EXAMINING THE STRUCTURAL RELATIONSHIPS OF DESTINATION IMAGE, ENVIRONMENTAL LANDSCAPE, INFRASTRUCTURE, PRICE, FINANCIAL RISK, TOURIST SATISFACTION AND DESTINATION LOYALTY

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Abstract: This research aims to identify the factors that affect the satisfaction and loyalty of tourists when participating in the tourism week in Dong Thap. The empirical data was collected from a survey of 200 visitors with convenient sampling. This study employs Partial Least Square Structural Equation Modeling (PLS-SEM) to assess the structural relationship of the model. Research results show five factors that influence tourist satisfaction, including: (1) destination image, (2) environmental landscape, (3) insfrastructure, (4) financial risk, (5) price. In particular, insfrastructure has the strongest impact on tourist satisfaction. In addition, tourist satisfaction also takes mediating impact on tourist loyalty. The theoretical and managerial implications on tourist satisfaction and tourist loyalty were drawn based on the study findings, and recommendations for future researchers were made.

Key words: Destination Image, Environmental Landscape, Insfrastructure , Financial Risk, Tourist Satisfaction, Tourist Loyalty

INTRODUCTION

Destination image, environmental landscape, infrastructure, price, financial risk have received huge attention among tourism researchers as it has been found to influence tourist satisfaction, tourist destination loyalty and post-purchase behaviour (Baloglu and McCleary, 1999; Sweeney *et al.*, 1999; Buhalis, 2000; Beerli and Martín, 2004; Lin and *el al.,* 2007; Tasci and Gartner, 2007; Martin, 2008). From empirical findings, these factors have great impact and their relationship with satisfaction and tourist destination loyalty attracted much academic interest. Hence, understanding and predicting tourists' tendency to revisit specific destinations are important. Notwithstanding the enlarged interest in destination image, environmental landscape and infrastructure the interrelationships between those main factors and tourist satisfaction and tourist destinational loyalty in the context of a village flower destination have not been sufficiently

researched. It is therefore important to extend the findings of these causal relationships.

The Mekong Delta of Vietnam is a destination with many beautiful tourist attractions, such as rivers, mountains, peninsualas, temples, culture and traditions. Dong Thap is a typical province in the region which also focus on developing tourist industry to attract more investment. One of tourist attraction event, a flower village just formed and developed in recent years. Hence, the image of this flower village has not attracted the attention of tourists. Tourism development based on the strength of flower village is still quite new concept for the people here. Recognizing the importance that the Dong Thap Travel Week with the theme "Where four seasons bloom" was held. This is considered a great event of the province in general and of Sa Dec city in particular, marking a big turning point in the resurrection of a land

is blessed to its name, Sa Dec - "Where four seasons bloom".

This study aims to assess the antecedents and consequences of key factors on tourist satisfaction and tourist destination loyalty toward the travel week event. By understanding the causal relationship between destination image, environmental landscape, infrastructure, price, financial risk and tourist satisfaction, tourist destination loyalty, the managers would better attract tourists to the flower village,improve marketing efforts to maximize the effective use of their resources and contribute to the development of flower tourism. This study therefore proposed a structural model to investigate the relationships betweeen estination image, environmental landscape, infrastructure, price, financial risk and tourist satisfaction to predict tourist destination loyalty. The theoretical framework was examined with PLS-SEM approach.

THE LITERATURE REVIEW

Destinational Image

Destination image is one of the most important antecedents of tourists satisfaction, post-purchase decisions and travel behaviors (Baloglu and McCleary, 1999; Beerli and Martín, 2004; Tasci and Gartner, 2007). The definitions of destination image focus on an individual's overall perception of a destination (Baloglu and McCleary, 1999). In different angle, destination image is defined as "a compilation of beliefs and impressions based on information processing from various sources over time that result in a mental representation of the attributes, benefits, and distinct influence sought of a destination" (Zhang *et al.*, 2014, p. 215). It recognizes not only the multiplicity of components (i.e. cognitive and affective) but also the formation process of a destination image by the interaction between these components.

Traditionally, only the cognitive component of a destination image is considered. Recent studies have captured both cognitive and affective dimensions to assess destination image and argued that the coexistence of both components may more accurately explain destination image (Kim and Yoon, 2003; San Martín and del Bosque,

2008; Zeng *et al.*, 2015). The cognitive component refers to an individual's beliefs or knowledge about the characteristics or attributes of a tourist destination (Baloglu, 2000; Pike and Ryan, 2004). On the other hand, the affective dimension denotes the individual's feelings toward the tourist destination (Baloglu and Brinberg, 1997; Kim and Yoon, 2003).

