A Structural Model of Foreign Tourists' Loyalty in Nature-based Tourism in Bali

I Gusti Ayu Oka Suryawardani[1], Agung Suryawan Wiranatha[2], I Komang Gde Bendesa[3], Made Antara[4] and Maria Gravari-Barbas[5]

[1,2,3,4] *Udayana University, Bali, Indonesia*
[5] *Université Paris-1 Pantheon Sorbonne-EIREST, Paris-France*
E-mail: gungdani@gmail.com

Abstract: Research was designed to analyze: (i) relationships between motivation (intrinsic and extrinsic) and trust to tourists' satisfaction to visit Bali and (ii) relationships between motivation (intrinsic and extrinsic), trust and satisfaction to tourists' loyalty to visit Bali based on holistic approach. Research on nature-based tourism was selected purposively at the main tourist destinations in Bali, namely: Bedugul, Kintamani, Sangeh, Monkey Forest, Jatiluwih, Balangan and Nusa Dua Beach. The accidental sampling technique was chosen to select the sample of foreign tourists who were visiting nature-based tourism attractions in Bali. The total number of respondents was 220 foreign tourists. Analysis of tourists' motivation, satisfaction, trust and loyalty was assessed by using a five-point Likert rating scale. Software AMOS Version 3.2.3 was used in analyzing the Structural Equation Modeling (SEM) developed in this research. The results showed that (i) intrinsic and extrinsic motivation influenced satisfaction through a mediating latent variables of trust, (ii) Only extrinsic motivation through mediating variables of trust and satisfaction significantly influence foreign tourists' loyalty to visit the nature-based tourism in Bali. The results indicated that variables of extrinsic motivation such as diversity of attractions, natural beauty, unique scenery, Balinese tradition and biodiversity significantly influenced tourists' loyalty in visiting nature-based tourism of Bali through variables trust and satisfaction. Hence, build a positive perception through improvement of destination quality is really important to be able to reach tourists' loyalty to visit Bali, including accessibility, quality of services, safety, security, accommodation, food and beverages to create attachment feeling of foreign tourist on the nature-based tourism of Bali.

Key words: motivation, trust, satisfaction, loyalty, nature, Bali.

INTRODUCTION

Tourism has a significant role to increase exchange rate, income and job opportunities and has been largely known to be the fastest growing economic sector in some countries and has been convinced as a powerful

source of economic development and poverty alleviation. Economic development of Bali is also highly rely on development of tourism industry and has resulted in an economic shift away from the agricultural sector to the service sector. The uniqueness of culture and natural beauty have made Bali as one of the famous tourist destinations in the world. The twice Bali bombings have resulted in a decline in the number of foreign tourist direct arrivals. Efforts has been undertaken to persuade foreign tourists to visit Bali which result in a gradual increases in foreign tourist direct arrivals. During the period from 2007 up to 2012, the average growth rate in foreign tourist direct arrivals to Bali was 14.7 % per year. By the year 2015 the number of foreign tourist direct arrivals in Bali had reached about 4,001,835 persons (Bali Government Tourism Office, 2015). In addition, the average tourist expenditure and length of stay also increased during this period. The average expenditure of foreign tourists per person per day increased from US$ 137.90 in 2009 to US$ 158.87 in 2011. The length of stay of foreign tourists also extended from 8.75 days in 2009 to 9.27 days in 2011 (Bali Government Tourism Office, 2015). In view of this steady growth in the number of tourists, the average tourist expenditure, and the length of stay, it seems that tourism in Bali will continue to be a promising source of household income for Balinese inhabitants, and contribute to the national exchange rate as well as increase the number of job opportunities.

Tourism has been convinced to increase economic development, however, it has also hampered by negative impacts of uncontrolled development of tourism industry. To minimize the negative impact of tourism, the concept of sustainable tourism is really important to be implamented which refers to environmentally friendly, economically viable and socio-culturaly acceptable, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability. This concepts have been found in Balinese phylosophy called Tri Hita Karana philosophy of harmony which has been inscribed in the UNESCO World Heritage List since July 2012, and have made Bali becoming more popular as a tourist destination.

Even though Bali has been a preffered destination, maintaining destination is very important to get tourists' loyalty which mean that tourists would be still interested to do revisit, even, to promote and to recommend the destination to their friends and relatives. Recently, holistic models have been used to explain destination loyalty in tourism research. Yoon and Uysal (2005) propose a model which relates destination loyalty with travel satisfaction and holiday motivations. This study found significant cause-effect relationship between travel satisfaction and destination loyalty as well as between motivations and travel satisfaction. Personal characteristics of tourists, such as motivations and sociodemographic characteristics also play an important role in explaining their future behaviour. Motivations form the basis of the travel decision process should also be considered when analysing destination loyalty intentions, as Beerli and Martín (2004) state that propose that motivation is the need that drives an individual to act in a certain way to achieve the desired satisfaction. Motivations can be intrinsic (push) or extrinsic (pull). Push motivations correspond to a tourist's desire and emotional frame of mind. Pull motivations represent the attributes of the destination to be visited. So that, develop models of understanding factors influence loyalty of foreign tourists visiting Bali based on holistic approach is required especially on nature-based tourism to create more tourists' loyalty.

Research Objectives

1. To analyze relationships between motivation (intrinsic and extrinsic) and trust to tourists' satisfaction to visit Bali.

2. To analyze relationships between motivation (intrinsic and extrinsic), trust and satisfaction to tourists' loyalty to visit Bali.

METHODOLOGY

Research Location

Research on nature-based tourism was undertaken at several nature-based tourism attractions in Bali Province, namely: Bedugul, Kintamani, Sangeh, Monkey Forest (Ubud), Jatiluwih (Tabanan), Balangan and Nusa Dua Beach (Badung). The locations for this research were selected purposively on the nature-based tourism attractions at the main tourist destinations in Bali.

Sample Design of Foreign Visitors

The accidental sampling technique (Zikmund, 1997) was chosen to select the sample of foreign tourists who were visiting nature-based tourism attractions in Bali. The total number of respondents was 220 foreign tourists.

Method of Data Analysis

Respondents were interviewed based on questionnaire. Analysis of tourists' motivation, satisfaction, trust and loyalty was assessed by using a five-point Likert rating scale. The range of intervals of the five points on the scale was counted based on the formula proposed by Likert (1965) in Westbrook (1980). To assess the level of satisfaction, the levels of rating are: (1) Dissatisfied, (2) Slightly Dissatisfied, (3) Uncertain, (4) Slightly Satisfied, and (5) Satisfied. Software AMOS Version 3.2.3 based on the Maximum Likelihood Estimation method was used in analyzing the Structural Equation Modeling (SEM) developed in this research.

Model of Tourists' Loyalty

Model of Tourists' Loyalty was developed based on five variables, namely: (1) INTRINSIC MOTIVATION, (2) INTRINSIC MOTIVATION, (3) TRUST, (4) SATISFACTION and (5) LOYALTY.

Indicators of each variable as follows:

1. Indicators of variables INTRINSIC MOTIVATION were: stimulate desire, cooling down emotion, stimulate inspiration, and overcome feeling.

2. Indicators of variables EXTRINSIC MOTIVATION were: diversity of attractions, natural beauty, unique scenery and tradition, and biodiversity.

3. Indicators of variables TRUST were: interesting experience, safe, secure & reliable services, knowledgeable, and attachment feeling.

4. Indicators of variables SATISFACTION were: accessibility, availability, uniqueness, diversity, quality of service, safety and security, accommodation, food and beverages, and whole services.

5. Indicators of variables LOYALTY were: favourite destination, intention to come back, doesn't want to switch, to promote, and to recommend. All of the above variables and indicators are presented in Table 1.

