INFLUENCE OF DESTINATION ATTRACTIVENESS ON PLACE SATISFACTION AND ENVIRONMENTALLY RESPONSIBLE BEHAVIOUR IN MARINE PARKS

NADZIRAH MOHAMMED1, YUHANIS ABDUL AZIZ2*, KHAIRIL WAHIDIN AWANG3 AND ZAITON SAMDIN4

1Department of Management and Marketing, Faculty of Economics and Management, 2Department of Management and Marketing, Faculty of Economics and Management, UPM, 43400 UPM Serdang, Selangor, Malaysia, 3Faculty of Hospitality, Tourism and Wellness, Universiti Malaysia Kelantan, 16100 Kota Bharu, Kelantan, Malaysia. 4Department of Economics, Faculty of Economics and Management, 43400 UPM Serdang, Selangor.

*Corresponding author: yuhanis@upm.edu.my

Abstract: Malaysia is well known as one of the 12 mega biodiverse countries in the world. In order to leverage the existing tourism product, the government has made some of the islands in Malaysia as official Marine Parks. The responsibilities of Marine Parks are to protect and manage the marine ecosystem systematically in order to market Malaysia as a nature hub. It is where tourist’s positive environmental behaviour plays an important role in sustaining the destination. However, tourism activities have impacted the nature of the Marine Parks and there are also negative reviews from the tourists regarding the landscape, services and safety in Malaysia’s Marine Park. In relation to this, it is important to understand the tourists’ attitude and behaviour on ecological issues as it can limit the environmental problems. The objective of this study is to examine the relationship between destination attractiveness, place satisfaction and environmentally responsible behaviour of tourists in Marine Parks. A survey had been conducted on selected Marine Parks of Malaysia which are Tioman Island, Payar Island, Redang Island and Perhentian Island. Data was collected from 275 tourists who visited these Marine Parks. This study uses descriptive statistics to identify the information of tourists’ profile and Structural Equation Modelling (SEM) to examine the relationships of the variables. Results show that destination attractiveness affects environmentally responsible behaviour of tourists in the Marine Parks through place satisfaction. It indicates that tourists who are satisfied with the Marine Park attractiveness tend to commit environmentally responsible behaviour. Thus, this will assist in enhancing the destination marketing strategy as well as sustaining the destination through identifying current tourists’ experience in Marine Parks. The paper ends with discussions and suggestions for future empirical research.

Keywords: Marine Park, destination attractiveness, satisfaction, environmental responsible behaviour, sustainability.

Introduction

The tourism industry has had a tremendous growth in the economic aspect. According to Malaysian Prime Minister, Dato’ Sri Mohd Najib bin Tun Abdul Razak, the tourism industry plays a crucial role in transforming Malaysia into a high-income country by 2020. In line with that, the government has acknowledged tourism industry as one of the National Key Economic Area (NKEA) which means that Malaysia is in the positive direction of creating a tourism destination, particularly for eco and heritage tourism by improving tourism products (Malaysia Plan, 2010). As Malaysia is in the phase of diverging and enhancing the tourism products, there are a lot of initiatives done by the government to ensure the variety of tourism destinations are able to boost Malaysia’s tourism in vast ways. Besides, Malaysia is one of the countries that has been blessed with the beauty of nature. In 2013, Malaysia has been awarded as most charming Asian island destination by New Voyage Magazine. The Cable News Network (CNN) has also listed Perhentian Kecil
Island and Tioman Island as among the world’s top 50 beaches (Ministry of Tourism and Culture Malaysia, MOTAC, 2015). These awards have benefited Malaysia to plan tourism strategies in order to promote Malaysia’s specialty. In order to sustain the island environment, there are some islands that have been established as Marine Parks under government’s protection. These islands are Payar Island Marine Park in Kedah, Redang Island Marine Park in Terengganu, Tioman Island Marine Park in Pahang, Mersing Island Marine Park in Johor, Tunku Abdul Rahman Park and Tiga Island in Sabah. In promoting Malaysia as a nature hub, the government has established Malaysia Mega Biodiversity Hub (MMBH). The visitor numbers who visit MMBH destinations are on a positive uptrend which amounts to 875,694 visitors in 2014 (Pemandu, 2015). The uniqueness of Marine Parks attracts many tourists, both local and foreign to visit the destinations while enjoying the fascinating scenery and the marine ecosystem. However, there were also negative reviews about the Marine Parks in Peninsular Malaysia on a popular travellers’ website, Trip Advisor. From the reviews on Trip Advisor (2014; 2015), several issues can be highlighted concerning the degradation of marine nature and services in Marine Parks of Malaysia. Furthermore, the construction of coastal, inland pollution of the seas and stress in corals also tend to threaten 25% of the world’s reef which caused bleaching (Annual Report of Department of Marine Park Malaysia, 2013). Consequently, some of the Marine Parks had been closed due to coral bleaching (Kosmo, 2010). Besides those issues, it appears that there is a lack of safety protocols in water sport activities (e.g. snorkelling and scuba diving) (News Straits Times, 2014). Overall, it reflects that there are issues on the natural landscape, services and safety in the Marine Parks. Thus, it is very important for the management of the destination to consider these issues seriously as it creates bad implication and reputation of Marine Parks in the future. In order to sustain our tourism destination, a high level of tourist’ satisfaction has to be achieved. Thus, ensuring a meaningful experience for the tourists as well as raising tourist’s awareness sustainability also should be considered (United World Tourism Organization, 2014). Maintaining the sustainability of the tourism destination in regards of individual behaviour is important as it helps to protect and conserve the natural resources from destruction. Each of the visitors has the responsibility to maintain the environment.