Previous studies have shown that the image of a destination plays an essential role in determining tourists' satisfaction (Tasci & Gartner, 2007; Chi & Qu, 2008; Prayag, 2009). In general, previous findings suggested that destination image is a direct antecedent of satisfaction and achieved a consensus that a more favorable destination image is likely to lead to a higher level of tourist satisfaction (Tasci & Gartner, 2007; Chi & Qu, 2008; Prayag, 2009; Prayag & Ryan, 2012; Chen & Phou, 2013). However, most of the existing research has mainly paid attention to the influence of cognitive image on satisfaction, but overlooked a more comprehensive effect of destination image, including both cognitive and affective images, on tourist satisfaction. To investigate the distinct influences of cognitive and affective images on tourist satisfaction, this study, therefore, proposed the first hypotheses as follows:

H_1: *Destination image will significantly influence tourist satisfaction.*

Environmental Landscape

Environmental landscape is assumed to be one of the major determinants of the interpretation of whether tourists are satisfied with the tourist destination (Buhalis, 2000, p.97) The environmental landscape is defined as beautiful images of nature, including location, landscape, climate, characteristics (Buhalis, 2000). Tourist appraised through specific images from low to high level. Environmental landscape factors are expected to have positive effects on tourist satisfaction, as follows:

H_2: *The environmental landscape has a positive effect on tourist satisfaction.*

Infrastructure

The infrastructure includes basic facilities such as roads, means of transportation, convenience of transportation

system (Lin and el al., 2007; Nguyen Dinh Tho, 2009). Infrastructure is also a component of the destination image (Martin, 2008). Infrastructure systems are the basic conditions to attract tourists and other groups of local investors such as business investors, laborers (Nguyen Dinh Tho, 2009, Dao Trung Kien and *et al.*, 2014). In order to be able to exploit the tourism resources, managers must create the mechanical system corresponding technical facilities. The system of technical facilities was proved that critical factors affect the level of tourist satisfaction by function its power and utility. Reality has proven in destination where there are basic systems good technical, then the new tourism can develop at high level. Insfrastructure factors are expected to have positive effects on tourist satisfaction, as follows:

> H_3: *The Insfrastructure has a positive effect on tourist satisfaction*

Price

Price is a variable that primarily affects the decision to buy (Dodds *et al.*, 1991; Campo and Yague, 2006). Once the tourist realizes the price they pay for the travel service is commensurate with the value they receive (Dodds & Mornoe, 1985). As such, it is positive influence on tourist satisfaction. Price factors are expected to have positive effects on tourist satisfaction, as follows:

> H_4: *The price has a positive effect on tourist satisfaction*

Financial Risk

Perceived financial risk is monetary loss incurred when the product needs to be repaired, replaced or the purchase price refunded (Horton, 1976). Performance risk relates to loss experienced when a product does not perform according to expectations (Sweeney *et al.*, 1999). In this study, financial risk is understood to be a problem for travelers with regards to stealing and begging at the destination. Financial risk factors are expected to have negative effects on tourist satisfaction, as follows:

> H_5: *Financial risk has a negative effect on tourist satisfaction*

Tourist Satisfaction

Satisfaction may be one of the most thoroughly researched variables in the tourism literature. Satisfaction can be regarded as a tourist's post-purchase evaluation of the destination (Ryan, 1995). In tourism research, Hunt (1983) argued that satisfaction is not only about the pleasure of the travel experience but also the evaluation rendered that the experience was at least as good as it was supposed to be. That is, satisfaction is evoked when consumers compare their initial expectations with their perceptions. Once perceived experience is greater than expectations, the consumer is satisfied (Yüksel and Yüksel, 2001).

Moreover, it is generally believed that satisfaction results in repeat purchase and positive word-of-mouth (WOM) recommendations, which are critical indicators of loyalty. Oliver (1999) argued that the satisfaction felt toward a destination is a necessary step in the formation of tourist loyalty. Furthermore, some studies have suggested a significant positive relationship between tourist satisfaction and loyalty (Chen and Tsai, 2007; Chi and Qu, 2008; Lee *et al.*, 2011; Prayag, 2009; Prayag and Ryan, 2012). Thus, the current study established the sixth hypothesis:

> H_6: *Tourist satisfaction will significantly influence tourist loyalty*

Tourist Loyalty

According to the definition of Oliver (1999, p.34), tourist loyalty is "a deeply held commitment to rebuy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same brand or same brand set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior". Tourist loyalty is one of the most critical aspects for destination marketers because it is more desirable, and less costly, to retain existing tourists than to attract new ones (Loureiro and González, 2008). Tourist with a high level of loyalty represents an important market segment for many tourism destinations, as they are more likely to stay longer at a destination than the first-time tourist, tend to spread positive information through WOM and participate in consumptive activities more intensively (Li *et al.*, 2010; Zhang *et al.*, 2014). Moreover, these repeating visitors can reduce marketing costs as compared with attracting first-time visitors (Shoemaker and Lewis, 1999).
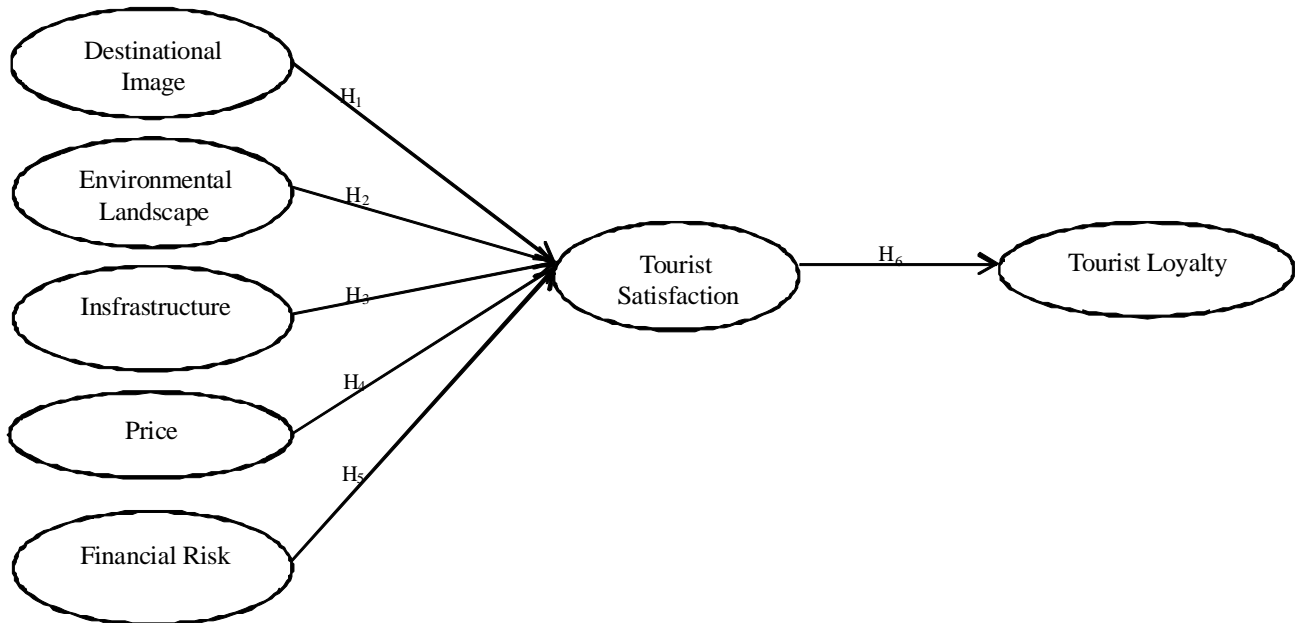
Figure 1: Proposed Conceptual Model

METHOD

Measurement development

The measurement scale for the variables were developed by collecting from previous related studies. The questionnaire for this research is divided into two parts. The first section of the questionnaire contains questions on the demographic profile such as respondents' age, gender and monthly income. The second section of the questionnaire solicits responses on the key constructs of the research framework namely, destinational image, environmental landscape, insfrastructure, price, financial risk, tourist satisfaction and tourist loyalty. All of measures were based on a seven point Likert scale in which 1 is "Strongly Disagree" to 5 "Strongly Agree". The measurement items were adapted from previous studies and revalidated for this study. The five constructs which effect on tourist satisfaction, such as: destinational image, environmental landscape, insfrastructure, price, financial risk. The evaluation of these five variables is employed from the studies of Kim, S. and Yoon, Y. (2003); Beerli, A. and Martín, J.D. (2004); Zhang, H., Fu, X., Cai, L.A. and Lu, L. (2014); Pike, S. and Ryan, C. (2004); Buhalis. D. (2000); Nguyen, T. D. (2009); Lin, Chung-Hsien, *et al* (2007); Horton, R. (1976); Sweeney, J., Soutar, G. and

Johnson, W. (1999) . In addition, tourist satisfaction variable is measured based on previous research (Ryan, C. (1995); Yüksel, A. and Yüksel, F. (2001); Hunt, H.K. (1983)) and tourist destination loyalty variable is measured based on previous research (Oliver, R.L. (1999); Loureiro, S.M.C. and González, F.J.M. (2008); Li, M., Cai, L.A., Lehto, X.Y. and Huang, J. (2010); Zhang, H., Fu, X., Cai, L.A. and Lu, L. (2014).

