous eruption that displaced them, and in spite of the danger of potential eruptions. The visit to their local village makes visitors recognise the difficulty of living in a volcanic environment. This influences empathy which resulted in negative feelings of pity and sadness:

“On the way, we saw a village with poor people and I feel sorry for them because they were born there. They have to stay there and their life there is not good.” (Domestic visitor 7, female)

“We felt quite sad, actually, for the kids but seeing them happy and contended even though it’s just living in a basic and simple environment”. (International visitor 3, female)

The ‘interaction’ opportunity with the Aeta provides a chance for visitors to take photos with the indigenous people. Some of the respondents, however, viewed this activity as unethical and unacceptable. This is illustrated by the following quotes:

“When we saw the Aeta, we also saw some of the visitors taking pictures but we didn’t choose to do so because it is exploitation. They are in that situation and we are in this situation, so we don’t want to feel the awkwardness...I felt hurt. Why would we exploit that moment?” (Domestic visitor 5, male)
Upon seeing the indigenous people’s situation, some of the respondents portrayed altruistic intentions. The motivation to give something to the Aeta is emergent as a response to their situation, as shown below:

“If I knew before that there were people there, maybe we could have prepared something for them”. (Domestic visitor 7, female)

However, some donated items to the indigenous people. They treated the Aeta interaction as an opportunity to show their compassion with Mount Pinatubo’s inhabitants. These events are described by the following responses:

“Instead of taking pictures, we just gave them food...(and) of course it was fulfilling. It is like their first time to receive food like that so it’s kind of fulfilling”. (Domestic visitor 5, male)

“We actually gave them two packets of M&M’s. And you know, seeing them take it from you without rushing for it and they were sharing it within themselves even though it is something that they like. It’s also very heart-warming.” (International visitor 3, female)

In these cases, it can be perceived that the charitable instances the visitors had with the indigenous population indicate personally satisfying experiences. This experiential outcome is different from achieving something or being able to accomplish a physically challenging activity. This is rather rooted in heart-warming experiences of being able to help or do something good for the less fortunate people encountered at the volcanic site.

6.5.3 Transformative

Personal transformation appears as one of the positive impacts of engaging in trekking activities performed in a natural setting. In contrast, this experiential benefit is indicated to stem from the socio-cultural interactions of the visitors with the Aeta people of Mount Pinatubo. This theme refers to the future-oriented outcomes emerging from the deeper connections and reflections made by the visitors in response to their social encounters. One of the factors that influence these transformative experiences is witnessing the actual living conditions of the indigenous people:

“I also saw the Aetas. When you get there and actually see them working, living up their lives in the middle of all that devastation, you can actually feel their resilience – their determination to live. The place tells a lot of lessons (including) the resilience of humankind.” (Domestic visitor 4, male)
Being an actual witness and having first-hand experiences of entering the Aeta’s living environment indicate a sense of awe of man’s adaptive capacity amid change. This instance inspires a further realisation, as narrated below:

“If we live there, I don’t think we’ll survive a week but they have been there for generations even with the eruption.” (Domestic visitor 4, male)

Comparisons of living a life that is seen as more comfortable to what they have witnessed at the Aeta village influence this schema-changing component of the tour. This is one of the unique benefits of the actual experiences generated by the socio-cultural aspect of volcano tourism at Mount Pinatubo.

Further, this provides visitors, most of them city dwellers, a genuine rural experience. This experience results in a future-oriented attitude, as International visitor 3 (female) shared that she “learns to not take things for granted” as a personal benefit from the experience. Finally, a refinement of the attitude in the treatment of the Aeta as an ethnic group of people was illustrated by the participants:

“Unfairly, we have treated them (the Aeta) as a minor ethnic group. In fact, as far as I’ve seen, they have been almost erased except in elementary textbooks.” (Domestic visitor 4, male)

“They’re also human beings like us. I don’t see any difference why they should be featured.” (Domestic visitor 6, female)

Here, it can be perceived that the immersive socio-cultural interactions with the indigenous population living on the slopes of the volcano inspire a re-assessment of people’s view of humanity. This experience may not manifest in other volcanic sites without local inhabitants. Thus, it can be asserted that this experiential outcome is unique to this volcanic site which differentiates the Mount Pinatubo experience from other volcano tourism experiences.

6.6 Conclusion

This chapter explores the actual volcano tourism experiences of visitors to Mount Pinatubo. Particularly, this explains that the Mount Pinatubo experience is shaped by the three dimensions that constitute a Mount Pinatubo tour, namely, natural, recreational, and socio-cultural. The visitor’s perceived experiential outcomes stemming from these dimensions are explained in this chapter. In addition, the various emotional outcomes and benefits that are attached to each of the dimensions are
discussed in this chapter as well. The following chapter is a discussion of findings from both the pre-tour survey of visitor motivations and experience expectations, and the post-tour inquiry of actual experiences of volcano tourism at Mount Pinatubo.
Chapter 7  DISCUSSION & OVERALL INTERPRETATION

This chapter discusses the findings for both the pre-tour and post-tour phases of this study. The first section presents a discussion of the results of the statistical tests and the findings of the qualitative analyses for Phase 1. This particularly focuses on the characteristics of the survey respondents, their motivations, and experience expectations. Thereafter, the second section discusses the findings from the thematic analysis for Phase 2 or the post-tour inquiry of visitor experiences at the volcanic site. Finally, the convergence and divergence of findings from the two phases of this mixed methods study are interpreted in the final section.

7.1  The motivations and experience expectations for volcano tourism at Mount Pinatubo

The first phase of this study is a combination of descriptive and exploratory survey research. This phase gives an insight into the underlying factors that motivate individuals and the types of experiential outcomes that they anticipate when participating in volcano tourism activities at Mount Pinatubo. A mixture of quantitative and qualitative approaches is applied in order to understand these perspectives.

7.1.1  Characteristics of the survey respondents

The profile of the respondents surveyed for this study is diverse. The information discovered that pertains to their characteristics may serve as indicators of the overall profile of visitors to Mount Pinatubo. Therefore, it is important to discuss the sample profile revealed by the survey.

Regarding gender, the number of males is slightly higher than the number of females. This is in accordance with the profile of respondents to a study of visitors to the Newberry National Volcanic Monument in the US where 55.8% were males (Covelli et al., 2005). Furthermore, this reflects the characteristics of visitors to a mountain attraction studied by Pan and Ryan (2007), to several geosites surveyed by Allan (2011), and to the Hong Kong Geopark studied by Cheung, Fok, and Fang (2014). This shows that although there are some physically challenging activities integrated in the volcano tour, the participants are not exclusively represented by a dominant gender.

With regard to age, it appears that the visitors to Mount Pinatubo are dominated by the younger visitor market. The sample is mostly represented by individuals who are within
the 18 to 29 age group. Again, this is consistent with the characteristics of visitors surveyed at a number of geological and mountain-area attractions (see Allan, 2011; Jaafar, Nordin, Abdullah, & Marzuki, 2014; Kim, Kim, Park, & Guo, 2008; Pan & Ryan, 2007).

In terms of education, the visitors surveyed in this study are highly educated. The majority have at least tertiary degrees or some postgraduate education. This finding is in line with previous studies of geotourist characteristics and behaviour (see Allan, 2011; Kim et al., 2008). Moreover, it is can be perceived that in general most nature-based tourists have higher educational attainments. For example, Kim et al. (2003) discovered that most of the respondents in a study of visitor motivations for visiting a Korean national park had university or higher degrees (60.8%). De-Gen (2004) found out that almost half of the respondents in a similar study at the Huangshan Mountain in China have tertiary or higher educational levels (41.9%). Moreover, Jaafar et al. (2014) determined that 98.5% of the respondents in a study of tourist satisfaction at the Kilim Geopark in Malaysia had received formal education.

With regard to occupation, the majority of the respondents for this study are reported to work either as professionals or managers. Again, this is consistent with the findings of Allan (2011) and Kim et al. (2008). In the Philippines, and probably in general, these occupational categories have higher income ranges. Nature-based attractions in the Philippines normally require entrance and other fees since these are the major tourism attractions of the country. A Mount Pinatubo tour is a relatively expensive tour compared to other day-trip activities in the same region. Thus, it can be perceived that individuals in these work categories have disposable incomes to spend for a Mount Pinatubo tour.

In terms of volcanic sites’ experience, the majority of the respondents are first-time visitors although a considerable number (34.8%) have previously visited other volcanoes prior to their visit to Mount Pinatubo. This finding is similar to the characteristics of the sample of visitors to the Newberry National Volcanic Monument, a volcanic destination without ongoing volcanic activity (Covelli et al., 2005). This is, however, in contrast with the profile of the respondents in a study of visitors to an active volcano with ongoing volcanic eruptions in Hawaii, US (Davis et al., 2013). More than 50% of the respondents there revealed that they had visited other volcanoes prior to their trip to that volcanic attraction. Therefore, it can be assumed that individuals who
have higher levels of experience of volcanic sites prefer to visit currently erupting volcanic attractions over those without ongoing volcanic activities.

For their travel party, it appears that Mount Pinatubo has an appeal to those travelling with their families and friends. This can be due to the sampling period of this study: March to May 2014. These months comprise the Philippine summer and the peak season for travel into and within the country. Also, this is an academic summer break; thus, this can be a time for them to travel with family and friends. In relation to this, Mount Pinatubo can be viewed as an attraction that could provide opportunities for recreation for families or groups of friends. Conversely, this finding reflects those revealed in the study of visitors to a geosite (Kim et al., 2008) and to a non-erupting volcanic site (Covelli et al., 2005).

Finally, the majority of visitors are classified as domestic visitors or those currently living and working in the Philippines. This resonates with the figures in an earlier study of the visitor profile of Mount Pinatubo, wherein 90% of annual visitors are domestic tourists (DOT Region III, n.d.). An obvious reason for this is that domestic visitors are already in the country; the volcanic attraction is in close proximity to them compared to international visitors who need to travel longer distances to get to the volcanic site. Moreover, the Philippines is marketed internationally as a destination that is popular for its islands and beaches. Volcanic attractions are not part of its sector marketing strategies. Therefore, this can explain the dominance of the number of domestic visitors over the international visitor figures.

7.1.2 Visitor motivations for volcano tourism at Mount Pinatubo

The first objective of this study is to identify the motivations of visitors for participating in a volcano tour in a non-erupting active volcano, by analysing the motives of visitors to Mount Pinatubo. In operationalising a push-pull motivation framework, multiple motives are discovered. Four push or person-specific motives, namely escape and relaxation, novelty-seeking, socialisation, and volcano knowledge-seeking, are revealed. Further, two pull or destination-induced motives, labelled dark and activities-induced, and volcanic and natural attributes-driven motives, are extracted from statistical analysis.

The extracted push motives reflects the four foundational motivation factors proposed by Pearce and Lee (2005) (i.e. novelty, escape/relax, relationship, and self-
development), and the four main motives for visiting a geological attraction revealed by Kim et al. (2008) (i.e. escape, knowledge, socialisation, and novelty). The pull motives, however, can be interpreted as unique factors for visiting Mount Pinatubo. Of the six extracted motives, novelty-seeking is found to have the highest-rated motivation factor. Thus, it can be asserted that the core motive for volcano tourism at Mount Pinatubo entails the intrinsic desire to discover and experience new and different things.

In past research, Pearce and Lee (2005) also discovered novelty as the highest-rated motive for undertaking pleasure travel. As this study’s results suggest, Pearce and Lee’s (2005) findings are validated in the context of volcano tourism. However, novelty-seeking is analysed as a push motive in this study. It is important to note that in Crompton’s (1979) seminal study of push and pull motives, novelty is introduced as a pull factor. He states “novel meant new experience” and “novelty resulted from actually seeing something” (Crompton, 1979, p. 419).

In this study, that ‘something’ may refer to the volcanic attraction and its attributes. It can be perceived that visitors seek novel experiences by being situated in an active volcanic environment and by looking at unique geological landscapes. The exoticism of Mount Pinatubo can further influence the visitors’ novelty-seeking motives. Thus, this implies that the ‘visited attraction’ matters in analysing novelty-seeking as a travel motivation construct.

Apart from statistically-derived motives, this study recognises that there can be some other motivational factors that are not measured in the quantitative scale items in the survey. Hence, the respondents were asked to list any additional motives that they have for joining a Mount Pinatubo tour. As previously interpreted, the qualitative responses revealed in the qualitative component of the visitor motives are either newly-emergent or complementary. In accordance with the quantitative element of this study phase, the codes discovered are categorised separately as push and pull motives.