As such, the aim of the paper is to examine the relationship between destination attractiveness, place satisfaction and environmentally responsible behaviour of tourists in Marine Parks. This study intends to explore these relationships as to understand current conditions of destination attractiveness in Malaysia’s Marine Parks and whether it can increase satisfaction in their visitation, whereby leads to environmentally responsible behaviour of tourists in the Marine Parks. The identification can assist in developing Marine Parks in sustainable way. In the following sections, there will be the literatures on destination attractiveness, place satisfaction, environmentally responsible behaviour, destination sustainability and underlying theories. Next, the hypotheses development and research methodology are discussed, followed by results and discussions. More specifically, the conceptual framework is tested using structural analysis by AMOS Structural Equation Modelling. Finally, the conclusion and the study’s implications are discussed.

**Destination Attractiveness**

In the tourism industry, destination is seen as a unique complex product (Kim, 1998). According to Kresic and Prebezac (2011), destination attractiveness is a mental image of a destination which is created through physical attractions that are available in a destination. However, Owusu-frimpong et al. (2013) claimed that in order to understand how tourists view a tourism product, other attributes should also be considered instead of only focusing on the physical elements of a destination. Meanwhile, Hu and Ritchie (1993) defined destination attractiveness as a combination of the relative
significance of individual benefits and the apparent capacity of the destination to convey individual benefits. In relation to this, Van Raaij (1986) grouped destination attractiveness into two categories known as “given” and “man-made”. Given attribute refers to a natural element of a destination and man-made attribute denotes as facilities that are available in a destination. Some of previous studies assessed destination attractiveness in cultural and nature destination through core attributes and augmented attributes (Hu & Ritchie, 1993; Thach & Axinn, 1994; Hou et al., 2005; Cheng et al., 2013). Destination attractiveness varies depending on the sort of tourism destination that the tourists visit (Kresic & Prebezac, 2011). Some of the attributes can be appealing and some of it may not (Albayrak & Caber, 2012).

Generally, tourists are encouraged through “pull factor” which is perceived as the external forces of the destination attributes (Jang et al. 2009). Lee et al. (2010) revealed that nature of a destination is the main factor in conveying destination attractiveness. Conversely, some of the researchers argued that safety and security of the visited destination is the most important factors of a destination attribute (George, 2003; Park et al., 2010). Particularly, previous study examined destination attractiveness based on only two components known as core attributes and augmented attributes (Hou et al., 2005). Consequently, this study further extends the components of destination attractiveness by integrating the attributes of safety and security as it is necessary to investigate destination attractiveness in integrated standpoint (Kim & Perdue, 2011). Thus, this study intends to integrate three main destination attributes that cover the Marine Park’s attractiveness which are core attributes, augmented attributes and safety and security attributes. The core attributes comprise of the nature and landscape, the augmented attributes comprise of services and facilities; and safety and security attributes refer to the safe elements of the Marine Park. Thus, this study will contribute in further enhancing the current body of knowledge on destination attractiveness, specifically in Marine Park of Malaysia.

