An Examination of the Relationships between Physical Environment, Perceived Value, Image and Behavioural Intentions: A SEM approach towards Malaysian resort hotels

Faizan Ali*
Rosmini Omar
International Business School,
Universiti Teknologi, Malaysia,
Kuala Lumpur, Malaysia
*Email: faizanali7@hotmail.co.uk

Muslim Amin
College of Business Administration
King Saud University
Riyadh, Kingdom of Saudi Arabia

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An examination of the relationships between physical environment, perceived value, image and behavioural Intentions: A SEM approach towards Malaysian resort hotels

Faizan Ali* · Rosmini Omar** · Muslim Amin***

abstract

This purpose of this study is to examine the effects of physical environment, perceive value and image on customers' behavioural intentions in Malaysian resort hotels. Data were collected from 280 guests of resort hotels in 2 different tourist spots in Malaysia using a survey questionnaire. Convenience sampling was used to draw the sample. SEM approach was used in the study to assess the model. The major findings are guests with higher perceptions of the physical environment are more likely to have positive perceived image, value and behavioural intentions. Therefore, resort hotels in Malaysia need to pay attention to develop and maintain better physical environments so that positive perceptions of image and value can be developed to create customers’ positive behavioural intentions.

Key words: Physical environment, Image, Perceived Value, Behavioural Intentions, Resort Hotels

* Assistant Professor, International Business School, Universiti Technologi Malaysia. E-mail: faizanali7@hotmail.co.uk
*** Assistant Professor, College of Business Administration, King Saud University. E-mail: tengkumuslim@yahoo.com
I. Introduction

Resort hotels are one of the fastest growing segments of tourism attractions and are rapidly growing in number, diversity, and popularity since the economic boom of 1960s. Today a large numbers of people travel to resort hotels situated in exotic and beautiful destinations in order to enjoy themselves and escape from their daily routine (Walker, 2006; Yang & Chan, 2010). In this context Gee (2000, p. 22) states that, “The core principle of the resort concept is the creation of an environment that will promote and enhance a feeling of well-being and enjoyment”. Nowadays, resort hotels have become one of the dominant segments of the accommodation industry (Inkabaran et al., 2004) and their focus is centred primarily on the customers and the pursuit of superior customer perceived quality of physical environment, value, and image in order to ensure customers’ loyalty and favourable behavioural intentions (Hu et al., 2009).

Numerous researchers have indicated the importance setting up an attractive physical environment and ensuring a good perceived image and value to achieve a competitive advantage in a very competitive hospitality industry (Amin et al., 2013; Clemes et al., 2011; Ha & Jang, 2012; Han & Ryu, 2009; Harris & Ezeh, 2008; Hu et al., 2009; Ryu et al., 2012). Although previous researchers have studied these factors and their interrelationships, understanding their effect on customer behaviour still require further investigation (Hu et al., 2009; Ryu et al., 2012). Therefore this study aims to propose a model that describes the relationships between physical environment, perceived value, and image on consumer behavioural intentions. The focus of this study will be on Malaysian resort hotel industry which is a highly relevant service context to study as Malaysia is one of the
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most popular tourist destinations in Asia Pacific for both the domestic and international tourists and is projected to continue growing in the coming years (WTTC, 2012).

II. Literature Review

1. Physical Environment

Bitner (1992, p. 58) used the term servicescape to describe “the built environment or more specifically ‘the man-made’ physical surroundings as opposed to the natural or social environment”. Similarly Lee & Jeong (2012) defined physical environment as an environment created by service provider including overall layout, design, decoration, and aesthetics. This phenomenon has recently been found to be an important part of consumer evaluation of satisfaction with services (Ali & Amin, 2013; Ruiz, et al., 2012). The importance of creating an attractive physical environment has gained growing attention among scholars and hospitality managers as it is a key factor for attracting and satisfying customers in hospitality industry (Han & Ryu, 2009). In this context, physical environment plays a critical role in differentiating service firms and influencing their image and consumer behaviours (Chen & Hu, 2010; Han & Ryu, 2009; Hu et al., 2009; Ryu et al., 2012).

2. Perceived Value

Perceived value has been studied and considered as a stable construct while predicting consumer behaviour (Hu et al., 2009). Many definitions of perceived value can be found in the literature. For example, Zeithaml (1988) defined value as the consumer’s overall
assessment of the utility of a product based on perceptions of what is received and what is given. Similarly Parasuraman et al. (1985) states that only the customer can evaluate whether or not a product or service provides value and the concept of customer perceived value is perceived to be very subjective and personal. Vandermerwe (2003) supports this notion and narrates that value should be defined by the customers, when the customers are satisfied with the total experience. Based on these definitions and conceptualisations, it can be observed that customer value is highly personal and may vary widely from one customer to another (Holbrook, 1994). Numerous researchers have pointed out the significant contribution of perceived value in evaluation of service quality, price fairness, loyalty and repeat purchasing behaviours (Hu et al., 2009; Ryu et al., 2012).