For the push motives, the findings show that the adventure-seeking motive is the most frequently mentioned amongst all the qualitatively-explored motives. This illustrates the strong relationship between volcano tourism and adventure tourism. As Newsome and Dowling (2006) assert, geological attractions serve as venues for extreme and physically challenging activities. Being situated at a volcanic site, however, can be perceived as an adventurous experience in itself, especially if there is ongoing volcanic activity. The
former assertion can perfectly apply to volcano tourism at Mount Pinatubo. Being an infrequently active volcano, activities such as the 4x4 jeepney-ride, trek, and hike before reaching the crater-lake and on the way back, should be integrated in lieu of the spectacle of viewing a volcanic eruption. In this case, Mount Pinatubo serves as the backdrop and setting for these activities. Accordingly, participating in these activities can be argued as satisfying the visitors’ intrinsic motives to experience adventure on a volcanic site.

Two qualitative findings are found to complement two extracted factors from the statistical analysis. First, complementing the novelty-seeking motive, the respondents specify that their motivation for further exploration of the Philippines is part of their agenda for travel to Mount Pinatubo. As previously discussed, the mainstream attractions in the Philippines are coastal and marine in orientation. It can be assumed that the respondents are motivated to explore the country beyond its usual tourist offerings.

Second, it has been shown that the desire to escape Manila is an additional motive converging with the motivation to ‘escape and relax’. This finding illustrates the geographical origin of the respondents: Manila, a highly urbanised metropolitan city. In choosing Mount Pinatubo, it can be proposed that these visitors prefer a nature-based destination in seeking opportunities for escape. This can be linked to the nature-seeking motive that is also revealed as an additional push motive.

The additional pull motives revealed in the qualitative analysis are primarily represented by the influence of the exotic nature of Mount Pinatubo and the other activities (i.e. church/company activity, photography, and walking) that can be undertaken at the volcanic site. The former finding confirms that the uniqueness of the attraction pulls individuals to travel to the volcanic site. Moreover, these exotic landscapes (e.g. the crater-lake) are some of the prominent images of Mount Pinatubo that can be seen in traditional and social media. This is based on the researcher’s survey of tour operators’ websites during the development of the survey questionnaire. In addition, Erfurt-Cooper (2014a) proposes that the media and the images that they convey play a significant role in the development of volcano tourism. Thus, these stimuli may have triggered the respondents’ desires to be situated in this type of environment.
Amongst other activities revealed to have induced travel to Mount Pinatubo, *church/company activity* can be viewed as one of the important findings. At the time of writing, the conducting of organisational activities at a volcanic site is unexplored. There can be an array of factors that attract organisations to conduct their activities at these attractions. For Mount Pinatubo, one respondent indicates that the close *proximity* of the site to Manila is one of the reasons. However, it can also be assumed that Mount Pinatubo has the image of a ‘resort’ due to the wide range of recreational activities that can be experienced by visitors. Also, due to the absence of a threatening volcanic activity, the volcanic site is observed to have the functions of an eco-park or a national park (Erfurt-Cooper, 2014a).

Finally, *photography* is analysed as a pull motive but it has not been included in the scale items in the survey. This motivational construct is a significant factor especially in the context of nature-based tourism (Kruger & Saayman, 2010; Saayman & Saayman, 2009). This construct can be associated with the tourist gaze (Urry, 2002). Visitors may have been motivated to visit Mount Pinatubo to take photographs of the ‘gazed’ unusual geological formations, and bring home and share memories of being in a volcanic environment.

7.1.3 **Socio-demographics, prior experience of volcanic sites, and motivations**

The second objective of this study aims to test for differences in motivations in terms of the visitors’ socio-demographic characteristics, namely, gender and age. In addition, the influence of the visitors’ prior experience of volcanic sites on motivations are analysed as well. Amongst these independent variables, age is the only factor that did not have an effect on visitor motivations.

Referring back to the respondent profile, Mount Pinatubo is more frequently visited by younger visitors aged 18 to 29 years old. At first, it can be assumed that this is because of the perceived challenge that stems from the recreational activities on-site. As Jönsson and Devonish (2008) assert, this group of young visitors are highly motivated by physical challenge for they are more active individuals compared to older visitors. However, this assumption is not supported in this study. There are no underlying factors identified that specifically motivate a particular age group to travel to the volcanic site.

Furthermore, this result contradicts the findings of previous studies that suggest age to influence travel motivations in other tourism contexts (see Kim et al., 2003; Phau et al.,
In the volcano tourism context, this finding diverges from the emerging trend in Japan (Nakata & Momsen, 2010), where collecting volcanoes is discovered as becoming popular for individuals aged 50 plus years old due to cultural and achievement motives.

7.1.3.1 The influence of gender on motivations

With regard to gender, female visitors are revealed to have higher volcano knowledge-seeking motives for their visit to Mount Pinatubo compared to their male counterparts. This finding is in accordance with the research on the visitor motivations to a rural destination. Compared to males, females are reported to have higher ‘social bonding’ motives that include the desire “to learn about the local culture and history” (Xie, Costa, & Morais, 2008, p. 377). Likewise, this study’s finding is consistent with the study of Chinese female outbound tourists where the ‘knowledge and prestige’ motive has been given the highest importance amongst all the motivations analysed (Li, Wen, & Leung, 2011). Thus, as the survey results indicate, females are more likely intrinsically motivated to learn about the visited destination or attraction than males, regardless of the settings.

Furthermore, although significant results are only found in the motivation to learn, females in general indicate higher levels of agreement on all the extracted motivation factors in this study. This finding is congruent with Meng and Uysal’s (2008) gendered study of motivations to visit a nature-based destination. In this study’s context, it can be implied that overall, women are more highly motivated than men when considering travel to volcanic sites.

7.1.3.2 The influence of prior experience of volcanic sites on motivations

The respondents’ previous tourism experience at other volcanic sites prior to their visit to Mount Pinatubo is shown to impact motivations as well. For this variable, it can be recognised that those who reported to have visited other volcanoes prior to their participation in a Mount Pinatubo tour have higher levels of volcano tourism experience. In contrast, those who have not visited a single volcano can be identified as having lower levels of volcano tourism experience.

Results reveal that those with prior experience of volcanic sites score highly on the volcanic and natural attribute-driven motive compared to those who do not have the
same experience. It can be perceived that as individuals increase their travel experience
to volcanic sites, they are more likely to be attracted by the geological features of
volcanoes and are more motivated to visit other volcanoes, compared to first-time
volcano tourists. As Lehto et al. (2004) postulate, “As people’s experience increased,
they tended to narrow down their place and activity choices” (p. 814).

Therefore, this affirms the notion that volcano tourism is a special interest form of
tourism due to the presence of serious volcano tourists or the so-called ‘volcano
collectors’ who are highly pulled by Mount Pinatubo’s volcanic and natural features. On
the contrary, those who have not been at a volcano prior to joining the tour, may not be
primarily attracted by the volcano and its natural environment. Perhaps, the latter can be
recognised as ‘general recreationists’.

This is in accordance with the findings of Mehmetoglu (2005) where ‘specialist’ nature-
based tourists are shown to have higher nature-seeking motives than the ‘generalist’
visitors to natural attractions. Also, this reflects the findings of Kim and Brown (2012)
where those clustered as ‘geotourists’ are revealed to have been more attracted to
tourism activities that specifically feature geological attractions, compared to visitors
who are identified as ‘general tourists’.

Finally, the findings of this study are congruent with the previous studies that applied
the Travel Career Ladder approach for engaging in general leisure and tourism
activities. It has been found that individuals with high levels of travel experience are
more motivated to visit nature-based attractions than those with low levels of travel
experience (Pearce & Lee, 2005). In the case of ski tourists, for example, advanced
skiers are shown to put more importance on the need for ‘thrilling’ and physically
stimulating experiences than beginners (Holden, 1999).

7.1.3.3 The differences in motivations between domestic and international visitors

The survey respondents are segmented as domestic and international visitors. According
to an undated case report of the Department of Tourism Region III (n.d.), these are the
two main segments of visitors to Mount Pinatubo. The term ‘visitor’ used for the
individuals surveyed in this study are ‘same-day’ visitors (UNWTO, 2015). Hence, the
differences between domestic and international visitors were explored using quantitative
techniques as part of the third objective of this research.
Significant differences were found on the *escape and relaxation* and *novelty-seeking* motives for these visitor types. Domestic visitors are reported to have higher motivations for *escape and relaxation* than international visitors. The intrinsic desire for resting is identified as one of the primary and pre-dominant motivations of domestic visitors in general (Pierret, 2011). In this study, this finding can be assumed to be influenced by the domestic visitors’ usual place of residence and occupation.

A percentage of 74.4 of the 127 domestic visitors surveyed in this study report that they are currently living in Metro Manila or the National Capital Region (NCR) of the Philippines. This region is a highly urbanised metropolis comprising 17 cities and one municipality. It has an estimated population of 22,710,000 making it one of the largest urban areas in the world (Demographia, 2014). Almost 10% of the country’s business and industrial establishments are situated in this area (Philippine Statistics Authority, 2014).

It can be asserted that domestic visitors may want to escape their life and responsibilities in the cities; that is why they chose to participate in a volcano tour at Mount Pinatubo and relax in nature. Also, this assumption confirms domestic visitors to be highly represented by ‘city-dwellers’ and are more likely to visit rural destinations, including natural attractions within a country of reference (Pierret, 2011). Also, this reflects nature-based tourism as the opposite of everyday life (Mehmetoglu, 2007a).

Moreover, a supplementary two-way ANOVA illustrates that younger domestic tourists aged 18 to 29 years old score highly on the *escape and relaxation* motive against their international counterparts. In exploration of the characteristics of the sample, the majority of domestic tourists are composed of 18 to 29 year-olds. Also, 82.7% of those within this younger age group report that they are from NCR (see Appendix K). It can be perceived that this younger group of domestic visitors are working as young professionals wanting to have a break from their usual routine and are seeking physical and mental relaxation at the volcanic site. In addition, it can be assumed that the proximity of Mount Pinatubo to NCR has an effect on this finding. A tour of Mount Pinatubo is viewed as highly accessible, and is a popular nature-based day-trip especially during the summer season for this visitor group.

Conversely, domestic visitors are discovered to have lower *novelty-seeking* motives than international visitors. It can be implied that familiarity is a critical factor that
affected this finding. It is obvious that domestic visitors are more familiar with the geology, flora, and fauna of the Philippines. Furthermore, domestic visitors may have a better cultural orientation and knowledge of Mount Pinatubo, since it is observed that a large number of domestic tourists are Filipinos. The volcano has always been featured in their local history textbooks, literature, and media.

As opposed to domestic visitors, international visitors may perceive Mount Pinatubo as a novel destination because it is not part of the Philippine mainstream tourist attractions (i.e. islands and beaches). Moreover, the unfamiliar images of the attraction (e.g. crater-lake, lahar, the Aeta) as advertised by tour operators may have influenced their intrinsic motive to seek unique experiences at the volcanic site. In reference to the sample characteristics, most of the international tourists come from countries without active volcanoes (see Figure 7.1). Therefore, the absence of these geological attractions in these countries where the majority of the international visitors usually live (e.g. the UK, 14.3%; China, 11.6%; Austria, 10.4%; Australia, 7.8%; and France, 7.8%) may impact the perceived novelty directed towards Mount Pinatubo as a tourist attraction. Overall, this result contradicts the findings of Mechinda et al. (2009) regarding the motivations for visiting Chiang Mai, Thailand, where international visitors were discovered to have lower novelty-seeking motives versus their domestic counterparts.

![Figure 7.1 International visitors’ usual country of residence](image)

7.1.4 Experience expectations for volcano tourism at Mount Pinatubo

Embedded in Phase 1 of this study, visitor expectations for a volcano tourism experience are identified qualitatively. This investigation reveals an array of
expectations projected towards the Mount Pinatubo experience. These are categorised as the experiences expected from the direct participation with the tour dimensions (i.e. natural, recreational, and socio-cultural) and as anticipated experiential outcomes.