**Place Satisfaction**

Satisfaction is characterized as including both of an individual’s cognitive and affective which gained through tourist experience (Del Bosque & San Martin, 2008). This definition clarifies that satisfaction depends on tourist’s experience which comprises of individual insight and emotional element that arouse in tourism destination. In terms of destination, scholar described place satisfaction as the utilitarian value of a place in encounter some essential need which ranging from sociability to services and physical qualities (Stedman, 2002). Specifically, the meaning of place satisfaction considered as a fulfilment reaction to comprehend and assess the tourist experience in Marine Park (Wu & Liang, 2009). These definitions clarify that place satisfaction concentrate on the tourist’s assessment based on their experience that they obtained in a tourism destination.

Satisfaction of the visitors is essential since it is one form of measurement of the success of the destination in terms of providing high quality experience for tourists (Coghlan, 2012). This is particularly crucial in the protected areas such as Marine Parks. The assessment of satisfaction will offer some understandings on how well a destination caters the tourists’ needs and wants as well as leads the management to enhance the quality of the products and services offers in a destination (Meng, Tepanon & Uysal, 2008). Subsequently, it is vital to understand the tourists’ perception of the destination attributes which lead to satisfaction (Maunier & Camelas, 2013). In line with this, some of the preceding studies assess the relationships of satisfaction with service quality (Lai & Chen, 2011) and loyalty (Lee et al. 2011; Barnes et al. 2014; Parola et al. 2014; Romao et al. 2014). Meanwhile, some studies use satisfaction to observe behavioural intention in terms of repurchase intention, word of mouth and intention to recommend (Petrick, 2004; Hosany & Prayag, 2013). Prayag et al. (2013) for example, claimed that emotions
significantly add the predictive power offered by satisfaction in exhibiting behavioural intentions. Therefore, it is essential to understand tourist’s environmental behaviour to ensure the sustainability of a destination particularly in maintaining the ecotourism system. Previous studies have examined the relationships between satisfaction and environmentally responsible behaviour in National Park setting. However, this study intends to examine these relationships in Marine Parks as it is limited evidence to suggest that satisfaction can affect environmentally responsible behaviour in Marine Parks setting due to the difference in landscape of Marine Parks and National Parks. Thus, it can be suggested that place satisfaction can lead to environmentally responsible behaviour of tourists in Marine Parks.

**Environmentally Responsible Behaviour (ERB)**

Ecological debasement is an imperative issue to be managed by creating environmental awareness among travellers to encourage ERB in ecotourism (Cave & Brown, 2012; Chiu et al., 2014a). Environmentally responsible behaviour refers to a purposeful action of a person or group who directly or indirectly affects the changes in the environment or to benefit the environment (Stern, 2000). It measures how tourists react on ERB. The understanding of tourists’ environmental attitudes and behaviours can minimize the negative impacts in protected destinations (Cheung et al. 2016) and lead to sustainable tourism destinations. It is where scholars contended that tourists experience in travelling will affect their environmental attitude and behaviour in ecotourism (Chiu et al. 2014b). Meanwhile, Kerstetter et al. (2004) claimed that the degree of individual environmental practices changed as it relies on the type of travel motivation in visiting a destination.

Besides tourists experience and motivation, Nisbet et al. (2008) regarded that tourists’ personal connection with nature also can provide some understanding about their responses towards the environment. In particular, it can be assumed that tourists who are more likely engage in environmentally responsible behaviour are the one who feels a greater devotion towards the environment (Davis, Le & Coy, 2011). Generally, management of the tourism destination is specifically in charge on the execution of environmental programs (De-Miguel-Molina et al., 2014). However, the responsibility of taking care of the environment is not only in the management aspects as tourists are also one of the main important stakeholders in maintaining the ecosystem of the destination as they involved directly in tourism activities. It is where tourists who have intention to react environmentally will probably engage with ecological practices (Lee & Moscardo, 2005). This indicates that tourists’ intention of protecting the environment will lead them to act positively towards the environment and it will help in sustaining the nature of the tourism destinations. Thus, through understanding tourists’ ERB in a destination can assist in ensuring successful ecological practices.

