Loyalty on Ecotourism analysed using the factors of tourist attraction, safety, and amenities, with satisfaction as an intervening variable

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Abstract

Tourist’s loyalty is an important factor that tourist destination managements have to pay attention to. This is especially true for ecotourism destinations which cannot accommodate high numbers of visiting tourists. Having only a few but loyal tourists is the main concern of ecotourism managements, including the Gunung Api Purba Nglanggeran (Nglanggeran Ancient Volcano) Ecotourism management. The purpose of this study was to examine how loyalty of tourists can be created by the factors of the tourist attraction, safety, and amenities, with satisfaction as an intervening factor, on the model of Community-Based Tourism development in Gunung Api Purba Nglanggeran Tourism Village. The analytical method used was a path analysis with Partial Least Square (PLS). The results showed that the tourist attraction is a dominant factor that gives a positive influence on the loyalty of tourists through intervention variable satisfaction. Other factors studied, namely safety and amenities, are not proven to affect the loyalty of tourists. This research recommends that loyalty of tourists can be achieved through efforts to improve the quality of tourist attraction.

Keyword: tourist attraction, safety, amenities, satisfaction, loyalty, Indonesia.

Introduction

Tourism in the Special Province of Yogyakarta tends to show a significant increase in the number of tourists, with 472,3000 tourists visiting per year (Statistik Kepariwisataan, 2015). The increasing number of visitors fulfills the expectation of people working in the tourism sector. A large number of tourists are expected to positively influence the economy greatly. However, not all tourist destinations are fit for mass tourism, especially fragile nature tourism areas or nature tourism which tend to rely on nature conservation as their main tourist attractions. These tourist destinations basically belong to the area of ecotourism.

The concept of ecotourism management has been adopted by Gunung Api Purba Nglanggeran management. The management deliberately sets the entrance fee high to so as to limit the number of visitors. Only loyal, qualified visitors are expected to visit. Those qualified visitors are tourists who come to really enjoy nature as their motives for tourism and not just merely to spend their holiday time. They are willing to pay a higher entrance fee for special experiences. However, obtaining such qualified tourists is not easy. Marketing management needs special promotion strategies, one of which is loyalty management. Loyalty is vital in ecotourism management and worth paying attention to. In terms of ecotourism, loyalty ensures continuous visits by those few selected visitors (Hurriyati, 2005; danSelang, 2013). Positive recommendation is also another form of loyalty, usually in the form of word of mouth (Kartajaya dan Setiawan, 2014).
Tourists’ repeat visits and positive recommendation, as aforementioned, are crucial and should be the continuous goals of Gunung Api Purba Nglanggeran ecotourism management in order to create a successful ecotourism management. Repeat visit is important because it will greatly assist the marketing management. A small number of repeat and continuous visitors will free the management from promoting the destination to attract a large number of tourists, and it consequently is capable of sustaining the operation of the destination, reserving the nature, and generating incomes from tourism for the management. Loyal tourists’ positive recommendations are the second important factor for the management. Positive recommendation may influence other tourists to visit Gunung Api Purba Nglanggeran ecotourism destination (Dyah & Abdul, 2016).

Tourism loyalty depends on a lot of factors due to the heterogeneous natures of tourism (Hermawan, Bramanto & Hamzah, 2018). In this article, the model of loyalty is limited to tourist attraction approach, safety concern, and amenities as decisive factors with tourists’ satisfaction as the intervening factor.

Satisfaction is a person’s feelings of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectations (Kotler, 2016). In the context of tourism, tourist’s satisfaction may be generated when the tourist’s initial expectations towards attributes of the tourist destination products match the reality encountered by the tourist. The satisfaction a tourist obtained during his/her stay in the destination will decisively determine whether (s)he will be a loyal customer of the destination or not. Satisfied tourists will generally repeatly visit the destination (Gendro, 2019). Dissatisfied tourists will, on the contrary, stop buying or visiting the destination (Wallin Andreassen & Lindestad, 1998). Satisfaction will also decide whether the tourists will recommend the destination to others or not. If the tourists are satisfied, they may recommend it. Unsatisfied tourists, on the other hand, tend not to recommend it and may malign it (Dyah & Abdul, 2016).

Tourist attraction is the most decisive factor for tourists to visit a tourist destination (Basiya & Rozak, 2012; Sopyan & Widiyanto, 2015; and Nasution et al., 2009). A well-managed tourist attraction will produce positive visiting experiences during a tourist’s visit to that tourist destination. The main attraction of ancient volcano ecotourism is its geological structure, which was uniquely formed due to prehistorical volcano activities. An in-depth study was required to determine the effect of tourist attraction to generate visiting tourist’s satisfaction in order to define a factor determining tourist’s loyalty.

Management’s concerns towards safety are assumed to become another consideration for a tourist to visit the destination. One of the requirements of a good tourist destination is its guarantee on security and safety (Hadiwijoyo Prabowo et al., 2016). Tourists will consider visiting a destination which offers a good security guarantee. A tourist destination which has no commitment to providing a security guarantee for its visitors will incite tourist’s dissatisfaction because tourists will fear for their safety. Offering no proper safety guarantee leads a tourist destination to be incompetent in the tourism market (Adom et al., 2012). The safety procedure in GunungApiPurba ecotourism is interesting to discuss because this ecotourism is based on locality, which means that all aspects of safety management rely on local resources.

The third aspect, which often becomes a target of tourist’s complaints, is the lack of readily available amenities in the destination. Amenities, unfortunately, are one aspect that constitutes satisfaction (Soebiyantoro, 2009). The quality and availability of a lot of supporting amenities installed in the tourist destinations are superficial, not properly maintained, and do not match tourists’ needs and desire. One common problem is dirty lavatories although the users of the lavatories are always required to pay a maintenance fee. Thus, it is appealing to place tourist facilities in the loyalty study model.
Based on the aforementioned presentation, this article will analyze loyalty on ecotourism by the factors of tourist attraction, safety, and amenities with tourist’s satisfaction as the intervening variable.