Table 1
Variables and Indicators of Tourist's Loyalty to Visit Nature-based Tourism in Bali

No.	Variables		Indicators	Description
1	INTRINSIC MOTIVATION			
		1.	Stimulate Desire	The natural and beautiful landscapes stimulate my desire to visit Bali
		2.	Cooling Down Emotion	The spirit of the nature and beautiful scenery of Bali can cooling down my emotion
		3.	Stimulate Inspiration	The spirit of the nature and beautiful scenery of Bali can stimulate my inspiration
		4.	Overcome Feeling	The natural-based tourism of Bali can overcome my feeling from daily activities
2	EXTRINSIC MOTIVATION			
		1.	Diversity of Attractions	The spirit of diversity of nature-based attractions.
		2.	Natural Beauty	The spirit of natural beauty of Bali
		3.	Unique Scenery and Tradition	The uniqueness of natural scenery and daily life of Balinese people and their tradition
		4.	Biodiversity	Biodiversity of Bali strengthen the natural-based tourism of Bali
3	TRUST			
		1.	Interesting Experience	Believe in Bali tourism offers an interesting nature-based experience
		2.	Safe, Secure & Reliable Services	Believe in Bali tourism offers safe, secure and reliable services
		3.	Knowledgeable	Believe in Bali tourism guides are knowledgeable in giving information related to the nature-based tourism
		4.	Attachment Feeling	Believe in the uniqueness of the nature-based tourism makes an attachment feeling to the visitors
4	SATISFACTION			
		1.	Accessibility	Satisfaction regarding accessibility to get the nature-based tourism
		2.	Availability	Satisfaction regarding availability of the nature-based tourism
		3.	Uniqueness	Satisfaction regarding uniqueness of the nature-based tourism
		4.	Diversity	Satisfaction regarding diversity of the nature-based tourism
		5.	Quality of Service	Satisfaction regarding quality of service of the nature-based tourism

6.	Safety and Security	Satisfaction regarding safety and security of service of the nature-based tourism
7.	Accommodation	Satisfaction regarding accommodation
8.	Food and Beverages	Satisfaction regarding food and beverages
9.	Whole Services	Satisfaction regarding the whole services

5	LOYALTY		
	1.	Favourite Destination	Bali is my favourite nature-based destination
	2.	Intention to Come Back	The natural beauty of Bali exactly make me want to come back to Bali
	3.	Doesn't want to switch	The natural beauty of Bali exactly make me does not want to switch to other places
	4.	Promote	I will promote attractiveness of the natural beauty of Bali to my friends and relatives
	5.	Recommend	I will recommend attractiveness of the natural beauty of Bali to my friends and relatives

Structural Equation Model

Analysis of relationships between variables was undertaken by using Structural Equation Modeling (SEM), involving five variables, namely: (i) intrinsic motivation; (ii) extrinsic motivation; (iii) trust; (iv) satisfaction; and (v) loyalty. The Structural Equation Modeling (SEM) of Bali Nature-based Tourism are outlined below (see Figure 1). In this model, the variables of intrinsic motivation and extrinsic motivation were considered as latent exogenous variables, however the variables of trust, satisfaction, and loyalty were considered as latent endogenous variables. The analysis of SEM was undertaken by using SmartPLS version 3.2.3 (Ringle *et al.,* 2005). This SEM consists of 2 sub-model, namely: (i) Outer or Measurement model that depicts relationship between variable and its indicators; and (ii) Inner or Structural model that depicts relationship between latens in a model (Jarvis *et al.,* 2003; Tenenhaus *et al.,* 2005; Henseler *et al.,* 2009).
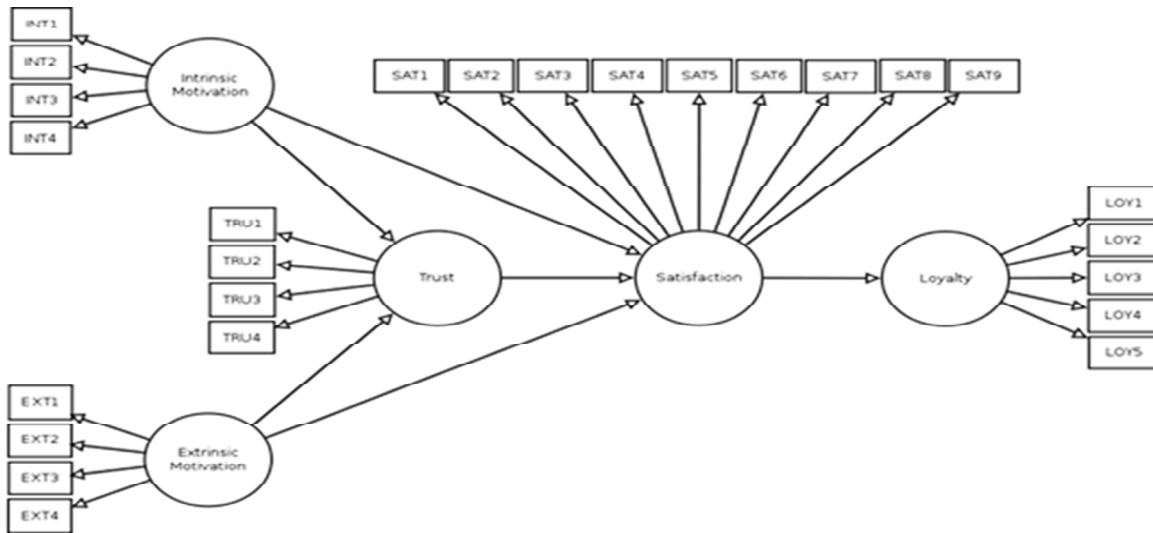

Figure 1: Structural Equation Modeling (SEM) of Foreign Tourists' Loyalty on Nature-based Tourism in Bali

Errors occur on the measurement indicators and latent variables. In the model SEM, there are two types of error namely error in a measurement and error on a structural model. Error in measurement model is an error that occurs when measuring the indicators, while the error in the structural model is called the residual error or disturbance terms, which reflect the unexplained variance in the endogenous variables because of other factors that cannot be measured. Several test will be undertaken to minimize the error, such as normality test and unidimensionality test. In addition, the Chi-Square (CMIN) test, Root Mean Residual, Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI) will be undertaken to examine the Structural Equation Modelling of Tourists' Loyalty to visit Bali.

RESULTS AND DISCUSSION

Characteristics of Respondents who Visited Nature-based Tourism in Bali Country of Origin

The respondents' country of origins were mostly from Australia (13.6%) and Germany (13.6%), followed by UK (9.5%), USA (7.7%), Netherland (7.3%), and France (6.4%). The rest foreign visitors came from Czech (4.1%), Polish (3.2%), Russian (3.2%), Canada (2.7%) and India (2.7%), and Other countries (25,9%), as shown in Figure 2.
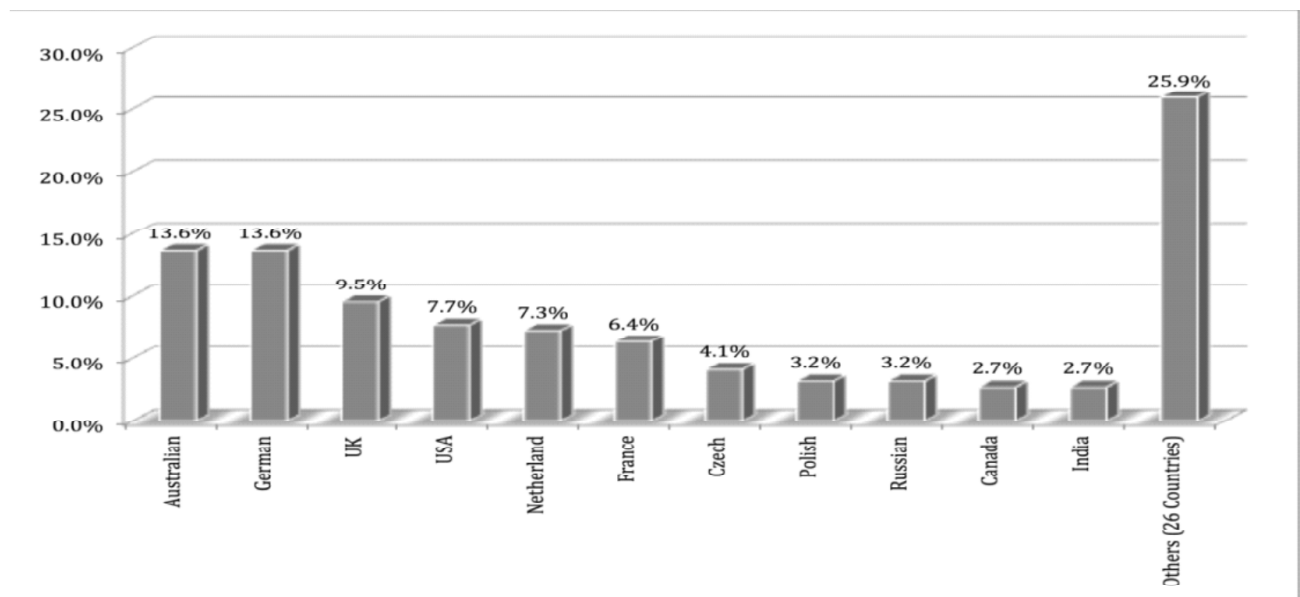

