Applying theory of planned behaviour in researching tourists' behaviour: The case of Hoi An World Cultural Heritage site, Vietnam

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Abstract

The study's aim was to apply the Theory of Planned Behaviour (TPB) in researching tourists behaviour. The research model included 7 constructs in that it integrated tourism products as a formative variable and satisfaction as an intermediary variable. 420 questionnaires were distributed to international tourists at different tourism locations in Hoi An City in Vietnam. A total of 400 questionnaires were returned and analysed by using Smart PLS software. The bootstrapping procedure was used to assess the significance and relevance of the structural model relationship. The effect size of the constructs as TP and BI on the endogenous latent variable ABE are 0.073 and 1.480, therefore, the omitted constructs have a substantive impact on the endogenous construct. This study explored the role of tourism product construct in shapping behavioural intention and actual behaviour. This study analyzed the significance of the indirect effect of Satisfaction on Actual Behaviour via the mediator variable (Behavioural Intention) and Behavioural Intention served as mediator variable in the relationship between Satisfaction and Actual Behaviour. Using IPMA, the study also ascertained that Tourism Product and Behavioural Intention are the two highest important factors in determining the Actual Behaviour of international tourists, this is due to their higher importance values compared to other latent variables.

Keywords: Theory of Planned Behaviour, bootstrapping procedure, tourist behaviour, performance matrix analysis, Vietnam.

Introduction

In 2017, Travel & Tourism's Total Contribution to Vietnam GDP is 20.6 US$bn and Travel & Tourism's Total Contribution to Employment is 4,060,900 jobs; that is the great success of Vietnam Tourism.(Table 1). In 2017, Vietnam tourism received over 12.9 million international visitors, an increase of 29% compared to 2016. Tourism became a bright spot in the Vietnamese economy last

when the total contribution (direct and indirect contribution) of Travel & Tourism to GDP (including wider effects from investment, the supply chain and induced income impacts) was VND468,291.0bn in 2017 (9.4% of GDP) and is expected to grow by 6.2% to VND497,303.0bn (9.3% of GDP) in 2018 (World Tourism Barometer, 2018).

Table 1: The Contributions of Travel & Tourism.

Country	Travel & Tourism's Direct Contribution to GDP, 2017 (US$bn)	Travel & Tourism's Total Contribution to GDP, 2017 (US$bn)	Travel & Tourism's Direct Contribution to Employment, 2017'000 jobs	Travel & Tourism's Total Contribution to Employment, 2017 '000 jobs
Thailand	42.2	95.0	2336.6	5834.0
Philippines	27.3	66.3	2348.2	7796.6
Malaysia	15.2	41.9	669.8	1704.5
Singapore	12.8	31.5	169.3	322.9
Myanmar	2.0	4.9	569.8	1282.4
Vietnam	13.0	20.6	2467.6	4060.9

Resource: Travel & Tourism Economic Impact 2018, Vietnam. World Travel & Tourism Council

In 2017, Hoi An welcomed over 3.22 million visitors, an average growth rate of over 20% per year in the period 2014 -2017, in which there were 1.78 million international tourists and 1.76 million domestic tourists. Hoi An, or Faifo, was a famous port town in Vietnam in the sixteenth and seventeenth centuries, which had trade relations with Japan and China in the North, with Southeast Asian countries such as Cambodia, Thailand, Malaysia, etc., and South Asian and European countries such as Portugal, Holland, France and England. Hoi An was also a center of extensive cultural interaction, which was reflected in the unique outlook and the cultural mosaic on the town. Hoi An and My Son are the two World Cultural Heritage sites, located in Quang Nam Province, Viet Nam. In them, Hoi An ranked 7th of the World's Top 15 cities by the Travel & Leisure magazine with the total score of 90.31.

Hoi An now still retains much of its Asian authentic architecture as well as its nostalgic ambience. In this UNESCO World Heritage Site, there are still various constructions of different Asian cultures, among which are the Japanese Pagoda Bridge and Chinese Phuc Kien Assembly Hall as the most outstanding. Hoi An's handicrafts and tailorship are renowned worldwide. Aside from all of these sightseeing and shopping experiences, the rural area surrounding Hoi An is ideal for cycling, and also beach and boat-cruise trips. Besides, tourists can also take part in many activities such as inter alia visiting Cham Island and My Son Sanctuary, swimming and fishing at Ha My beach, and enjoying International Kite Festival.

Theoretical Framework and Hypotheses
There were the theorical models about human behaviour as TAM (Technology Acceptance Model) of Davis (1989), TRA (Theory of reasoned action) of Ajzen and Fishbein (1980) and TPB (Theory of Planned Behaviour) of Ajzen (1991).

With the TAM model, two important factors influence their decision about how and when they will use it those are Perceived usefulness (PU) and Perceived ease-of-use (PEoU) (Davis, 1989). A limitation of TAM is that while it provides a valuable insight into user's acceptance and use of technology, it focuses only on the determinants of intention and does not tell us how such perceptions are formed or how they can be manipulated to foster user's acceptance and increased usage. TRA has been applied in its original form to explain the adoption of ICT - applications but typically TRA is used as a basis for modifying the TAM with subjective norm (Venkatesh, et al., 2000). TRA suggests that attitudes towards behaviour and subjective norms will determine intention to perform a behaviour. With TRA, Ajzen and Fishbein (1980) opined that behaviour can be predicted from intentions that correspond directly to that behaviour. TRA has been successfully applied to predict behaviour and intention in a variety of subjective areas.

