Research Article

Perceived destination competitiveness and response behavior: A test of mediation

Journal of Tourism, Hospitality & Culinary Arts (JTHCA)
2020, Vol. 12 (1) pp 279-288

Submit date: 31st July 2019
Accept date: 26th August 2019
Publish date: 29th February 2020

Zaliha Zainuddin[*1]
Salleh Mohd Radzi[2]
Mohd Salehuddin Mohd Zahari[2]
Mohd Hanafi Azman Ong[3]

[1]Faculty of Business, Economics and Social Development
Universiti Malaysia Terengganu, MALAYSIA

[2]Faculty of Hotel and Tourism Management
Universiti Teknologi MARA, MALAYSIA

[3]Faculty of Computer and Mathematical Sciences
Universiti Teknologi MARA, MALAYSIA

zaliha.z@umt.edu.my

Proposed citation:

Zainuddin, Z., Radzi, S. M., Zahari, M. S. M., & Ong, M. H. A. (2020). Perceived destination competitiveness and response behavior: A test of mediation. *Journal of Tourism, Hospitality & Culinary Arts, 12*(1), 279-288.

Abstract

This study intends to investigate the effect of tourist satisfaction towards the relationship of perceived destination competitiveness and response behavior of tourists using 384 tourists who have visited Langkawi Island. By using the Structural Equation Modeling based on Partial Least Square (PLS-SEM) statistical analysis method, the result indicates that, tourist satisfaction gives a mediating effect towards the relationship of perceived destination competitiveness and response behavior.

Keywords:

Perceived destination competitiveness, Tourist satisfaction, Response behavior, Mediating analysis, PLS-SEM

1 Introduction

The purpose of this paper is to examine the perceived destination competitiveness from tourists' perspective. The guiding principle of this study is that the competitiveness of Langkawi Island, Malaysia is dependent upon the perceived tourism image of the island itself. To be specific, this research attempts to identify the factors that are likely to influence tourist perception of destination competitiveness. Through the proposed theoretical model, the relationship between tourists' involvement and perceived destination competitiveness is statistically tested.

In fact, in a highly competitive tourism destination market, tourists' experiences and their opinions and attitudes should be understood in order to enhance the performance of destination products, services, and promote destination development strategies. In this sense, the relationship between Langkawi Island's tourism performance on the local economic and socio-cultural impacts is rather vague. Furthermore, the international tourists' perception of Langkawi Island as a competitive tourism destination is rarely discussed or investigated.

2 Literature Review

According to a short-term data analyzed by region, Asia and the Pacific recorded the highest growth of 7% which is in line with UNWTO's long-term projection of 3.8% growth a year for the period of 2010 to 2020 (United Nation World Tourism Organisation, UNWTO World Tourism Barometer. Vol 14, July 2016). A target of 30 million of tourist arrivals and RM100 billion in revenue are set by the government in line with the 2020 Vision for tourism industry in Malaysia. With the intention of making competitive destinations, some of the popular islands are also included. Langkawi Island, besides Penang and Tioman Island, since its inclusion as a prospective competitive tourist destination in 1975 is one of the popular destinations that is being aggressively developed.

In positioning Langkawi Island as an international tourist destination, the Langkawi Development Authority (LADA) as the local government agency is formed and is responsible to expand the economy and support tourism development in the Island. This government body is operated based on social, economic and physical development of Langkawi Island in line with the central government policies of preserving the natural resources and establishing a conducive environment.

2.1 Perceived Destination Competitiveness

Perceived Destination Competitiveness is defined as the "tourism's holy grail", however, the research on this field is limited and has only emerged since the 1990s (Omerzel-Gomerzelj, D., Mihalic, T. 2008). Researchers have agreed that Ritchie and Crouch's model of tourism destination competitiveness is now "arguably the most comprehensive and most rigorous" of all models of this type that are currently available (Bastic, M., & Gojcic, S. 2011). Adapted based on the Integrated Model of Destination

Competitiveness, the determinants are Inherited Resources, Created Resources and Supporting Factors and Resources (Dwyer, L., & Kim, C. 2003).