Figure 2: Percentage of Respondents based on the Country of Origin

Age and Sex

The majority of respondents were at the age group of 26 - 55 years (68.8%). This was followed by the age group of 16 - 25 years (23.6%), the age group of 56 years or older (7.7%) and the age group of 15 years or younger (0.0%), as shown in Figure 3. Mostly respondents on this research were female. The percentage of respondents based on sex, namely: male (45.4%) and female (54.6%), as shown in Figure 3 The difference between male and female respondents was 9.2 %.
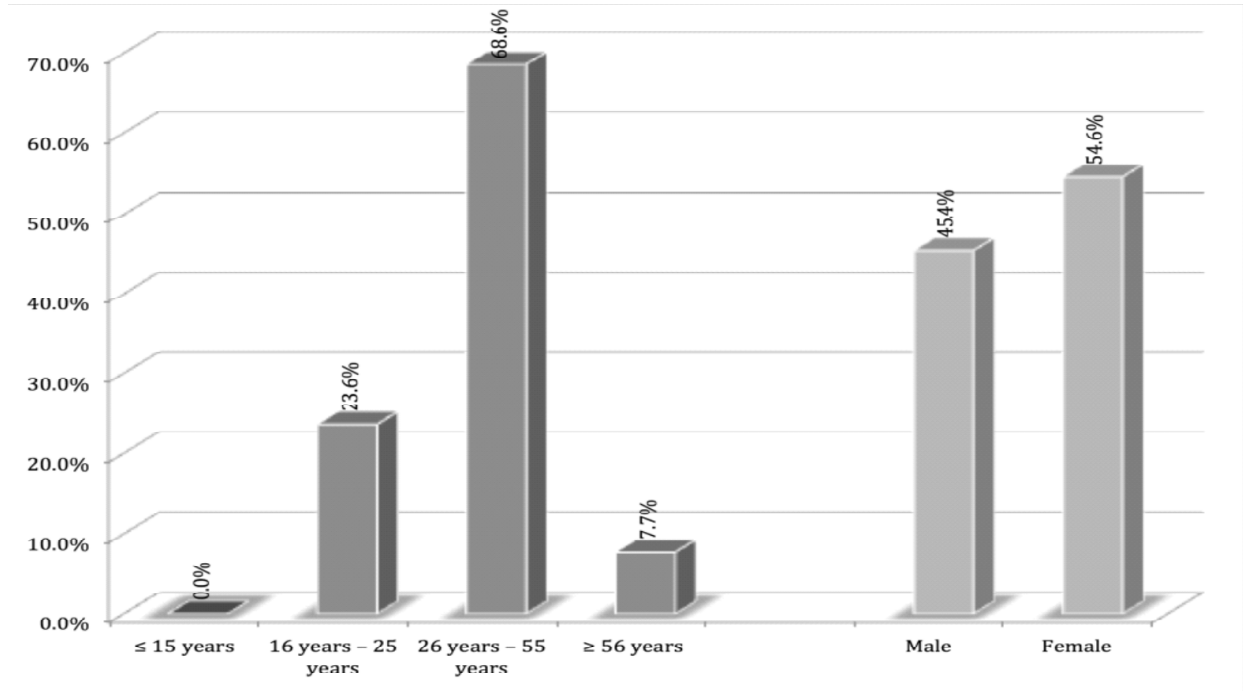
Figure 3: Percentage of Respondents based on Age and Sex Group

Type of Accommodation

Most of the respondents preferred staying in star-rated hotels (44.3%) and villas (23.3%). Only some of them were staying at homestays (13.2%), non-star rated hotels (7.3%), and other accommodations (11.9%), as shown in Figure 4.
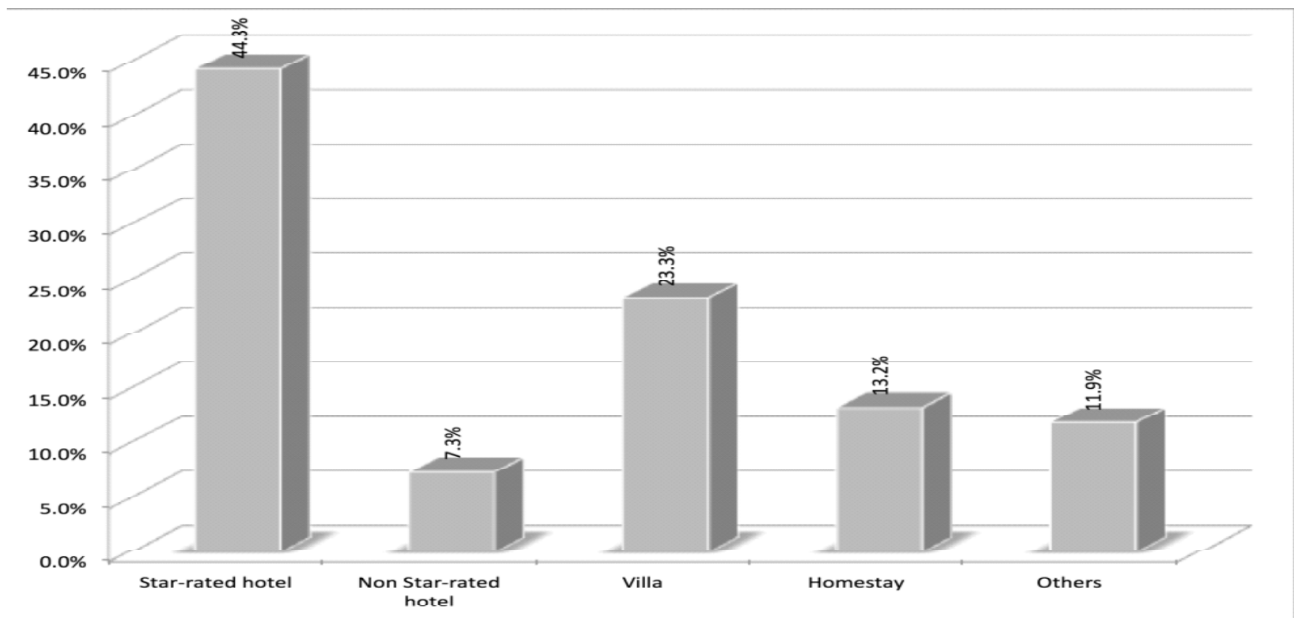