The emergence of the expectations for the direct participation in the tour activities informs that the participants have strong pre-tour knowledge of the tour components (Hsu et al., 2010). Moreover, this illustrates the strong influence of the pull factors or destination attributes on visitor experience expectations (Gnoth, 1997). However, although physical involvement with tour activities are considered as experiences (e.g. trekking and climbing experiences) and can be expected (Sheng & Chen, 2013), these aspects diverge from the experience expectations that this study aims to identify. This study leans towards understanding the affective states that the visitors expect for a Mount Pinatubo tour. Therefore, the reported anticipated experiential outcomes are viewed to address the study objective.

Most of the frequently reported anticipated experiences are positive in nature. For example, the expectations for having fun and excitement during the tour indicate that the majority of the respondents are ‘fun-seekers’. As such, their experience expectations are centred on the hedonic and positive entertaining experiences (Vespestad & Lindberg, 2010). These concepts are in accordance with the experience expectations discovered for museum visitors in Taiwan (Sheng & Chen, 2012, 2013). Similar to this study, visitors view the tour at the volcanic site to provide them with pleasant experiences as they participate in the activity (Pine & Gilmore, 1998).

While the above hedonistic expectations are anticipated by passive involvement, the adventurous and challenging experiences expected by the respondents are aroused by the anticipation to be actively involved and immersed in the tour (Pine & Gilmore, 1998). It can be assumed that visitors are well-oriented to the physical activities ahead of the tour. Thus, they expect to be emotionally impacted by these intense experiences.

In relation to this, there appears to be a strong sense of escapism in the responses. Relaxing experiences are reported to be expected. This may have been shaped by the projected ambience that the environment of Mount Pinatubo can provide to the visitors.

Apart from the physically challenging and relaxing experiences, intellectually stimulating experiences are also expected. This could have been shaped by the
impression that the tours are ‘guided’. Likewise, this could be an indicator of the respondents’ desires to fulfil their curiosity about the volcano.

Finally, unique, memorable, and safe experiences are revealed as experience expectations as well. Although these can be regarded as general anticipations for a tourism experience (like the one discussed above), these can be assumed to be focused on the volcanic nature of the toured attraction. Being close to a volcano or to be in a volcanic crater is one of the unique experiences one can have (Lockwood & Hazlett, 2010; Sigurdsson & Lopes-Gautier, 2000). To some, this can be an unforgettable experience citing that the majority of the respondents are ‘first-time’ volcano tourists. Furthermore, the presence of risk in volcano tours cannot be neglected (Erfurt-Cooper, 2011). It is natural for visitors to anticipate (or wish) safe experiences while at the volcanic site.

7.2 Volcano tourism experiences at Mount Pinatubo

The fifth objective of this study refers to the exploration of the actual experiences of volcano tourism at Mount Pinatubo. This is addressed in Phase 2 of this mixed methods study. Through inductive thematic analysis, several themes were revealed. These themes are a mixture of experiential outcomes, emotions, and benefits perceived in participating in a Mount Pinatubo tour. These are classified into and explained within the boundaries of the three dimensions conceptualised to constitute the Mount Pinatubo experience, namely, natural, recreational, and socio-cultural.

The visitor experiences revealed in this study are complex in nature. Throughout their journey, the interviewed individuals have interacted and been involved with different aspects of the tour (e.g. geological objects, physical activities, and local people). To discuss this multidimensionality, various layers of the experience are conceptualised. These layers exemplify the components of the volcano tourism experience, as illustrated in the framework shown in Figure 7.2.

This framework shows that the first or outer layer of the experience is represented by the immediate responses to the tourism experience. This includes the surface level or common leisure experiences that can be found in literature and can be applied to almost all types of nature-based tourism. The second layer refers to the reflective responses that entail deeper perceptions and recollections on the volcano tourism experience. Finally, the third layer entails the visitors’ immersive responses which are situated at the core of
the visitor experiences at Mount Pinatubo. The experiential outcomes included in this component are discussed to be the deepest and most meaningful experiences for visitors during their journey to Mount Pinatubo.

![Mount Pinatubo experience model](image)

**Figure 7.2** Mount Pinatubo experience model. Shades indicate the depth of experience.

### 7.2.1 Immediate responses: The surface of the volcano tourism experience

Appreciating nature is observed as the most commonly explored theme in nature-based tourism (Gordon, 2012; Webb, 2002). This is an immediate experiential response that reflects the ‘aesthetic’ outcome from a nature-based experience. An aesthetic outcome refers to the positive affective state caused by the physical beauty of a toured destination (Kellert, 1996). For this to manifest, an individual needs to be passively involved and be situated in a setting where experiences are staged (Pine & Gilmore, 1998). Thus, visitors are perceived to assume the role of ‘gazees’ that see and appreciate the physical properties of the toured landscape (Urry, 2002; Webb, 2002).

Furthermore, Coghlan et al. (2012) suggest that the immediate physical encounters with the toured objects and setting shape the initial reactions of being awed. As the journey to Mount Pinatubo progresses, various scenery can be viewed by the individuals. As a result, different surprises produce overwhelming and attention-grabbing emotions along the way. Conversely, since visitors act simply as spectators to the wonders of nature, lower levels of place attachment, which Kil et al. (2011) propose as the emotional bonding and sense of belonging to a place, are present in this experiential outcome.
Aside from being audiences, visitors also act as ‘performers’ as they experience volcano tourism at Mount Pinatubo. Their performance is undertaken in the commoditised setting of Mount Pinatubo. Initially, the volcano’s environment is viewed as a ‘recreational space’ for visitors to utilise (Reis, 2012). Hence, utilitarian outcomes represented by the concept of hedonism and physical stimulation emerge as part of the immediate experiences at the volcanic site.

The utilitarian perspective in nature-based tourism underpins the basic sense of human’s relationship with nature. This entails the use of nature’s resources for the purpose of leisure and recreation (Powell et al., 2012). This phenomenon is one of the commonly explored themes in nature-based tourism; hence, this is also viewed to be part of the outer layer of the Mount Pinatubo experience.

For example, Chan and Baum (2007) discover that one of the positive perceptions in an ecotourism experience include hedonic experiences. These refer to enjoyable, exciting, and memorable experiences drawn from tourism activities in nature; these reflect the relationship between visitors and nature as mediated by the recreational activities organised for the tour (Markwell, 2001).

In the case of Mount Pinatubo, the hedonic perceptions of the experiences are directed towards fun, exciting, relaxing, and physically stimulating activities performed during the tour. These hedonic experiences are linked to the production of entertaining experiences (Vespestad & Lindberg, 2010). Similar to visitors’ roles as audiences, to be entertained means there is passive participation (Pine & Gilmore, 1998) and lower levels of place attachment amongst them.

In addition, participation in touristic activities in nature is implied as the reversal of daily life (Mehmetoglu, 2007a; Uriely, 2005). Based on the immediate responses, the visitors reveal that physically involving themselves in tourism activities is something that they would not experience in their usual environment. These hedonic experiences are closely associated with differentiation of tourism experiences.

Lastly, the outer layer of the framework includes a socio-cultural aspect of the volcano tourism experience. Visitors express their experiences to be in solidarity with the local people. In organising nature-based tours, the intervention of people who deliver the services matters in the experience (Markwell, 2001). It has been explored previously
that visitors’ interaction with these individuals is a key aspect, especially in community-organised tours (Chan & Baum, 2007).

Here, it can be conceptualised that the visitors found themselves within a ‘servicescape’. This is an intangible concept that refers to the composition of hosts, the services they deliver, and the setting where the service is delivered (Vespestad & Lindberg, 2010). Within Mount Pinatubo’s ‘servicescape’, the interviewees perceived themselves as ‘guests’ welcomed and served by the host community. Since most of the visitors have the opportunity to be included in this ‘servicescape’, this can be one of the immediately perceived experiences in a Mount Pinatubo tour.

7.2.1.1 Lack of intellectually stimulating experiences

Educating visitors at volcanic sites is a key aspect of volcano tourism (Erfurt-Cooper, 2011, 2014a; Newsome & Dowling, 2010a; Wittlich & Palmer, 2010). It has been argued in Section 3.5.2 that intellectually stimulating experiences are anticipated to be generated in a Mount Pinatubo tour. However, the interviewees report that this important tour feature is non-existent. Therefore, in the experience model, the lack of interpretation is theorised as a white spot which should have been situated as an immediate response to a Mount Pinatubo experience.

This outcome contradicts the findings of previous research showing educational experiences as perceived benefits during nature-based tours (see Chan & Baum, 2007; Walker & Moscardo, 2014; Webb, 2002). This type of experience is recognised as one of the basic experiences in visiting natural attractions. Establishing interpretive provisions and human interventions (e.g. guided tours) are known to enhance visitor experiences (Coratza & De Waele, 2012; Wittlich & Palmer, 2010). Thus, the lack of interpretation could be an issue that needs to be addressed to improve volcano tourism at Mount Pinatubo.

7.2.2 Reflective responses: Comparative experiences of volcano tourism

The experiential aspects discussed in the reflective responses to the Mount Pinatubo experience entails instances where visitors ‘look back’ and recollect from their previous knowledge and experiences. Furthermore, this is the experience layer where ‘points of reference’ are made to construct experiences. As mentioned, higher levels of place attachment and deeper reflections compared to the first layer are required for individuals to enter this experiential dimension.
Novel experiences in nature are often directed towards the unusual landscape and environment that confront the visitors (Chan & Baum, 2007). In this study, these unique experiences are indicated as subjective and highly constructed experiences. It appears that novelty, like authenticity, is communicated as a ‘state of mind’ because evidences of ‘mental-matching’ are present as the visitors describe what they witness (Di Betta, 2014). Particularly, the participants refer to their pre-existing images (based on digital images) of the volcano and compare these to their personal images (up-front) of the scenery.

Likewise, past experiences, either at home or on previous travel experiences, are regarded as points of reference as the participants narrate the unfamiliarity of their volcano tourism experiences. This exactly refers to the ‘comparative uniqueness’ component of awe proposed by Coghlan et al. (2012). The unfamiliarity of the experience of being in a volcanic landscape is perceived to have been manipulated in the minds of the visitors themselves.

In addition, imaginative experiences are present during the tour. As the participants describe the vastness of the landscape and the massive size of the volcanic rocks they encountered, ‘metaphorical’ images are created as references (Lengkeek, 2000). It can be assumed that these tendencies emerge as a result of the lack of interpretation at the volcanic site.

While the novel experiences are cognitive in nature, the visitors’ personal reflections on nature and spiritual performance of the recreational activities are in general affective. For reflecting on nature, it is indicated that the opportunities for personal recollection were shaped by the tranquil ambience of the volcanic setting. As Sharpley and Jepson (2011) postulate, the solitude and quietness of the place influence spiritual and contemplative experiences.

Apart from the serenity of the environment, the spiritual experiences perceived by the participants in volcano tourism are drawn out from the remnants of Mount Pinatubo’s previous eruption. Although observed as an affective response, the spiritual experience in this study relies on the participants’ cognitive processing of their existing knowledge of the impacts of Mount Pinatubo’s 1991 eruption. They retrospectively relate facts regarding the effect of the eruption to the images of the disaster landscape they currently view and traverse.
The spiritual experiences in the recreational dimension of the Mount Pinatubo tour are induced by the on-site trekking activity. As implied by Saunders et al. (2013), long distance walking does not always deliver pleasant experiences, but rather this activity provides negative experiences drawn from feelings of fear, concern for safety, and physical exhaustion. However, there are instances where these negative outcomes resulting in performing challenging activities are converted into positive spiritual experiences. A previous study of mountaineers at Mount Kinabalu in Malaysia shows that high levels of physical activity as a moderator between spirituality and satisfaction have a significant positive effect (Esfahani, Musa & Khoo, 2014).

In this study, the fatigue that visitors experienced appears to be the key aspect that shaped their positive reflective instances. Instead of emotionally bonding themselves with the setting, the visitors in this experience dimension are perceived to attach themselves to the physical task. Particularly, the findings illustrate that the physical hardships during the trek at the volcanic site have been related to the challenges in life, in general. This entails the reflective response to the experience that permits visitors to recollect from their life experiences as they proceed on the journey (Powell et al., 2012). Thus, compared to the initial hedonic experiences of recreation, the spiritual benefits derived from the reflective responses have longer positive impacts that target the visitors’ personal well-being (Heintzman, 2010).

### 7.2.3 Immersive responses: The core of the volcano tourism experience

The immersive responses are implied as the very essence of the visitor experiences at Mount Pinatubo. Located at the core of the framework, these can be the most intense and meaningful experiences that a visitor can perceive during a Mount Pinatubo tour (see Figure 7.2). Deeper reflections and a stronger sense of place attachment are observed to be present during these experiences.