In TRA, the ability of attitude and subjective norms to predict behaviour intention will differ within the domain of study. Attitude will be a dominant predictor of behaviour intention over subjective norms when personal based influence is stronger in the behavioural domain. On the other hand, subjective norms are a dominant predictor of behaviour intention for behaviour in which normative implications are strong. At the same time, a number of studies have been carried out to understand its limitations, test hypotheses, analyze extensions and refinements. TRA is a general theory; it does not specify the beliefs that are operative for particular behaviour (Davis et al., 1989). Thus, Ajzen & Fishbein (1980) suggested that researchers using TRA must first identify the beliefs that are salient for subjects regarding the behaviour under investigation**.** The basic connection between TRA and TAM is Behavioural Intention (BI). They both postulate that user behaviour in information systems is determined by behavioural intent.

The development of TPB is originally based on TRA designed to explain almost any human behaviour across various application contexts. The TPB suggests that in addition to determinants of behavioural attitude and subjective norm, a third element, perceived behavioural control (PBC), also influences behavioural intentions and actual behaviour**.** Theory of planned behaviour (TPB) was proposed as an extension of TRA to account for conditions where individuals do not have complete control over their behaviour (Ajzen, 1991). Models based upon TPB have been applied to the explanation of different types of behaviour, but when applied to the adoption of ICT systems or services, the model contains five concepts which are behavioural attitudes, subjective norm, behavioural control, intention to use and actual use. According to the theory, both attitude toward behaviour and subjective norms are immediate determinants of intention to perform behaviour. Attitude refers to the degree of a person's favorable or unfavorable evaluation or appraisal of the behaviour in question. Subjective norms refer to the perceived social pressure to perform or not to perform the behaviour (Ajzen, 1991). TPB further proposes that intention to perform behaviour is the proximal cause of such behaviour. Intentions represent motivational components of behaviour, that is, the degree of conscious effort that people will exert in ease or difficulty in performing the behavioural of interest.

In the tourism and recreation field, distinctions have been made between quality of opportunity or performance, and satisfaction or quality of experience. These contents were first introduced by Brown (1999) and were highly agreed upon by Crompton and Love (1995) in their discussion of the quality and satisfaction constructs in the context of tourism. Tourist products consist of numerous components due to their complex nature. These components come in various forms: *Integral products* that can be sold independently on the market (such as hotel accommodation, air transport, admission to visitor attractions etc.); *"Free" or "public" goods*, such as the climate and the scenery, that can be used or consumed by tourists free of charge; *Complementary services* that cannot be sold independently on the market, such as the services provided by a tourist information office or by a tour leader (Koutoulas & Dimistris, 2001). Tourists are an integral part of the service process, which is one of the characteristics that distinguishes services from products, therefore research of tourist

behaviour must include diversified components as previous researchers' have suggested.

Consumer satisfaction is based on an evaluation of product-related standards, product consumption experiences, and/or purchase-related attributes (Giese & Cote, 2000). The companies need not only to eliminate the cause for direct complaints, but also to provide their product or services with excellence, and an attractive quality in order to get a consumer's satisfaction and bring delight to their consumer (Fecikova, 2004). Taylor and Baker (1994) stated that service quality and customer satisfaction are widely determined as key influences in the formation of consumers' purchase intentions. The results of this study suggest that consumer satisfaction is best described as moderating the service quality/purchase intention relationship.

TPB suggests that stronger intention to implement behaviour will bring in a higher level of actual behaviour (Ajzen, 1991). In earlier studies, the intention is confirmed as "a stated likelihood to engage in behaviour" (Oliver, 1997: 28). Alegre and Cladera (2009) reported that several studies on tourist intentions have focused on the factors that determine the behavioural intention. Hence, research on behavioural intentions remains a vital subject in the study of tourism since positive intentions indicate tourist loyalty (Prayag *et al.,* 2013). Lee et al., (2007) developed an ecotourism behavioural model of national forest recreation areas in Taiwan, this model incorporated satisfaction construct as a mediating construct to the TPB. With this proposed model, Lee (2007) explained that subjective norms, attitude and perceived behavioural control directly affected satisfaction, and behavioural intention and behaviour indirectly. Lee (2017) stated that ecotourism behaviour can be better explained by adding a satisfaction construct to the TPB.

Paul (1977) stated that tourist products are the means to satisfy tourist needs. What do tourists consume during their trips? Marketing literature has focused on this issue since the early 1970s as part of the discussion regarding tourist products. According to Jovicic (1988), tourist needs are those that are "satisfied when movement is performed (travel and sojourn) outside the place of residence". Perera and Vlosky (2017) proposed an ecotourism behavioural model based on Ajzen's TPB, incorporating knowledge and satisfaction as predictors of ecotourism behaviour. The model of this study has 7 determinants including knowledge, attitudes, social influence, perceived behavioural control, satisfaction, behavioural intention and behaviour. This study's results gained knowledge, attitudes, social influence and perceived behavioural control are important determinants of an individual's intention to take part in ecotourism and his/her actual ecotourist behaviour. The results also show that in the model satisfaction plays a key mediating role by bridging the four determinants: knowledge, attitudes, social influence, perceived behavioural control with behavioural intentions. Knowledge had a significant and direct effect on behaviourial intention and behaviour. This model has a very important role to play in widening the determinants of human behaviour in activities of tourism, and in enriching behavioural research in tourism from the theoretical perspective.

With the above- mentioned researches, satisfaction and actual behaviour of tourists depends on many elements such as tourism products, attitude, social influence, perceived behavioural control. Based on important factors of TPB as attitude, subjective norm and behavioural control, in order to research tourist's behaviour the study developed a model of tourist's behaviour, integrating tourism products as a formative variable and satisfaction as an intermediary variable. Figure 1 describes the theorical framework with 7 constructs. The hypotheses of research are presented as below:

H_1: *Tourism products positively influence attitude.*
H_2: *Tourism products positively influence satisfaction.*
H_3: *Tourism products positively influence behavioural intentions.*
H_4: *Tourism products positively influence behaviours.*

H_5: Attitudes positively influences satisfaction.