Sample Data and Data Collection Preference

In this study, the data was collected by direct survey 200 tourists who attended in the flower village at Dong Thap Travel week in the year 2017. The author uses a convenient sampling technique in this study.

Data Analysis

Data analysis utilized a two-step approach as recommended by Anderson and Gerbing (1988). The first step involves the analysis of the measurement model, while the second step tests the structural relationships among latent constructs. The aim of the first step approach is to assess the reliability and validity of the measures before their use in the full model. The main purpose of this investigation is to access the relationships

and the effect of the main factors affecting on tourist satisfaction and tourist loyalty. To accomplish this objective, PLS-SEM was used as it is appropriate for complex structural model and it allows researcher to identify the key factors in the model. The methods of using PLS might be appropriate for its ability to improve the propositions by investigating in detail the relationships among variables. PLS-SEM method is prefered in this study for the reasons that: (1) this technique is comprehensive and systematic; particular analysis could accomplish by establishing relationships among the independent and dependent constructs of multi-group at the same time (Gerbing & Anderson, 1988); (2) there are evidence supports that this technique is extremely effective to multicollinearity and skewed response distribution (Cassel, Hackl, & Westlund, 2000), this study contains exploratory consideration and intent to detect the fundamental trigger constructs in the model; (3) the proposed model is quite complicated (Hair *et al.*, 2014).

Measurement Model

Analysis of validity and reliability of measurement model is the first step in the procedure. Composite Reliability (CR) was employed to examine internal consistency. The results show all the CR values are above 0.8, which is the threshold value as suggested by Hair *et al.* (2014).

Table 1
Demographic Information of Respondents (N=200)

Demographic Factor		Freq.	Percent (%)
Gender	Male	98	49
	Female	102	51
Age	<18 years old	35	17.5
	18-22 years old	80	40
	>22-25 years old	50	25
	>25	35	17.5
Income	No income	30	15
	<3 mil	68	34
	3 - <6 mil	76	38
	6 - 9 mil	14	7
	>9 mil	12	6

Moreover, the convergent validity was examined using the two criteria recommended by Fornell and Larcker (1981): (1) all indicator loadings should be significant and exceed 0.7; and (2) average variance extracted (AVE) by each construct should exceed the variance due to measurement error for that construct (i.e. AVE should exceed 0.50). As showed in Table 2 all the loadings are above 0.8 and AVE of all contruct is from 0.561 to 0.911. Therefore, the results confirms the covergent validity and internal consistency of the contructs.

Table 2
Outer Loadings and Internal Consistency Results

Constructs		Items	Outer Loadings	CR	AVE
Destinational Image	DESIMAGE	DI3	0.758	0.882	0.600
		DI4	0.734		
		DI5	0.753		
		DI7	0.823		
		DI8	0.802		
Environmental Landscape	ENVLANDS	EL1	0.742	0.847	0.580
		EL2	0.764		
		EL4	0.807		
		EL6	0.732		
Insfrastructure	INFRASTRU	INFR3	0.763	0.900	0.561
		INFR4	0.773		
		INFR5	0.780		
		INFR6	0.718		
		INFR7	0.743		
		INFR8	0.731		
		INFR9	0.735		

contd. table 2

Constructs		Items	Outer Loadings	CR	AVE
Price	PRI	PRI1	0.876	0.913	0.777
		PRI2	0.930		
		PRI3	0.836		
Financial Risk	FINRISK	FR1	0.950	0.953	0.911
		FR2	0.959		
Tourist Satisfaction	TOURISAT	SAT1	0.792	0.906	0.658
		SAT2	0.823		
		SAT3	0.783		
		SAT4	0.829		
		SAT5	0.827		
Tourist Loyalty	TOURILOY	LOY2	0.843	0.841	0.784
		LOY3	0.861		

To assess discriminant validity, the construct should share more variance with its measures than with any other constructs using the square root of AVE (Hair *et al.*, 2014). Table 3 shows the square roots of AVE for each construct was greater than the correlations between constructs, indicating the discriminant validity. Another assessment to assess discriminant validity is cross-loading showed in Appendix B. According to Hair *et al.*, 2014, each item should have a higher loading on its latent variable rather than any others. The results confirmed the sufficient discriminant validity.