*Awe in the power of nature* is perceived to have been shaped by gazing at the disaster landscapes of Mount Pinatubo. The experiences reported here are transformed from simple appreciation of the geological formations into being inspired by the disaster landscapes. This is synonymous with the experiences of visitors to Iceland during the eruption of Eyjafjallajökull in 2010. The presence of risk is indicated to play a key role in inspiring the visitors during this event (Benediktsson et al., 2010). Although the participants did not experience any eruption at Mount Pinatubo, the same feelings of
uncertainty have been illustrated by visitors. These negative feelings were generated by being closely situated to the disaster terrain.

The feelings of ‘helplessness’ are also reported within these awe experiences. The participants indicate that they were humbled by the event when they realised that they were at the ‘mercy of nature’. According to Powell et al. (2012), this is a manifestation of awe when individuals feel insignificant against the vastness of the landscape they are in. Moreover, this reflects Coghlan et al.’s (2012) concept regarding the ‘schema-changing’ dimension of awe where individuals are asserted to gain future-oriented positive outcomes. In this study, the enlightenment of the participants has been gained by gazing at and realising the power of the landscape that they have confronted.

The sense of fulfilment reported by the participants is also considered as an immersive experience. It should be noted that a Mount Pinatubo tour entails a journey. This journey starts from interacting with the people affected by its eruption, trailing the disaster landscapes, and getting closer to the main cause of the destruction: the crater-lake. This journey somehow tells a story about the disastrous events. The audience (visitors) need to physically involve themselves in order to learn about this story. Along this storyline, several obstacles need to be faced and surpassed. Upon overcoming these challenges, the utmost feelings of satisfaction can be experienced by the participants. These immersive experiences refer to ‘peak’ experiences or the most intense and climactic feelings during the tour (Wang, 2002). In the context of mountaineering, these feelings of personal satisfaction emerge upon reaching the mountain summit (Beedie & Hudson, 2003; Pomfret, 2006). In climbing volcanoes, peak experiences could manifest upon reaching the craters, the ‘life’ and ‘heart’ of volcanoes. Therefore, getting close to these geological formations can be the most fulfilling and immersive event that one can experience during a volcano tour.

The final immersive responses are generated from the socio-cultural interactions of the visitors with the indigenous people of Mount Pinatubo, the Aeta. These host-guest interactions where visitors are given the chance to become guests at an Aeta village are asserted as the unique aspects of the Mount Pinatubo experience. In turn, over-arching themes namely, compassion and transformative, are revealed from these experiences.

This socio-cultural aspect of the tour transfers visitors from a tourism-oriented ‘servicescape’ into an eco-cultural landscape. It should be noted that the interaction
opportunity with the *Aeta* is not a ‘staged’ experience. The village portrays a ‘real-life’ setting where the actual living conditions of the indigenous people on the slopes of the volcano can be witnessed. First-hand encounters of this setting enable visitors to empathise with the hosts’ situation and re-assess their own living conditions. These immersive instances triggered the participants’ altruistic motives where they have donated goods to the *Aeta*, and have been inspired to value the things that they have.

It appears that this phenomenon created a ‘temporary community’ comprising the village, the *Aeta*, and the visitors. This is also an example of a one-shot *reciprocal altruism* (Fennell, 2006). Visitors to Mount Pinatubo are required to pay a mandatory ‘*Aeta* fee’\(^9\). The amount generated from this fee is distributed to the *Aeta* communities at the volcanic site. Moreover, the participants are given the opportunity to visit the village as guests and later on donate goods to the villagers voluntarily. Of course the *Aeta*, although they are somewhat featured in the tour, are not expected to provide any tourism services to the visitors apart from welcoming them as ‘village guests’. Conversely, it shows that the visitors have gained ‘intangible’ rewards through the life lessons they realised and the inspiration that urges them to become ethically responsible travellers, in return for the tangible items they provided.

Finally, the socio-cultural context of the experience benefitted the visitors in terms of a better understanding of Mount Pinatubo and it inhabitants. Acting as socio-cultural interpreters (Vespestad & Lindberg, 2010), the *Aeta* provide symbolic meanings of the volcanic landscape to their guests. The visitors have constructed and realised the value of resilience and how the *Aeta*’s way of life revolves around this concept. Through their interactions, visitors understood that no matter how dangerous and life-threatening potential eruptions can be, the *Aeta* will remain connected to their ancestral domain and ‘supreme being’, Mount Pinatubo.

### 7.3 From motivations to actual experiences: An overall interpretation

The final objective of this thesis aims to identify the convergences and/or divergences of the findings of the pre-tour study of motivations and experience expectations, and post-tour inquiry of visitor experiences. Moreover, this section synthesises the complementarities and non-complementarities of the findings between these two study phases. The framework below illustrates the summary of study phases integrated with

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\(^9\) The ‘*Aeta* fee’ amounts to PHP 150 (USD 3.33) per person. This does not serve as an ‘entrance fee’ to the *Aeta* village.
the analytical framework applied to the overall interpretation of the findings (see Figure 7.3).

In summary, it has been discussed that the visitors’ socio-demographic characteristics, prior experience of volcanic sites, and origin (visitor types) influence their motivations. Based on the results, the experience expectations are discovered to be linked to the a priori analysed motivations, as well. Particularly, pull motives are found to inform the majority of the experience expectations although push motives are indicated to inform the general anticipated experiential outcomes of the visitors. The findings on these two interrelated constructs serve as indicators of the pre-tour motivations and expectations for a volcano tourism experience, and are linked to the actual perceived experiences or reality in a Mount Pinatubo tour. Primarily, the synthesis is based on how the actual experiences of the interviewed participants complement the motivations and experience expectations of the surveyed respondents in this study. The following format is adopted in interpreting these convergences and divergence: ‘motivation(s)’ – ‘experience expectation(s)’ – ‘actual experience theme(s).

7.3.1 Convergence

The first set of complementarities involves the convergence of the novelty-seeking motive and the anticipation of having unique experiences with the actual perception of novel experiences at nature. This finding indicates that the visitors’ intrinsic desires to see and experience new and different things were anticipated, and in turn, resonated in the actual reported experiences. It is suggested that the volcanic site matters for interpreting this inference.

There also appears to be a convergence of the escape and relaxation motive with the expectations for relaxing experiences in nature. This pre-trip finding complemented the experiential theme, personal reflections on nature, which composed the second set of complementarities. The intrinsic desire to escape and relax is one of the fundamental motives for nature-based tourism (Holden & Sparrowhawk, 2002), and for undertaking leisure in general (Pearce & Lee, 2005). Converging with the expectation to have a relaxing experience; therefore, the escape and relaxation motive posits respondents to view a Mount Pinatubo tour as just another ‘day-trip’ that could satisfy their pleasure-seeking behaviour.
Figure 7.3 From motivations to actual experiences: An overall framework of the findings.
However, the reported actual experiences inform that apart from gaining physiological benefits from being relaxed and calmed by the environment, spiritual benefits manifested as well. The setting plays a role in inducing these personal reflections on and spiritual experiences in nature. It is viewed that “being in nature and being away from everyday world” (Heintzman, 2010, p. 77) are the main reasons for spiritual experiences to emerge. Furthermore, the tranquillity of the setting provided visitors the chance to reflect, recollect, and re-assess themselves, and re-connect with nature (Powell et al., 2012). These spiritual experiences were not anticipated by those surveyed in the study. Therefore, this finding may not necessarily pertain to a ‘divergence’, but rather this entails that the basic expectations for the tour are more likely exceeded by these reflective experiences.

The pull of Mount Pinatubo’s volcanic features is rated the third highest motive by the respondents in general. This finding confirms that the natural setting of volcanoes without ongoing eruptions attracts an array of individuals ranging from general recreationist to hardcore volcano tourists (Erfurt-Cooper, 2014a). Since the extrinsic desire of the respondents is focused on viewing geological formations, the anticipated outcomes reported is directed towards having awesome experiences of nature. In turn, these motive and experience expectations converged with the actual experiences having an appreciation of nature and awe in the power of nature. This reveals the third set of complementarities.

It can be observed that varying degrees of ‘amazement’ have occurred with the interviewees. On a lighter perspective, appreciating natural wonders is resonated by the experience expectations. This outcome delivers initial emotionally impacting experiences. However, romanticising the volcanic landscape emerges as a more intense aspect of the experience. Responses where nature has been lived and experienced deeply were evident (Lund, 2013). The inspiration of the scenery is implied to have been shaped by the power of the geological landscapes and by the visitors themselves (Olafsdottir, 2013). Based on the survey, these deeper affective outcomes were not anticipated.

There is a multiplicity of activities that can be undertaken during a Mount Pinatubo tour. These activities together with the dark tourism dimension of the tour motivate individuals to visit the volcanic site. Findings reveal that the majority of the reported pre-experience expectations, namely, fun, exciting, adventurous, challenging, healthy,
fulfilling, and safe, are viewed to be anticipated from these activities. These experience expectations converge with the dark and activities-induced motive measured in the survey. These pre-tour perspectives complement the post-tour experiential themes, namely, hedonism and physical stimulation, spiritual performance, and sense of fulfillment. These pre-tour and post-tour concepts, which emerged from undertaking the recreational activities at Mount Pinatubo, compose the fourth set of complementarities of the findings.

The disaster landscapes of Mount Pinatubo not only serve as the backdrop for the recreational activities but they also set the level of challenge for the physical activities. The experiences derived here entail the interaction of the natural and recreational dimension of the tour. Before the trip, it appears that the survey respondents anticipated these challenges ahead of them, apart from the fun and enjoyment that can be experienced on-site. The outcomes, according to the interviewees, are perceived as the most pleasurable aspects of the Mount Pinatubo experience.

Moreover, the powerful landscapes trigger the respondents to anticipate a safe journey at the volcanic site. After successfully traversing these landscapes and completing the challenge of trekking, a sense of joy is manifested by the participants. This can be regarded as the therapeutic effects of the tour’s physical activities and natural setting (Olafsdottir, 2013). In relation to this, the physiological benefits concerning personal wellbeing were also part of the reported experience expectations.

As was found in the reflective instances of the natural dimension of the experience, the actual spiritual experiences discovered on the recreational component of the Mount Pinatubo tour were not anticipated by the survey respondents. These are viewed as exceeding the hedonic expectations for the tour. Moreover, these spiritual outcomes are suggested to result in therapeutic effects as well. The trek at Mount Pinatubo can be considered as a ‘spiritual enabler’ that, according to Heintzman (2010), is a leisure activity that helps individuals to cope with stress by providing opportunities to create meaningful journeys.

Having a sense of fulfillment is also anticipated by the survey respondents before the tour. These were reflected in the actual experiences of the interviewees upon completing the trek at Mount Pinatubo. Related to achievement, these are considered as the most meaningful experiences produced by the recreational activities because intense
emotions are viewed as emerging on reaching this state. Furthermore, through achieving self-efficacy and empowerment, the completion of the challenge is perceived as providing personal transformative experiences to visitors (Saunders et al., 2013). These positive changes, which are sometimes unexpected, are explained to occur normally when individuals are confronted by an intense physical challenge (Brymer, 2013).

The final set of convergences drawn out from the analysis revolves around the socio-cultural dimension of the tour. Prior to the tours, the survey respondents rated the motive for socialisation as the second-highest amongst extracted factors. Likewise, they report that they expect social experiences to be central as they meet ‘like-minded’ people which leads to the anticipation of experiencing ‘communitas’ (Sharpley & Jepson, 2011). Apart from the actual experiences of doing something with others, the shared experiences reported by the interviewees refer to instances where they were in solidarity with the local people. Hence, ‘communitas’ is implied here to be shaped by the social fabric that visitors and the receiving community construct.

Furthermore, at first it appears that the visitors’ pre-tour perspectives are limited to having a good time with family and friends, meeting new people, and interacting with the Aeta; however, the engagement of visitors with the indigenous people resulted in meaningful experiences and a higher sense of satisfaction. The social and cultural experiences at Mount Pinatubo lead to personal transformative experiences and compassion.

It can be recognised that the interviewees experienced a certain degree of culture shock (Walter, 2013). This happened to the participants when they suddenly interacted with a community of people living on their ancestral land set in a potentially dangerous environment. This experience is a by-product of the interaction of the socio-cultural and natural aspects of the Mount Pinatubo tour. Also, this is an unexpected experience that resulted in personal transformative learning during the tour.