H_6: Social influence positively affects satisfaction.

H_7: Perceived behavioural control positively influences satisfaction.

H_8: Perceived behavioural control positively influences behavioural intentions.

H_9: Perceived behavioural control positively influences behaviours.

H_{10}: Satisfaction positively influences behavioural intentions.

H_{11}: Behavioural intentions positively influence behaviour.
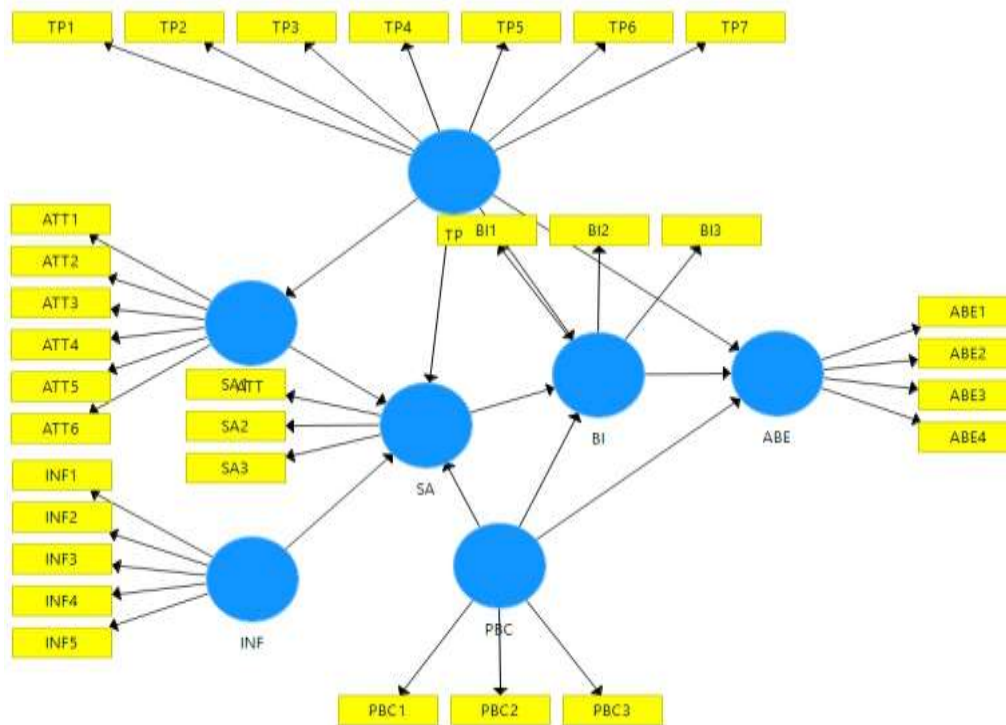
Figure 1. Theorical Framework

Research findings

The theoretical framework and questions were sent to 30 foreign tourists and 10 tourism experts in order to receive their advice; after that, the author adjusted and supplemented where needed. The constructs and the indicators of this study are shown in figure 1. A five point Likert scale was used in the questionnaire (SD-strongly disagree, D -disagree, N- neutral, A-agree, SA-strongly agree) for collection of primary data. To get the reliability of investigation, foreign tourists who participated answered the questionnaire in the presence of a field worker who could provide any information on items in the research model. The survey was collected from May 2018 to August 2018 in Hoi An City (Quang Nam Province, Vietnam) with 430 overseas travelers, in which, there were 30 unusable lacking-information samples and 400 samples were suitable for the research. Information about the samples (400 international tourists) is presented in details in Table 2 as follows:

Table 2. Descriptive statistics of samples

	Number	Frequency (%)		Number	Frequency (%)
Age Group	**400**	**100**	**Earns per month**	**400**	**100**
From 16 to 22 years old	40	10	No income,	40	10
Form 23 to 35 years old	70	30	Under 2000 USD	160	40

Fron 36 to 55 years old	160	40	From 2000 to 3,000 USD	120	30
Over 55 years old	80	20	From 3,000 to 4,500 USD	60	15
			Over 4,500 USD	20	5
Nationality	**400**	**100**	**Job**	**400**	**100**
-Korea	144	36	-Having job	240	60
-China	120	30	-No job	20	5
-Japan	60	15	-Student	40	10
-Unites State of America	40	10	-Retirement	80	20
-EU	20	5	-Others	20	5
-Others	16	4			
Gender	**400**	**100**			
Male	180	45			
Fermale	220	55			

The study uses SmartPLS 3 for analyzing. PLS –SEM (patial least squares –structural equation modeling) allows specification of relationships between constructs and indicator variables (Sarstedt et al., 2017) and PLS –SEM relies on a bootstrap procedure to test coefficients for their significance (Davison, Hinkley, 1997). This study used reflective measurement constructs, it included seven constructs. The study analyzes the outer loading of the indicators and the average variance validity to evaluate the convergent validity of the reflective constructs. The outer loadings of all indicators should be statistically significant and the standardized outer loading should be above 0.70. There are 32 indicators in the measurement model, but 11 indicators (SA1, BI2, BI3, TP4, TP5, TP6, TP7, INF3, INF4, INF5, INF6) were eliminated because their outer loadings are smaller than 0.70 (Table 3). The observed variables are reliable and used in PLS -SEM analysis are SA2, SA3, BI1, TP1, TP2, TP3, ATT1, ATT2, ATT3, ATT4, ATT5, ATT6, INF1, INF2, PBC1, PBC2, PBC3, ABE1, ABE2, ABE3, ABE4.