Figure 4: Percentage of Respondents based on Type of Accommodation

Main Occupation

The most common occupation of respondents was professional/manager/executive (40.9%). It was followed by private employees (16.4%), and then student/university student (13.2%). Other specified occupations each made up of 5 % or less, namely: retired (5,0%), government employees (4.5%), entrepreneur (4.5%), housewife (1.4%) and police/army (0.9%), and other occupations (13.2%), as shown in Figure 5.
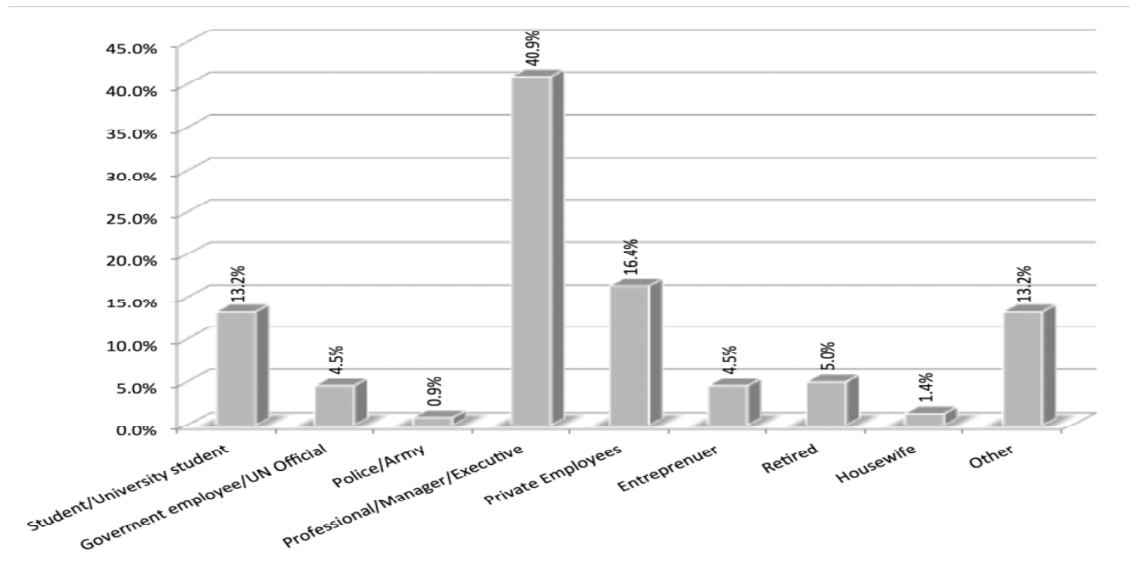
Figure 5: Percentage of Respondents based on Main Occupation

Periodicity of Visit

First time visit Bali was the highest percentage of the respondents (73.6%). It was followed by visits more than five times (10.5%), second time visits (9.5%), third times visit (3.2%), the fifth times visit (2.3%), and fourth time visits (0.9%), as shown in see Figure 6.
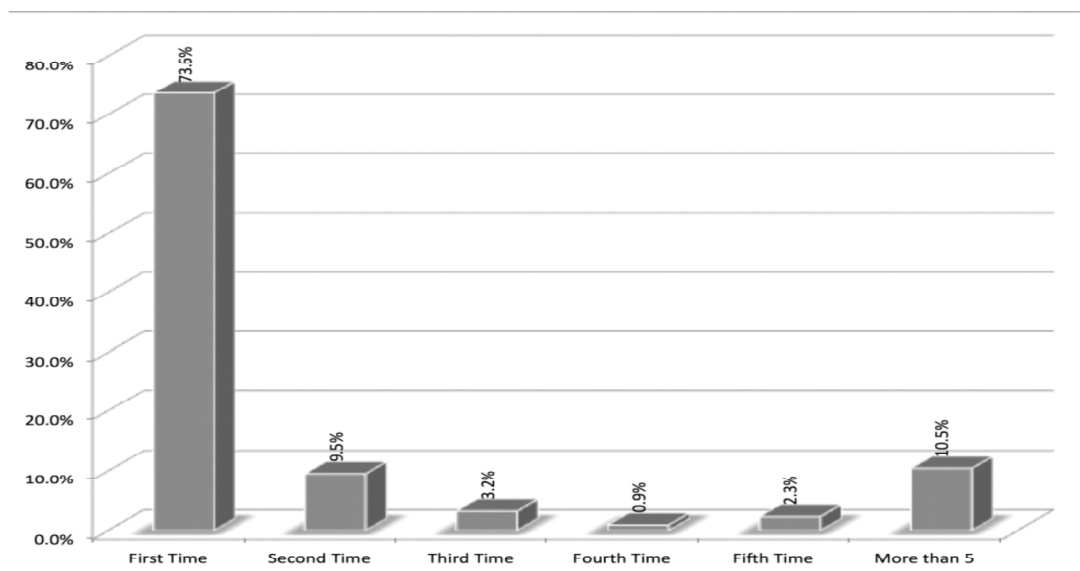

Figure 6: Percentage of Respondents based on Periodicity of Visit

Length of Stay

The average length of stay for all respondents during their visit in Bali was 8.6 days. The percentage of respondents based on the length of stay can be seen in Figure 7. It shows that most of respondents were staying more than 7 days (74.5%), followed by 4 days up to 7 days (21.8%), and 3 days or less (3.6%).
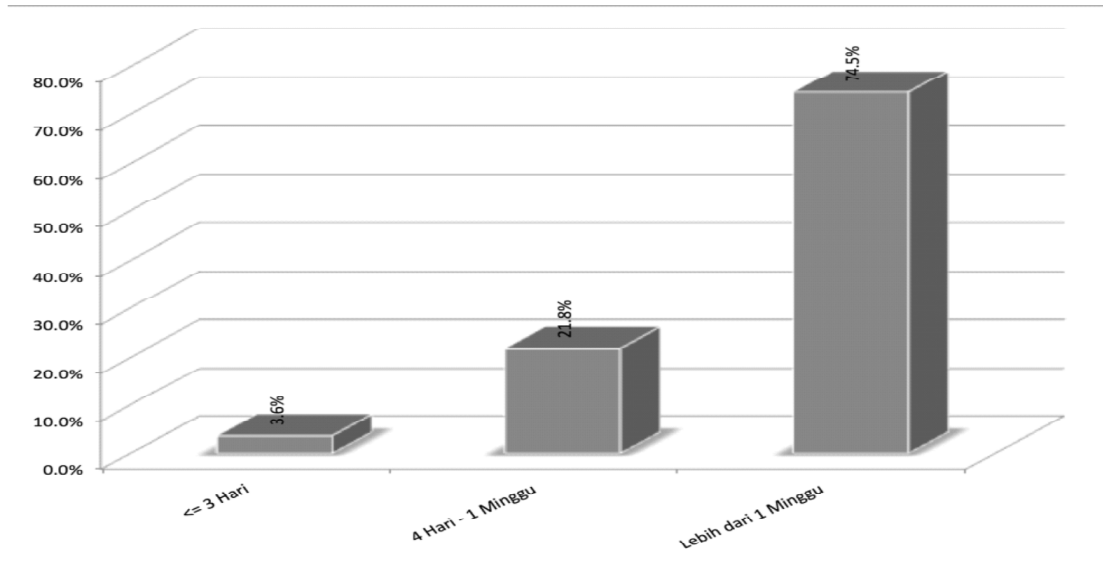
Figure 7: Percentage of Respondents based on Length of Stay

Main Reason to Visit Bali

The most common reason of respondents to visit Bali was vacation/recreation (89.1%). Only very few of them visiting Bali for other reasons, namely: visiting friends/relatives (3.2%), business (1.4%), education/research (1.4%), religious/spiritual (0.9%), health/beauty (0.9%), MICE (0.5%) and others (2.7%), as shown in Figure 8.

Figure 8: Percentage of Respondents based on Main Reason to Visit Bali

Level of Satisfaction, Trust and Loyalty of Foreign Tourists on Nature-based Tourism in Bali