As visitors witness the Aeta people’s resilience and determination to continue to live at Mount Pinatubo, they were able to assess the difference of their way of life compared to the Aeta’s. This experience enables visitors to examine social inequalities and power imbalance during those instances (Walter, 2013). The visitors allowed themselves to change their own views, treatment, and relationships with the Aeta as indigenous
people. This, in turn, permits visitors to break down the barriers or the dichotomy between indigenous and non-indigenous peoples.

### 7.3.2 Divergence

Educational experiences are conceptualised to be delivered in nature-based attractions (Dowling, 2011; Erfurt-Cooper, 2011). The empirical findings of the pre-tour phase of this study show that volcano knowledge-seeking is one of the underlying motives for participating in a Mount Pinatubo tour. This converged with the respondents’ expectations for educational experiences prior to the tour. However, the thematic analysis of the actual experiences reveals that there is a lack of interpretation on site at Mount Pinatubo. Thus, this non-complementarity between the pre-tour and post-tour perceptions is identified as a divergence of findings.

The pre-trip anticipation of learning something about the volcano, its features, and history by those surveyed individuals was opposed by the low level of satisfaction from the lack of intellectual stimulation experienced by the interviewees. However, it cannot be claimed that those interviewed also have higher expectations for learning prior to the tour for these desires were not measured in the study. Consequently, since the absence of interpretation is apparent in general, it can be assumed that those surveyed have experienced that lack of interpretation as well.

### 7.4 Conclusion

When studying visitor motivations, interpretive assumptions are made within the nature of the volcano tourism phenomenon at Mount Pinatubo, for example, when discussing the sample, extracted factors, differences in motivations, and experience expectations discovered. In discussing further the actual experiences, a framework is proposed to better understand the perceptions, feelings, emotions, and views of the visitors. In addition, these findings are compared, contrasted, and linked with the previous research that relate to the visitor perspectives examined in this study. Finally, an overall interpretive discussion is presented to integrate the components of this thesis as a whole.
Chapter 8  CONCLUSIONS, IMPLICATIONS & RECOMMENDATIONS

Tourism in volcanic and geothermal environments is not a new phenomenon, yet research on volcano tourism has only started in recent years. While the literature is focused on the supply-side of this special interest form of tourism, little research has been undertaken on the demand-side of volcano tourism. Thus, this thesis aims to add to the literature by gaining an insight into the perspectives of visitors engaging in volcano tourism.

To achieve this, a mixed methods research approach has been adopted. By conducting a survey and interviews on actual visitors to Mount Pinatubo, different motivations, experience expectations, and actual experiences have been revealed in this study. In the first section of this chapter these visitor perspectives are revisited in line with the research objectives. Moreover, various implications are drawn from the insights provided by this study. These implications, which are methodological, theoretical, and practical in nature, are outlined in the second section of this chapter. Following these, the limitations of this study are presented. Finally, this chapter recommends further direct research on volcano tourism and volcano tourists.

8.1 Research summary and conclusions

The complexity of the volcano tourism phenomenon has been recognised, and it has been proposed that this special interest form of tourism may overlap with other special interest forms of tourism. Moreover, the diverse processes and features of volcanic sites may contribute to the complexity of visitor perspectives on volcano tourism. Thus, in addressing the central research question, What are the motivations, experience expectations, and actual experiences of visitors to Mount Pinatubo, Philippines?, a holistic approach has been carried out in understanding volcano tourist behaviour.

This multiphase mixed methods study employed concurrent research phases. Phase 1 focuses on examining the pre-tour motivations and experience expectations of visitors. The methods, tools, and analysis procedures for this phase are guided by the first four objectives of this study. Research objective 1 aims to identify the push and pull motives of visitors for visiting non-erupting active volcanoes. By conducting an exploratory survey on 204 actual tourists and applying statistical analyses, the following motives are discovered.
Push motives (person-specific)

1. Escape and relaxation
2. Novelty-seeking
3. Socialisation
4. Volcano knowledge-seeking

Pull motives (destination-driven)

1. Dark and activities-induced
2. Volcanic and natural attribute-driven

Of these motivation factors, novelty-seeking was determined to be the core motive for visiting Mount Pinatubo. It is implied that apart from the intrinsic desire to have unfamiliar experiences, the concept of novelty examined here comes from the exotic nature and unique landscapes the volcanic site features. Furthermore, what adds to the novelty of Mount Pinatubo is that it diverts from the mainstream tourism products that the Philippines offer to visitors. As an archipelago, the country’s tourism relies on islands, beaches, and other coastal and marine tourism destinations.

Additional motives are also reported by some of the survey respondents. These are central to the concept of adventure-seeking in volcanic settings. Thus, it can be implied that it is not necessary for volcanoes to have ongoing eruptions to attract the intrinsic desire for adventure experiences (Erfurt-Cooper, 2014a). In the case of Mount Pinatubo, being situated in a volcanic landscape, on-site activities are perceived as inducing these adventure-seeking push motives.

Research objective 2 focuses on testing for differences in push and pull motivation factors for gender, age, and prior experience of volcanic sites. As a result of several statistical tests, the following differences were discovered.

For gender

1. Differences in the volcano knowledge-seeking motive is identified, where female visitors report to be more likely interested in knowing more about the volcano compared to male visitors.

This is related to the importance of prestige for women when they travel to nature-based destinations (Meng & Uysal, 2008). In this study, it may not refer to buying luxurious things, completing a physically challenging task or getting to a remote destination;
rather, there is a strong desire for intellectual stimulation which implies the sophistication that women attach to their visit to Mount Pinatubo.

For age – No statistically significant differences were found on all the motivation factors.

This finding implies that motivations to participate in volcano tourism did not vary across the different age groups. At least in the case of visitors to Mount Pinatubo, this finding does not support the impressions that create a dichotomy between younger and older tourists. This study opposes the assumptions illustrating younger tourists to be more motivated to perform physically challenging activities, or the conclusions showing older individuals to be more attracted by social and relaxing activities (Jónsson & Devonish, 2008; Kim et al., 2003; Nakata & Momsen, 2010; Phau et al., 2013). Thus, a Mount Pinatubo tour can be suggested as an activity for individuals of all ages.

For prior experience of volcanic sites

1. Differences are found on the volcanic and natural attribute-driven motive. Visitors with prior experience of volcanic sites are more likely attracted by Mount Pinatubo itself and its natural environment compared to first-time volcano tourists.

This finding may address the question that asks if volcano tourism is a supply of nature or tourist demand? (Perkins & Grace, 2009). On the one hand, it can be implied that those who have visited one or more volcanoes prior to their visit to Mount Pinatubo create a specific demand for volcano tourism. Likewise, this shows that as individuals are exposed to volcano tourism, they will more likely engage themselves in other volcano tours in other locations. This group of people, who sometimes label themselves as ‘volcano collectors’, posits this special interest in volcanoes which leads volcano tourism to be called a special interest form of tourism.

On the other hand, those who have not visited a volcano prior to their tour participation can be considered as ‘general recreationists’. Since their volcanic motives differ to those more experienced volcano tourists, it can be assumed that they view Mount Pinatubo tour as ‘tourism’ in general. Perhaps, their visit is influenced by other factors, for example, its proximity, or the variety of the tours within the area. In this regard, volcanoes are viewed as venues for general leisure and not for fulfilling a special interest. If this is the case, therefore, volcano tourism should not be labelled as special interest or niche tourism.
Research objective 3 aims to explain the differences in motivations for domestic versus international visitors, the a priori visitor segments identified for this study. Significant statistical differences are found between these segments.

**Domestic visitors**

1. Higher *escape and relaxation* motives are reported by domestic visitors versus their international counterparts.

**International visitors**

1. Higher *novelty-seeking* motives are indicated by international visitors compared to domestic visitors.

Since the majority of domestic visitors in this study come from urban areas, they perceive a trip to Mount Pinatubo as a whole-day activity that will satisfy their intrinsic desires to temporarily escape and relax. Moreover, the fact that the tour is nature-based heightens the impression of having relaxing experiences of nature. However, it is implied that those visitors who are currently living in the Philippines are more familiar with the volcanic site. Hence, those originating from outside of the country may view Mount Pinatubo as a novel destination. Also, as mentioned earlier, volcano tourism is not considered as a tourism sector for marketing for the Philippines even though volcanic attractions are abundant in the country (Edelmann, 2010). Therefore, international visitors may perceive a trip to Mount Pinatubo as a unique tourism activity when they are already planning to go to or are already travelling within the country.

Research objective 4 aims to analyse the visitor experience expectations for a Mount Pinatubo tour. A multiplicity of pre-experience expectations is discovered from the embedded qualitative element (*qual 2*) on Phase 1. These are characterised into two categories:

**Experience Expectations for direct participation in tour components** – these are developed from the visitors’ anticipations to experience the various activities in the tour.

**Anticipated experiential outcomes** – these are the anticipated perceptions, emotions, and feelings that could be induced by the volcano tourism experience. These are either drawn directly from the volcano tourism dimensions or expected in general.
Based on the overall findings, it can be concluded that these concepts are mainly focused on the anticipations of experiencing *fun, excitement, adventure, and challenge*. Firstly, visitors expect that their participation will provide them enjoyable and pleasurable experiences. Secondly, they also anticipate experiences where they will be physically stimulated and emotionally impacted by the tour. Thus, it can be argued that anticipated outcomes only revolve around the entertainment-value and hedonic nature of the tour.

In addition, fewer than half (45.6%) of the total survey respondents answered the corresponding question on the pre-experience expectations. Some of them specifically echoed that they do not have expectations. Therefore, it can be implied that most of visitors do not know what types of experiences to expect prior to their Mount Pinatubo tour.

Phase 2 of this study is exclusively applied to a qualitative inquiry of visitor experiences at Mount Pinatubo. This addressed *research objective 5* whose aim is to explore the visitors’ actual experiences of a Mount Pinatubo. A conceptual framework has been applied to delineate and categorise the themes into large dimensions, namely, *natural, recreational, and socio-cultural*.

**Experiences on the natural dimension of the tour**

1. Appreciation of nature
2. Novel experiences
3. Personal reflections on nature
4. Awe in the power of nature

The experiences explored here are those shaped by gazing at the geological formations and by being at the volcanic landscape of Mount Pinatubo. Most of these responses are affective in nature. Moreover, these indicate the three components of having awe experiences: physiological, comparative uniqueness, and schema-changing (Coghlan et al., 2012). It is suggested that as individuals immerse themselves in nature and have stronger levels of connection with nature, they are more likely to report meaningful experiences.
Experiences on the recreational dimension of the tour

1. Hedonism and physical stimulation
2. Spiritual performance
3. Sense of fulfilment
4. Lack of interpretation

These themes are revealed based on the perceived experiences of visitors while they physically involve themselves in the recreational activities of the tour. The nature of these outcomes resonate the basic relationship of humans with nature which implies the former to benefit from the latter (Powell et al., 2012). These benefits range from having fun and enjoyment, enhancement of spirituality and well-being, and having a sense of satisfaction upon completing a challenging task. However, the absence of environmental interpretation appears as an indicator for dissatisfaction.

Experiences on the socio-cultural dimension of the tour

1. Solidarity with the local people
2. Compassion
3. Transformative

The interactions of the visitors with the host community create socio-cultural experiences at Mount Pinatubo. As the tourism environment moves from a ‘servicescape’ to a more natural ‘eco-cultural landscape’, deeper reflections and meaningful experiences are reported. Most of the experiences discovered here are situated at the core of the volcano tourism experience at Mount Pinatubo. Thus, while the main components of the tour include the natural and leisure activities, the unique and memorable experiences at Mount Pinatubo are drawn from the socio-cultural interactions with the indigenous people who are physically connected with their ancestral domain.