Table 3. Outer Loading

	ABE	ATT	BI	INF	PBC	SA	TP
ABE1	0.883						
ABE2	0.859						
ABE3	0.811						
ABE4	0.875						
ATT1		0.928					
ATT2		0.959					
ATT3		0.948					
ATT4		0.967					
ATT5		0.979					
ATT6		0.974					
BI1			1.000				
INF1				0.769			
INF2				0.797			
INF3				0.737			
PBC1					0.871		
PBC2					0.860		
PBC3					0.869		
SA2						0.743	
SA3						0.742	
TP1							0.967
TP2							0.828

|							0.763

Source: Compiled by the authors

Measurement Model

R^2 value of 0.25, 0.50 or 0.75 for endogenous latent variables can be respectively described a weak, moderate, or substantial *(*Henseler et al., 2009). For the endogenous variable actual behaviour (ABE), the R Square value is 0.740, meaning that about 74% of the variance in ABE is explained by the model; this is a substantial level **(Table 4).**

Table 4. R Square

	R-Square	R-Square Adjusted
ABE	0.740	0.738
ATT	0.132	0.130
BI	0.327	0.321
SA	0.166	0.158

The R-Square values are shown inside the blue ellipse for endogenous latent variables **(Figure 2)**.
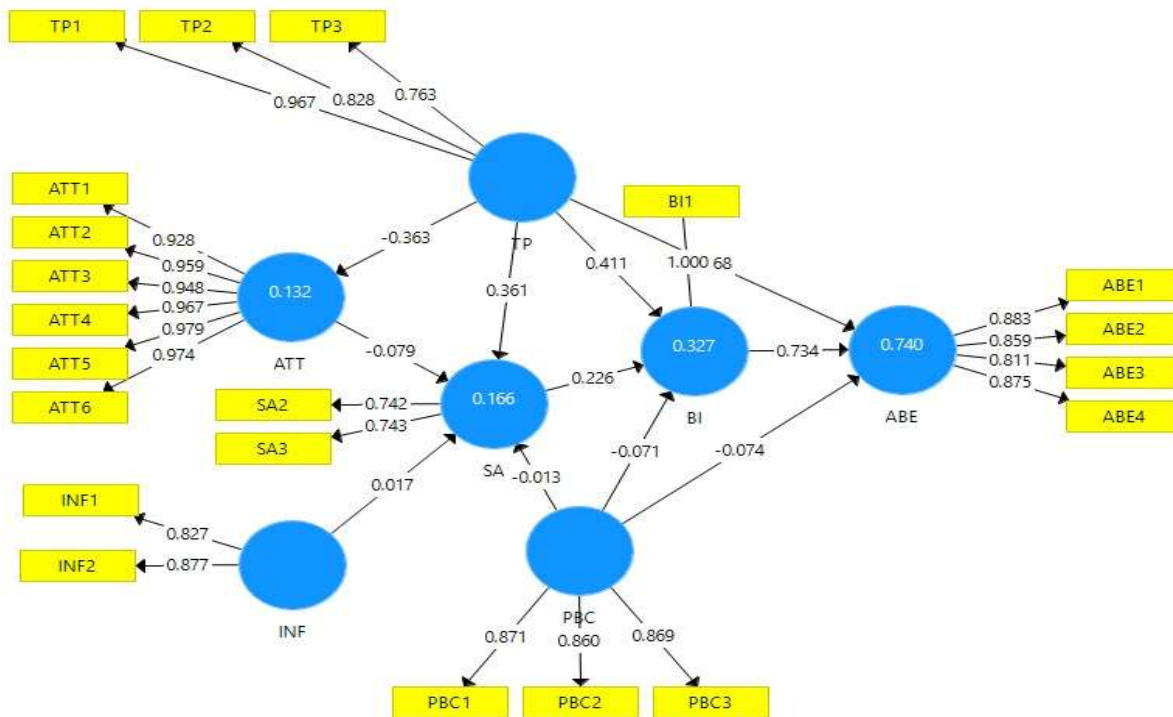
Figure 2. PLS –SEM Results

Composite Reliability: Cronbach's Alpha *and* Composite Reliability are the popular method to measure of internal consistency reliability based on the intercorrelations of the observed indicator variables. Cronbach's Alpha assumes that all indicators are equally reliable, but PLS-SEM prioritizes the indicators according to their individual reliability and moreover Cronbach's Alpha is sensitive to the number of the items in the sample and generally tends to underestimate the internal consistency reliability. Hair et al., (2005) recommended a minimum threshold of 0.7 for CR to be acceptable. Therefore, in this case, Composite reliability (CR) is used. The composite reliability (CR) method depicts the degree to which the construct indicators represent the latent constructs.

***Convergent validity*:** A common measure to establish convergent validity on the construct level is AVE. An AVE value of 0.50 or higher indicates that, on average, the construct explains more than half of the variance of its indicators *[Hair et al.,* 2017]. With a value of 0.917 (ABE), 0.986 (ATT), 1.000 (BI), 0.812 (INF), 0.900 (PBC), 0.711 (SA) and 0.891 (TP), all seven reflective constructs have a high level of internal consistency reliability. All AVE in the model are bigger than 0.50, therefore the model gets the convergent validity (Table 5).

