Examining the structural relationships of destination image, perceived value, tourist satisfaction and loyalty: case of Mauritius

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Abstract

Tourists’ perceptions of destination image, perceived value, tourist satisfaction and loyalty are vital for successful destination marketing. The literature on travel and tourism reveals an abundance of studies on destination image, perceived value and tourist satisfaction, however their relationships with destination loyalty have not been thoroughly investigated in small island destination. Consequently, the aim of the study was to investigate the relationship among destination image and perceived value and to empirically test the constructs that are likely to influence tourist satisfaction, which in turn affect tourist loyalty. The conceptual model was developed on the basis of existing theoretical and empirical research in the fields of marketing and tourism. The empirical data was collected in an island tourism destination - Mauritius. A total of 370 questionnaires were returned and the data were analysed using Structural Equation Modelling (SEM). The theoretical and managerial implications were drawn based on the study findings, and recommendations for future researchers were made.

Keywords: destination image, perceived value, tourist satisfaction, destination loyalty, Mauritius

1. Introduction

Destination image has become a popular area of investigation among tourism researchers as it has been found to influence destination choice, satisfaction, and post-purchase behaviour (Chon, 1990; Um & Crompton, 1990; Echtner & Ritchie, 1991; Oppermann, 2000; Bigné, Sánchez, & Sánchez, 2001; Echtner & Ritchie, 2003; Chen & Tsai, 2007; Castro, Armario, & Ruiz, 2007; Chi & Qu, 2008; Prayag, 2009; Zhang et al., 2014). Destinations are

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compelled to enhance their images in order to increase tourism receipts, income, employment and government revenues among other contributions of international tourism. Destination image is therefore seen as a critical factor in tourists’ final evaluation of a destination (Cai, Wu, & Bai, 2004; Castro et al., 2007) and their future behaviour (Bigné et al., 2001; Yoon & Uysal, 2005). A review of the tourism literature shows that destination image and its relationship with satisfaction and behavioural intentions have attracted much academic interest (Chen & Tsai, 2007; Chi & Qu, 2008; Prayag, 2009). Understanding and predicting tourists’ intentions to revisit specific destinations are important. Despite the increased interest in destination image, the interrelationships between the attributes of destination image, tourist satisfaction and tourist behavioural intentions in the context of an island destination have not been sufficiently researched. It is therefore important to extend the findings of destination image to different destination settings to broaden the understanding of these causal relationships.

In the marketing literature, perceived value has been characterised as key to explaining consumer behaviour (Ostrom & Iacobucci, 1995; Oh, 2000; Petrick, 2004). Yet perceived value of tourist destination is not well explored (Petrick, 2004; Chen & Tsai, 2007; Pandža Bajs, 2013). The current study thus extends the existing destination marketing literature by presenting an integrated model that could shed new light on the understanding of the antecedents and consequences of destination image towards tourist perceived value, satisfaction and destination loyalty.

By understanding the causal relationships between destination image, perceived value, tourist satisfaction and loyalty, destination tourism managers would better know how to build an attractive image and improve their marketing efforts to maximize the effective use of their resources. This study therefore proposed a model which investigated the relationships between destination image, perceived value and tourist satisfaction to predict loyalty in an island destination. The theoretical model was tested with structural equation modelling (SEM).

2. Conceptual background and hypotheses

Destination image can be defined as a tourist’s general impression of a destination (Fakeye & Crompton, 1991), that is, it is ‘sum of beliefs, ideals and impressions’ that a visitor has toward a certain place (Kotler, Bowen & Makens, 1996; Baloglu & McCleary, 1999; Kozak & Andreu, 2006; Assaker & Hallak, 2013). The image is a portrayal of the visitor’s attitude towards a number of cues related to the destination attributes (Echtner & Ritchie, 2003). Destination image in the mind of the visitors plays an important role in their travel purchase decisions and subsequently, stimulating their visiting intentions (Oppermann, 2000; Pike, 2004). The main elements considered by visitors in a destination are natural and scenic resources, accessibility, cultural resources, security, night life and entertainment, and quality/price ratio (Bigné et al., 2001; Chen & Tsai, 2007; Chi & Qu, 2008). Milman & Pizam (1995) describe the destination image as consisting of three components: the product, for instance the quality of the attraction; the second one as the behaviour and attitude of the destination hosts; and thirdly the environment: weather, scenery, and facilities. Island destinations are immersed in images of the “exotic” associated including both tangible and intangible elements such as pristine beaches, white sand, blue sea, rivers, landscape, biodiversity, brown skin and colourful culture to attract Western visitors (Lockhart, 1997; Prayag, 2009; Seebaluck, Naidoo & Ramseook-Munhurrurun, 2013). Beaches are considered as one of the major attractions of the tourism industry and are one of the most important motivators for tourists to visit island destinations (Philips & House, 2009; Prayag & Ryan, 2011).