Level of Satisfaction of Foreign Tourists on Nature-based Tourism in Bali

The results show that level of satisfaction of foreign tourists in nature-based tourism attractions were mostly satisfied (82.1%). It ranged between 75.5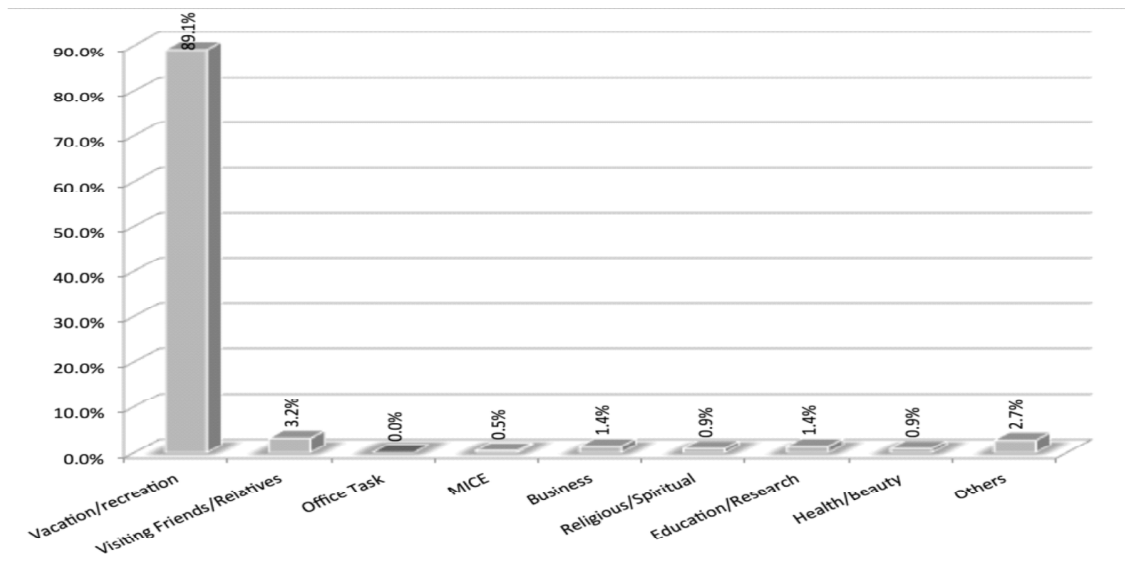% and 86.4%. The highest level of satisfaction of foreign tourist was the uniqueness of nature-based attractions (86.4%), and the lowest level of satisfaction was availabilty of nature-based attractions (75.5%). The following percentages of satisfaction level were: diversity of nature-based attractions (85.9%), accommodation (84.0%), foods & beverages (83.4%), whole services (82.7%), safety & security (82.3%), quality of service (81.4%), and accessibility (77.7%). However, the most negative perceptions on satisfaction was accessibility (5.0%), followed by diversity (4.1%). More details can be seen in Figure 9. The results indicated that foreign tourists were satisfied with nature-based tourism in Bali. However, availability, accessibility, and diversity of nature-based tourism need to be improved.

Level of Trust of Foreign Tourists on Nature-based Tourism in Bali

The results show that the level of trust of foreign tourists on nature-based tourism in Bali were mostly really high (86.5%). It ranged between 85.5% and 88.6% (see Figure 9). These show that foreign tourists had high attention of their believe. The highest percentage of trust was safe, secure and reliable service (88.6%), followed by knowledgeable of the tourist guides (86.4%), and the lowest percentage was their trust in interesting experience (85.5%) and in the attachment feeling (85.5%). More details can be seen on Figure 10. The results indicated that foreign tourists were really trust on the nature-based tourism in Bali.

Level of Loyalty of Foreign Tourists on Nature-based Tourism in Bali

The results show that level of loyalty of foreign tourists on nature-based tourism of Bali were considered still relatively high (71.7%). It varied from 38.2% up to 92.3%. The lowest was "does not want to switch to
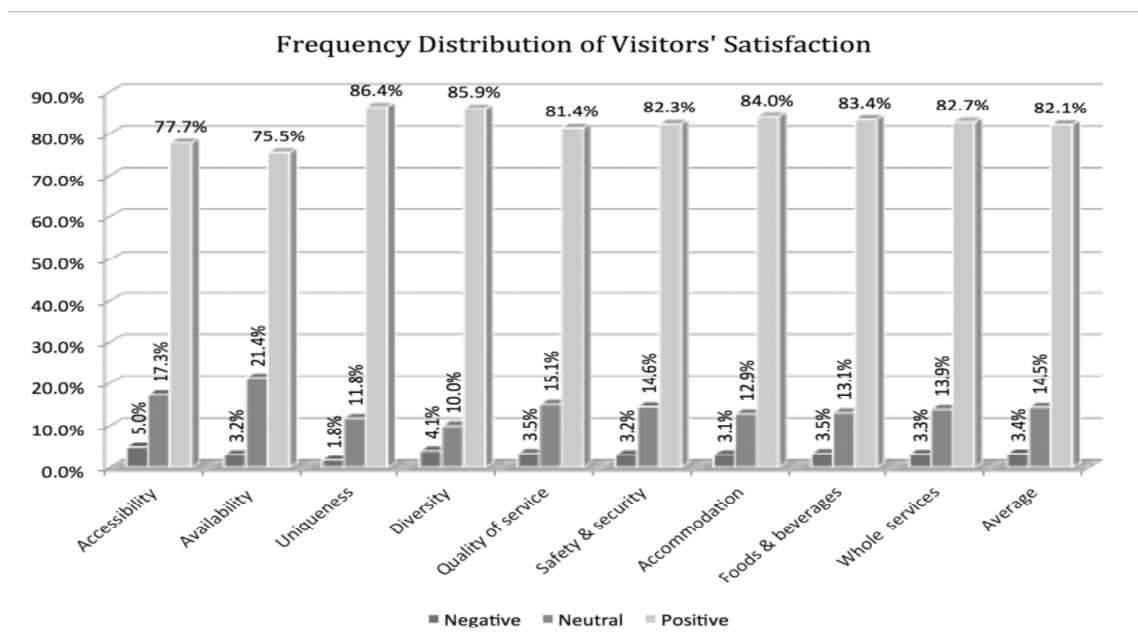
Figure 9: Level of Satisfaction of Foreign Tourists in Nature-based Tourism in Bali
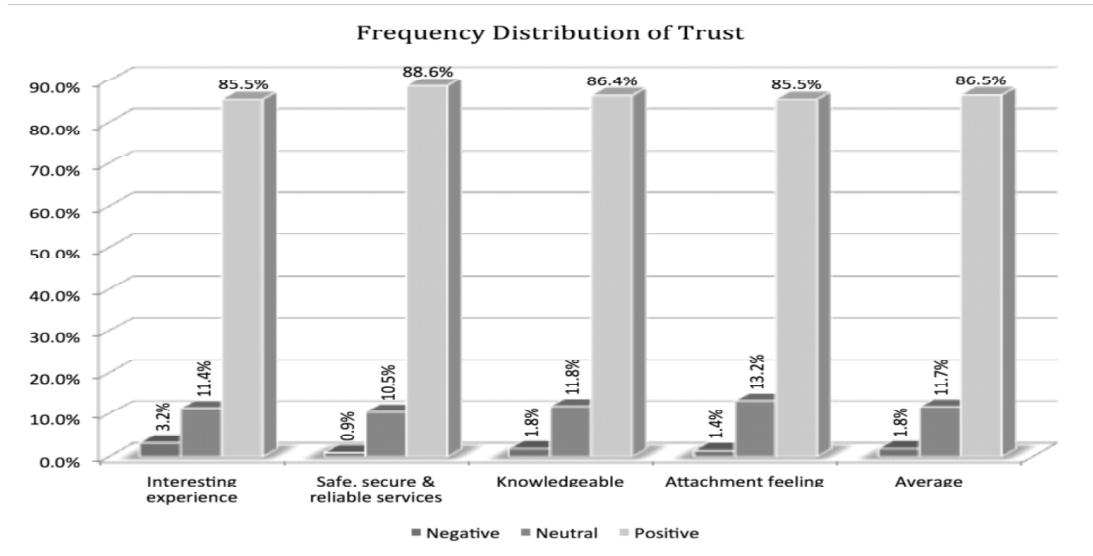
Figure 10: Level of Trust of Foreign Tourists in Nature-based Tourism in Bali

other places" and the highest was "willingness to recommend to friends and relatives". However, the willingness to promote was also very high (90.9%) and the willingness to come back (revisit) was also high, i.e. 83.6% of respondents want to come back to Bali for the next visit (see Figure 11). Even though the results show that foreign tourist loyalty on nature-based tourism in Bali was high, their level of agreement on the following indicators were not so high, namely: Bali is favourite nature-based tourism destination (53.6%), and does not want to switch to other tourism destinations (38.2%). The results indicated that the quality of nature-based tourism in Bali need to be maintained and improved in order to increase foreign tourist loyalty visiting Bali.