Table 5. Construct Reliability and Validity

	Composite Reliability	Average Variance Extracted (AVE)
ABE	0.917	0.735
ATT	0.986	0.921
BI	1.000	1.000
INF	0.812	0.590
PBC	0.900	0.751
SA	0.711	0.551
TP	0.891	0.734

Discriminant validity: Discriminant validity implies that a construct is unique and captures phenomena not represented by other constructs in the model. A common measure to establish convergent validity on the construct level is average variance extracted (AVE). An AVE value of 0.50 or higher is accepted, which means that the construct explains more than half of the variance of its indicators. Other approaches can be used to assess the discriminant validity of the indicators, that are the Fornell-Larcker criterion (Fornell-Larcker, 1981) and the Heterotrait Monotrait Ratio (HTMT). In this study, we used HTMT. HTMT is the mean of all correlations of indicators across constructs measuring different constructs. Henseler et al.,(2015) suggest a threshold value of 0.90 if the path model includes constructs that are conceptually very similar. The HTMT can serve as the basis of a statistical discriminant validity test. In this study, we rely on a procedure called bootstrapping to derive a distribution of the HTMT statistic. The lower and upper bound of the confidence interval of HTMT for the relationship between BI and ABE are 0.657 and 0.803, respectively. Similarly, the lower and upper bound of the confidence interval of HTMT for the relationship between TP and BI are 0.325 and 0.498. Thus all HTMT values of seven constructs in the study are smaller than 0.90. Thus, the reflective measurement construct possesses discriminant validity **(Table 6).**

Table 6. Confidence Intervals Bias Corrected

		Orginal Sample (O)	Sample Mean (M)	Bias	2.5%	97.5%
ATT	→ SA	-0.080	-0.078	0.001	-0.270	0.117
BI	→ ABE	0.734	0.734	0.000	0.657	0.803
INF	→ SA	0.024	0.039	0.015	-0.043	0.126
PBC	→ ABE	-0.074	-0.072	0.002	-0.125	-0.019
PBC	→ BI	-0.071	-0.071	0.000	-0.154	0.017
PBC	→ SA	-0.013	-0.012	0.000	-0.211	0.189
SA	→ BI	0.226	0.224	-0.002	0.116	0.329
TP	→ ABE	0.168	0.170	0.002	0.094	0.253
TP	→ ATT	-0.363	-0.362	0.001	-0.444	-0.274
TP	→ BI	0.411	0.412	0.001	0.325	0.498
TP	→ SA	0.358	0.356	-0.002	0.258	0.451

Source: compiled by the authors

***Collinearity Statistics*:** To consider VIF value for reflective indicators. All VIF value are uniformly below the threshold value of 5 because the model doesn't have the collinearity phenomenon (Appendix 2).

***Hypothesis Testing*:** The bootstrapping procedure was used to assess the significance and relevance of the structural model relationships. Hair et al., (2017) stated that commonly used critical values for two-tailed tests are 1.65 (significance level=10%), 1.96 (significance level=5%), and 2.57 (significance level=1%). When an empirical t-value is larger than the critical value, we conclude that coefficient is statistically significant with a certain error probability. The results in Table 7 represent that the path coefficients of the respective constructs with their level of significance in order to validate some of the considered hypotheses The relationship between PBC and ABE is accepted by H_9: (t-statistic = 2.747, p< 0.05). Following, the relationship between BI and ABE is accepted by H_{11}: (t-statistic = 19.515, p< 0.05), between SA and BI is accepted by H_{10}: (t-statistics = 4.130, p<0.05). The relationships between TP with ATT, SA, BI, ABE are also accepted by H_1 , H_2 , H_3 , H_4. The other hypotheses are rejected **(Table 7 and Figure 3).**

Table 7. Path Coefficients

	Orginal Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T- statistics	P-Value
ATT ⟶ SA	-0.080	-0.078	0.100	0.797	0.425
BI ⟶ ABE	0.734	0.734	0.038	19.515	**0.000**
INF ⟶ SA	0.024	0.039	0.043	0.553	0.580
PBC ⟶ ABE	-0.074	-0.072	0.027	2.747	**0.006**
PBC ⟶ BI	-0.071	-0.071	0.043	1.635	0.102
PBC ⟶ SA	-0.013	-0.012	0.102	0.125	0.901
SA ⟶ BI	0.226	0.224	0.055	4.130	**0.000**
TP ⟶ ABE	0.168	0.170	0.041	4.063	**0.000**
TP ⟶ ATT	-0.363	-0.362	0.044	8.310	**0.000**
TP ⟶ BI	0.411	0.412	0.044	9.361	**0.000**
TP ⟶ SA	0.358	0.356	0.050	7.213	**0.000**
Source: compiled by the authors					

***Evaluating Effect Size*:** The change in the R^2 value when a specified exogenous construct is omitted from the model can be used to evaluate whether the omitted construct has a substantive impact on the endogenous constructs. This measure is referred to as the f^2 effect size and is increasingly encouraged by journal editors and reviewers. Guidelines for assessing f are that values of 0.02, 0.15 and 0.35, respectively, represent the small, medium, and large effects of the exogenous latent variable. Effect size values of less than 0.02 indicate that there is no effect (*Cohen,* 1988). The effect size of the constructs as TP and BI on the endogenous latent variable ABE are 0.073 and 1.480, therefore, the omitted constructs have substantive impact on the endogenous construct **(Table 8).**