2.2 Tourist Satisfaction

Customer satisfaction is a function of customer expectation on the service received. Customers attain satisfaction from the services provided by a destination if the service meets the expectation of quality and is in accordance with the tourist satisfaction. On the other hand, viewing satisfaction as an emotional feeling resulting from an evaluation process may also determine future behavioral intentions (Armenski, T., Gomezelj, D. O., Djurdjev, B., Curcic, N. & Dragin, A. Economic Research. Vol 25 2012). Customers' degree of emotionally-based satisfaction does have a significant effect on their service quality perception, overall satisfaction and future behavioral intentions (Martin, D., O'Neill, M. Hubbard, S., & Palmer, A. 2008)

2.3 Response Behavior

In this sense, favorable behavior intention comes by the ways of saying positive things about all the Perceived Destination Competitiveness attributes, feeling satisfied, revisiting and recommending the destination to others. In this study, the response behavior uses three determinants namely; Revisit Intention, Word-of-Mouth (WOM) and Recommendation (Soderlund, M., & Öhman, N. 2005). Revisit Intention which is commonly characterized by what customers "want" has more impact on the behavior responses compared to when Revisit Intention is represented by customers' expectation (Chen. CF., & Tsai, D. 2007). Traditional WOM happens in the real world through telephone or face-to-face interaction (Ratchford, B.T 2015). However, still 90% of comments about brands occur via traditional WOM such as at home, workplace, or social gathering. Recommendation refers to tourists' recommendation to other tourists and the willingness of the tourists to spend money in the recommended destination (Lee, R., & Lockshin, L. 2012).

2.4 Theoretical Framework

Based on the literature review explained earlier, this study comes with one theoretical model that shows relationships between Perceived Destination Competitiveness, Satisfaction, and Response Behavior (see Figure 1) (Meng, F. 2006). Hence, the following hypotheses are developed:

1) Perceived Destination Competitiveness has a significant relationship towards Satisfaction.

2) Satisfaction has a significant relationship towards Response Behavior.

3) Perceived Destination Competitiveness has a significant relationship towards Response Behavior.

4) Satisfaction mediates the relationship between Perceived Destination Competitiveness and Response Behavior.

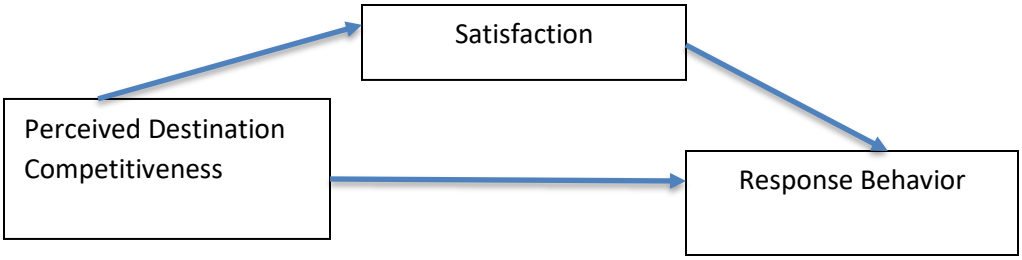

Figure 1: Framework Model

3 Research Methodology

This study employed the quantitative approach using the structured questionnaire to get the required data. The data collections method was by means of self-administered surveys at hotels in Langkawi Island. The measuring instrument was a structured questionnaire. 325 respondents who were hotel guests above the age of 18 years old had stayed in the hotels at least once for the past twelve months.

The Structural Equation Modeling based on Partial Least Square Estimation (i.e. PLS-SEM) statistical technique was used to test the suggested hypotheses using the Smart PLS 2.0 software. Since Perceived Destination Competitiveness and Response Behavior constructs were measured by a number of dimensions (i.e. LOC), hence higher orders construct (i.e. HOC) was applied. Therefore, the two-stage approach statistical technique was employed. This technique worked by using the latent variable scores (i.e. LVS) that were estimated from the first order measurement model, and then using this LVS as an indicator to represent HOC in the second order measurement model (Hair, J.F, Hult, G.T.M., Ringle, C.M., Sarstedt, M. 2014).

The structural model in this second order measurement model was used in testing the proposed hypotheses via 5000 replications of bootstrap analysis 10, 11. In assessing the significant paths of the structural model, Percentile Bootstrap and Bootstrap-t confidence interval were used. The assessment of Variance Accounted For (i.e. VAF) was employed in deciding the effect of mediating. The VAF value was in the range of 20% to 80% could be considered as partially mediating effect, whereas if the VAF value was less than 20%, it could be considered as no mediating effect. The fully mediating effect existed if the VAF value was above 80%. Other researchers also recommended the following procedures to decide the mediating effect. The procedures are:

1) If the path of the independent variable to the dependent variable is not significant and the indirect effect is significant, hence the mediating effect is a full mediating effect.

2) If the path of the independent variable to the dependent variable is significant and the indirect effect is significant, hence the mediating effect is a partial mediating effect.