**Destination Sustainability (DS)**

According to Buhalis (2000), destination is a place that offer combinations of tourism products and services which people like to travel and stay to gain experience. Meanwhile, the sustainability of a destination reflects the nature, development of the tourism destination, destination and tourism practices (Saarinen, 2006). In a long term, destination sustainable tourism relies on the stakeholder’s cooperation in the industry (Carey et al., 1997). The sustainability of one destination also relies on many important indicators such as sustainable tourism policy, nature protection and respect for animals, protection of landscape and scenery, waste water treatment, solid waste reduction as well as education of fossil fuel dependency. The growing need of tourism sustainability is increasing as people have the knowledge and concern regarding tourism impacts and
environmental issues (Holden, 2003). However, to date, Malaysia is not listed as one of the top 100 sustainable destinations as evaluated by “Green-destinations” (2016). Thus, more efforts need to be taken in ensuring the sustainability of Malaysia. Moreover, tourism producers claimed that tourists do not have sensitivity toward the environment and if they concern, it will not show in practice (Cottrell et al., 2004). There is a need to plan tourism development through understanding the importance of sustainable development to promote sustainable tourism (Dwyer & Kim, 2003) to all stakeholders. Managing and maintaining destination sustainability requires effective cooperation and concern between all the stakeholders as well as the environmental responsible behaviour of individual must show into practice to ensure the successful of sustainability.

Underlying Theories

In the present study, Expectation Disconfirmation Theory (EDT) and Theory of Reasoned Action (TRA) were utilized to enlighten the relationships of the variables. EDT is used to explain how deviation of expectation influence satisfaction (Tse, 2003). It is where expectation is referred to pre-purchase belief or it reflects anticipated performance of product (Churchill & Surprenant, 1982; Oliver & Winer, 1987). Confirmation occurs when outcome equivalents with the expectation and disconfirmation occurs when there are gaps between outcomes and expectations (Pizam & Milman, 1993). In short, tourists satisfaction or dissatisfaction is a result of a positive or negative difference between expectation and performance of product or services (Yuksel & Yuksel, 2001). Researchers claimed that the calculation of the differences between expectation and performance can be omitted by directly understanding to what extend tourists’ experience meets the expectation (Yuksel & Yuksel, 2001). In this study, the expectation and performance were evaluated based on the tourist’s experienced in viewing the destination attractiveness. In relation to this, Owusu-Frimpong et al. (2013) also agreed that expectations are formed by attribute is explained (Ajzen & Fishbein, 1980). The intention to execute behaviour is made of the combination of attitude in performing behaviour. It postulates that behaviour is a result from the formation of intention to act (Kim et al., 2010). Scholars also agree that TRA is one of the useful theories of behaviours which incorporate a sequential method to explain the formation of ERB (Chiu et al., 2014b). Thus, in this study, TRA was used to prove the relationships between place satisfaction (attitude) and environmentally responsible behaviour (intention).

Hypotheses Development

According to Cheng et al. (2013), a stronger destination attractor is related to a stronger environmental behavioural intention in a destination. Tourist appreciates the physical environment of a destination through the interpretation services that they perceived (Lee et al., 2013). In turn, tourist’s experience in a destination would affect their attitude and environmental behaviour in ecotourism, yet not all of them will act in a positive way (Chiu et al., 2014b). Zeidenitz et al. (2007) revealed that tourists’ attitudes toward environment show their appreciation of the destination diversity and it is an important predictor for tourists to behave ecologically as well as to sustain the tourism destination. Tourists travel in ecological spots because they are attracted towards nature (Chiu et al., 2014b), thus it is essential to sustain the ecological site. Therefore, H1 is hypothesized as follow:

H1: Destination attractiveness has a significant influence on environmentally responsible behaviour

Satisfaction is stimulated through tourists’ psychological feeling about destination that they visit (Barnes et al., 2014) as each destination conveys a variety of perceptions. Previous study revealed that declining number of tourists in a destination is due to the dissatisfaction with the quality of the product and services of the tourism destination (Akama & Kieti, 2003). The identification of attributes that encourage
Tourists’ motivation in travelling will assist in the satisfaction, in which it can be a key of successful tourism destination (Devesa, Laguna & Palacios, 2010). The identification is able to maximize and enhance the resource allocation (Formica, 2006). It is where the management of destination should focus in delivering proper tourism products to increase the satisfaction level of tourists (Park et al., 2010). Accordingly, understanding the tourists’ preferences toward product and service attributes is critically important. Romao et al. (2014) found that in the natural concept of tourism, tourists were more satisfied with the destination landscape. It can be suggested that each tourism destination conveys a different attraction that can influence tourists’ place satisfaction. Moreover, based on EDT, it posits that the pre beliefs towards a product will affect satisfaction. The following hypothesis is proposed:

H2: Destination attractiveness has a significant influence on place satisfaction.