Table 8: f-Square

	ABE	ATT	BI	INF	PBC	SA	TP
ABE							
ATT						0.002	
BI	1.480						
INF						0.001	

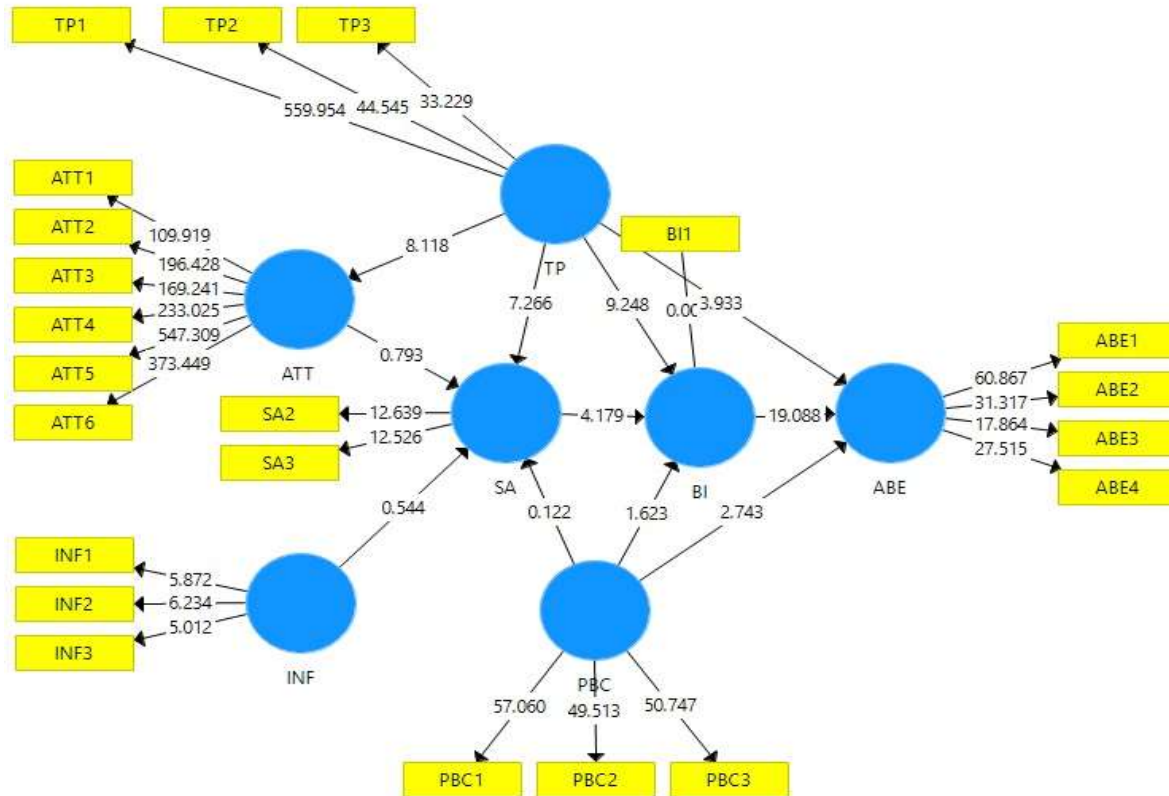| PBC	0.018		0.006			0.000	
SA			0.063				
TP	0.073	0.152	0.191			0.125	
Source: compiled by the authors							

Figure 3: Measurement Model

Table 9. Total Indirect Effects

	Orginal Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T- Statistics	P-Values
ATT ⟶ ABE	-0.013	-0.013	0.017	0.766	0.444
ATT ⟶ BI	-0.018	-0.018	0.023	0.778	0.436
ATT ⟶ SA					
BI ⟶ ABE					
INF ⟶ ABE	0.004	0.006	0.007	0.544	0.587
INF ⟶ BI	0.005	0.008	0.010	0.552	0.581
INF ⟶ SA					
PBC ⟶ ABE	-0.054	-0.055	0.038	1.431	0.152
PBC ⟶ BI	-0.003	-0.004	0.023	0.123	0.902
PBC ⟶ SA					
SA ⟶ ABE	0.166	0.165	0.045	3.685	**0.000**
SA ⟶ BI					
TP ⟶ ABE	0.366	0.366	0.037	9.853	**0.000**
TP ⟶ ATT					

TP → BI	0.087	0.086	0.025	3.494	**0.000**
TP → SA	0.029	0.028	0.037	0.791	0.429

Table 10: Direct, Indirect and Total Effects on Constructs

	Direct Effect	Indirect Effect	Total Effect
SA on ABE	-	0.016	0.016
SA on BI	0.226	-	0.226
PBC on ABE	-0.074	-	**-0.074**
BI on ABE	0.734	-	0.734
TP on BI	0.411	0.087	0.498
TP on SA	0.358	-	0.358
TP on ABE	0.168	0.366	**0.534**