Theoretical Review

Attraction

Indonesian Law number 10 of 2009, defines tourist attraction as anything having uniqueness, beauty, and value in terms of natural wealth, culture diversity, and the man-made results being the target or destination of the tourists visit. More specifically, ecotourism attraction is anything having uniqueness, beauty, natural originality, and values in the form of natural wealth diversity, which becomes a target for tourists’ visits. Damanik and Weber (2006) emphasize the importance of originality to determine the quality of tourist attraction both from the aspects of originality or authenticity. Gunung Api Purba Nglanggeran ecotourism relies on the natural attraction in the form of Nglanggeran ancient volcano complex. This is the reason why the tourist attraction development of GunungApiPurba belongs to the development of ecotourism attraction development as aforementioned.

Safety

Tourism safety management involves attempts to minimize risks and accidents. A general definition of risk is the occurring of anything unexpected that may befall a person. Risks refers to sources of anything containing elements which are potentially destructive towards tourists, operators or destinations, and community. Elements of risk are viewed from who and what are affected, or what suffers from any dangerous situations. Those elements include people, environments, facilities, infrastructure, public facilities, and economy (AICST, 2006). People’s actions basically contain risks, although those actions are intended to gain pleasure (Yudistira & Susanto, 2012). The definition of accident is unwanted occurrences which can inflict injury, death, loss, and property damage. Accidents may take place due to simultaneous factors regarding people, environment, and nature (AICST, 2006).

Guidelines for safe recreational water (2003) mentions that accident risk prevention is achievable through safety improvement. Safety improvement can be facilitated through five approaches: 1. engineering; 2. enforcement; 3. education; 4. encouragement; and 5. emergency preparedness. It is imperative that management bodies of high-risk tourist destinations pay attention to the safety of the visitors through planning and risk control measures, as instructed by Law no. 10 of 2009, article 26 (Undang-Undang Republik Indonesia No 10 Tahun, 2009 Pasal 26). Gunung Api Purba Nglanggeran is a tourist destination relying on ecotourism at the Nglanggeran ancient volcano complex and climbing adventure as its main attraction. Such adventures are a deliberate risk-seeking activity with no guarantee of successful outcomes. Commercial adventure tourism must manage to eliminate, or at least, minimize risks (Ewert et. al. in Entwistle, 1923).

Amenities

Facilities or tourist amenities are elements in a destination which allow tourists to stay in the destination to enjoy or participate in the offered attractions (Suharto, 2016). Baud Bovy and Lawson (1998) state that amenities are any facilities which provide services to tourists for all their needs during their stay at a tourist destination. Amenities are not directly involved in tourism, but tourists need them. The function of amenities is to serve the tourists’ needs temporarily in the tourist destinations they visit. One factor that drives people to start a tour is the availability of amenities that make the tour convenient.
Satisfaction

Tourist’s satisfaction is the level of a person’s feeling after comparing a perceived performance or outcome with his/her expectation (Kotler, 2016). Kotler (2016) also defines satisfaction as a person’s feelings of pleasure or disappointment resulting from comparing a product perceived performance (or outcome) in relation to his or her expectations. Satisfaction towards a tourist destination comes after the tourist compares his/her expectations prior to his/her visit with his/her experiences during his/her visit. Tourist attraction, safety, and amenities as a satisfaction-determining variable is only observable through control attribution theory approach. Control attribution theory includes aspects under a human’s control and responsibility, which can be better managed. Unexpected accidents, such as natural phenomena, does not belong to the control attribution theory. The selection of control attribution theory was based on the assumption that damage resulted by an avoidable accident inflicts more frustration than harm from an accident by natural risk, which is unexpected or unforeseen by the management.

Loyalty

Loyalty refers to the attitude associated with a particular brand of a product. It includes possibilities for customers to renew a contract toward a brand in the future, modify their support toward a brand, or improve their positive images of a brand. Brand is an identity, and in tourism, brand is equivalent to particular features associated with a region, a tourist destination, or a building that becomes a landmark of a region. Generally, if a product or brand fails to serve the customers satisfactorily, the customers will react by declaring they will stop buying that product or brand and stating their dissatisfaction directly to the company producing the product or giving a negative recommendation (Wallin Andreassen & Lindestad, 1998). Loyalty is interpretable as a customer’s commitment to subscribe or consistently rebuy a specific product/service (Hurriyati, 2005; Selang, 2013). Kartajaya and Setiawan (2014) believe that the highest loyalty is manifested in the customer’s active recommendation toward a specific brand. However, recommendation is sometimes biased. In reality, people often get a negative recommendation from their companions.

In conclusion, rebuying and recommendation are crucial for the marketing. However, loyalty cannot be sufficiently described in those ways because customers who rebuy and recommend do not always have a positive attitude toward those products or services. Customers may rebuy a product or a service although they are not satisfied with it. They rebuy it because they must do it or have other reasons. This also applies to news and recommendations. Those who spread news and recommend may give negative recommendations instead. This does not belong to loyalty dimension as this is just a quasi or biased loyalty (Irawan, 2012). A true customer’s loyalty is formed if the customer becomes an advocate to a company without any incentive (Selang, 2013). To ensure that no bias due to quasi loyalty, data collection emphasized the “willingness” of the participants to ensure their act is not involuntarily.