An experience in a natural environment that benefits individual in terms of satisfaction towards the environment will predict their level of commitment to the environment (Davis et al., 2011). In another extends, previous study on golf travellers also revealed that satisfied individual with their visit to a destination were more likely engaging to the behavioural intention (Hutchinson et al., 2010). As an example, when the tourists are satisfied with their visitation, they will have a greater understanding on the importance of environment, in which can help in promoting environmentally responsible behaviour (Williams & Soutar, 2009; Chiu et al., 2014b). In TRA, it indicates that attitude influenced behavioural intention. Consequently, it can be suggested that tourists’ satisfaction in a destination can lead to environmentally responsible behaviour. Thus, H3 is hypothesized as below:

H3: Place satisfaction has a significant influence on environmentally responsible behaviour.

The identification of attributes in a destination in the formation of overall visitor satisfaction is in need (Albayrak & Caber, 2012) while tourists’ environmental behaviour could benefit the nature and minimize the impacts of tourism activity in a destination (Juvin & Dolnicar, 2016). Some scholars suggested that the nature of the tourism product can be clarified through describing how the components of the destination affect tourist’s behaviour during their visitation (Murphy et al., 2000; Wong & Wan, 2012). It is where attributes in a destination are an important element in understanding tourists’ attitude and behaviour whereby tourists who felt greater commitment to the tourism destination environment are more likely to prevail environmentally responsible behaviour (Davis et al., 2011; Herington et al., 2013). It can be suggested that tourists who are satisfied with the destination attributes will exhibit environmentally responsible behaviour. Thus, the following hypothesis is proposed:

H4: Place satisfaction mediates the relationship between destination attractiveness and environmentally responsible behaviour.

Hence, Figure 1 illustrates the conceptual framework of the present study.

**Methodology**

**Sample and Data Collection**

This study uses the quantitative approach by using a survey technique. A set of self-completion questionnaire was developed to gather information from the tourists in the Marine Parks. An on-site survey has been distributed to tourists who visited selected Marine Parks. Marine Parks that are involved in this study were Tioman Island, Pahang, Payar Island, Langkawi, Perhentian Island and Redang Island, Terengganu. According to Krejcie and Morgan (1970) suggestions on sample size, around 382 respondents are adequate for the total population of tourists in Marine Parks (N= 884,180). Meanwhile, Williams (2003) stated that for the confidence level of 95% and 5% of sample error, the sample size of 400 is appropriate. Based on the suggestions, 400 questionnaires were distributed in these four islands which represent
100 respondents for each of the Marine Parks. The respondents represented a convenience sample as they agreed to participate in this study. The data were collected between August to October 2016 as it is the best time to visit the Marine Parks (Department of Marine Park Malaysia, 2012). After data screening through identifying missing values and outliers, around 275 samples were used for further analysis. In the analysis stage, descriptive statistics were used to identify tourists’ profile through Statistical Package for Social Sciences (SPSS). Meanwhile, relationships of the variables were analysed using AMOS which involved Confirmatory Factor Analysis (CFA) and structural model.

**Measurement**

As this study uses a survey method, a questionnaire has been designed which comprises of 5 sections. Section A focused on the tourists’ opinion on the destination attractiveness of Malaysia’s Marine Parks, Section B measured tourist’s place satisfaction, Section C measured the environmentally responsible behaviour of tourists, Section D captured the tourists profile and Section E focused on the tourists’ travel profile. The measurements of all constructs are adapted from several studies in tourism literatures. The first section involved 18 items of destination attractiveness which comprises five items of core attributes (DAC), six items of augmented attributes (DAA) and seven items of safety and security attributes (DAS). The destination attractiveness scale is adapted from Cheng et al. (2013) and Lee et al. (2009). These items measured the overall satisfaction of the tourists in the Marine Park. Environmentally Responsible Behaviour (ERB) was measured by six items which were adapted from Chiu et al. (2014b) and Cheng et al. (2013). All items for each of the construct were measured in Likert scale type which ranging from 1 (strongly disagree) to 5 (strongly agree).

**Results and Discussion**

A complete SEM model comprises of measurement model which relates the variables to the constructs and a structural model (Iacobucci, 2009). Through this complete approach, the direction and significance of the relationships will be determined by analyzing the hypotheses simultaneously (Lee & Chang, 2012). In this study, it involves destination attractiveness, place satisfaction and environmentally responsible behaviour concurrently. Table 1 shows the total number of respondents for each island and Table 2 shows the descriptive statistics of the respondent profile.