Most marketing strategies aim to create an image or reinforce positive images in the mind of the visitors within the target market (Chon, 1990; Pike, 2004). Customer loyalty is an important goal in the consumer marketing community as it is a key component for a company’s long-term viability or sustainability. Chen & Tsai (2007) found that destination image indirectly influences satisfaction via the trip quality–perceived value path and has both direct and indirect effects on behavioural intentions. Chi & Qu (2008) developed a conceptual model to explain destination loyalty by examining the causal relationships among destination image, tourist attribute and overall satisfaction and destination loyalty. Their results supported the proposed destination loyalty model, which advocated that destination image directly influenced attribute satisfaction; destination image and attribute satisfaction were both direct antecedents of overall satisfaction; and overall satisfaction and attribute satisfaction in turn had direct and positive impact on destination loyalty. However, their study did not examine the effect of tourists’ perceived value on the destination loyalty model. Based on the review, the first three hypotheses, therefore, would be:

H1. The higher the destination image, the higher the perceived value
H2. The higher the destination image, the higher the tourist satisfaction
H3. The higher the destination image, the higher the tourist loyalty

Perceived value is defined as “the consumer’s overall assessment of the utility of a product or service based on perceptions of what is received and what is given” (Zeithaml, 1988). Similarly, Lovelock (2000) defined perceived value as the trade-off between perceived benefits and perceived costs. Perceived value is considered as a key construct in relationship marketing and for gaining competitive edge (Ravald & Gronroos, 1996; McDougall & Levesque, 2000). Previous studies have recognised that perceived value and satisfaction as the antecedents of behavioural intentions (McDougall & Levesque, 2000; Parasuraman & Grewal, 2000; Petrick, 2004; Chen & Tsai, 2007). Research studies suggested that perceived value may be a better predictor of repurchase intentions than satisfaction (Oh, 1999; Cronin et al., 2000; Chen & Chen, 2010). The study of Lee et al. (2007) found that perceived value is the best predictor of behavioural intentions. More recently, Pandža Bajs (2013) found that tourists’ perceived value directly affects their satisfaction, while satisfaction has a direct impact on their future behavioural intentions toward the destination. Based on the above discussion, the fourth and fifth hypotheses, therefore, would be:

H4. The higher the perceived value, the higher the tourist satisfaction
H5. The higher the perceived value, the higher the tourist loyalty

Customer satisfaction has received much attention in the marketing literature. Satisfaction is defined as customers’ judgments about products or service fulfilment (Oliver, 1993; 1997). One of the key elements of destination marketing success is tourist satisfaction because it influences the choice of destination and the decision to revisit (Kozak & Rimmington, 2000; Yoon & Uysal, 2005). Loyalty signals customers’ attitudes and behaviours towards the products and services received and their repeat usage (Shoemaker & Lewis, 1999; Baker & Crompton, 2000). Past studies have confirmed the relationship between customer satisfaction and loyalty (Taylor & Baker, 1994; McDougall & Levesque, 2000; Cronin et al., 2000). It is therefore important to examine the concept of image and its relation to the satisfaction obtained in order to determine visitors’ intentions to revisit and to recommend the destination (Bigné et al., 2001; Cai et al., 2004; Yoon & Uysal, 2005). A number of studies in the field of tourism found satisfaction has an influence on tourists’ future behavioural intentions (Baker & Crompton, 2000; Petrick, 2004; Chen & Tsai, 2007; Chi & Qu, 2008; Prayag & Ryan, 2012). Positive travel experiences in term of services, products and other resources provided by the destination could induce positive word-of-mouth (WOM) recommendations as well as repeat visits (Oppermann, 2000; Yoon & Uysal, 2005; Chi & Qu, 2008). Therefore, it would be postulated that:

H6: The higher tourist satisfaction, the higher the tourist loyalty

The conceptual model of this study is proposed in Figure 1. The proposed model concurrently investigates the relationships of destination image, perceived value, satisfaction and destination loyalty. The model also posits that destination image, perceived value and satisfaction all have directional relationships with each other and also serve as antecedents to destination loyalty. Each of the components in the model is defined as follows:

**Destination image:** the tourist’s subjective perception of the destination reality (Chen & Tsai, 2007; Chi & Qu, 2008)

**Perceived value:** the tourist’s overall evaluation of the destination based on benefits acquired (Bolton & Drew, 1991; Chen & Tsai, 2007)

**Tourist satisfaction:** the tourists’ overall evaluation and contentment felt of the destination experience, fulfilling their desires, expectations and needs (Fakeye & Crompton, 1991; Kozak & Rimmington, 2000; Echtner & Ritchie, 2003; Chen & Tsai, 2007)

**Loyalty:** the tourists’ intentions to revisit the destination and in their willingness to recommend it (Oppermann, 2000; Chen & Tsai, 2007).
3. Research Methodology

3.1 Questionnaire Design

A questionnaire was designed as the survey instrument including all constructs of the proposed model to investigate the hypotheses of interest. The questions in the questionnaire were based on a review of the literature and specific destination characteristics. A total of 23 items were extracted from previous research (Chen & Tsai, 2007; Chi & Qu, 2008) and adapted to the research context. Perceived value was measured with three items relating to functional value such as “visiting the place is reasonably priced”, “while visiting the place, I received good service” and “visiting the destination is valuable and worth it” (Bolton & Drew, 1991; Chen & Tsai, 2007). Three items were adopted to measure tourist satisfaction based on previous studies (Fakaye & Crompton, 1991; Kozak & Rimmington, 2000; Bignè et al., 2001; Echtner & Ritchie, 2003; Chen & Tsai, 2007; Chi & Qu, 2008; Prayag & Ryan, 2012) and adapted for this research. Destination loyalty was finally captured using 2 items: “tourists’ intention to revisit Mauritius” and “their willingness to recommend Mauritius as a favourable destination to others” and the items were adapted for this study (Oh, 2000; Chi & Qu, 2008). Respondents were asked to indicate their degrees of agreement with each item for each construct along with a 5-point Likert-type scale (1 = strongly disagree and 5 = strongly agree). Respondents’ demographic information including age, gender, marital status, occupation and monthly income were also measured using the categorical scale. The survey instrument was revised and finalised based on a pilot sample of 25 international tourists and feedback from two academics in the tourism field. Hence, the content validity of the survey instrument was deemed as adequate.

3.2 Data Collection

The empirical research for the current study was conducted in the island of Mauritius. The island, covering 1,860 square kilometers (720 square miles) with 1.2 million inhabitants, is a well-known holiday destination for beach-resort tourists in the Indian Ocean. It has a range of positive features upon which its tourism appeal is established including its tropical climate with beaches, lagoon, tropical fauna and flora, as well as a multi-ethnic population. Data were collected over a four-week period between September and October 2013. The study was conducted at the international airport among 500 tourists originating mainly from France, United Kingdom, Germany, Belgium, Italy, Switzerland, South Africa and India. Only departing tourists were surveyed as they would be in a better position to express their views based on their experiences with several aspects of the destination. The international tourists were approached and briefly explained the purpose of the research, and subsequently they were invited to participate in the survey. Applying the convenient sampling technique, a total number of 500 questionnaires were distributed to the tourists who were over 18-years old and keen to complete the questionnaire. A total of 370 usable samples were obtained, resulting in a response rate of 74%.