Figure 11: Level of Loyalty of Foreign Tourists in Nature-based Tourism in Bali

Validity, Reliability and Goodness of Fit Tests

Validity and Reliability Tests

Validity and reliability tests had been undertaken based on the confirmatory analysis by using AMOS-21 computer program on each exogenous variable (X) and endogenous variable (Y). The exogenous variables were namely intrinsic motivation (X_1), extrinsic motivation $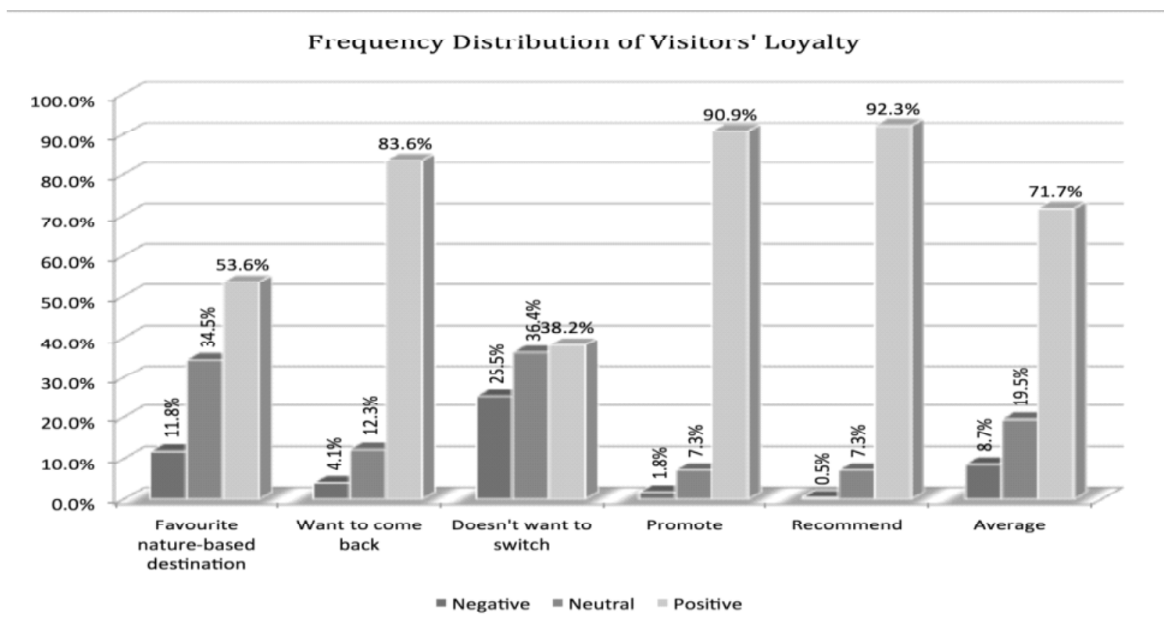(X_2)$, trust (X_3), and satisfaction (X_4). The endogenous variable was loyalty (Y). The results can be seen as follow:

Intrinsic Motivation

Intrinsic motivation (X_1) is an exogenous variable was representing by 4 indicators, namely: stimulate desire; cooling down emotion; stimulate inspiration; and overcome feeling. Validities of the indicators were estimated by the value of correlation, and reliabilities were estimated by the value of Alpha Cronbach. The results show that all of the above indicators were significant to represent intrinsic motivation in which the value of correlation was higher than 0.30 (Chin *et al.*, 2003). The indicators that mostly represent intrinsic motivation were: Stimulate inspiration (0.590), followed by Cooling down emotion (0.514), Stimulate desire to visit Bali (0.422) and Overcome feeling (0.324) respectively, see Table 2. All of the indicators are also reliable which was indicated by the value of Alpha Cronbach, i.e. 0.665, in which the value is higher than 0.60 (Hair *et al.,* 1995).

Table 2
Results of Validity and Reliability Analysis of Indicators of
Intrinsic Motivation

No.	Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	Stimulate desire to visit Bali	12.95	3.642	0.422	0.629
2	Cooling down emotion	13.48	2.351	0.514	0.557
3	Stimulate inspiration	13.47	2.378	0.590	0.484
4	Overcome feeling	13.11	3.604	0.324	0.668
	Alpha Cronbach	0.665			

Source: Statistical results of this research, 2016.

Extrinsic Motivation

Extrinsic motivation (X_2) is an exogenous variable was representing by 4 indicators, namely: diversity of attractions; natural beauty; unique scenery and tradition; and biodiversity. The results show that all of the above indicators were significant to represent extrinsic motivation in which the value of correlation was higher than 0.30 (Chin *et al.,* 2003). The indicators that mostly represent extrinsic motivation were: biodiversity (0.455), followed by natural beauty (0.393), unique scenery and tradition (0.386) and diversity of attraction (0.354) respectively, see Table 3. All of the indicators are also reliable which was indicated by the value of Alpha Cronbach, i.e. 0.671, in which the value is higher than 0.60 (Hair *et al.,* 1995).

Table 3
Results of Validity and Reliability Analysis of Indicators of Extrinsic Motivation

No.	Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	Diversity of attraction	13.55	2.650	0.354	0.577
2	Natural beauty	13.45	2.550	0.393	0.549
3	Unique scenery and tradition	13.45	2.724	0.386	0.555
4	Biodiversity	13.61	2.375	0.455	0.500
	Alpha Cronbach	0.671			

Source: Statistical results of this research, 2016.

Trust

Trust (X_3) is an exogenous variable was representing by 4 indicators, namely: interesting experience; safe, secure & reliable services; knowledgeable; and attachment feeling. The results show that all of the above indicators were significant to represent variable trust in which the value of correlation was higher than 0.30 (Chin *et al.*, 2003). The indicators that mostly represent the variable trust were: Attachment feeling (0.575), followed by Safety, secure, and reliable services (0.561), Knowledgeable guides (0.560) and Interesting experience (0.501) respectively, see Table 4. All of the indicators are also reliable which was indicated by the value of Alpha Cronbach, i.e. 0.753, in which the value is higher than 0.60 (Hair *et al.*, 1995).

Satisfaction

Satisfaction (X_4) is an exogenous variable was representing by several indicators, namely: accessibility, availability, uniqueness, diversity, quality of service, safety and security, accommodation, food and beverages, and whole services. The results show that all of these indicators were significant to represent variable "satisfaction" in which the value of correlation was higher than 0.30 (Chin *et al.*, 2003). The indicators that mostly represent the variable "satisfaction" were: Quality of service (0.641), Accessibility (0.639), and Accommodation (0.635). It was followed by Food and beverages (0.593), Uniqueness (0.559), Safety and security (0.531), Whole services (0.501), Diversity (0.473), and Availability (0.436) respectively, see Table 5. All of the indicators are also reliable which was indicated by the value of Alpha Cronbach, i.e. 0.839 (see Table 5), in which the value is higher than 0.60 (Hair *et al.*, 1995).

Table 4
Results of Validity and Reliability Analysis of Indicators of Trust

No.	Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	Interesting experience	13.10	3.237	0.501	0.722
2	Safety, secure, and reliable services	12.93	3.297	0.561	0.689
3	Knowledgeable	12.99	3.114	0.560	0.689
4	Attachment feeling	13.05	3.167	0.575	0.681
	Alpha Cronbach	0.753			

Source: Statistical results of this research, 2016.

Table 5
Results of Validity and Reliability Analysis of Indicators of Satisfaction

No.	Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	Accessibility	34.06	16.252	0.639	0.811
2	Availability	34.08	17.820	0.436	0.836
3	Uniqueness	33.76	17.636	0.559	0.821
4	Diversity	33.82	17.611	0.473	0.832
5	Quality of service	33.78	17.626	0.641	0.813
6	Safety and security	33.84	18.500	0.531	0.825
7	Accommodation	34.01	17.749	0.635	0.814
8	Food and beverages	34.21	17.091	0.593	0.817
9	Whole services	34.03	18.232	0.501	0.827
	Alpha Cronbach	0.839			

Source: Statistical results of this research, 2016.

Loyalty

Loyalty (Y) is an endogenous variable was representing by 5 indicators, namely: favourite destination; intention to come back; doesn't want to switch; to promote; and to recommend. The results show that all of the above indicators were significant to represent variable "Loyalty", in which the value of correlation was higher than 0.30 (Chin *et al.*, 2003). The indicators that mostly represent the variable "Loyalty" were: favourite nature-based destination (0.738), followed by want to come back (0.717), to promote (0.679), to recommend friends (0.655), and doesn't want to switch to other places (0.553) respectively, see Table 6. All of the indicators are also reliable which was indicated by the value of Alpha Cronbach, i.e. 0.842 (see Table 6), in which the value is higher than 0.60 (Hair *et al.*, 1995).