**Confirmatory Factor Analysis (CFA)**

SEM is a confirmatory technique in providing a comprehensive means to validate the measurement model of the latent constructs (Zainudin, 2015). The validation procedure is known as Confirmatory Factor Analysis (CFA). In CFA, any item that does not fit the measurement model due to low factor loading (<0.50) was removed from the model. In this stage, five items of destination attractiveness and two items of environmentally responsible behaviour were deleted to achieve the model fit due to low factor loading (refer Table 3). After the deletion, the CFA result showed that the
model achieved the goodness of fit indices ($\chi^2$/df = 2.39, RMSEA = 0.07 and CFI = 0.93) which exceed the level of acceptance cut-off ($\chi^2$/df < 3, RMSEA < 0.08 and CFI > 0.9). Each of the factor loading items exceeded the suggested threshold (>0.50). The Cronbach’s alpha also meets the suggested internal consistency value (>0.60) which ranged from 0.80 to 0.94. The Composite Reliability (CR) and Average Variance Extracted (AVE) are achieved as the value exceeded 0.60 and 0.50 respectively for all of the constructs (refer Table 3).

Table 1: Total number of respondents for each island

<table>
<thead>
<tr>
<th>Name of Island</th>
<th>Total of Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tioman Island</td>
<td>70</td>
</tr>
<tr>
<td>Payar Island</td>
<td>64</td>
</tr>
<tr>
<td>Perhentian Island</td>
<td>68</td>
</tr>
<tr>
<td>Redang Island</td>
<td>73</td>
</tr>
</tbody>
</table>

Table 2: Profile of the respondents

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>149</td>
<td>54.2</td>
</tr>
<tr>
<td>Male</td>
<td>126</td>
<td>45.8</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25 years</td>
<td>117</td>
<td>42.5</td>
</tr>
<tr>
<td>26-30 years</td>
<td>79</td>
<td>28.7</td>
</tr>
<tr>
<td>31-35 years</td>
<td>43</td>
<td>15.6</td>
</tr>
<tr>
<td>36-40 years</td>
<td>12</td>
<td>4.4</td>
</tr>
<tr>
<td>41-45 years</td>
<td>10</td>
<td>3.6</td>
</tr>
<tr>
<td>46 years and above</td>
<td>14</td>
<td>5.1</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>179</td>
<td>65.1</td>
</tr>
<tr>
<td>Married</td>
<td>93</td>
<td>33.8</td>
</tr>
<tr>
<td>Divorced/Separated/Widowed</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Income (RM &amp; USD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RM3,000 and below/ $3,000 and below</td>
<td>167</td>
<td>60.7</td>
</tr>
<tr>
<td>RM3,001 - RM6000/ $3,001 - $6,000</td>
<td>72</td>
<td>26.2</td>
</tr>
<tr>
<td>RM6,001 - RM9000/ $6,001 - $9,000</td>
<td>18</td>
<td>6.5</td>
</tr>
<tr>
<td>RM9,001 - RM12000/ $9,001 - $12,000</td>
<td>10</td>
<td>3.6</td>
</tr>
<tr>
<td>RM12,001 - RM15000/ $12,001 - $15,000</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>RM15,001 and above/ $15,001 and above</td>
<td>5</td>
<td>1.8</td>
</tr>
<tr>
<td>Time of Visitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once (Current Visit)</td>
<td>182</td>
<td>66.2</td>
</tr>
<tr>
<td>Twice</td>
<td>56</td>
<td>20.4</td>
</tr>
<tr>
<td>More than Twice</td>
<td>37</td>
<td>13.5</td>
</tr>
</tbody>
</table>

Structural Model

Structural Equation Modelling is used to examine the relationship between destination attractiveness, place satisfaction and environmentally responsible behaviour and to determine the mediation effect of these three constructs. First, there must be a significant direct effect on the destination attractiveness on environmentally responsible behaviour. Based on Table 4, it is shown that there is a direct effect on the destination attractiveness on environmentally responsible behaviour ($\beta =$ 0.39, $p <0.001$). The test of overall goodness of fit indicates that it has a good data fit as
χ²/df = 2.46, RMSEA = 0.07 and CFI = 0.93 which achieved the acceptable cut-off values at χ²/df < 3, RMSEA < 0.08 and CFI > 0.9 (refer Table 4). This result shows that H1 of this study is supported. Similarly, Cheng et al. (2013) revealed that there was a positive direct effect on the destination attractiveness on environmentally responsible behaviour. This indicates that the better the destination attractiveness of the Marine Parks, the stronger the reaction of tourists’ environmentally responsible behaviour in Marine Parks. Thus, further analysis for identifying the presence of mediation can be analysed.