Previous Research

Tourist destination attraction is empirically proven as a decisive factor in tourist’s satisfaction and loyalty toward a destination (Naidoo et al., 2011; Adom, Jussem, Pudun, & Azizan, 2012; Basiya & Rozak, 2012; Soebiyantoro, 2009 and Darsono, 2015. Research by Ayob and Masnori (2014), employing a qualitative approach, revealed a fact stating that if a tourist feels unsafe and threatened in a tourist destination, (s)he will be dissatisfied and tend to have a negative impression toward the tourist destination. Safety, as discovered by another research, is the main factor of a tourist’s consideration when (s)he decides which tourist destinations (s)he will visit (Pizam and Mansfeld, 1996; Adom et al., 2012; Chiang, 2000). Soebiyantoro
(2009) found out that amenities and attraction trigger tourist’s satisfaction. This finding was also corroborated by other research, one conducted by Setiawan (2016) and another by Ghani and Brahmanto (2016). All those research showed that the variables of attraction, amenities, accessabilities, and service are decisive factors which determine the satisfaction level.

Employing the method of structural equation modeling, Valle et al's research (2006) discovered that satisfaction positively contributes to loyalty.

**Theoretical Framework**

Previous research indicated that tourist attraction, safety, and amenities are influential to forging tourists’ satisfaction and loyalty. Satisfaction significantly affects loyalty. Thus, it is necessary to develop a new theoretical framework which sets satisfaction as an intervening variable to forge tourist’s loyalty through tourist attraction, safety, and amenities. This theoretical framework is described in the following diagram:

![Theoretical Framework Diagram](image)

**Figure 1. Theoretical Framework**

**Research Hypotheses**

Based on the literature review, the alternative research hypotheses (H_a) were formulated as follows:

1. Tourist attraction has an influence towards tourist’s satisfaction.
2. Safety has an influence toward tourist’s satisfaction.
3. Amenities have an influence toward tourist’s satisfaction.
4. Satisfaction has an influence toward tourist’s loyalty.
5. Tourist attraction has an influence toward loyalty.
6. Safety has an influence toward tourist’s loyalty.
7. Amenities have an influence toward tourist’s loyalty.
8. Developing tourist attraction, safety, and amenities has an influence toward satisfaction simultaneously.
9. Tourist attraction, safety, amenities, and satisfaction have an influence toward loyalty simultaneously.
Research Method

This article studied the effects of tourist attraction, safety, and amenities toward the building of tourist satisfaction, and their impacts toward tourist loyalty in ecotourism. After this, a model which could elaborate the effect of loyalty on ecotourism in general could be developed. The study was conducted in the ecotourism site of Gunung Api Purba Nglanggeran, Kecamatan Pathuk (Pathuksubdistrict), KabupatenGunungKidul (GunungKidul regency), D.I.Yogyakarta (Special Province of Yogyakarta). Subjects being samples, were tourists. 100 tourists were randomly selected (accidental sampling). The objects of the study were three independent variables: 1. Tourist attraction, 2. Safety, and 3. Amenities. The intervening variable was satisfaction, while the dependent variable was loyalty. Data collection instrument was a questionnaire using a Likert scale. Partial Least Square (PLS) was used to analyze the influences of independent variables of tourist attraction (x1), safety (x2), amenities (x3) toward the dependent variable of tourist’ loyalty (y2) through intervening variable of satisfaction (y1).

Results and Discussion

Research Data Characterisctics

Participants of this research were 100 tourists of Gunung Api Purba Nglanggeran. Participant characteristics were used to obtain information on the general descriptions of the participant profiles who became the subjects of this research. Aside from the aspect of demography, other characteristics of participants involved in this study refer to the typology of tourists by I. G. Pitana & Putu (2009), some of them were participant's age, sex, region of origin, and the participant’s motive to visit Gunung Api Purba Nglanggeran. Characteristics based on age were dominated by adults, with the percentage of 76%, followed by middle-aged, 18%, and Lastly, teenagers, 6%. People with the characteristic of early adulthood have a mature way of thinking toward tourism, it is not impulsive or too thoughtful. Analysis on characteristics of the participants based on their gender showed that there were more women than men, with 54% female and 46% male. 51% participants who went to Gunung Api Purba Nglanggeran, based on their motivation, wanted to take a relief from fatigue caused by work routines (leisure). The rest of 49% wanted to have an adventure (drifter). Data also revealed that based on their region of origin, majority of participants, 81%, were people from outside of Yogyakarta. Only 19% participants were from Yogyakarta.

Results of the Descriptive Analysis

Tourist Attraction

The descriptive analysis processing the perceptions of 100 respondents who participated in this study found that 36% of the participants selected “strongly agree” with statements they were asked to respond to (5 items). Another 54% chose to “agree” with the statements, and 9% respondents decided to remain “neutral”, and the remaining 1% took the “disagree” stance. The conclusion of the data aforementioned was that the majority of respondents had a positive perception, or we could infer that the ecotourism attraction of Gunung Api Purba Nglanggeran is appealing.

Safety

From the descriptive analysis result based on perception of 100 respondents, 9% chose “strongly agree” to all statements presented to them (15 items), 45% tended to “agree”, while “neutral” was the selected option for another 29% respondents. Negative responses, “disagree” and “strongly disagree” were selected by 14% and 3% of the respondents.
respectively. Safety in Gunung Api Purba Nglanggeran, based on the previously analyzed data, was considered positive or at least meets the safety standard.

Amenities

From the result of descriptive analysis, of 100 respondents participating in the research, 12% selected “strongly agree” toward all the statements presented to them (6 items). Response from another 56% participants was “agree”, while “neutral” was the selection of 24% of the respondents. Between two options of negative responses, there were 8% respondents who answered “disagree” while none of the respondents chose “strongly disagree”. The result presented previously led to the conclusion that respondents’ views towards amenities in Gunung Api Purba Nglanggeran was positive. In other words, the range of available amenities already met the tourists’ needs.