4 Results and Discussions

4.1 First Order Measurement Model

Table 1 shows that, all indicators that measured the targeted latent variables have passed the minimum threshold of convergent validity criterion which is factor loading above .70 and statistically significant, AVE values above .50. The Composite Reliability and Cronbach's Alpha are also above .70.

Table 1: Convergent Validity for first order measurement model

LV	Indicator	L	AVE	ρ	α
Inherited Resources	inh1	.872*	.723	.954	.945
	inh2	.888*			
	inh3	.880*			
	inh4	.834*			
	inh5	.877*			
	inh6	.840*			
	inh7	.802*			
	inh8	.805*			
Created Resources	cre1	.856*	.724	.955	.946
	cre2	.902*			
	cre3	.795*			
	cre4	.859*			
	cre5	.868*			
	cre6	.832*			
	cre7	.851*			
	cre8	.842*			
Supporting Resources	sup1	.843*	.741	.958	.950
	sup2	.865*			
	sup3	.860*			
	sup4	.892*			
	sup5	.855*			
	sup6	.883*			
	sup7	.842*			
	sup8	.845*			
Satisfaction	trs1	.918*	.822	.970	.964
	trs2	.911*			
	trs3	.936*			
	trs4	.923*			
	trs5	.905*			
	trs6	.888*			
	trs7	.862*			
Revisit Intention	rev1	.972*	.938	.978	.967
	rev2	.972*			
	rev3	.962*			

Word of Mouth	wom1	.957*	.847	.943	.910
	wom2	.951*			
	wom3[a]	.848*			
Recommend	rec1	.849*	.779	.913	.859
	rec2	.910*			
	rec3	.887*			

*Note: LV = Latent Variable; L = Factor Loading; AVE = Average Variance Extracted; ρ = Composite Reliability; α = Cronbach Alpha; this is a reversed coded item; *p <.01.*

The discriminant validity for this model is also valid via the use of the Fornell-Larcker and Cross Loading methods. Hence, the LVS score produced from this model can be used as indicators for the respective HOC in second order measurement model.

4.2 Second Order Measurement Model

Table 2 indicates that all the indicators at this measurement model are also above the minimum recommended threshold of convergent validity (i.e. factor loading value ≥.70, AVE ≥ 0.50, Composite Reliability ≥ 0.70, and Cronbach's Alpha ≥ 0.70)10, 11, 14, hence the second order measurement model has a good validity in the context of convergent validity.

Table 2: Convergent Validity for second order measurement model

LV	Indicator	L	AVE	ρ	α
Perceived Destination Competitiveness	Inherited Resources	.893*	.816	.930	.887
	Created Resources	.915*			
	Supporting Resources	.901*			
Satisfaction	trs1	.918*	.822	.970	.964
	trs2	.911*			
	trs3	.936*			
	trs4	.923*			
	trs5	.905*			
	trs6	.888*			
	trs7	.861*			
Response Behavior	Revisit Intention	.816*	.678	.864	.764
	Word of Mouth	.830*			
	Recommend	.825*			

*Note: LV = Latent Variable; L = Factor Loading; AVE = Average Variance Extracted; ρ = Composite Reliability; α = Cronbach Alpha; *p <.01.*

For the discriminant validity, all latent variables in this measurement model are totally discriminating towards each other since it passes the criterion of Fornell-Larcker method (i.e. Table 3), where the values of the off-diagonal elements are smaller than the value of the square root of AVE15. The assessment of Cross Loading method (i.e. Table 5) also shows the same conclusion, where all of the indicators are highly loaded

towards their respective latent construct compared to other latent constructs (Hair, J.F, Hult, G.T.M., Ringle, C.M., Sarstedt, M. 2014)

Table 3: Fornell-Larcker discriminant validity for the second order measurement model

LV	(1)	(2)	(3)
(1)	**.903**		
(2)	.691	**.907**	
(3)	.511	.472	**.823**

Note: LV = Latent Variable; (1) = Perceived Destination Competitiveness; (2) = Satisfaction; (3) = Response Behavior; the value in the diagonal (bold) is a square root of the AVE of each latent variable and the off-diagonal element value is the inter correlation value between latent variable.