Second, the mediating model is established to examine the effects of place satisfaction on destination attractiveness and environmentally responsible behaviour. The goodness of fit indices is χ²/df = 2.34, RMSEA = 0.07 and CFI = 0.93 which achieved the acceptable cut-off values at χ²/df < 3, RMSEA < 0.08 and CFI > 0.9. Specifically, this proposed model has achieved good fit model (refer Table 5). Furthermore, the results in Table 6 showed that the direct effect of

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Factor Loading</th>
<th>Cronbach alpha</th>
<th>CR</th>
<th>AVE</th>
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<tbody>
<tr>
<td><strong>Destination Attractiveness</strong></td>
<td>DAC1</td>
<td>0.80</td>
<td>0.879</td>
<td>0.829</td>
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<td></td>
<td>DAC2</td>
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<td>DAC3</td>
<td>0.71</td>
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<td>DAC4</td>
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<td>DAC5</td>
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<td>0.813</td>
<td>0.524</td>
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<td></td>
<td>DAA7</td>
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<td><strong>Augmented Attributes (DAA)</strong></td>
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<td>DAS16</td>
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<td>DAS18</td>
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</table>

| **Place Satisfaction (PS)**     | PS1  | 0.81           | 0.940          | 0.941 | 0.761 |
|                                  | PS2  | 0.89           |                |       |       |
|                                  | PS3  | 0.89           |                |       |       |
|                                  | PS4  | 0.88           |                |       |       |
|                                  | PS5  | 0.89           |                |       |       |

| **Environmentally Responsible Behaviour (ERB)** | ERB1 | 0.54 |
|                                                 | ERB2 | deleted |
|                                                 | ERB3 | deleted |
|                                                 | ERB4 | 0.62 |
|                                                 | ERB5 | 0.93 |
|                                                 | ERB6 | 0.79 |

Table 3: The CFA results for the measurement model (χ²/df = 2.39, RMSEA = 0.07 and CFI = 0.93)
destination attractiveness on place satisfaction was significant at 0.65 (p<0.001) and the direct effect of place satisfaction on environmentally responsible behaviour was significant at 0.48 (p<0.001). Thus, H2 and H3 of this study were supported. These results were in line with EDT and TRA assumption. It is where EDT posits that the performance (destination attractiveness) of the marine parks influence place satisfaction and TRA posits that attitude (place satisfaction) influence intention (environmentally responsible behaviour). It is also synchronized with previous study who found that destination attractiveness influence tourists’ emotion in a destination (Cheng et al., 2013). Besides, H3 is also supported by Chiu et al. (2014b) which revealed that tourist’s satisfaction can promote environmentally responsible behaviour. Explicitly, from the results of this study, it can be suggested that tourists who feel satisfied with the Marine Parks will exhibit environmentally responsible behaviour.

However, after place satisfaction is included in the model, the coefficient value for β is reduced from 0.39 to 0.08 and the direct effect on the destination attractiveness on environmentally responsible behaviour is no longer significant (p=0.37) (refer Table 6). It is where the indirect effect of this mediation model is 0.31(0.65x0.48) and the direct effect is 0.08. Since the indirect effect is greater than direct effect (0.31>0.08) and both of the indirect path DA à PS and PS à ERB are significant, so the mediation occurs. The results of hypothesis testing in Table 6 indicate that place satisfaction does mediate the relationship between destination attractiveness and environmentally responsible behaviour. Thus, the type of mediation of this model has been a complete mediation since the direct effect on the destination attractiveness and environmentally responsible behaviour is no longer significant after the mediation enters the model. This supported H4 of this study. Additionally, this result is similar with previous study who found that destination attractiveness is no longer affect environmentally responsible behaviour after entering the mediation construct (Cheng et al., 2013).