Tourist Satisfaction

Based on the descriptive analysis on 100 respondents’ responses, it was revealed that 25% respondents tended to “strongly agree” to all statements presented on them. The option of “agree” was selected by 49% of the respondents. 21% of the respondents observed their “neutral” stance. Negative responses were also found, in which 3% selected “disagree” and “strongly disagree” were chosen by the remaining 2%. As the majority of the respondents had a positive attitude toward the statements, it could be concluded that Gunung Api Purba satisfied its visitors.

Tourist Loyalty

Perceptions of 100 respondents were processed using descriptive analysis. The result indicated that 44% of the respondents opted for “strongly agree” with all statements presented to them (4 items). 40% selected “agree”. 17% respondents decided to be “neutral”. Negative responses, consisting of the “disagree” and “strongly disagree” options were not found, and 0% of the respondents chose these two negative options. The majority of the respondents tended to be loyal to having a tour in Gunung Api Purba Ngarlanggeran.

Inferential Analysis

The following are the results of the Outer Model test.

- **Convergent Validity**

  Table 1. Convergent Validity

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Code</th>
<th>x1</th>
<th>x2</th>
<th>x3</th>
<th>y1</th>
<th>y2</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniqueness</td>
<td>X1.1</td>
<td>0.759</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Beauty</td>
<td>X1.2</td>
<td>0.819</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Originality</td>
<td>X1.3</td>
<td>0.879</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Score</td>
<td>X1.4</td>
<td>0.847</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Engineering</td>
<td>X2.1</td>
<td>0.804</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Encouragement</td>
<td>X2.2</td>
<td>0.906</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Education</td>
<td>X2.3</td>
<td>0.607</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Emergency Prep</td>
<td>X2.4</td>
<td>0.556</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Enforcement</td>
<td>X2.5</td>
<td>0.667</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th></th>
<th>Conclusin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gazebo</td>
<td>0.667</td>
<td>Valid</td>
</tr>
</tbody>
</table>
Based on convergent validity analysis presented by Table 1, it is observable that all indicators and each construct can measure their own constructs. It is proven by their outer loading values of all indicators toward their construct are higher than 0.5.

### b. Discriminant Validity

#### Table 2. Discriminant Validity

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Code</th>
<th>x1</th>
<th>x2</th>
<th>x3</th>
<th>y1</th>
<th>y2</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniqueness</td>
<td>X1.1</td>
<td>0.759</td>
<td>0.378</td>
<td>0.300</td>
<td>0.378</td>
<td>0.396</td>
<td>Valid</td>
</tr>
<tr>
<td>Beauty</td>
<td>X1.2</td>
<td>0.819</td>
<td>0.308</td>
<td>0.204</td>
<td>0.308</td>
<td>0.481</td>
<td>Valid</td>
</tr>
<tr>
<td>Originality</td>
<td>X1.3</td>
<td>0.879</td>
<td>0.405</td>
<td>0.172</td>
<td>0.405</td>
<td>0.434</td>
<td>Valid</td>
</tr>
<tr>
<td>Scores</td>
<td>X1.4</td>
<td>0.847</td>
<td>0.428</td>
<td>0.368</td>
<td>0.428</td>
<td>0.648</td>
<td>Valid</td>
</tr>
<tr>
<td>Engineering</td>
<td>X2.1</td>
<td>0.344</td>
<td>0.804</td>
<td>0.246</td>
<td>0.255</td>
<td>0.312</td>
<td>Valid</td>
</tr>
<tr>
<td>Encouragement</td>
<td>X2.2</td>
<td>0.559</td>
<td>0.906</td>
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<td>0.488</td>
<td>0.337</td>
<td>Valid</td>
</tr>
<tr>
<td>Education</td>
<td>X2.3</td>
<td>0.178</td>
<td>0.607</td>
<td>0.196</td>
<td>0.209</td>
<td>0.099</td>
<td>Valid</td>
</tr>
<tr>
<td>Emergency Prep</td>
<td>X2.4</td>
<td>0.065</td>
<td>0.556</td>
<td>0.146</td>
<td>0.172</td>
<td>0.052</td>
<td>Valid</td>
</tr>
<tr>
<td>Enforcement</td>
<td>X2.5</td>
<td>0.125</td>
<td>0.667</td>
<td>0.352</td>
<td>0.091</td>
<td>0.023</td>
<td>Valid</td>
</tr>
<tr>
<td>Gazebo</td>
<td>X3.1</td>
<td>0.089</td>
<td>0.283</td>
<td>0.646</td>
<td>0.345</td>
<td>0.235</td>
<td>Valid</td>
</tr>
<tr>
<td>Parking</td>
<td>X3.2</td>
<td>0.266</td>
<td>0.200</td>
<td>0.707</td>
<td>0.194</td>
<td>0.123</td>
<td>Valid</td>
</tr>
<tr>
<td>Toilet</td>
<td>X3.3</td>
<td>0.485</td>
<td>0.200</td>
<td>0.767</td>
<td>0.313</td>
<td>0.340</td>
<td>Valid</td>
</tr>
<tr>
<td>Viewing post</td>
<td>X3.4</td>
<td>0.312</td>
<td>0.071</td>
<td>0.715</td>
<td>0.136</td>
<td>0.185</td>
<td>Valid</td>
</tr>
<tr>
<td>Small eatery</td>
<td>X3.5</td>
<td>-0.163</td>
<td>0.137</td>
<td>0.573</td>
<td>0.244</td>
<td>-0.009</td>
<td>Valid</td>
</tr>
<tr>
<td>Kt. Dayatarikxxx</td>
<td>Y1.1</td>
<td>0.667</td>
<td>0.257</td>
<td>0.273</td>
<td>0.834</td>
<td>0.060</td>
<td>Valid</td>
</tr>
<tr>
<td>Kt. Keselamatan xxx</td>
<td>Y1.2</td>
<td>0.385</td>
<td>0.387</td>
<td>0.424</td>
<td>0.846</td>
<td>0.680</td>
<td>Valid</td>
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<tr>
<td>Kt. Saranaxxx</td>
<td>Y1.3</td>
<td>0.248</td>
<td>0.422</td>
<td>0.229</td>
<td>0.804</td>
<td>0.386</td>
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<tr>
<td>Recommend</td>
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<td>0.625</td>
<td>0.260</td>
<td>0.237</td>
<td>0.696</td>
<td>0.944</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Note:
- Emergency Prep: Emergency Preparedness
- St. Attraction/Safety/Amenities: Satisfaction toward …

Source: Primary Data (2017)
Table 2 shows that each indicator has its own loading factor to its own construct which is higher than to other constructs. Thus, it can be concluded that every indicator is valid, or correctly reflects its own variable.