Mediation Analysis

Mediation occurs when a third mediator variable intervenes between two other related constructs (Hair et al.,2017). More precisely, a change in the exogenous construct causes a change in the mediator variable, which, in turn, results in a change in the endogenous construct in the PLS path model. Thereby, a mediator variable governs the nature of the relationship between two constructs. This study analyzes the significance of the indirect effect of Satisfaction on Actual Behaviour via the mediator variable (Behavioural Intention). If the indirect effect is not significant, we conclude that Satisfaction does not function as a mediator in the tested relationship. From Figure 3 and Table 10, it follows that Behavioural Intention serves as mediator variable in the relationship between Satisfaction and Actual Behaviour, and Satisfaction has the role as mediator variable in the relationship between Tourism Product and Actual Behaviour, between Tourism Product and Behavioural Intention.
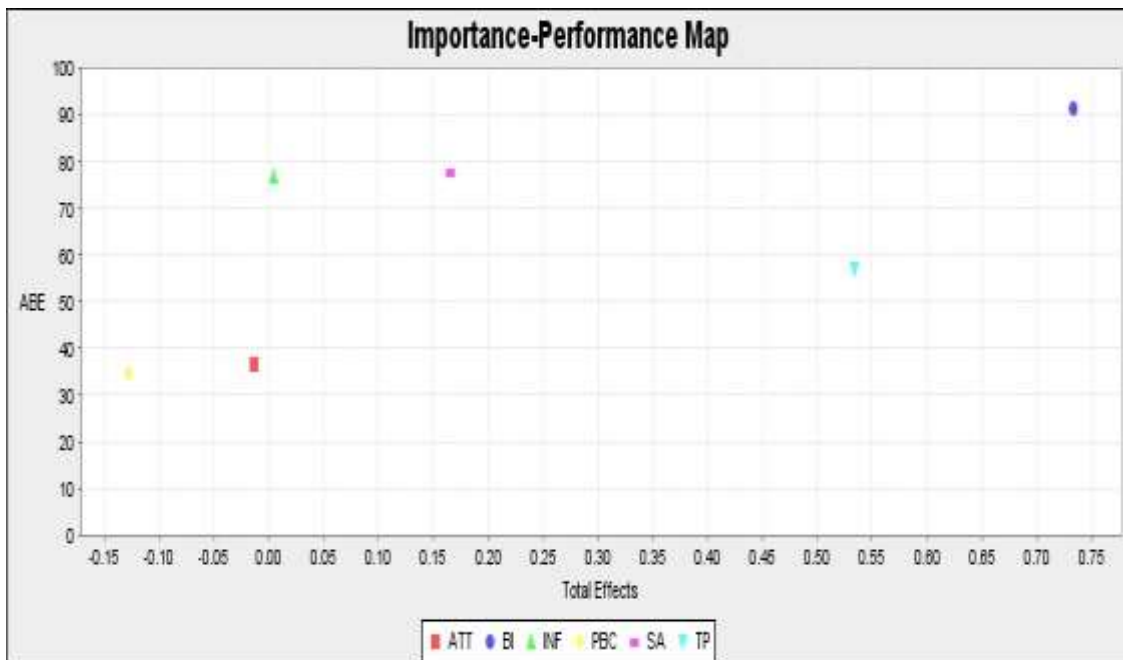
Figure 4. Importance Performance Matrix Analysis.

Importance Performance Matrix Analysis (IPMA).

The importance –performance map analysis (IPMA) represents a particularly valuable tool to extend the results presentation of the standard PLS- SEM estimations by contrasting the total effects of the latent variables on some target variable with their latent variable scores. The graphical representation of outcome enables researchers to easily identify critical areas of attention and action. The IPMA compares the structural model's total effects on a specific target construct (Actual Behaviour) with the average latent variable scores of this construct's predecessors (Tourism Product, Satisfaction, Behavioural Intention, Perceived Behavioural Control). The total effects represent the predecessor constructs' importance in shaping the Actual Behaviour while their average latent variable scores represent their performance. The goal is to identify the predecessors that have relatively high importance for Actual Behaviour but also a relatively low performance.

The aspects underlying these constructs represent a potential area for improvement that may be of interest. Using the IPMA data allows us to create an important performance map as shown in Figure 4.

+The x-axis represents the (unstandardized) total effects of Tourism Product, Satisfaction, Behavioural Intention, Perceived Behavioural Control on the target construct (Actual Behaviour).

+The y-axis depicts the average rescaled (unstandardized) latent variable scores of Tourism Product, Satisfaction, Behavioural Intention, Perceived Behavioural Control.

Figure 4 shows that the Tourism Product and Behavioural Intention are the two highest important factors in determining the Actual Behaviour of international tourists, this is due to their higher importance values compared to other latent variables. Satisfaction is also an important factor, while Perceived Behavioural Control has the lowest level of importance. The local authorities and tourism companies need to focus on improving the performance of tourism product and tourists' satisfaction.

Conclusion

TPB is used for researching international tourists' actual behaviour in the case of HoiAn World Cultural Heritage site. The proposed model is a modification of Ajzen's theory of planned behaviour and incorporates tourism products and satisfaction as added constructs. The utility of the TPB in researching leisure selections and behaviours has been well formed (Lam & Hsu, 2004; March & Woodside, 2005). The study model includes 7 constructs, in that, it integrates tourism products as a formative variable and satisfaction as an intermediary variable. This study explored the role of tourism product constructs in shaping behavioural intention and actual behaviour. The bootstrapping procedure was used to assess the significance and relevance of the structural model relationships. The results of the study are as follows:

- Tourist product construct positively affects attitude, satisfaction, behavioural intention and actual behaviour of the international tourists.
- The tourists' satisfaction influenced their behavioural intention directly and influences actual behaviour indirectly.
-The tourists' perceived behavioural cotrol and behavioural intention also affect tourists' actual behaviour directly.

The other hypotheses are rejected.

Most of the previous researches when using TPB in the technological sector give the results as: Subjective norm, attitude and perceived behavioural control have positive effects on behavioural

intention and behaviour (Venketesh et al., 2003; Brown et al., 2005; Tavallaee et al., 2017). The results of this study gives the evidence about these different points when applying TPB in researching the tourism sector compared to TPB in the technological sector. The reasons can be explained as a sense of belonging. In developed and developing societies, people usually go to travel to other countries for seeing, pleasure, learning and new experiences. Therefore going on tours does not create pride in tourists' perceptions, and the social influence construct does not act on tourists' behavioural intention and actual behaviour. Tourists have enough stamina, time, information and moneyu for their trips, they can control their behaviour and have decisions for selecting destinations, hence tourists' perceived behavioural control could not have significant relationships with tourists' satisfaction and behavioural intention. Attitude refers to the degree of a tourist's favorable or unfavorable evaluation about a tourism destination, but there are many tourism destinations in the world in which are interesting, friendly, educational and enjoyable. Therefore in researching factors that act on tourists' actual behaviour, the attitude construct doesn't influence that much, perhaps the international tourists travelling to Hoi An City can discover the Hoi An World Cutural Heritage site, and learn more about its authentic Asian architecture.