Table 6
Results of Validity and Reliability Analysis of Indicators of Loyalty

No.	Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	Favourite nature-based destination	16.36	6.634	0.738	0.784
2	Want to come back	15.78	7.477	0.717	0.793
3	Doesn't want to switch to other places	16.76	6.994	0.553	0.851
4	To promote	15.55	8.057	0.679	0.807
5	To recommend friends and relatives	15.45	8.395	0.655	0.816
	Alpha Cronbach	0.842			

Source: Statistical results of this research, 2016.

Goodness of Fit Test

Goodness of Fit (GoF) Test was used to test the feasibility of the model by using formula proposed by Tenenhaus *et al.* (2005), as follow:

$$\text{GoF} = \sqrt{Communality \ \text{x} \ \overline{\overline{R^2}}} = \sqrt{\overline{AVE} \ \text{x} \ \overline{R^2}}$$

From the above equation, $\overline{AVE}$ is the weighted average of all indicators of each latent variable, and the R² is the coefficient of determination. By using this formula, the GoF of this model was 0.5623, which is higher than 0.50. It means that the model is fit or feasible to be used, therefore the further analysis can be undertaken.

Results of Structural Equation Modeling

Outer or Measurement Model

Analysis of outer or measurement model was undertaken to evaluate the relationships between a latent variable and its indicators. Table 7 shows the *outer loading* of each indicator of the latent variable of intrinsic motivation.

Table 7
Loading Value of Indicators of Intrinsic Motivation

	Indicators	Original Sample	Standard Error	T Statistic	
INT$_1$	Stimulate desire to visit Bali	0.792	0.044	18.147	**
INT$_2$	Cooling down emotion	0.780	0.072	10.837	**
INT$_3$	Stimulate inspiration	0.741	0.080	9.260	**
INT$_4$	Overcome feeling	0.526	0.120	4.365	**

Source: Statistical results of this research, 2016.

Table 7 shows that all loading values of the indicators were significant. It means that all indicators could represent the variable of intrinsic motivation. The highest reflection of the variable of intrinsic motivation laid on the indicator INT$_1$ (Stimulate desire to visit Bali) with loading value of 0.792. The lowest reflection found on the indicator INT$_4$ (Overcome feeling) with loading value of 0.622.

Outer loading of the latent variable of each indicator of extrinsic motivation can be seen in Table 8. The Table 8 shows that all loading values of the indicators were significant. It means that all indicators could represent the variable of extrinsic motivation. The highest reflection of the variable of extrinsic motivation was the indicator EXT$_4$ (Biodiversity) with loading value of 0.864. It means that main external motivation of foreign visitors to visit nature-based tourism in Bali is the biodiversity of nature in Bali. The lowest reflection found on the indicator EXT$_1$ (Diversity of attraction) with loading value of 0.437.

Table 9 shows the *outer loading* of each indicator of the latent variable of trust. All loading values of the indicators were significant. It means that all indicators could represent the variable of trust. The highest reflection of the variable of trust was the indicator TRU$_4$ (Attachment feeling) with loading value of 0.816. It means that the main trust of foreign tourists to visit nature-based tourism in Bali is the uniqueness of

Table 8
Loading Value of Indicators of Extrinsic Motivation

	Indicators	Original Sample	Standard Error	T Statistic	
EXT_1	Diversity of attraction	0.437	0.150	2.916	**
EXT_2	Natural beauty	0.546	0.122	4.478	**
EXT_3	Unique scenery and tradition	0.792	0.085	9.305	**
EXT_4	Biodiversity	0.864	0.058	14.857	**

Source: Statistical results of this research, 2016.

natural resources in Bali makes an attachment feeling to the visitors. The lowest reflection found on the indicator TRU_1 (Offers interesting experience) with loading value of 0.729.

Table 9
Loading Value of Indicators of Trust

	Indicators	Original Sample	Standard Error	T Statistic	
TRU_1	Offers interesting experience	0.729	0.065	11.137	**
TRU_2	Offers safety, secure, and reliable services	0.774	0.056	13.893	**
TRU_3	Knowledgeable	0.799	0.043	18.588	**
TRU_4	Attachment feeling	0.816	0.038	21.319	**

Source: Statistical results of this research, 2016.

Table 10 shows the *outer loading* of each indicator of the latent variable of tourist's satisfaction. All loading values of the indicators were significant. It means that all indicators could represent the variable of tourist's satisfaction. The highest reflection of the variable of satisfaction was the indicator SAT_8 (Food and beverages) with loading value of 0.762. It means that the main satisfaction of foreign tourists to visit nature-based tourism in Bali is food and beverages served in Bali. It was followed by Accessibility (0.745), Accommodation (0.716), and Quality of service (0.705). The lowest reflection found on the indicator SAT_2 (Availability of nature-based attractions) with loading value of 0.457.

Table 10
Loading Value of Indicators of Tourist's Satisfaction

	Indicators	Original Sample	Standard Error	T Statistic	
SAT_1	Accessibility	0.745	0.060	12.427	**
SAT_2	Availability	0.457	0.125	3.646	**
SAT_3	Uniqueness	0.674	0.077	8.712	**
SAT_4	Diversity	0.691	0.080	8.638	**
SAT_5	Quality of service	0.705	0.079	8.875	**
SAT_6	Safety and security	0.655	0.098	6.712	**
SAT_7	Accommodation	0.716	0.064	11.252	**
SAT_8	Food and beverages	0.762	0.058	13.134	**
SAT_9	Whole services	0.669	0.065	10.329	**

Source: Statistical results of this research, 2016.

Table 11 shows the *outer loading* of each indicator of the latent variable of tourist's loyalty. All loading values of the indicators were significant. It means that all indicators could represent the variable of tourist's loyalty. The highest reflection of the variable of loyalty was the indicator LOY_4 (Promote) with loading value of 0.880. It means that the main loyalty of foreign tourists to visit nature-based tourism in Bali is their willingness to promote nature-based tourism in Bali. The lowest reflection found on the indicator LOY_3 (Doesn't want to switch on other activities) with loading value of 0.750.

Table 11
Loading Value of Indicators of Tourist's Loyalty

	Indicators	*Original Sample*	*Standard Error*	*T Statistic*	
LOY_1	Favourite nature-based destination	0.829	0.035	23.605	**
LOY_2	Want to come back	0.846	0.032	26.525	**
LOY_3	Doesn't want to switch on other activities	0.750	0.046	16.363	**
LOY_4	Will promote	0.880	0.024	36.217	**
LOY_5	Will recommend friends and relatives	0.835	0.038	22.260	**

Source: Statistical results of this research, 2016.

Inner or Structural Model

Analysis of *inner* or *structural model* was undertaken to evaluate the direct relationships between latent variables. In this research, the analysis of relationships between latent variables was undertaken for : (i) relationship between intrinsic motivation and trust; (ii) relationship between extrinsic motivation and trust; (iii) relationship between intrinsic motivation and satisfaction; (iv) relationship between extrinsic motivation and satisfaction; (v) relationship between trust and satisfaction; and (vi) relationship between satisfaction and loyalty. Results of Structural Equation Modeling (SEM) of Bali Marine-based Tourism are presented in Figure 12. Values mentioned in this figure show the direct effects of exogenous latent variable to related endogenous latent variable.
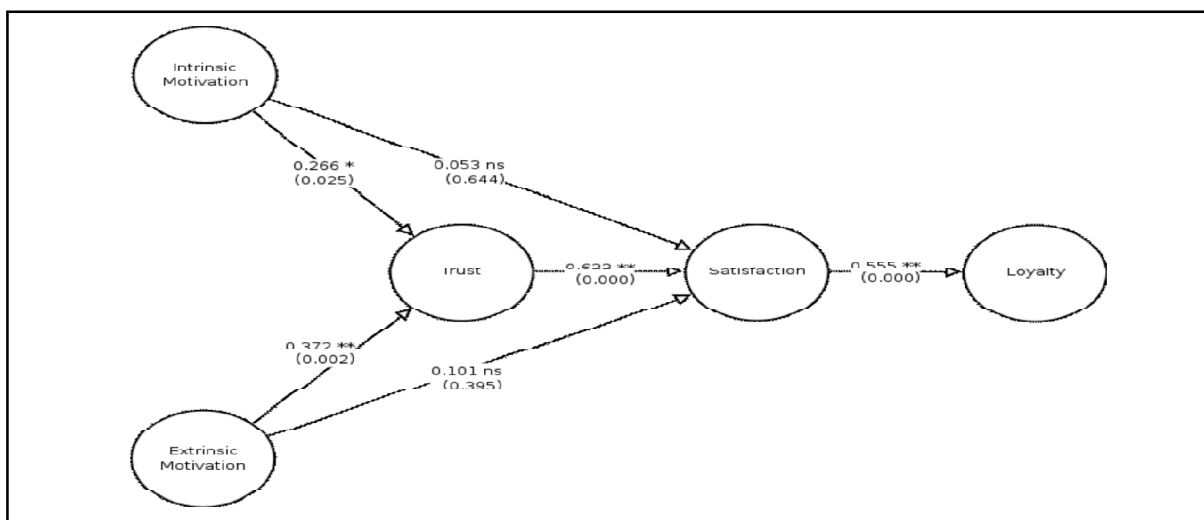