### c. Construct Reliability

#### Table 3. Discriminant Validity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Reliability</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourist Attraction (X1)</td>
<td>0.896</td>
<td>Reliable</td>
</tr>
<tr>
<td>Safety (X2)</td>
<td>0.839</td>
<td>Reliable</td>
</tr>
<tr>
<td>Amenities (X3)</td>
<td>0.814</td>
<td>Reliable</td>
</tr>
<tr>
<td>Satisfaction (Y1)</td>
<td>0.867</td>
<td>Reliable</td>
</tr>
<tr>
<td>Loyalty (Y2)</td>
<td>0.743</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: Primary Data (2017)

Analysis concluded that Composite Reliability on all constructs was satisfactory or higher than the minimum score of 0.60. This shows that indicator consistency and stability were high, thus it can be concluded that indicator reliability of each variable was acceptable.

1. Results of Inner Model Test

#### a. R-squared (R²) Determination Coefficient

Inferential analysis was conducted based on the result of structural model test (inner model) on the R-squared (R²) output, as shown in the following.

#### Table 4. Determination Coefficient (R²)

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction (y1)</td>
<td>0.375</td>
<td>0.355</td>
</tr>
<tr>
<td>Loyalty (y2)</td>
<td>0.568</td>
<td>0.549</td>
</tr>
</tbody>
</table>

Source: Primary Data (2017)

#### b. Hypothesis Testing

#### Table 5. Parameter Coefficient and P Value

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Koefisien</th>
<th>P-Value</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>0.408</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H2</td>
<td>0.169</td>
<td>0.013</td>
<td>Significant</td>
</tr>
<tr>
<td>H3</td>
<td>0.201</td>
<td>0.031</td>
<td>Significant</td>
</tr>
<tr>
<td>H4</td>
<td>0.539</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H5</td>
<td>0.347</td>
<td>0.001</td>
<td>Significant</td>
</tr>
<tr>
<td>H6</td>
<td>-0.073</td>
<td>0.440</td>
<td>Insignificant</td>
</tr>
<tr>
<td>H7</td>
<td>-0.002</td>
<td>0.987</td>
<td>Insignificant</td>
</tr>
<tr>
<td>H8</td>
<td>0.355</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H9</td>
<td>0.549</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Source: Primary Data (2017)
c. Results of Path Analysis

Path analysis was processed by calculating the direct effect, indirect effect, and total effect as shown in Table 6:

<table>
<thead>
<tr>
<th>Var</th>
<th>Y1</th>
<th>Y2</th>
<th>Y3</th>
<th>Y4</th>
<th>TE</th>
<th>Sig</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>0.408</td>
<td>0.347</td>
<td>0.220</td>
<td>0.567</td>
<td>0.000</td>
<td></td>
<td>Intervening is influential, significant at 95%</td>
</tr>
<tr>
<td>X2</td>
<td>0.169</td>
<td>-0.073</td>
<td>0.091</td>
<td>0.018</td>
<td>0.864</td>
<td></td>
<td>Intervening is influential, not significant at 95%</td>
</tr>
<tr>
<td>X3</td>
<td>0.201</td>
<td>0.002</td>
<td>0.108</td>
<td>0.107</td>
<td>0.280</td>
<td></td>
<td>Intervening is influential, not significant at 95%</td>
</tr>
</tbody>
</table>

Table 6. Path Analysis Result

Source: Primary Data (2017)

Discussion

Inferential analysis aimed to obtain information on how tourist attraction, safety, and amenities, as the dependent variables, affect tourist’s satisfaction and their effects on loyalty. The research result is presented in the following:
(H1) the impact of tourist attraction toward tourist’s satisfaction

Tourist attraction was proven to be crucially influential toward tourists' satisfaction in Gunung Api Purba Nglanggeran. The evidence is observable in Table 5 which shows that $P$ value is 0.000, much lower than alpha value of 0.05 at the confidence level of 95%. The outcome of this study confirmed previous research, one of them was by Naidoo et. al (2011) which discovered that ecotourism attraction is contributory to satisfaction. The other previous research whose findings stated that tourist attraction has a positive impact on tourist’s satisfaction were conducted by Lesmana & Brahmanto (2016), Rajesh (2013), Naidoo et al., (2011), Adom et al., (2012), Basiya & Rozak (2012), and Darsono, (2015). The original sample value of the variable of tourist attraction in affecting satisfaction is 0.408 which shows that the correlation direction between $X_1$ and $Y_1$ is positive. This positive influence was further verified from the result of descriptive analysis, which shows the respondents’ positive perceptions toward tourist attraction, in accordance with respondents’ satisfaction level which stands at the satisfied level. It means that, “The higher tourist attraction is, the higher the tourist’s satisfaction toward Gunung Api Purba will be”. The positive influence, however, can also mean oppositely: the lower the quality of tourist attraction is, the lower the tourist's satisfaction will be, which worryingly may see the drop in the number of tourist’s visits, as shown in the previous research (Wiradiputra & Brahmanto, 2016).