**Conclusion and Research Implications**

This study aims to contribute further in the literature by investigating the relationship of destination attractiveness, place satisfaction and environmentally responsible behaviour as there are limited studies discussing the
relationship of these constructs concurrently. These relationships were examined based on the tourists’ perspective on four selected Marine Parks namely Tioman Island, Pahang, Payar Island, Langkawi, Perhentian Island and Redang Island, Terengganu. Accordingly, the findings of this study can help the practitioners to be a competitive sustainable tourism destination through understanding tourists’ preferences as well as creating tourist’s the awareness to protect environment by identifying their environmentally responsible behaviour in Marine Parks. Overall, the results of this study indicate that place satisfaction plays a mediating role in the relationship between destination attractiveness and environmentally responsible behaviour. The most important elements that strongly influence place satisfaction are augmented attributes and safety and security attributes. The management of the Marine Parks have to ensure the offers of services, safety and security should achieve tourist’s satisfactory level of experience during their visitations. Through enhancing and sustaining the attractiveness of the Marine Parks, the management can increase the satisfaction level and lead to environmentally responsible behaviour of tourists in the Marine Parks. Indirectly, this will help the practitioners focus on the important attributes in sustaining the tourism destinations especially in Marine Parks. Based on the findings, some implications of theoretical and management aspects were drawn.

**Theoretical Implications**

This study attempted to make an original contribution to the current body of knowledge by examining the relationship between the dimensions of destination attractiveness as the key antecedents in influencing place satisfaction and environmentally responsible behaviour in Marine Parks. It appears that there are various dimensions of destination attractiveness in tourism literature. As previous studies focused on the physical elements and the service aspects of the tourism destination, this study attempts to evaluate destination attractiveness by using three dimensions of destination attributes which encompasses of core attributes, augmented attributes and safety and security attributes. Accordingly, based on the results provided earlier (Goodness of Model Fit), it can be confirmed that safety and security attributes are indeed an important element in determining tourist satisfaction along with core attributes and augmented attributes. Another main theoretical contribution of this study derives from the empirically significant close relations that have been found among three constructs: destination attractiveness, place satisfaction and environmentally responsible behaviour. It is expected to contribute further in strengthening the evaluation of destination attractiveness in Marine Parks of Malaysia. The findings of the study indicate that augmented attributes and safety as well as security attributes highly influenced the tourist’s satisfaction in the Marine Parks. It can be concluded that both of these attributes play important factors in influencing place satisfaction of tourists rather than the landscapes of the Marine Parks itself.

**Managerial Implications**

Marine Parks are protected areas that should be sustained well in order to protect the destination environment. Tourism activity is the most common factors that will impact the environment of the tourism destination. Accordingly, it is important to understand the tourists’ environmentally responsible behaviour in Marine Parks can be sustained as they are one of the important stakeholders who are involved in tourism activity. Thus, this study incorporates destination attractiveness and place satisfaction concurrently to identify tourists’ environmentally responsible behaviour in Marine Parks. It can be concluded that both of these attributes play important factors in influencing place satisfaction of tourists rather than the landscapes of the Marine Parks itself.
several researchers have highlighted the attributes on the destination attractiveness, the present study provides the first comprehensive factors in promoting environmentally responsible behaviour through examining three components of destination attractiveness and place satisfaction. In order to ensure the tourists’ environmentally responsible behaviour, the managers should be concerned of the satisfactory experience of the tourists when they visit the Marine Parks. To provide satisfactory experience, the managers should enhance the quality of the service delivery and also upgrade the safety and security of Marine Parks. Meanwhile, it is important for the management to manage the Marine Parks’ attraction in a good condition to build a sense of belonging for the tourists toward the Marine Parks and indirectly lead to environmentally responsible behaviour.

Limitations and Suggestions for Future Research
The current study is not without limitations. Some limitations were faced. First, this study is conducted in Marine Parks, which are considered as protected areas. The findings can be different when the variables are investigated in other types of destination. Thus, future research can be conducted in other types of tourism destination such as culture and heritage destination. Second, there are only four Marine Parks in Peninsular Malaysia that are selected in this study. In future, Marine Parks in Borneo also can be included to explore the differences between Marine Parks in Peninsular Malaysia and Borneo. This can assist in investigating the scarcity of the Marine Parks on both sides. Lastly, the study only investigated three important constructs which appear to miss out some other relevant constructs that may also have a significant effect on environmentally responsible behaviour. Thus, future research can integrate other related variables such as activity involvement, environmental attitudes and trip characteristics in order to examine the antecedents of environmentally responsible behaviour further.

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References