The percentage of females was higher than males with 56.1% and 43.9% respectively although the tourists were approached with no gender discrimination. However, when groups of mixed genders were approached, the female
was delegated to complete the questionnaire as they were keener to respond as compared to males. The respondents’ age ranged from 18 to 58 years old and above and the majority of them were aged between “28 – 37” and “38 – 47”. It was further observed that 56.7% of the respondents were on their first visit, 43.3% were repeaters among which 17.0% had visited the island twice and were on their third visit. It can be noted that the largest segment came from United Kingdom (37.4%), followed by France (26.4%), South Africa (21.4%) and Australia (12.1%) and this is primarily due the high frequency of flights departing for these countries at the time the survey was carried out.

3.3 Data Analysis

The data was analyzed using factor analysis (principal component analysis) with Varimax rotation to identify the underlying dimensions for destination image and to examine its dimensionalities and psychometric properties. The relationships of destination image, the evaluative factors (i.e. perceived value and satisfaction), and loyalty were then empirically tested using confirmatory factor analysis (CFA) and SEM.

4. Empirical results

To explore the dimensions underlying the destination image, exploratory factor analysis was used. Employing the principal components factor analysis with Varimax rotation, five factors with a cut-off factor loading of 0.5 and an eigenvalue greater than one explained 53.3% of the variance of destination image scale (Hair et al., 2005). The KMO measure of sampling adequacy of 0.875 and Bartlett’s test of sphericity ($X^2 = 3206.67, p = 0.000$) confirmed suitability of the data for factorization. Table 1 presents the five factors which were titled ‘travel environment’ (four items, $\alpha = 0.671$, eigenvalue = 2.85, variance explained = 12.39%), ‘attractions’ (five items, $\alpha = 0.724$, eigenvalue = 2.74, variance explained = 11.92%), ‘events’ (five items, $\alpha = 0.727$, eigenvalue = 2.48, variance explained = 10.77%), ‘infrastructure’ (five items, $\alpha = 0.715$, eigenvalue = 2.40, variance explained = 10.43%) and ‘sport’ (four items, $\alpha = 0.698$, eigenvalue = 1.78, variance explained = 7.74%).

<table>
<thead>
<tr>
<th>Table 1. Factor Analysis of Destination Image</th>
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<tbody>
<tr>
<td>Factor/Item</td>
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<tr>
<td>Travel Environment ($mean = 4.10$)</td>
</tr>
<tr>
<td>Safe and secure environment</td>
</tr>
<tr>
<td>Clean and unpolluted environment</td>
</tr>
<tr>
<td>Friendly and helpful host community</td>
</tr>
<tr>
<td>Peaceful and restful atmosphere</td>
</tr>
<tr>
<td>Attractions ($mean = 3.87$)</td>
</tr>
<tr>
<td>Good and sandy beaches</td>
</tr>
<tr>
<td>Unspoiled wilderness and fascinating wildlife</td>
</tr>
<tr>
<td>Exotic places</td>
</tr>
<tr>
<td>Spectacular scenery and natural attractions</td>
</tr>
<tr>
<td>Scenic mountains</td>
</tr>
<tr>
<td>Events ($mean = 3.61$)</td>
</tr>
<tr>
<td>Distinctive history and heritage</td>
</tr>
<tr>
<td>Variety of entertainment</td>
</tr>
<tr>
<td>Tempting cultural events and festivals</td>
</tr>
<tr>
<td>Colourful nightlife</td>
</tr>
<tr>
<td>Large selection of restaurants and cuisines</td>
</tr>
<tr>
<td>Infrastructure ($mean = 3.86$)</td>
</tr>
<tr>
<td>Wide variety of shopping facilities</td>
</tr>
<tr>
<td>Wide selection of restaurants/cuisine</td>
</tr>
<tr>
<td>Wide choice of accommodations</td>
</tr>
<tr>
<td>No language barrier for visitors</td>
</tr>
<tr>
<td>Signs and indicators are properly displayed over the island destination</td>
</tr>
<tr>
<td>Sport ($mean = 3.65$)</td>
</tr>
<tr>
<td>Exciting water sports and activities</td>
</tr>
<tr>
<td>Terrific place for hiking and picnicking</td>
</tr>
<tr>
<td>Opportunities for outdoor recreation over the island</td>
</tr>
<tr>
<td>Good facilities for golfing</td>
</tr>
</tbody>
</table>

*Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA)= 0.875; Bartlett’s Test of Sphericity = 3206.67; p < 0.01*
The mean for each of the factors was also estimated. Cronbach’s coefficient for each factor was calculated and subjected to reliability assessment. The factors were moderately reliable with Cronbach’s alpha coefficients ranging from a low of 0.671 for factor 1 to a high of 0.727 for factor 3 (Table 1). These five constructs measuring destination image were thus included in the estimation of the measurement and structural models.