3. Image

Due to its complex nature, various definitions and operationalization of image can be found throughout the literature (Ryu et al., 2008). For example, Keller (1993) defined brand image as a series of perceptions about a brand the consumer formulates as reflected by brand associations. Similarly, Low & Lamb (2000, p. 352) defined image as “the reasoned or emotional perceptions consumers associate to specific brands”. Baloglu & Brinberg (1997, p. 11) also defined image as “the sum of beliefs, ideas, and impressions that people have of a place or destination”. Numerous researchers have studied image across hospitality industry. For instance, Ryu et al., (2012) studied the effect of food quality and physical quality on restaurant image and customer satisfaction by using four items to study customer satisfaction. On the other hand, Hu et al., (2009) also studied the relationships of service quality, perceived value, image satisfaction in hotel industry using two sub-dimensions i.e., image attributes and image holistic. Consequently, developing a good
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perceived image is the goal of every service provider due to its potential impact on repeat purchasing behaviour and profits (Ryu, et al., 2012; Hu et al., 2011).

4. Behavioural Intentions

Zeithaml et al. (1996: p. 33) states that behavioural intentions “...signal whether customers will remain with or defect from the company”. These behavioural intentions are either favourable or unfavourable. The favourable includes positive word of mouth, more spending with the service provider, paying a price premium and remaining loyal. The unfavourable, includes leaving the service provider, negative word of mouth, less spending with the company and/or taking legal action (Ali & Amin, 2013; Ladhari, 2009). Similarly, Oliver (1997: p. 28) described behavioural intentions as “a stated likelihood to engage in behaviour”. In this context, behavioural intentions are considered to include revisit and word-of-mouth intentions (Jani & Han, 2011). Consequently, customers’ previous experiences with a product or service results in formation of an attitude toward the provider that is greatly associated with consumer intentions to repurchase and recommend (Han & Kim, 2009).

III. HYPOTHESES DEVELOPMENT

1. Physical Environment, Image, Perceived Value and Behavioural intentions

Bitner (1992) argued that a firm’s servicescape has a direct relationship with cognitive responses, such as customer beliefs and perceptions. Recent literature also supports the significant influence
of physical environment on perceived value and behavioural intentions (Chen & Hu, 2010; Han & Ryu, 2009; Lai et al., 2009; Liu & Jang, 2009b; Ryu et al., 2012). Besides, physical environment also does much to shape a place’s brand image. Booms & Bitner (1982) documented that the servicescape of a hospitality firm had a significant impact on customer revisit intention and a restaurant’s brand image which is supported by recent studies as well (Lai et al., 2009; Ryu et al., 2012; Ryu et al., 2008). Therefore, it is hypothesized that:

H1. Physical environment is positively related to perceived value.
H2. Physical environment is positively related to image.
H3. Physical environment is positively related to behavioural intentions.

2. Image, Perceived Value and Behavioural Intentions

Past research has indicated that there was a positive relationship between perceived value, image and behavioural intentions (Ryu et al., 2012). The brand/store image has significant impact on customer perceived value, satisfaction, and revisit intention (Cretu & Brodie, 2007; Hu et al., 2009; Lai et al., 2009; Ryu et al., 2008; Ryu et al., 2012). Therefore, it is hypothesized that:

H4. Image is positively related to perceived value.
H5. Perceived value is positively related to behavioural intentions.
H6. Image is positively related to behavioural intentions.

IV. Methodology

1. Research Instrument
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Physical environment was measured using five items adapted from (Wu & Liang, 2009). Perceived value was measured using three items (Ryu et al., 2012; Ryu et al., 2008). Image was measured using four items (Kim & Kim, 2004; Ryu et al., 2012). Four items for behavioural intentions were adopted from (Jani & Han, 2011). A five-point Likert scale were employed in this study starting from 1 (strongly disagree) to 5 (strongly agree).

2. Sample Design and Data Collection

The target population for this study was limited to those guests who had stayed at Malaysian resort Hotels at least once. The survey was conducted through face-to-face interaction with the guests at various locations at selected resort hotels at two tourist spots of Malaysia i.e., Langkawi and Penang. A self-administered survey was used to collect the data. A convenience sample was drawn for the survey. Sampling was conducted by distributing questionnaires to guests at different times of the day, over three weeks period. In order to reduce the referrals to participate, guests were explained with the purpose of the research. A total of 280 questionnaires collected back from guests were used further for data analysis. Out of these 280 respondents, 48% were male whereas 52% were female. 8% were between 16-20 years of age, 54% were between 21 and 30 years, 22% were between the ages of 31-40 years and 16% were older than 41 years. Amongst the 280 respondents, 38% were Malaysians whereas 62% were foreigners.