This outcome proved the importance of tourist attraction management in improving tourist’s satisfaction. Management was right when they took steps in developing ecotourism attraction of Gunung Api Purba. Applying the principle of upholding local geniuses, the tourist destination was expected to offer uniqueness and local sense as a competitive advantage, maintain the environment sustainability, increase locals’ pride and most importantly, ensure the tourist’s satisfaction (Ainurrahman, 2010).

(H2) the effect of safety toward tourist’s satisfaction

Safety concern by management of Gunung Api Purba Nglanggeran has an impact toward tourists’ satisfaction. It was evidenced in Table 5 which shows $P$ value at 0.013, lower than the alpha value of 0.05 at the confidence level of 95%. Thus, this study strengthened the results of previous studies which discovered that safety has a positive impact toward tourist’s satisfaction (Adom et al., 2012; Ayob & Masroni, 2014). The value of original sample is positive, at 0.169, which shows that the correlation direction between $X_2$ and $Y_1$ is positive. This significant impact was further proven by the result of descriptive analysis which shows that the perceptions of respondents toward safety are positive, in accordance with the respondents’ level of satisfaction. It can be concluded that, “Improving tourism safety will in turn improve satisfaction of tourists who visit Gunung Api Purba Nglanggeran.” Safety assurance is a factor which tourists put into consideration when selecting a tourist destination they will visit (Pizam and Mansfeld, 1996; Chiang, 2000). Therefore, improving safety is believed to be the most proper attempt to guarantee tourists’ satisfaction toward a particular tourist destination. Besides, it is the obligation of the management to provide protection against risks and accidents during vacation (Suharto, 2016).

Wibowo (2015) conducted a research which discovered that developing a uniquely-cultured and local-genius-based safety concern in Gunung Api Purba Nglanggeran was proven to be more effective than building a standard safety concern. Hence it is suitable for the safety concern in Gunung Api Purba Nglanggeran to be uniquely developed based on the existing local geniuses. Aside from providing safety to tourists, this unique safety concern was proven to be able to improve tourist’ satisfaction, making it worth to sustain.
(H3) The effect of amenities toward tourist's satisfaction

Availabilities of amenities in Gunung Api Purba Nglanggeran have an impact on tourist’s satisfaction. It is concluded from Table 5 which shows that P value 0.031, lower than alpha value 0.05 at the confidence level 95%. Result of this study was in accordance with those of previous research which stated that the availability of amenities improves tourist’s satisfaction (Soebiyantoro, 2009); Salindri, 2016; Ghani & Brahmant, 2016). Meanwhile, the value of original sample is positive at 0.201, which shows the correlation direction between X3 and Y1 is positive. This positive influence is observable through the descriptive analysis result which demonstrates the respondents’ perceptions toward amenities are sufficiently positive, in line with the level of respondents’ satisfaction. This result means “The development of amenities will improve tourist’s satisfaction in Gunung Api Purba Nglanggeran.” Building of amenities, however, should not create a stark contrast to the natural environment and the locals’ social and cultural conditions to avoid triggering landscape pollution. One way to achieve this is to develop tourism which accommodates local geniuses as well as special local sense which reflects cultural and natural uniquenesses (Cox, in Pitana, 2009). Those localities include the characteristics of ecotourism in Gunung Api Purba and building materials used to construct amenities which are nature and culture-friendly.

(H4) The effect of satisfaction toward loyalty

Tourist’s satisfaction affects tourist’s loyalty, and it was proven by the four P values which stand at 0.000, much lower below the alpha value 0.05 at the confidence level 95%. The outcome of this research also strengthened other research which discovered that tourists’ satisfaction positively contributes to tourists’ loyalty to a tourist destination as seen by Valle et al., (2006) and also Prayag, (2008). However, this study presented an opposing result to research by Rahmawati and Barustyawati (2009) which has not found any correlation between tourist’s satisfaction and tourist’s loyalty which is measured by their willingness to promote the tourist destination. The value of original sample is positive, 0.539, showing that the correlation direction between Y1 and Y2 is positive. This positive influence also appeared in the result of descriptive analysis showing the tourist’s satisfaction toward Gunung Api Purba Nglanggeran is on the level of “satisfied”, and on a par with the respondents’ loyalty which is on a sufficient level. This implies that “The increasing tourist’s satisfaction to a particular tourist destination will result in increasing tourist’s loyalty to visit that tourist destination.”

(H5) The effect of tourist attraction toward loyalty

Tourist attraction in Gunung Api Purba Nglanggeran is influential to loyalty. This conclusion was confirmed by Table 5 which shows P value at 0.001, much lower than alpha value 0.05 at confidence level 95%. The result of this study is in conformity with those of the previous research by Naidoo et al. (2011), Bursan (2006), and Rajesh (2013), which discovered that tourist attraction affects loyalty. The value of original sample estimate is positive, 0.347, displaying that the correlation direction between X1 and Y2 is positive. This was further proven by the result of descriptive analysis which portrayed the positive perceptions of the respondents toward tourist attraction, consistent with tourist’s loyalty which is sufficiently good. The consequence is “Augmenting tourist attraction will result in the improvement of the tourist’s loyalty in Gunung Api Purba Nglanggeran.” This research highlights that good tourist attraction management is one of the keys to improving a tourist’s loyalty. Tourist loyalty to a particular destination can be maintained through a unique, beautiful, originally conserved, and valued tourist attraction quality, the more quality the better. The manifestation of loyalty can be in the form of revisiting that particular destination, or at least giving recommendation about that tourist attraction. However, in reality, the concept of loyalty in tourism industry is very difficult to precisely measure. This difficulty comes from the absolute freedom a tourist has when (s)he makes a tour (Wibowo & Yuniawati, 2007).
(H6) The effect of safety concern toward loyalty