The final objective, research objective 6, addresses the purpose of mixing methods for this study. Also known as Phase 3, the specific focus of this objective is to interpret complementarities/non-complementarities between the findings from the pre-tour investigation of visitor motivations and experience expectations, and post-tour analysis of actual experiences. The findings’ convergence and divergence are summarised in Table 8.1.
Table 8.1 Summary of findings convergence/divergence

<table>
<thead>
<tr>
<th>Tourism dimension</th>
<th>Motivation</th>
<th>Experience expectation</th>
<th>Actual experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>Novelty-seeking</td>
<td>Unique experience</td>
<td>Novel experiences</td>
</tr>
<tr>
<td></td>
<td>Escape and relaxation</td>
<td>Relaxing experience</td>
<td>Personal reflections on nature</td>
</tr>
<tr>
<td></td>
<td>Volcanic and natural attribute-driven</td>
<td>Awesome</td>
<td>Appreciation of nature; Awe in the power of nature</td>
</tr>
<tr>
<td>Recreational</td>
<td>Dark and activities-induced</td>
<td>Fun; exciting; adventurous; challenging; fulfilling; healthy; safe experiences</td>
<td>Hedonism and physical stimulation; Spiritual performance; Sense of fulfilment</td>
</tr>
<tr>
<td></td>
<td>Volcano knowledge-seeking</td>
<td>Educational experience</td>
<td>Lack of interpretation</td>
</tr>
<tr>
<td>Socio-cultural</td>
<td>Socialisation</td>
<td>Social and cultural experience</td>
<td>Solidarity with the local people; Compassion; Transformative</td>
</tr>
</tbody>
</table>

Note: Italicised words indicate divergence/non-complementarities of findings

Most of the findings on the different phases of this study complement each other. It appears that what motivates and what is expected by the survey respondents resonates with the actual experiences reported by interview participants. However, it can be implied that the pre-trip expectations are primarily focused only on the leisure and recreational benefits of the volcano tour. These anticipations are shown in the immediate responses of the interview participants and seem to be situated only at the surface level of the Mount Pinatubo experience. Thus, the basic hedonic, novelty, and fun-seeking motives are more likely to be satisfied by the actual experience of the tour.

In contrast, a divergence of findings on the educational dimension of the experience has been identified. Learning about nature is a fundamental motive and expectation when going on a nature-based tour. This is an important factor that turned out to generate negative experiences for the interviewees because a lack of environmental interpretation is indicated. Thus, in some instances, it can be assumed that the visitors’ pre-trip expectations can move beyond having entertaining experiences because they put a high importance on the intellectual dimension of the experience.
Finally, transformative experiences are indicated in the actual visitor experiences. These meaningful outcomes are recognised to be shaped by the interaction of the three dimensions of the Mount Pinatubo experience. These are also viewed to be at the core of the volcano tourism experience.

Firstly, the power of the volcanic landscapes can influence a schema-changing type of awe. Secondly, the intense physical challenge undertaken in nature can provide the most climactic, fulfilling, and empowering experiences. Lastly, the socio-cultural interactions with the indigenous people who remain connected to their native land can shape compassionate and transformative learning experiences. Thus, as these outcomes indicate, the volcano tourism product of Mount Pinatubo has the ability to influence people to self-develop, leading to a ‘third generation’ experience economy (Goytia & de la Rica, 2012).

Since the pre-tour impressions are limited to general leisure experiences, the potential transformative and ‘moving’ experiences are neglected by the participants. This is the power of volcano tourism. Opportunities for contemplation on spirituality and existence are given to visitors behind the hedonic and entertaining nature of the trip. These opportunities for transformation are often instant and unexpected (Brymer, 2013).

8.2 Implications of the study

8.2.1 Practical implications

This study provides insightful knowledge on the perspectives of visitors on a volcano tourism experience at Mount Pinatubo. Several practical implications can be drawn from these insights. These implications may be useful to enhance the marketing and management of Mount Pinatubo.

Firstly, marketing initiatives for Mount Pinatubo should be focused on escape and relaxation, and socialisation. It should be noted that Mount Pinatubo is more accessible for domestic visitors. Thus, this marketing strategy may increase the number of domestic visitors as they report having higher motives for physical and mental relaxation.

Moreover, no differences were found for gender, age, prior experience of volcanic sites, and visitor types on the socialisation motive. Therefore, the desire to have a good time with family and friends, and to meet others can be considered as a fundamental
motivation factor for visiting Mount Pinatubo. Given this, tour operators and retailers should market the Mount Pinatubo tour as a day trip suitable for travelling families and barkada (group of friends). In addition, no significant differences were found on the dark and activities-induced pull motive across the independent variables. This indicates that disaster landscapes and adventure activities on the tour should be highlighted in future marketing campaigns.

Secondly, tourism managers at Mount Pinatubo should ensure that the intrinsic motives for escape and relaxation are satisfied. In contrast to reported relaxing experiences of nature, physically challenging and exhausting experiences are also indicated after the tour. Thus, there should be more opportunities for visitors to actually escape and relax. Below are suggestions that can be considered in addressing this issue.

1. The re-launching of the Mount Pinatubo ‘Spa Town’ – prior to its closure, massages, thermal baths, and ‘lahar’ spa treatments were available right at the tour jump-off site (Visit My Philippines, 2013). The re-introduction of these wellness products will make Mount Pinatubo a competitive tourism product. In this way, the material by-products of the volcano can be integrated with the body, which, in turn provides a holistic volcanic experience for visitors.

2. The homestay facilities’ offering of wellness products – it is acknowledged that the re-opening of the ‘Spa Town’ would require a substantial amount of financial and human capital. If this is not possible, homestay facilities within the area have the opportunity to incorporate wellness components into their accommodation products. They could hire previous ‘spa town therapists’, who are mostly locals, and set up simple wellness facilities in their accommodation. Apart from catering to the relaxation needs of visitors, this will be an additional income for homestay owners and ex-Spa Town employees.

Thirdly, tourism managers should plan for strategies on how to keep Mount Pinatubo as a novel destination and how to consistently deliver novel experiences. Although the concept of novelty is argued here to stem from the exoticism of the attraction, and as a constructed experience, it is possible to be shaped by the on-site experiences as well. Therefore, the following are proposed to address this implication.
1. Retract the prohibition of swimming at the crater-lake – to be able to swim in the crater-lake of an active volcano can be one of the most exciting and memorable experiences. Although, this was banned at Mount Pinatubo due to a casualty, better risk and emergency management protocols should be implemented on-site. For example, visitors may be required to wear life-jackets while swimming. Also, lifeguards could be stationed to supervise swimming visitors.

2. Resuming the boating activity – prior to the data collection, visitors could also ride a wooden boat and cruise around the crater-lake. This activity was banned together with the swimming because of the same unfortunate circumstance. Allowing boating activities may intensify the novelty of Mount Pinatubo as a tourism attraction. This could also be resumed as a replacement for swimming at the crater-lake.

Finally, the lack of interpretation at Mount Pinatubo indicates an obvious managerial implication. This is an important issue that needs to be addressed by the volcanic site’s tourism managers. This is an opportunity for improving the visitor experience at the volcano. The following can be considered for the enhancement of the educational aspect of the Mount Pinatubo tour.

1. Convert ‘trail guides’ into ‘tour guides’ – while the current staff that escort visitors throughout the tour are called ‘tour guides’, they actually perform the functions of ‘trail guides’. This means that their primary duty is to be with their assigned clients, lead the trail, and ensure the clients’ safety and security. Delivering tour commentaries is beyond their responsibilities. However, these individuals have the potential to become instruments for relaying basic information about Mount Pinatubo, its history, and personal or cultural significance since they are inhabitants of the locality. Thus, training should be given to the local guides with regard to this aspect.

2. Establishment of information panels – these interpretive provisions are revealed and proposed as effective tools for on-site dissemination of information about an attraction’s geology (Wittlich & Palmer, 2010). This can be an alternative strategy if the first suggestion is not possible. Moreover, these are cost-efficient tools for interpreting the volcanic site because these can be permanently established.
3. Hiring professional tour guides (optional) – each Philippine region has a set of professionally trained tour guides. These individuals are adept in delivering commentaries and customer service. Their service can be an optional inclusion for those who want to learn more about the volcano. Tour operators and retailers can include this in their tour packages.

8.2.2 Theoretical implications

This study has made contributions to knowledge that can be useful for students, researchers, and other stakeholders in academia. By applying the push-pull motivation framework, an empirical study of the motivations for volcano tourism has been undertaken. While the push motives studied here are referred to as ‘person-specific’ motives, the pull motives are analysed as ‘destination-driven’ motives. This approach moves beyond the usual measurement of the latter as ‘destination-attractors’ only. As a result, this study phase revealed factors that serve as indicators of the motives of individuals for volcanic destinations’ visitation that are currently under-researched. The measures developed for the survey questionnaire can be applied or adapted to other volcanic destinations to better understand this phenomenon.

Similarly, this study presented the nature of the experiences that visitors expect prior to their involvement in volcano tourism. The knowledge generated here serves as a starting point for the further investigation of pre-trip expectations for a volcano tourism experience. In addition, the actual experiences explored in this study provide rich and detailed descriptions on what visitors perceive, feel, and obtain as benefits from a volcano tourism activity. By operationalising a conceptual model from the interactional theory, these experiences are simplified and clarified. Likewise, a conceptual understanding of the experiences is developed, which in turn shows that there can be different levels of responses on a volcano tourism experience.

Overall, this thesis responds to the call for understanding volcano tourists (who are also considered as geotourists), their behaviour, and attitude (Newsome & Dowling, 2010a). A holistic approach has been undertaken from a pre-tour survey of the motivations and experience expectations, and post-tour interviews about the actual experiences of volcano tourists at Mount Pinatubo. This is a meaningful addition to the developing knowledge on volcano tourism, which is still in its infancy.
8.2.3 Methodological implications

The primary methodological implication of this study shows that the integration of different methods and logical approaches is an effective way for understanding tourist perspectives that are different and complex in nature. Moreover, the multiphase mixed methods design of this study allows the investigation of each issue carefully and exclusively. Doing so leads the researcher to select methods that are appropriate for each construct without contradicting the philosophical foundations of the study; thus, this provides a degree of reflexivity for the researcher.

Furthermore, a ‘complete picture’ of the visitor perspectives on volcano tourism has been presented by integrating interrelated issues in one study. Deductive logic and quantitative methods, which are popular and widely used approaches for delineating and measuring visitor motivations, were adopted. In addition, inductive thinking and qualitative interviews, which are effective tools for understanding the nature of experiences, were incorporated. For the analysis, the reductionist approach is proposed as an effective method for incorporating the post-positivist stance of the researcher.

Moreover, this study illustrated that findings can be converged even though the sets of sample for each component are different. However, caution should be undertaken in adopting this technique as this study implies that this ‘mixing process’ should be performed at the findings level only (Oppermann, 2000). Likewise, instead of comparing results, the mixing should focus on the search for complementarities and non-complementarities, or congruency and discrepancy across findings.

8.3 Limitations of the study

Primarily, this study is exploratory in nature. Thus, the findings which are preliminary have limited generalisability. It was mentioned that there are different types of volcanoes based on physical characteristics, eruptive history, and eruptive capacity. This research was conducted on an active volcano without heightened volcanic activity. In addition, the research targeted the actual visitors and is contextualised within the dimensions of Mount Pinatubo only. Therefore, the results of this study may mainly apply to the volcano tourism phenomenon at the research site only and the insights revealed here do not necessarily apply to all types of volcanoes especially to those with ongoing eruptions.
Similarly, the methods used in this study contribute in limiting the generalisability of the findings. For the survey, the quota sampling method did not provide an equal chance for all visitors to participate in the project. Hence, the key informants were limited to those immediately available and willing to be involved in the survey.

The same issue can be drawn from the purposive sampling method for the interviews. The goal for convenience and minimisation of disturbance on tourism operations at the site led to recruitment of participants who were exclusively homestay guests. Thus, this criterion did not open the opportunity for non-homestay guests to be interviewed about their volcano tourism experience.

In general, the survey administration and interviews were performed during summer, the tourist peak season in the Philippines, in order to get a higher number of potential participants. However, it is acknowledged that the motivations, experience expectations, and actual experiences of visitors may be different should the data collection be conducted in a different season of the year. For example, motivations for travel seem to vary at different times of the year (Phau et al., 2013). Finally, the sampling of two different sets of visitors, before and after the tours, limited the inferences made in this mixed methods study. This technique did not allow conclusions to be drawn based on how the motivations inform the actual experiences, or how the actual experiences satisfy motivations.

8.4 Recommendations for future research

In line with the limitations of this study, several recommendations are raised for future research. These are outlined below.

1. This thesis implies that the individual experience differs at different volcanic sites due to the dynamic nature of volcanoes. Thus, future studies should consider and compare visitor perspectives on extinct, dormant, and active volcanic environments.