3. Analytical Methods

The collected data was analysed using SPSS Statistics 20 and AMOS 20. Following the procedure suggested by Anderson & Gerbing (1988), a measurement model was estimated before the structural
model. A confirmatory factor analysis (CFA) was employed to assess the measurement model and to test data quality, including reliability and construct validity checks. Structural equation modelling (SEM) was conducted to assess overall fit of the proposed model and test hypotheses.

V. RESULTS

1. Measurement Model

A measurement model was estimated using the maximum likelihood estimation method. The initial 16 items developed for measurement were subjected to CFA. The results of CFA on these 16 items showed a moderate fit to the data. The chi-square value ($\chi^2$) of the measurement model was 205.109 ($df = 98, p = 0.000$). The $\chi^2/df$ value of 2.093 falls within a range of below 5 as suggested by Marsh & Hocevar (1988). Other practical fit indices demonstrated that the measurement model fit the data well (RMSEA 0.057; CFI 0.965; GFI = 0.932). Consequently, this measurement model was used for all further analyses.

As shown in Table I, the composite reliability values were well above the 0.70 level suggested by Nunnally (1978). All standardized factor loadings emerged fairly high and significant, ranging from 0.620 to 0.863. This suggested convergence of the indicators with the appropriate underlying factors (Anderson & Gerbing, 1988). The average variance extracted (AVE) values for each construct were all above 0.50 (Fornell & Larcker, 1981). Overall, these results showed strong evidence of the uni-dimensionality, reliability, and validity of the measures.
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### (Table I) Validity and reliability for constructs

<table>
<thead>
<tr>
<th>Physical Environment (PE)</th>
<th>Factor Loadings</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>The resort’s lighting is appropriate</td>
<td>0.749</td>
<td>0.548</td>
<td>0.858</td>
</tr>
<tr>
<td>The resort’s temperature is comfortable</td>
<td>0.775</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The resort’s environment is clean</td>
<td>0.773</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The resort’s architecture is impressive</td>
<td>0.718</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The colours within the resort are complementary and coordinating</td>
<td>0.681</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceived Value (PV)</th>
<th>Factor Loadings</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>This resort offered good value for the price</td>
<td>0.620</td>
<td>0.525</td>
<td>0.767</td>
</tr>
<tr>
<td>The resort experience was worth the money</td>
<td>0.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This resort provides me great value as compared to others</td>
<td>0.751</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Image (IM)</th>
<th>Factor Loadings</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>The resort is sophisticated</td>
<td>0.787</td>
<td>0.684</td>
<td>0.896</td>
</tr>
<tr>
<td>It has a cheerful and enchanting atmosphere</td>
<td>0.838</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It has authentic atmosphere</td>
<td>0.850</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It had good enjoyment compared with price</td>
<td>0.832</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Behavioural Intentions (BI)</th>
<th>Factor Loadings</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>I intend to continue visiting this resort hotel</td>
<td>0.860</td>
<td>0.645</td>
<td>0.878</td>
</tr>
<tr>
<td>I consider this resort hotel as my first choice</td>
<td>0.863</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will spread positive word-of-mouth about this resort hotel</td>
<td>0.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will recommend this resort hotel to my friends and others</td>
<td>0.695</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: \( \chi^2 = 205.109, \text{CMIN/df} = 2.093, \ GFI = 0.932, \ CFI = 0.965, \ RMSEA = 0.057 \)

Discriminant validity of the constructs are shown in Table II. The diagonal in Table II shows the square root of the AVE between each pair of factors that was higher than the correlation estimated between factors, thus ratifying its discriminant validity (Hair et al., 2006; Amin et al., 2013).
2. Structural Model

A structural model was estimated to test the hypotheses from $H_1$ to $H_6$. The goodness-of-fit statistics of the proposed model showed that the model reasonably fits the current data. Chi-square value of the model ($x^2 = 205.109$, $df = 98$, $p = 0.000$) and other goodness of fit indices (RMSEA = 0.057; CFI = 0.965; GFI = 0.932) revealed that the model fit the data reasonably well. The structural results of the proposed model are depicted in Figure 1.