The study's results determined that predictive effect of tourism product and mediating effect of satisfaction adjusted to the TPB are indeed important modifications in predicting behavioural intention and actual behaviour of international tourists. This derives from the tourism product having significant positive direct effect on satisfaction, behavioural intention and actual behaviour, while satisfaction has a strong direct effect on behavioural intention and an indirect effect on actual behaviour. TPB model use in studying Hoi An World Cultural Heritage contributed to extending knowledge in determining actual behaviour of tourists, especially in HoiAn World Cultural Heritage site, Vietnam.

Recommendation

This study suggests some recommendations as below:

a. Hoi An needs to reserve and reconstruct much of it's Asian authentic architecture as well as the nostalgic ambience; especially the old town, Japanese Pagoda Bridge and Chinese Phuc Kien Assembly Hall. This will create an impression of an attractive destination which is also safe and friendly and the foreign tourists will likely stay longer and spend more. Travel groups will agree that they will gain greater satisfactions for having selected Hoi An as a tour destination.

b. Creating the image of Hoi An tour destination is critical, investing in cultural and historical tourism products, broadening the scope of sea tourism; developing and exploiting new tourist activities such as waterway tours, golf tours and community-based tourism effectively. Simultaneously, there is a need to develop ecotourism products, handicraft villages, shopping tours, health care tourism, agricultural tourism, tourism that is associated with conferences, seminars and events. These issues create concern, stimulation and motivation of foreign tourists in behavioural intent of selecting Hoi An destination. The more the tourism products on offer, the higher number of tourists will come. This is also a way to limit the seasonality aspect of Hoi An tourism.

c. Hoi An World Cultural Heritage has clean and beautiful beaches, and has tours to villages and nature sightseeing, friendly local people and good food safety for tourists. The local authority and tourism companies need to design the marketing programs and establish a website about HoiAn as a heritage tourism destination and thus introduce it globally by implementing effective marketing activities to attract international tourists.

d. Public information is needed about listed prices and quality standards of accommodations and services in Hoi An destination. The local authorities must control and inspect this aspect strictly for effective implementation as this is necessary to strengthen the management of destinations, to ensure security, and also environmental sanitation and food safety for all tourists.

e. In terms of aviation, Vietnam's airport infrastructure tends to be overloaded and not be responsive to the needs of tourists; especially Tan Son Nhat Airport (Ho Chi Minh City) did not respond to the actual requirements. The Vietnam Government needs to attract the investment capital to build airport infrastructure, restricting the overloading of events, and by establishing a new airline to exploit the domestic destinations and raise the competitive capacity of Vietnam's tourism.

f. Hoi An City needs to upgrade many standard hotels and resort facilities to service tourists' requirements better. Attracting foreign investors and domestic companies for developing the accommodation, infrastructure and tour products; promoting of performing arts and local festivals to become a cultural tourism attraction.

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Appendix 1: Questionnaire for the study

Construct	Indicator	Epoxy
Tourism Product (TP)		
	HoiAn City is both coastal city and cultural heritage city	TP1
	HoiAn City has been developing tourism products, handicraft villages, heath care tourism, agricultural tourism, event tourism v.v...	TP2
	HoiAn City has marine recreational services such as sport tourism, sightseeing, scuba diving tours, Jet-ski service, Night Yacht Service	TP3
	Hoi An City is the tour destination ranked 7th of the World's Top 15 cities by the Travel & Leisure Magazine	TP4
	Tourists can take part many activities as visiting Cham Island and My Son Sanctuary, swimming and fishing at Ha My beach, enjoying International Kite Festival, etc.	TP5
	Hoi An City now still retains much of its Asian authentic architecture as well as its nostalgia ambiance; especially the old town	TP6
	HoiAn City has reasonable prices for food and also has offer accommodation and shopping options	TP7

Attitude (ATT)		
	Making the travel to HoiAn City is environmentally favorable	ATT1
	Travelling to HoiAn City is interesting	ATT2
	Travelling to HoiAn City is enjoyable	ATT3
	Travelling to HoiAn City is educational	ATT4
	The city is backpacker-friendly	ATT5
	HoiAn City has a distinguished history and heritage	ATT6
Social Influence (INF)		
	The popular thinking in the society is to travel to HoiAn City	INF1
	People who are important to me would like to travel to HoiAn City	INF2
	My colleagues would think I should travel to HoiAn City	INF3
	My family members would think I should take part to HoiAn City	INF4
	My friends would think I should travel to HoiAn City	INF5
Perceived Behaviour Control (PBC)		
	I have enough money when I go to travel HoiAn City	PBC1
	I have many informations to select the HoiAn destination	PBC2
	I have enough stamina to take part in tourism	PBC3
	To participate in travelling HoiAn City, I have enough time	PBC4
Satisfaction (SA)	I satisfy very much when travelling to HoiAn City	
	My choice to purchase this trip was a wise one	SA1
	I am satisfied with my decision to visit the HoiAn World Cultural Heritage	SA2
	I have positive feelings regarding the HoiAn World Cultural Heritage	SA3
Behavioural intentions (BI)		
	I shall recommend the HoiAn destination to others	BI1
	I intend to go to HoiAn City in the near future	BI2
	In the future, I intend to go to HoiAn City whenever I have a travel	BI3
Actual Behaviour (ABE)		
	Observed nature and seabeach thoroughly	AB1
	Coming HoiAn City to see the Asian authentic architectures as well as its nostalgia ambiance; especially the old town	AB2
	Helped to maintain the local environmental quality	AB3
	I am going to revist the HoiAn City in the next day	AB4
Source: compiled by the authors.		

Appendix 2: Inner VIF values

	ABE	ATT	BI	INF	PBC	SA	TP
ABE							
ATT						4.601	
BI	1.397						
INF						1.077	

PBC	1.160		1.157			4.594	
SA			1.197				
TP	1.490	1.000	1.311			1.229	