2. The concurrent/parallel multiphase mixed methods design of this study revealed complementarities and non-complementarities across the visitor perspectives. However, this approach only aims to explore and describe the studied issues. For a more in-depth technique, an explanatory sequential design (QUAN building up for QUAL) is suggested.
3. In so doing, the quantitative survey of motivations should employ random sampling techniques. Moreover, an *a posteriori* segmentation method is suggested. Visitors can be clustered by their motivations to further delineate the various types of volcano tourists.

4. After segmenting visitors by motives, cases or individuals should be selected per cluster. Each selected respondent can then be interviewed regarding their actual experiences. This allows inferences to be made between motives and experiences, and comparisons of actual experiences of visitors across the quantitatively derived segments.

5. Furthermore, various constructs can be extracted from the findings on the actual experiences explored in this study. To generalise these findings, the experiential themes can be quantitatively measured and tested on the visitors to Mount Pinatubo, or other volcanic attractions.

8.5 Final thoughts

Volcanoes are described as fascinating, exciting, and life-threatening geological formations. The aesthetic value they provide is one of the benefits that humans enjoy. No matter how dangerous volcanoes are, humans are continuously fascinated by these landforms.

This study reveals that there can be different types of people that visit volcanic sites. Like the dynamic nature of volcanoes, these people are diverse: they can be general tourists or even volcano collectors; some may view volcanoes as ‘attractions’ only and some may view the sites as the ‘destination’ itself. Additionally, their experiences may not be solely influenced by the volcano itself, while for some, being at the volcano is the ‘experience’ itself.

As a special interest form of tourism, volcano tourism can be integrated into larger tourism products. Considering volcano tourism as a tourism segment is perceived as an effective way of gaining a competitive edge over other destinations. This strategy should be adopted by locations with volcanic attractions so that their tourism potential can be maximised.
REFERENCES


Biran, A., Liu, W., Li, G., & Eichhorn, V. (2014). Consuming post-disaster destinations: The case of Sichuan, China. *Annals of Tourism Research, 47*(0), 1-17. doi:http://dx.doi.org/10.1016/j.annals.2014.03.004


Appendix A. Correspondence from the Capas Municipal Tourism Office

From: Tourism [capastourism@yahoo.com]
Sent: 19 November 2013 16:36
To: Richard Aquino
Subject: {Spam?} Re: ATTN: Ms Marissa Vidal. RE: Research in Mount Pinatubo

Hi Mr. Aquino,

Our warm greetings!

I read your email, we are grateful because you have chosen one of our famous tourist destination, the Mt Pinatubo Trekking Adventure. We are proud to say that the best gateway to the Mt Pinatubo Crater Lake is via Sta Juluana, a western barangay of the Municipality of Capas in Tarlac province.

Relative with this, you are very much welcome to do your research work anytime you want. Also, whatever the result of your work, we know it will be of great help to improve more our services. Rest assured that our office, Capas Tourism, will assists or give you a helping hand in the very best we can.

Kindly let us know by email or even just text message when you are coming to our municipality.

Thank you and we are looking forward to meet you.

Very yours truly,

Marissa Velasquez-Vidal
Mun. Tourism Officer
Municipality of Capas
Tarlac
Appendix B. Correspondence from the Majestic Mount Pinatubo Tour and Homestay

From: Sonia Bognot [mtpinatubotour_bognothomestay@yahoo.com]
Sent: 03 November 2013 01:16
To: Richard Aquino
Subject: Re: Research in Mount Pinatubo

Dear Richard,

I would like to give feedback on:

Given this, I am humbly asking for your permission if I could conduct this study with your future guests from 1 March 2014 until 30 May 2014? - The bulk of Pinatubo visitors are on weekends, maximum of 400 guests every Sat & Sun on Peak season. I usually contribute 60-80 heads/day (my cut-off) on a Sat and Sun. On weekdays, I have guests regularly but not as many as on weekends. You may include and interview them.

- The research activity will include: a) survey questionnaires to be filled-up at the Tourism Satellite Office, at the beginning of the trip; - I think this will not be a problem as long as we have the forms/questionnaires ready and it will not cause delay in their departure. I think this will be feasible (as for the groups that I organize they should be at the jump-off at 5:30 AM to fill up the necessary documents for the trek (I can incorporate the questionnaires along), briefing and registration must be all done by 6:00 AM. All my groups must depart between 6:00-7:30 AM only.

and b) selected one-on-one interviews (max of 20 participants for the whole study) at the end of the trip, which I propose to conduct in your homestay facility if possible. - for this one-on-one interview, maybe we should schedule it. We cannot invite all the participants or subjects at Homestay facility if they are not checked in for it may cause complaints from guests who are staying. What should be done is interview some at the jump-off (which I could arrange personally to my own guests) and the rest of the subjects at the homestay = those who are checked-in.

. Participation in this research is strictly voluntary and guests will not be forced.

Also, I am looking for a possible accommodation throughout my study and I found your establishment as the most suitable one due to its proximity to the site. I am also interested in knowing the prices for example if I stay for one month? - normally on peak season we are full.
We have 2 homestay facilities, HOMESTAY A—one being operated by my brother at the jump-off and HOMESTAY B—3 minutes away from the jump-off at the next village. But if you need WIFI access, it is only available on HOMESTAY B since there is no any internet access in Sta. Juliana (Homestay A). Room rates for single occupancy is Php 1,000/night with FREE USE of wifi ----we can give you free dinner and breakfast.

Sonia Bognot
Head/Owner-Majestic Mount Pinatubo Tour And Homestay
a.k.a Pinatubo Eco-Expeditions (PEE)

DTI Permit No. TRN: 3677363

Contact Numbers:
+63-918-602-1943
+63-932-609-4226
+639258001943

Website@ http://mtpinatubotourhomestayphilippines.wordpress.com

Verify our DTI Accreditation (TYPE: Majestic Mount Pinatubo Tour And Homestay ) @ http://www.bnrs.dti.gov.ph/web/guest/search

FB Fan Page: MailScanner has detected definite fraud in the website at "www.facebook.com", Do not trust this website: https://www.facebook.com/mtpinatubotourhomestay

FB Trekkers' Closed Group: MailScanner has detected definite fraud in the website at "www.facebook.com", Do not trust this website: https://www.facebook.com/groups/437166016388614/
Appendix C. Survey questionnaire

Understanding Visitor Motivations and Experiences on Volcano Tourism at Mount Pinatubo, Philippines: A mixed methods study

VISITOR MOTIVATION SURVEY

I am currently conducting research that aims to understand visitor perspectives on volcano tourism at Mount Pinatubo, Philippines. By participating in this study, you are helping me discover the factors that influence people’s participation in active volcano tours. The knowledge that you will impart will be used for my Master’s thesis and may potentially be helpful to the area’s local tourism administrators and tour operators in marketing volcano tourism where the local community benefits.

I know you are excited to start your Mount Pinatubo experience. I am humbly asking for 10 to 15 minutes of your valuable time to answer this questionnaire. By completing this survey form, you are giving your consent to participate in this study. Kindly take note that this research is voluntary and you may refuse to answer, and withdraw at any stage.

Part A. Why are you participating in a Mount Pinatubo Tour? Please rate the following statements according to your level of “agreement” by checking (✓) the boxes that best correspond to your answer on each item.

<table>
<thead>
<tr>
<th></th>
<th>1 Strongly Disagree</th>
<th>2 Disagree</th>
<th>3 Neither</th>
<th>4 Agree</th>
<th>5 Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>1. To be away from my daily routine</td>
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<td>2. I want to get away from stress and pressure</td>
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<td>3. To get away from the usual demands of life</td>
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<td>4. I want to rest and relax</td>
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<td>5. In order to give my mind a rest</td>
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<td>6. To refresh my mental and physical state</td>
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<td>7. I want to experience new and different things</td>
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<td>8. I enjoy looking at things I have not seen before</td>
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<td>9. I want there to be a sense of discovery</td>
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<td>10. To do something with my family/friends</td>
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<tr>
<td>11. I want to have a good time with my family/friends</td>
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<td>12. To be with others who enjoy the same things as I do</td>
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<td>13. To increase my current knowledge about volcanoes</td>
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<td>14. To fulfill my scientific knowledge interest on volcanoes</td>
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<td>15. In order to learn other new things</td>
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<td>16. Because of the volcano itself</td>
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<td>17. Because of the volcano’s crater-lake</td>
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<td>18. Because of the volcano’s land and rock formations</td>
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<td>19. For the scenery and nature</td>
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Part B. Additional questions.

1. Kindly state any other motives that you have aside from those stated above.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Please describe the experiences that you expect on this tour.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Part C. Demographics. Kindly put a check mark (√) on the boxes that best correspond to your answers.

1. Gender
   □ Female    □ Male

2. Age
   □ 18 to 29 years
   □ 30 to 39 years
   □ 40 to 49 years
   □ 50 to 59 years
   □ 60 plus years

3. Have you visited an active volcano before?
   □ Yes    □ No

If you answered “Yes”, kindly state which ones on the spaces below.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
4. **Place of Residence. Please indicate your current place of residence.**
   - □ Living in the Philippines (if checked, please indicate your home region)
     - □ National Capital Region
     - □ Cordillera Administrative Region
     - □ Ilocos Region
     - □ Cagayan Valley
     - □ Central Luzon
     - □ CALABARZON
     - □ MIMAROPA
     - □ Bicol Region
     - □ Western Visayas
   - □ Living Abroad (Outside of the Philippines)
     - What country? ________________________________

5. **Travelling Party. Please choose one that best describes the people you are travelling with today.**
   - □ Travelling alone
   - □ Family
   - □ Friends
   - □ Colleagues
   - □ Companion/Partner
   - □ Classmates
   - □ Others

6. **Education. Please choose one of the following that best describes your highest educational level.**
   - □ Highschool Graduate
   - □ Technical College Degree
   - □ University/Bachelor’s Degree
   - □ Postgraduate Diploma
   - □ Master’s Degree
   - □ Doctoral/PhD Degree
   - □ Other (Please specify) ________________

7. **Occupation. Please choose one that best describes your current employment category.**
   - □ Manager
   - □ Professional
   - □ Technical and Trades Worker
   - □ Community or Personal Service Worker
   - □ Clerical or Administrative Worker
   - □ Sales Worker
   - □ Machinery Operator or Driver
   - □ Labourer
   - □ Other (Please specify) ________________

Finally, I understand that you are here to be on a wonderful trip. I cannot offer you anything but my sincerest gratitude for your generous time in helping me on my study.

Enjoy and have a great day.

Many thanks,

Richard Aquino

*If you wish to receive feedback regarding the findings of this research, please write your e-mail address on the space provided. Kindly be advised that your details will be kept confidential.*

E-mail: ________________________________
Appendix D. Survey PIS

Survey Participant Information Sheet

Date Information Sheet Produced:
17 January 2014

Project Title

Understanding visitor motivations and experiences on volcano tourism at Mount Pinatubo, Philippines: A mixed methods study

An Invitation

I am Richard Aquino, a tourism student currently doing research for my Master’s thesis with AUT University in Auckland, New Zealand. The aim of this research is to understand visitor perspectives in volcano tourism. I seek your participation in completing the attached questionnaire. Please be advised that this is entirely voluntary. If you choose to participate, you may withdraw at any time without any consequences.

What is the purpose of this research?

This research seeks to identify and explore visitor motivations and experiences of volcano tourism at Mount Pinatubo. The survey is intended to study why people travel to active volcanoes.

This project is a requirement in partial fulfilment of my programme of study, the Master of International Tourism Management. This will be published as a thesis in both printed and electronic formats, and potentially be presented in academic journals and conferences.

How was I identified and why am I being invited to participate in this research?

Being a participant in a volcano tour at Mount Pinatubo, you can be a valuable contributor to this research and thus you are invited to participate in the study. Your views are very important to the knowledge that will be generated by this research that may potentially be utilised by the local tourism administrators and tour operators for the promotion of this destination.

What will happen in this research?

This research activity involves the completion of the attached survey questionnaire before the start of the tour. If you also want to participate in this activity, please do let me know.

What are the discomforts and risks?

I understand that you came here to experience and enjoy Mount Pinatubo. By participating in this research, you are allotting 10 to 15 minutes of your valuable time to help me in my studies.

How will these discomforts and risks be alleviated?

You may not answer all the questions asked in the questionnaire. Moreover, you may stop filling-out the survey at any time without any consequences. This study is regulated by my University’s Ethics Committee. I will ensure that your information will be kept strictly confidential.