Table 4: Cross-Loading discriminant validity for the second order measurement model

Indicator	(1)	(2)	(3)
Inherited Resources	**.893**	.608	.464
Created Resources	**.915**	.614	.463
Supporting Resources	**.901**	.649	.457
trs1	.634	**.918**	.438
trs2	.649	**.911**	.411
trs3	.632	**.936**	.472
trs4	.630	**.923**	.439
trs5	.615	**.905**	.393
trs6	.608	**.888**	.410
trs7	.614	**.861**	.428
Revisit Intention	.445	.395	**.816**
Word of Mouth	.430	.433	**.830**
Recommend	.379	.327	**.825**

Note: (1) = Perceived Destination Competitiveness; (2) = Satisfaction; (3) = Response Behavior.

4.3 Structural Model

Table 5 shows that Perceived Destination Competitiveness (f^2 = .912) has a large effect size towards Satisfaction. However, both exogenous constructs which are Perceived Destination Competitiveness (f^2 = .088) and Satisfaction (f^2 = .039) give a small effect size towards Response Behavior. On the other hand, the predictive relevance effect can be considered adequate, since the magnitudes of the q^2 of each exogenous construct towards targeted endogenous construct are above zero. Furthermore, Perceived Destination Competitiveness is able to explain about the 47.7% of variance towards Satisfaction. In addition, about 28.8% of Response Behavior total variation are explained by both exogenous constructs (Hair, J.F., Ringle, C.M., & Sarstedt, M. 2011).

Table 5: Effect size (f^2) and Predictive Relevance (q^2) of endogenous latent variables of structural model

	f^2	q^2	Remark
Endogenous: Satisfaction			
Exogenous: Perceived Destination Competitiveness	.912	.637	Large
Endogenous: Response Behavior			
Exogenous: Perceived Destination Competitiveness	.088	.049	Small
Exogenous: Satisfaction	.039	.016	Small

Table 6 indicates that Perceived Destination Competitiveness has a positive and significant direct effect towards Satisfaction ((β)̂ = 0.691, t = 26.58, p <.01) and also Response Behavior ((β)̂ = 0.353, t = 579, p <.01). Besides that, Satisfaction ((β)̂ = 0.228, t = 3.51, p <.01), is also found having a positive significant direct effect towards Response Behavior. It is also supported by the results of Bootstrap-t and Percentile Bootstrap confidence interval, where both bootstrap confidence intervals do not include zero for each tested path.

Table 6: Path Coefficients of Structural Model

Path	β	SE	t-value	Bootstrap-t	Percentile Bootstrap
PDC → SAT	0.691	0.026	26.58*	(0.564, 0.818)	(0.637, 0.740)
SAT → RB	0.228	0.065	3.51*	(0.108, 0.348)	(0.097, 0.355)
PDC → RB	0.353	0.061	5.79*	(0.302, 0.404)	(0.235, 0.476)

*Note: PDC = Perceived Destination Competitiveness; SAT = Satisfaction; RB = Response Behavior; β = Standardized Path Coefficient; the results of Bootstrap-t and Percentile Bootstrap are based on 95% bootstrap confidence interval with 5000 replications; *p <.01*

4.4 Mediating Effect

The indirect effect assessment confirms that Satisfaction mediates the relationship between Perceived Destination Competitiveness and Response Behavior. It is because the indirect path of PDC→ SAT → RB is significant (Indirect effect Coefficient = 0.158, t = 3.49, p <.01) and this result is supported by both results of bootstrapping analysis.

Table 7: Indirect Effect Assessment

Path	IEC	t-value	Bootstrap-t	Percentile Bootstrap	VAF (%)
PDC → SAT → RB	0.158	3.49*	(0.069, 0.246)	(0.067, 0.246)	44.63

*Note: PDC = Perceived Destination Competitiveness; SAT = Satisfaction; RB = Response Behavior; IEC = Indirect Effect Coefficient; VAF = Variance Accounted For; the results of Bootstrap-t and Percentile Bootstrap are based on 95% bootstrap confidence interval with 5000 replications; *p <.01.*

The effect of Satisfaction towards the relationship between Perceived Destination Competitiveness and Response Behavior can be categorized as partial mediating effect since the VAF (VAF = 44.63%) is in the range of 20% to 80%. Hence, it can be concluded

that Satisfaction is a mediator variable, giving an effect about 44.63% towards the relationship between Perceived Destination Competitiveness effect and Response Behavior.

5 Conclusions

This study has successfully developed and validated Satisfaction as a mediator that gives an effect of 44.63% towards the relationship between Perceived Destination Competitiveness and Response Behavior. The finding of this paper provides valuable insights for tourist stakeholder especially Langkawi Development Authority (LADA), Malaysia Tourism Promotion Board, Ministry of Tourism Art and Culture, and other industry players for better promotional strategies for Langkawi Island. The posted recommendation at the end of this research provides insight and guidelines for them. Finally, this study contributes on the extension of practical applications of PLS-SEM techniques in the field of tourism studies.