Fig I. Structural Model

![Structural Model Diagram]

* $p<0.05$, ** $p<0.01$
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The hypothesized relationship between the perception of physical environment and perceived value was significant \( p < 0.01 \), thus \( H1 \) was supported. The results indicated that customers who have higher perceptions of the physical environment are more likely to have perceptions of achieving higher value. The path coefficient of the relationship between the perception of physical environment and image was also significant, and thus \( H2 \) was supported. These findings suggest that a better environment helps customers to create a better image of the service providers in their mind. The relationship between the perception of physical environment and behavioural intentions \( (H3) \) was also supported by an estimate of 0.131 \( (p < 0.01) \), suggesting that a more positive perception of physical environment leads to more favourable behavioural intentions. This result confirmed previous studies verifying that the perception of physical environment positively influences customers' behavioural intentions. The path coefficient of the relationship between image and perceived value was 0.072 \( (p < 0.01) \) indicating that customers' positive perception of brand image will lead to development of a positive perception of value. This result supported \( H4 \). The linkage between perceived value and behavioural intentions \( (H5) \) was supported by an estimate of 0.122 \( (p < 0.01) \), supporting \( H5 \) and suggesting that a positive perceived value leads to more favourable behavioural intentions. The path coefficient of the relationship between image and behavioural intentions was not supported with an estimate of 0.29 \( (p > 0.05) \). This result did not support \( H6 \). The summary of the results are presented in Table III.
Table III: Results of the structural model

<table>
<thead>
<tr>
<th>Hypothesized path</th>
<th>Standardized Coefficients</th>
<th>t-value</th>
<th>P</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Physical Environment → Perceived Value</td>
<td>0.090</td>
<td>8.63**</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 Physical Environment → Image</td>
<td>0.062</td>
<td>10.31**</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 Physical Environment → Behavioural Intentions</td>
<td>0.131</td>
<td>2.673**</td>
<td>0.007</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 Image → Perceived Value</td>
<td>0.072</td>
<td>1.966**</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H5 Perceived Value → Behavioural Intentions</td>
<td>0.122</td>
<td>2.112*</td>
<td>0.034</td>
<td>Supported</td>
</tr>
<tr>
<td>H6 Image → Behavioural Intentions</td>
<td>0.069</td>
<td>-0.262</td>
<td>0.793</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

*p < 0.05; **p < 0.01

VI. DISCUSSION AND CONCLUSIONS

The influence of the physical environment on consumer behaviour has received significant attention of researchers (Andreu, et al., 2006), and has also gained a wide acceptance from the academicians and practitioners (Turley & Milliman, 2000). However, few studies have focused on its influence on developing brand image or perceived value while determining the effect of physical environment on the behavioural responses of the customers (Ryu et al., 2012), especially in the context of resort hotels which is one of the least studied segments of hospitality industry (Line & Runyan, 2012). This study fills this gap by investigating the effect of physical environment on perceived value, image and future behavioural intentions in the Malaysian resort hotels.

These findings were consistent with previous studies identifying the
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role of physical environment on perceived value (Chen & Hu, 2010; Han & Ryu, 2009; Lai et al., 2009; Liu & Jang, 2009b; Ryu et al., 2008; Ryu et al., 2012), image (Hu et al., 2009; Han & Ryu, 2009; Jin et al., 2012; Oh et al., 2008; Wu & Liang, 2009) and customers' post-consumption behaviours (Bitner, 1992; Ha & Jang, 2012; Jang et al., 2011; Ruiz et al., 2012; Wakefield & Blodgett, 1994). The findings also show that perceived value also significantly influenced behavioural intentions. These findings are also in line with the previous literature (Hu et al., 2010; Ryu et al., 2012).

Additionally, this study was conducted in Malaysian resort hotels. It is very surprising to see that despite being one of the fastest growing tourist destinations, Malaysian hospitality industry in general and resort hotels in particular are overlooked by the researchers. Most of the studies focusing on service environment, perceptions and satisfaction and/or behavioural intentions in hospitality industry are mainly focused on restaurants (Chow et al., 2007; Ryu et al., 2012; Ryu & Han, 2010).

1. MANAGERIAL IMPLICATIONS

The study results indicate that better physical environments would help developing perceived image which will influence perceived customer value. It is evident that creating a high quality and attractive environment is not an option for the management, but a substantial aspect of service quality. As stated earlier, resort hotels emphasize more on hedonic aspects of customer experiences through an environment reflecting their theme or culture. Thus, physical environment can be a critical cue for customers to determine the value they get from the services in resort hotels (Yang & Chan, 2010). Therefore, Malaysian resort hotels should make an effort develop positive intentions of customers by ensuring them of the value they
are getting through a well-designed and maintained physical environment. Malaysian resort hotels should consider physical environment as an effective marketing strategy in order to appeal to customers from various backgrounds.

2. LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS

Although the results of the current study have shed light on several important issues, some limitations need to be considered in future research. Since convenience sampling was used in this study, results cannot be generalised. For instance the findings should be interpreted with caution when applied to different types of hotels or different industries. Future research should examine the proposed relationships in other types of hotels and industries. Besides, this study employed a uni-dimensional construct of physical environment. It is advisable to use multi-components of physical environment in future studies.

참고문헌


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