What are the benefits?

The research site was constructed after the devastating eruption 20 years ago, local communities now benefit from tourism as an alternative economic tool. The different tourist perspectives that will be
discovered will be useful in marketing and developing the research site’s tourism potential. Your perspective is crucial to this aspect of the tourism activity.

How will my privacy be protected?

Your answers to the questionnaire will be kept anonymous. There is no way that these will link to your personal details, as well. No person will be indentified in the presentation of findings. If you wish to know the results of this study, I may ask for your e-mail address but kindly note that this will only be used to provide you a summary of findings. This information will be kept separate from your survey responses, so that your identity cannot be matched to your survey responses.

What are the costs of participating in this research?

I humbly ask 10 to 15 minutes of your time to answer the questionnaire.

What opportunity do I have to consider this invitation?

After reading this Participant Information Sheet, you may or may not decide to participate in this study.

How do I agree to participate in this research?

Kindly fill in the attached questionnaire should you agree to participate in this research.

Will I receive feedback on the results of this research?

I am happy to send you the results of this study. You may write your e-mail address in the space indicated on the questionnaire.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Heike Schänzel: e-mail heike.schanzel@aut.ac.nz, phone +64 9 9219999 ext 6923

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O’Connor, ethics@aut.ac.nz, + 64 9 921 9999 ext 6036.

Whom do I contact for further information about this research?

Researcher Contact Details:

Richard Aquino: E-mail aquino.chard@yahoo.com, Phone +64 21 08453201

Project Supervisor Contact Details:

Dr Heike Schänzel: E-mail heike.schanzel@aut.ac.nz, Phone +64 9 9219999 ext 6923

Approved by the Auckland University of Technology Ethics Committee on 28 January 2014, AUTEC Reference number 13/360.
Appendix E. Ethics approval from AUTEC

28 January 2014

Heike Schanzel
Faculty of Culture and Society

Dear Heike


Thank you for providing evidence as requested, which satisfies the points raised by the AUT University Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 20 January 2017. Your minor amendment to the survey questionnaire has also been approved.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through http://www.aut.ac.nz/researchethics. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 20 January 2017;
- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/researchethics. This report is to be submitted either when the approval expires on 20 January 2017 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

[Signature]

Kate O’Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Rochard Aquino aquino.chard@yahoo.com; raquino@aut.ac.nz

Auckland University of Technology Ethics Committee
WAS05F Level 5 WA Building City Campus
Private Bag 92006 Auckland 1142 Ph: +64-9-321-9999 ext 8316 email ethics@aut.ac.nz
13 May 2014

Heike Schanzel
Faculty of Culture and Society

Dear Heike


Thank you for your request for approval of an amendment to your ethics application.

I have approved the minor amendment to your ethics application allowing the use of Research Assistants to administer the survey.

I remind you that as part of the ethics approval process, you are required to submit the following to the Auckland University of Technology Ethics Committee (AUTEC):

- A brief annual progress report using form EA2, which is available online through http://www.aut.ac.nz/researchethics. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 20 January 2017;

- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/researchethics. This report is to be submitted either when the approval expires on 20 January 2017 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

[Signature]

Kate O’Connor
Executive Secretary
Auckland University of Technology Ethics Committee

CC: Rochard Aquino aquino.chard@yahoo.com; raquino@aut.ac.nz
Appendix G. Confidentiality Agreement form for Research Assistants

Confidentiality Agreement

Project title: Understanding visitor perspectives on volcano tourism at Mount Pinatubo, Philippines: A mixed method study of motivations and experiences

Project Supervisor: Dr Heike Schänzel
Researcher: Richard Aquino

☐ I understand that all the material I will be asked to distribute and collect is confidential.

☐ I understand that the contents of the Survey Questionnaires can only be discussed with the researchers.

☐ I will not keep any copies of the information nor allow third parties access to them.

Intermediary’s signature: ........................................................................................................
Intermediary’s name: ...........................................................................................................
Intermediary’s Contact Details (if appropriate):
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

Date:

Project Supervisor’s Contact Details (if appropriate):
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

Approved by the Auckland University of Technology Ethics Committee on 28 January 2014 AUTEC Reference number 13/360

Note: The Intermediary should retain a copy of this form.

This version was last edited on 8 November 2013
Appendix H. Interview guide and questions

Understanding Visitor Motivations and Experiences on Volcano Tourism at Mount Pinatubo, Philippines: A mixed methods study

VISITOR EXPERIENCES INTERVIEW GUIDE

Introductory questions - Why did you go on tour today? And who did you travel with?

1. Before the start of your tour, what experiences were you expecting of Mount Pinatubo?

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

2. How would you describe your actual experiences of Mount Pinatubo? Can you tell me how you felt about the experiences? Why?

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

3. What are the highlights of your Mount Pinatubo experience? Why was this a highlight? How did it make you feel?

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

4. Which parts of the tour do you think should be improved in order to enhance your experience? Why do you think that?

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

5. Was there anything that you were not expecting? Why?

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________
6. Would you like to add anything else about your tour today?
Appendix I. Interview PIS

Interview Participant Information Sheet

Date Information Sheet Produced:
17 January 2014

Project Title
Understanding visitor motivations and experiences on volcano tourism at Mount Pinatubo, Philippines: A mixed methods study

An Invitation
I am Richard Aquino, a tourism student currently doing research for my Master’s thesis with AUT University in Auckland, New Zealand. The aim of this research is to understand visitor perspectives in volcano tourism. As a ‘volcano tourist’, you are a key individual for this activity. I would like to encourage your participation in this interview session. Please be advised that this is entirely voluntary. If you choose to participate, you may withdraw at any time without any consequences.

What is the purpose of this research?
This research aims to identify and explore visitor motivations and experiences of volcano tourism at Mount Pinatubo. This interview is intended to explore visitor experiences of volcano tourism.

This project is a requirement in partial fulfilment of my programme of study, the Master of International Tourism Management. This will be published as a thesis in both printed and electronic formats, and potentially be presented in academic journals and conferences.

How was I identified and why am I being invited to participate in this research?
Being a participant in a volcano tour at Mount Pinatubo, you can be a valuable contributor to this research and thus you are invited to participate in the study. Your views are very important to the knowledge that will be generated by this research that may potentially be utilised by the local tourism administrators and tour operators for the development and promotion of the destination.

What will happen in this research?
In this research activity, you will be asked questions about your recent experience of the Mount Pinatubo Tour. Please be advised that the interviews will be conducted in English.

What are the discomforts and risks?
I understand that you came here to experience and enjoy Mount Pinatubo. By participating in this research, you are allotting your valuable time to help me with my studies. You may not also feel comfortable in sharing your experience to me.

How will these discomforts and risks be alleviated?
You may not want to answer all the questions in this interview. If there are questions which are unclear to you, you may ask me to repeat and elaborate further. Moreover, we can terminate the interview session at anytime without any consequences. I will also keep the time limit to a maximum of 45 minutes. This study is regulated by my University’s Ethics Committee. I will ensure that your information will be kept strictly confidential.
What are the benefits?

The research site was constructed after the devastating eruption 20 years ago and local communities now benefit from tourism as an alternative economic tool. The different tourist perspectives that will be discovered are useful in marketing and developing the research site's tourism potential. Your perspective is crucial to this aspect of the tourism activity.

How will my privacy be protected?

Your answers will be kept anonymous and your personal details will be kept separate. No person will be indentified in the presentation of findings even in citing quotations from the transcribed answers. If you wish to know the results of this study, I may ask for your e-mail address but kindly take note that this will only be used to provide you a summary of findings. This information will be kept in a protected file and will not be shared with anyone.

What are the costs of participating in this research?

I ask about 30 to 45 minutes of your time to answer the questions.

What opportunity do I have to consider this invitation?

After reading this Participant Information Sheet, you may or may not decide to participate in this study.

How do I agree to participate in this research?

Kindly fill-out the Consent Form should you agree to participate in this research.

Will I receive feedback on the results of this research?

I am happy to inform you of the findings of this study. I will ask for your e-mail address in order to electronically send you a summary of the results.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Heike Schänzel: e-mail heike.schanzel@aut.ac.nz, phone +64 9 9219999 ext 6923

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O’Connor, ethics@aut.ac.nz , + 64 9 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

Richard Aquino: E-mail aquino.chard@yahoo.com, Phone +64 21 08453201

Project Supervisor Contact Details:

Dr Heike Schänzel: E-mail heike.schanzel@aut.ac.nz, Phone +64 9 9219999 ext 6923

Approved by the Auckland University of Technology Ethics Committee on 28 January 2014, AUTEC Reference number 13/360.
Appendix J. Interview Participant Consent Form

Consent Form

Project title: Understanding visitor motivations and experiences on volcano tourism at Mount Pinatubo, Philippines: A mixed method study

Project Supervisor: Dr Heike Schänzel
Researcher: Richard Aquino

☐ I have read and understood the information provided about this research project in the Information Sheet dated 11 November 2013.

☐ I have had an opportunity to ask questions and to have them answered.

☐ I understand that notes will be taken during the interviews and that they will also be audiotaped and transcribed.

☐ I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.

☐ If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.

☐ I agree to take part in this research.

☐ I wish to receive a copy of the report from the research (please tick one): Yes ☐ No ☐

Participant’s signature: ...........................................................................................................

Participant’s name: ..............................................................................................................

Participant’s Contact Details (if appropriate):
............................................................................................................................................
............................................................................................................................................
............................................................................................................................................
............................................................................................................................................

Date: .....................................................................................................................................

Approved by the Auckland University of Technology Ethics Committee on 28 January 2014
AUTEC Reference number 13/360

Note: The Participant should retain a copy of this form.
Appendix K. Cross-tabulation analysis of domestic visitors’ residence by age group (SPSS Output)

<table>
<thead>
<tr>
<th>PhilRegion * AgeGroup Crosstabulation</th>
<th>AgeGroup</th>
<th>18 to 29</th>
<th>30 to 39</th>
<th>40 plus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Count</td>
<td>67</td>
<td>17</td>
<td>9</td>
<td>93</td>
</tr>
<tr>
<td>% within PhilRegion</td>
<td></td>
<td>72.0%</td>
<td>18.3%</td>
<td>9.7%</td>
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</tr>
<tr>
<td>% within AgeGroup</td>
<td></td>
<td>82.7%</td>
<td>70.8%</td>
<td>45.0%</td>
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<tr>
<td>Cordillera Administrative Region</td>
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<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>% within PhilRegion</td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within AgeGroup</td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>5.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Ilocos Region</td>
<td>Count</td>
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<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>% within PhilRegion</td>
<td></td>
<td>0.0%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within AgeGroup</td>
<td></td>
<td>0.0%</td>
<td>4.2%</td>
<td>0.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Cagayan Valley</td>
<td>Count</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>% within PhilRegion</td>
<td></td>
<td>0.0%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within AgeGroup</td>
<td></td>
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<td>4.2%</td>
<td>0.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Central Luzon</td>
<td>Count</td>
<td>4</td>
<td>2</td>
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<td>12</td>
</tr>
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<td>% within PhilRegion</td>
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<td>33.3%</td>
<td>16.7%</td>
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<td>100.0%</td>
</tr>
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<td>% within AgeGroup</td>
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<td>4.9%</td>
<td>8.3%</td>
<td>30.0%</td>
<td>9.6%</td>
</tr>
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<td>12.5%</td>
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</tr>
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<tr>
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<td>4</td>
<td>6</td>
</tr>
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<td>% within PhilRegion</td>
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<td>16.7%</td>
<td>66.7%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within AgeGroup</td>
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<td>1.2%</td>
<td>4.2%</td>
<td>20.0%</td>
<td>4.8%</td>
</tr>
<tr>
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<td>Count</td>
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<td>0</td>
<td>2</td>
</tr>
<tr>
<td>% within PhilRegion</td>
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<td>50.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within AgeGroup</td>
<td></td>
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<td>4.2%</td>
<td>0.0%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Zamboanga Peninsula</td>
<td>Count</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
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<td></td>
<td>100.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within AgeGroup</td>
<td></td>
<td>1.2%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>81</td>
<td>24</td>
<td>20</td>
<td>125</td>
</tr>
<tr>
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<td>19.2%</td>
<td>16.0%</td>
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</tr>
<tr>
<td>% within AgeGroup</td>
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<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
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</tr>
</tbody>
</table>