6 About the authors

Dr Zaliha Zainuddin holds a PhD (Hotel and Tourism Management) from UiTM Shah Alam, Malaysia with 30 years of experience in the tourism industry. Her previous position as the Regional Director at Tourism Malaysia East Coast Office in Kuantan, Pahang tasked her in marketing planning and promoting East Coast product highlights. Additionally, this also allowed her to work closely with the state tourism, tourism industry players, hoteliers, airlines, universities, and also National Tourism Associations. Based in Hong Kong, she served more than four years as a Tourism Director supervising Hong Kong, Shenzhen, and Macau. From 2013 until 2016, she was the Head Unit that managed marketing strategies and roadshow of East and North Asia market. After retiring from her position as a Regional Director, she is now the Head Program of Tourism in the Faculty of Business, Economics and Social Development at Universiti Malaysia Terengganu.

Professor Dr Mohd Salehuddin Mohd Zahari, is a Dean in the Faculty of Hotel and Tourism, Univeristy Teknologi MARA, Malaysia. He has vast teaching experience under/postgraduates for the last 30 years. His research interest covers the area of sustainable tourism, culinary, gastronomy, tourists' behavior, tourist destination and more other subject matter. He has been engaged by many international bodies during his work.

Dr. Salleh Mohd Radzi is an Associate Professor in the Faculty of Hotel and Tourism Management, University Teknologi MARA, Malaysia, where he started her career more than 30 years as a lecturer. He received his PhD from Universiti Putra Malaysia. His research interest is in the area of quality, hotel, gastronomy, tourists' behavior, tourist destination and sustainable tourism.

Mohd Hanafi Azman Ong, is a Statistic lecturer at Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA, Johore.

7 References

Armenski, T., Gomezelj, D. O., Djurdjev, B., Curcic, N. & Dragin, A. Economic Research. Vol 25 (2012) No 2 (485-502).

Bastic, M., & Gojcic, S. (2011). The ecological motivation of tourists as a determinant of the tourists' loyalty. In Z. Babic, L. Neralic, S. Pivac & J. Arneric (eds.), Croation Operational Research Review (Vol. 2, pp. 14-22).

Chen. CF., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions? Tourism Management, 28, 1115-1122.

Cohen, S.A.; Prayag, G. & Moital, M. (2013). Consumer behaviour in tourism concepts, influences and opportunities. Current Issues in Tourism, 17 (10). pp. 872-909.

Dwyer, L., & Kim, C. (2003). "Destination Competitiveness, Determinants and Indicators." Current Issues in Tourism, 6(5), 369-414.

Hair, J.F, Hult, G.T.M., Ringle, C.M., Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks: SAGE Publications.

Hair, J.F., Ringle, C.M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. *Journal of Marketing Theory and Practice, Vol. 19* (2), 139-151.

Iacobucci, D., Saldanha, N., & Deng, X. (2007). A meditation on mediation: Evidence that structural equation models perform better than regression. *Journal of Consumer Psychology, Vol. 7*(2), 140-154.

Lee, R., & Lockshin, L. (2012). Reverse country-of-origin effects of product perceptions on destination image. *Journal of Travel Research, 51*(4), 502– 511.

Meng, F. (2006). An examination of destination competitiveness from the tourist's perspective: The relationship between quality of tourism experience and perceived destination competitiveness Ph.D. Virginia Polytechnic Institute and State University.

Martin, D., O'Neill, M. Hubbard, S., & Palmer, A. (2008). The role of emotion in explaining consumer satisfaction and future behavioral intention. *Journal of Service Marketing, 22* (3), 224-236.

Omerzel-Gomerzelj, D., Mihalic, T. (2008). Destination competitiveness – Applying different models, the case of Solvenia, Tourism Management. 29(2), 294-307

Ratchford, B.T (2015). Some Directions for Research in Interactive Marketing, *Journal of Interactive Marketing, 29*, v-vii.doi: 10.1016/j.intmar.2015.01.001.

United Nation World Tourism Organisation, UNWTO World Tourism Barometer. Vol 14, July 2016. [Press Release] Retrieved from http://mkt.unwto.org/em/barometer.

Soderlund, M., & Öhman, N. (2005). Assessing behavior before it becomes behavior: An Examination of the role of intentions as a link between satisfaction and repatronizing behavior. *International Journal of Service Marketing Management, 16*(2), 169-185.