During this research, it was found that there is no effect that safety concern has over loyalty of the tourists visiting Gunung Api Purba Nglanggeran. This finding was the conclusion presented by the data in Table 5, which shows that P value is 0.440, higher than alpha value 0.05 at the confidence level of 95%. The finding of this study is at odd with the conclusion of previous research by Ayob and Masroni (2014) which claims safety is influential to loyalty. Another previous research by Prayag (2008) also contradicts the finding of this research. Prayag’s discovery concludes that some attributes, safety included, have an effect on tourist’s loyalty. Possible causes of contradictions this study has with some previous research were probably due to the high number of tourists with adventurer characteristics, numbering 49%, as observable in the analysis of tourist’s characteristics. A literature work by Entwistle (1923) explains that tourist with an adventurous nature favors a tourist attraction which offers originality. On top of that, a drifter tourist tends to prefer an underdevelopment and unvisited destination (Pitana & Putu, 2009). As insignificant as safety’s influence toward tourist’s loyalty seems, safety should still be a concern of the management of a tourist destination. Providing a proper tourist safety assurance is already declared an obligation of a tourist resort management as stated by Indonesian Law no 10 year 2009 on Tourism (Undang-Undang Republik Indonesia No 10 Tahun 2009) and Indonesian Law no. 8 year 1999 on Consumer Protection (Undang-Undang Nomor 8 Tahun 1999 Tentang Perlindungan Konsumen, n.d.)

(H7) The effect of amenities toward tourist’s loyalty

Amenities do not substantially have any impact on the loyalty of tourists visiting Gunung Api Purba Nglanggeran. This is proven by the presentation in Table 5 which shows that P value is 0.987, higher than the alpha value of 0.05 at the confidence of 95%. Contrary to this study, previous research by Prayag (2008) concludes that amenities have a direct impact on loyalty. High amounts of tourists having adventurer traits, numbering 49%, presumably become the reason why amenities do not affect loyalty. Tourists with adventurer traits, according to the literature study, favour originally natural tourist destinations, disfavour a general tourist route, and are more inclined to unconventionalities. Even more, a drifter-spirited tourist, one level above adventurer, opts an unvisited destination (Pitana & Putu, 2009).

(H8) Tourist attraction, safety, and amenities simultaneously affect satisfaction

Simultaneously, tourist attraction, safety, and amenities prove to be able to influence tourist’s satisfaction. Such a conclusion comes from interpretation of the P value, which numbers 0.000, much lower than alpha value 0.05 at the confidence of 95%, thus hypothesis (H8) was accepted. This study agrees with previous research by Ihshani (2005), Naidoo et al., (2011), and also Adom et al., (2012) which show variables of attraction, safety, and amenities simultaneously affect tourist’s satisfaction levels. Meanwhile, original sample value indicates a positive direction, at the value of 0.355. This outcome was supported by descriptive analysis on variables of tourist attraction, safety, and amenities, each variable showing a tendency of having a positive value, similar to another variable, tourist’s satisfaction, which also shows a positive value. An in-depth translation of those calculations is stated as “An attempt to improve variables of tourist attraction, safety, and amenities simultaneously will trigger an improvement on the satisfaction level of tourists visiting Gunung Api Purba Nglanggeran as much as 35.5%, while the rest 65.5% is under the influence of variables beyond the scope of this study.”

(H9) Tourist attraction, safety, amenities, and satisfaction simultaneously affect loyalty

Simultaneous hypothesis analysis proved that tourist attraction, safety, amenities, and satisfaction (Y1) simultaneously affect loyalty (Y2). This statement was concluded from the P value, which is 0.000, much lower than alpha value 0.05 at the confidence 95%, making
hypothesis (H9) accepted. The result of this study corroborated Prayag’s finding (2008) which noted that amenities, safety, infrastructures, tourist attraction, ambience, and accessibility are related to tourist’s loyalty. The value of original sample moves to a positive direction at 0.549. It means that “Simultaneous development of the variables of attraction, amenities, and satisfaction will improve tourist’s loyalty to Gunung Api Purba Nglanggeranas as much as 54.9%, while the rest 45.1% is under the influences of other variables.” In brief, the key to raising tourist’s loyalty so the tourist will make a tour is improving the three variables aforementioned. Tourist attraction is a fundamental consideration why one favors a destination and ignores the other (Crouch & Ritchie, in Stevianus, 2014). It is considered a tourist’s main motivation to go on a tour (Suryadana, 2015). Safety efforts are required to guarantee a destination to have the ideal conditions which make tourists enjoy their stay and feel comfortable during a tour. Meanwhile, amenities serve as supporting facilities which facilitate and assist the tourists with their necessities during their tour to the destination. Those three variables are key variables in the development of Gunung Api Purba Ecotourism.

Path analysis result discussion

Tourist attraction directly has an impact on loyalty at 0.347. If it intervenes through the variable of satisfaction, its influence is at 0.567 with the significance of 0.000, much lower than alpha value 0.05 at the confidence level 95%. As an intervening variable, satisfaction appears to be able to significantly contribute to the improvement of the tourist attraction variable’s positive influence toward satisfaction. This reveals that satisfaction is a valid factor that intervenes in the impact of tourist attraction toward tourist’s loyalty, eliminating possibilities of tourist’s quasi loyalty to Gunung Api Purba Nglanggeran Ecotourism. The research bore a practical solution: improving the quality of tourist attractions in Gunung Api Purba Nglanggeran, which includes: uniqueness, beauty, originality, and value, will trigger an improvement of tourist’s satisfaction. The satisfied tourist will have an increase in his/her loyalty toward Gunung Api Purba Nglanggeran tourism, either in the form of positive recommendation or an intent to revisit the destination. Tourism safety does not directly show any proof to have an influence toward loyalty, because the significance value, 0.864, is higher than the alpha value, 0.05, at the confidence level of 95%. This was further proven by observing the original value which only stands at -0.073. The impact of safety to loyalty through intervening of satisfaction is 0.018.