Table 3
Finding of Discriminant Validity

	DESIMAGE	ENVLANDS	FINRISK	INFRASTRU	PRICE	TOURILOY	TOURISAT
DESIMAGE	0.775						
ENVLANDS	0.599	0.762					
FINRISK	-0.117	-0.127	0.954				
INFRASTRU	0.648	0.640	-0.156	0.749			
PRICE	0.549	0.409	-0.054	0.511	0.882		
TOURILOY	0.088	-0.002	-0.138	0.013	0.090	0.852	
TOURISAT	0.573	0.531	-0.222	0.614	0.461	0.182	0.811

Structural Model

In PLS analysis, the explanatory power of a structural model is examined by the structural paths and the R^2 of the dependent variables. The analysis provides supports for all six hypotheses with all p-value below 0.033. The non-parametric bootstrapping procedure was applied to 200 cases, 5,000 subsamples, and individual sign changes. The R^2 indicates that the five predictors explains 46.8% the tourist satisfaction; tourist satisfaction accounts for 3.3% of tourist loyalty.

DISCUSSIONS AND IMPLICATIONS

This study provides strong evidence to support the notion that destination image, environmental landscape, infrastructure, price and financial risk directly affects tourist satisfaction (Baloglu and McCleary, 1999; Sweeney *et al.*, 1999; Buhalis, 2000; Beerli and Martín, 2004; Lin and el al., 2007; Tasci and Gartner, 2007; Martin, 2008), while only satisfaction directly affects tourist destination loyalty. Therefore, the structural path between satisfaction and loyalty is consistent with the literature (Chen and
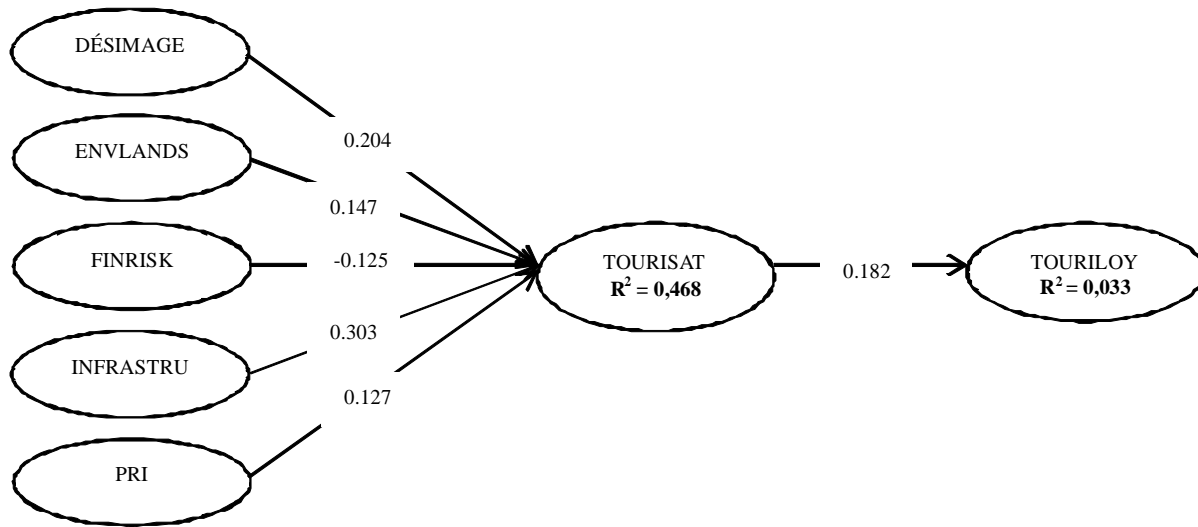
Figure 2: Analysis for Research Model

Tsai, 2007; Chi and Qu, 2008; Lee *et al.*, 2011; Prayag, 2009; Prayag and Ryan, 2012). The statistical results confirm the hypotheses proposed in the model. The results suggest that Insfrastructure is the key determinant influencing tourist satisfaction ($\beta = 0.303$). Beside that, the factors destinational image, environmental landscape, price, financial risk have the degree of influence on tourist satisfaction as follows: ($\beta = 0.204$, $\beta = 0.147$, $\beta = 0.127$, $\beta = -0.125$). The tourist satisfaction influence on tourist destination loyalty with degree of influence ($\beta = 0.182$).

LIMITATIONS AND FUTURE RESEARCH

This research has found results that have scientific significance. However, there are still shortcomings to overcome in the future. First, the sample size in the study was small and the convenient sampling method was not representative of the overall population. Second, the factors in the model only accounted for 46.8% of the variation in visitor satisfaction, 53.2% were explained by variables not yet included in the model. In addition, satisfaction has little impact on visitor loyalty, so it is important to study the factors that better explain the loyalty of visitors.

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