Since the destination image was developed from the literature, content validity is thus assumed. However, the convergent validity of the scale was tested using CFA. The construct reliability (CR) and the average variance extracted (AVE) were therefore computed for the latent constructs. All the four constructs exceeded the threshold value of 0.70 and 0.50 for both the CR and AVE respectively. The results were as follows: destination image (CR = 0.79; AVE = 0.55), perceived value (CR = 0.81; AVE = 0.56), satisfaction (CR = 0.75; AVE = 0.53) and loyalty (CR = 0.80; AVE = 0.56). The overall fit of the structural model is firstly verified by examining the $\chi^2$ statistics. A significant $\chi^2$ statistic demonstrates an inadequate fit, but this statistic is sensitive to sample size (n = 370 in this study) and model complexity (Hu & Bentler, 1999). Therefore, rejecting the model only on the basis of this evidence is not appropriate. Therefore, the ratio of $\chi^2$ over d.f. has been recommended as a better goodness of fit than $\chi^2$ (Hair et al., 2005). The $\chi^2$/d.f ratio is 1.874 (below 3) with 59 d.f., indicating a good fit. The other indicators of goodness of fit are GFI = 0.970, AGFI = 0.948, PGFI = 0.627, NFI = 0.940, CFI = 0.971, RMR = 0.021, RMSEA = 0.043. All the model-fit indices exceeded the respective common acceptance levels (Hu & Bentler, 1999), indicating that the hypothesised model fits the empirical data well.

Structural equation modelling using AMOS was used to test the hypothesised model. This study examined the structural model with one exogenous construct (i.e. destination image) and three endogenous constructs (i.e. perceived value, satisfaction and loyalty). The estimates of the structural coefficients provide the basis for testing the proposed hypotheses. The destination image has a significant and positive effect on both perceived value and satisfaction ($\gamma_1 = 0.83$, t-value = 10.59, p < 0.01, and $\gamma_2 = 0.46$, t-value = 3.17, p < 0.01, respectively), thus supporting H1 and H2. However, the path of destination image on destination loyalty is not supported (H3). Perceived value, as hypothesised, has a significant and positive influence on satisfaction ($\beta_1 = 0.65$, t-value = 7.41, p < 0.01), thus supporting H4. Due to its insignificance on structural coefficient, however, the hypothesis of perceived value has a positive effect on loyalty is not supported (H5). Finally, satisfaction has a significantly positive influence on loyalty ($\beta_2 = 0.86$, t-value = 10.84, p < 0.01), supporting H6. The study shows that the path “destination image \(\rightarrow\) perceived value \(\rightarrow\) satisfaction \(\rightarrow\) loyalty” can be established. Table 2 reports the results of the hypothesis tests. The direct effect of destination image on perceived value (0.83) is greater than the effect on satisfaction (0.46), while no direct effect of destination image on loyalty is found. With respect to indirect effects, the effect of destination image on loyalty is mediated by satisfaction.

Table 2. Summary of hypotheses testing results

<table>
<thead>
<tr>
<th>Path</th>
<th>Structural coefficients</th>
<th>Standard Error</th>
<th>t-value</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Destination Image</td>
<td>Perceived value</td>
<td>0.83</td>
<td>0.092</td>
<td>10.59*</td>
</tr>
<tr>
<td>H2: Destination Image</td>
<td>Satisfaction</td>
<td>0.46</td>
<td>0.098</td>
<td>3.17*</td>
</tr>
<tr>
<td>H3: Destination Image</td>
<td>Loyalty</td>
<td>0.65</td>
<td>0.073</td>
<td>7.41*</td>
</tr>
<tr>
<td>H4: Perceived value</td>
<td>Satisfaction</td>
<td>0.65</td>
<td>0.182</td>
<td>0.82</td>
</tr>
<tr>
<td>H5: Perceived value</td>
<td>Loyalty</td>
<td>0.65</td>
<td>0.073</td>
<td>7.41*</td>
</tr>
<tr>
<td>H6: Satisfaction</td>
<td>Loyalty</td>
<td>0.86</td>
<td>0.085</td>
<td>10.84*</td>
</tr>
</tbody>
</table>