The outcome presented aforementioned clearly indicated that there is no influence from safety to tourist’s loyalty, with satisfaction as the intervening variable. Safety is indeed a fundamental necessity or aspect in destination management. However, safety does not have much meaning in tourists’ evaluation occurs during normal conditions, although it is a crucial aspect. If an accident or emergency occurs, the management is likely to be the culprit or main actor to blame. Therefore, safety assurance should be obligatory for the management to guarantee the tourist’s safety.

Direct influence of amenities toward loyalty is unproven because significance value stands at 0.280, higher than alpha value of 0.05 at the confidence level of 95%. Another evidence is the original value which scored at 0.002. The influence of safety toward loyalty through intervening of safety scored at 0.107. The finding aforementioned is understandable. 49% of tourists in Gunung Api Purba Nglanggeran belong to the adventurer-motive segment. Accordingly, those tourists crave for experiences from a challenge-based tourism and pay less heed to amenities (Pitana & Putu, 2009).

Discussion on the analysis of dominant factor

Tourist attraction is the only exogenous variable which is proven to significantly affect tourist’s loyalty. This conclusion was proven by the p value 0.000, and is much lower than the alpha value 0.05 at the confidence level 95%. Additionally, tourist attraction has the highest original
sample value of 0.567 compared to the other two exogenous variables: safety value (X2) which is only 0.018 and amenities (X3) 0.107.

In conclusion, tourist attraction is the most dominant variable that affects tourist satisfaction in Gunung Api Purba Nglanggeran, with a positive correlation between them. Therefore, it can be said that the key to improving the loyalty of tourist visiting Gunung Api Purba Nglanggeranis to improve its destination attraction.

Conclusions

Loyalty has been a focus of attention for marketing experts. It also becomes a center of attention in the eyes of tourist destination managers. Loyal tourists who revisit a certain destination and spend some money there continuously add incomes to the tourist destination. Meanwhile, positive recommendation will improve positive image of the destination, thus its popularity in the tourism market will grow. In brief, tourist’s loyalty ensures continuity for tourism business. This study proved that satisfaction is a significant variable which intervenes with factors influencing tourist’s loyalty in Gunung Api Purba Nglanggeran ecotourism. Thus, the key is to develop tourists’ loyalty by improving its independent variables or particular factors.

The most proven dominant influential factor toward satisfaction and loyalty in this study is tourist attraction, presenting a positive correlation. This positive correlation implies that improving tourist attractions will raise tourist’s satisfaction up as well, which in turn will forge tourist’s loyalty. There are other determinant factors under examination as well, i.e. safety and amenities. However, those other determinant factors only have an impact toward satisfaction and are not significantly proven to be able to foster tourist’s loyalty, either directly or through the medium of satisfaction. This phenomenon exists because supposedly the segment of tourists visiting Gunung Api Purba Nglanggeran are people having adventurer characteristics and their number is high. Adventurer tourists are tourists who seek satisfaction from challenging experiences and tend to take risks. The lack of impact of amenities toward loyalty is made possible because the tourists visiting Gunung Api Purba Nglanggeran see amenities as only supporting facilities for common tourism. Thus those tourists do not consider amenities as a factor to be loyal to a destination.

Managerial implications that can be derived from this research are described in the following section. Gunung Api Purba Nglanggeran development should focus on the development of ecotourism attractions of Gunung Api Purba Nglanggeran. Ecotourism management based on local resources and values have been proven to be effective in increasing the number of tourists. However, it should be noted that Gunung Api Purba Nglanggeran complex is an exclusive ecotourism attraction due to its location in a conservation zone. Ecotourism attraction is characterized by fragility, irreplaceability, and unrenewability. Accordingly, it is important for the management to conserve nature. Management also need to apply strict rules as a preventive measure against pillaging or vandalism by ill-mannered tourists.

From the marketing aspect, this research illustrates the importance of properly managing tourist’s satisfaction and loyalty via a good ecotourism management policy. A good ecotourism management policy can be developed through these steps: 1. Introducing an ecotourism project via its uniqueness as a selling point, which in marketing is known as product diversification; 2. Refining beauties by conserving and rearranging the complex as a point of interest, exposing exotic nature of Nglanggeran; 3. Conserving nature’s originality and natural characters by not making changes which exude a stark contrast with the surrounding environments, thus avoiding visual pollution or natural ecosystem damage; 4. Maintaining a management which accommodates local cultures or locality and reflect them comprehensively in each of the introduction of the tourist attraction, increasing the value of selling of the destination.
Although there is no correlation between safety and tourist’s loyalty, safety assurance is an obligation that has to be put into realization by tourist destination management, as issued by Undang-Undang Nomor 10 Tahun 2009 Tentang Kepariwisataan (Indonesian Law no. 10 year 2009 on Tourism) and Undang-Undang Nomor 8 Tahun 1999 Tentang Perlindungan Konsumen (Indonesian Law no. 8 year 1999 on Consumer Protections).

Amenities are proven to be not that significant in affecting tourist’s satisfaction. They even have no correlation at all with tourist's loyalty in Gunung Api Purba Nglanggeran. Thus, limiting the buildings of amenities in Gunung Api Purba Nglanggeran is a prudent act in order to support natural conservation of Nglanggeran which harbors protected ecosystems and biodiversities. It is important to evaluate zones, determining in which zones amenities are allowed to build and which zones belong to the conservation core areas. Tourists should be notified on the divisions of zones and understand them.

References


Undang-Undang Nomor 8 Tahun 1999 Tentang Perlindungan Konsumen. Indonesia.