Figure 12: Analysis of Structural Equation Modeling (SEM) of Foreign Tourists' Loyalty on Nature-based Tourism in Bali

Analysis of *inner* or *structural model* was also undertaken to evaluate the indirect relationships between latent variables, namely: (i) relationship between intrinsic motivation and satisfaction; (ii) relationship between extrinsic motivation and satisfaction; (iii) relationship between intrinsic motivation and loyalty; (iv) relationship between extrinsic motivation and loyalty; and (v) relationship between trust and loyalty.

Direct Effects of Exogenous Latent Variable to Endogenous Latent Variable

Figure 12 shows six direct relationships amongst latent variables in the model. The detail results of the analysis are shown in Table 12.

Table 12
Direct Effects of Exogenous Latent on Endogenous Latent in the Inner Model

Latent Exogenous Endogenous	Latent	Original sample	Standard Deviation	t Statistic	p-Value	
Intrinsic Motivation	⇨ Trust	0.266	0.119	2.246	0.025	*
Intrinsic Motivation	⇨ Satisfaction	0.053	0.114	0.463	0.644	ns
Extrinsic Motivation	⇨ Trust	0.372	0.117	3.172	0.002	**
Extrinsic Motivation	⇨ Satisfaction	0.101	0.119	0.852	0.395	ns
Trust	⇨ Satisfaction	0.622	0.098	6.369	0.000	**
Satisfaction	⇨ Loyalty	0.555	0.081	6.823	0.000	**

Source: Statistical results of this research, 2016.
Note:

ns : Non significant
* : Significant in 95% (e=5%)
** : Significant in 99% (e=1%)

Table 12 shows that two direct relationships were not significants, namely: (i) direct relationship between intrinsic motivation and tourists' satisfaction with a direct coefficient of 0.053; and (ii) direct relationship between extrinsic motivation and tourists' satisfaction with a direct coefficient of 0.101. Other four direct relationships had significant relationships, namely: (i) direct relationship between intrinsic motivation and trust; (ii) direct relationship between extrinsic motivation and trust; (iii) direct relationship between trust and tourists' satisfaction; and (iv) direct relationship between tourists' satisfaction and tourists' loyalty.

The above results indicated that tourists' satisfaction on nature-based tourism in Bali was influenced by the variable of trust with the coefficient of 0.622. Two latent variables of intrinsic motivation and extrinsic motivation were only significantly influenced the variable of trust, and they were not able to influence tourists' satisfaction. Therefore, regarding tourists' satisfaction in visiting nature-based tourism in Bali, the only significant variable was the trust of foreign tourists on Bali as a tourist destination which offers interesting nature-based experience, safe, secure and reliable services, and provides knowledgeable tourism guides, as well as make an attachment feeling to the visitors (see Table 10).

Indirect Effects of Exogenous Latent Variable to Endogenous Latent Variable

The model of SEM in Figure 12 could also be evaluate by analyzing indirect relationship between one exogenous latent variable on another endogenous latent variable through a mediating latent variable. Table 13 shows the indirect effects amongst latent variables in this SEM.

Table 13
Indirect Effects of Exogenous Latent on Endogenous Latent in the Inner Model

Exogenous		Variable Mediator		Endogenous	Original	St. sample	t Dev	p-Value Statistic	
Intrinsic Motivation	⇨	Trust	⇨	Satisfaction	0.165	0.076	2.184	0.029	*
Extrinsic Motivation	⇨	Trust	⇨	Satisfaction	0.232	0.089	2.605	0.009	**
Intrinsic Motivation	⇨	Trust ⇨ Satisfaction	⇨	Loyalty	0.121	0.064	1.901	0.058	ns
Extrinsic Motivation	⇨	Trust ⇨ Satisfaction	⇨	Loyalty	0.185	0.065	2.828	0.005	**
Trust	⇨	Satisfaction	⇨	Loyalty	0.345	0.067	5.125	0.000	**

Source: Statistical results of this research, 2016.

Note:

    ns : Non significant

    *   : Significant in 95% (e=5%)

    ** : Significant in 99% (e=1%)

Table 13 shows that only one indirect relationships was not significant, namely: indirect relationship between intrinsic motivation to tourists' loyalty neither through mediating variables of trust nor satisfaction. However, other indirect relationships were significant. Trust is a mediator for intrinsic and extrinsic motivation to satisfaction, but extrinsic motivation is better mediated by trust in comparison to intrinsic motivation. Indirect relationships between extrinsic motivation and tourists' loyalty through either mediating variables of trust or satisfaction were significant. Another indirect relationship between trust and tourists' loyalty through a mediating variable of satisfaction was also significant. The results show that only latent variables of extrinsic motivation through mediating variables of trust and satisfaction could significantly influence the foreign tourists' loyalty to visit nature-based tourism in Bali.

CONCLUSION

1. Intrinsic and extrinsic motivation influenced satisfaction through a mediating latent variable of trust.

2. Only extrinsic motivation through mediating variables of trust and satisfaction significantly influence the foreign tourists' loyalty to visit nature-based tourism in Bali.

3. The extrinsic motivation such as diversity of attractions, natural beauty, unique scenery, Balinese tradition and biodiversity significantly influenced tourists' loyalty in visiting nature-based tourism of Bali through variables trust and satisfaction. Hence, build a positive perception through improvement of destination quality is really important to be able to reach tourists' loyalty to visit Bali, including

accessibility, quality of services, safety, security, accommodation, food and beverages in order to create attachment feeling of foreign tourist on the nature-based tourism of Bali.

REFERENCES

Bali Government Tourism Office. (2015), Bali Tourism Statistic 2014. Denpasar. Bali.

Beerli, A., & Martín, J. D. (2004), Tourists' characteristics and the perceived image of tourist destinations: a quantitative analysis – a case study of Lanzarote, Spain. *Tourism Management,* 25(5), 623-636.

Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C., (1995), Multivariate Data Analysis with Readings. 4th ed. New Jersey: Prentice-Hall, Inc.

Hair, J.F., Sarstedt, M., Ringle, C.M. & Mena, J.A., (2012), An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of Academic Marketing Science,* 40, pp.414-33.

Henseler, J., Ringle, C.M. & Sinkovics, R.R., (2009), The Use of Partial Least Squares Path Modeling in International Marketing. Advances in International Marketing, 20, pp. 277-319.

Jarvis, C.B., Mackenzie, S.B. & Podsakoff, P.M., (2003), A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. *Journal of Consumer Research*, 30, pp.199-218.

Tenenhaus, M., Vinzi, V.E., Chatelin, Y.-M. & Lauro, C., (2005), PLS path modeling. Computational Statistics & Data Analysis, 48, pp. 159-205.

Westbrook, R. A. (1980), A Rating Scale for Measuring Product/Service Satisfaction. Journal of Marketing. Vol. 44 (Fall. 1980): 68-72

Zikmund, G.W. (1997), Business Research Methods. The Dryden Press. Fort Worth. Texas.