Note: * denotes p < 0.01

5. Discussion and Conclusion

With the expansion of the global tourism industry, island destinations are competing in the international market place. The purpose of this study was to develop a conceptual model for destination image and validate its structure in an island destination such as Mauritius. It is important to gain better understanding of international tourists’ perceptions of destination image, why they are loyal to a destination and why drives the loyalty. The exploratory and confirmatory factor analyses revealed that destination image is composed of five underlying dimensions (travel environment, attraction, events, infrastructure and sport). This study provides strong evidence to support the notion that destination image directly affects perceived value and satisfaction, while only satisfaction directly affects loyalty. Therefore, the structural path between satisfaction and loyalty is consistent with the literature (Bigné et al., 2001; Chen & Tsai, 2007; Chi & Qu, 2008; Prayag & Ryan, 2012). Chen & Tsai (2007) found no relationship...
between destination image and perceived value, this study confirms otherwise. This study does not establish any significant direct relationship between destination image and loyalty, unlike the study of Zhang et al. (2014). However, the current study shows that destination image indirectly influences loyalty through perceived value and satisfaction respectively, as a moderating variable. This finding confirms the arguments of previous studies (Pandža Bajs, 2013). In addition, tourists’ perceived value directly affect their satisfaction, while satisfaction has a direct impact on their loyalty toward the destination. In this study, satisfaction is a mediator between the perceived value and loyalty. Similarly, other studies in the field of tourism pointed out that satisfaction is a mediator between the perceived value and loyalty (Lee et al., 2007; He & Song, 2008; Bradley & Sparks, 2012). These findings demonstrate that tourists considered visiting Mauritius to be valuable and have made a correct decision to choose this destination. Perceived value is thus found to play a significant role in affecting the level of tourist satisfaction. The more valuable the tourists perceive their travel experiences in the island, the higher their satisfaction levels with the destination, and consequently, influencing their intentions to revisit and their willingness to recommend the island destination to others.

The current study shows that both destination image and perceived value are direct determinants of satisfaction. The results of this study offer a better insight into destination image and tourist consumer behaviour by trying to ascertain which constructs are most influential in the likelihood of revisiting and recommending a destination. Destination managers and marketers in Mauritius should continually work on the destination image in terms of quality of travel environment, attraction, infrastructure, event and sport, thus increasing the perceived value of the island destination and ensuring that the tourists are highly satisfied. Island destination managers should take note of the significant role of image and value in stimulating tourists’ satisfaction and their loyalty, which triggers tourists to visit the destination again and also recommend the destination to others. Establishing high levels of tourist satisfaction in island destination is important in order to create positive future behavioural intentions, thus improving and sustaining the destination competitiveness. Consequently, destinations must chart out more efficient and effective marketing strategies and service delivery to meet tourists’ expectations and needs aimed at improving the tourists’ travel experiences.

This study has several limitations that need to be acknowledged. First, the results of this study cannot be applied conclusively to other island destinations as the population for the study was limited to tourists who have visited Mauritius. To be able to generalize the findings of this study, similar studies can be replicated in other island destinations. Secondly, the measurement scales employed were adapted from existing scales created for tourism destinations and the minor modifications might not be enough when applying them to an island destination. Therefore, an exploratory analysis is necessary in this area. In addition, examining perceived destination image of both the first-time and return visitors could be considered in future research. It would be important to examine how first and previous travel experience can affect tourists’ perceptions of destination image and their effect on perceived value, satisfaction and loyalty. Finally, tourist demographics are receiving increased attention in the destination literature given that the demographics of the travel market are changing and may have an influence on destination image and tourists’ behaviours. Therefore this study can be extended to investigate the effects of tourist demographics on destination image and their behaviour.

References


